



## Thematic Report

# Characteristics of households and housing





#### Ministry of Finance and Economic Planning National Institute of Statistics of Rwanda

#### Fourth Population and Housing Census, Rwanda, 2012

Thematic Report

Characteristics of households and housing

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The Fourth Rwanda Population and Housing Census (2012 RPHC) was implemented by the National Institute of Statistics of Rwanda (NISR). Field work was conducted from August 16<sup>th</sup> to 30<sup>th</sup>, 2012. The funding for the RPHC was provided by the Government of Rwanda, World Bank (WB), the UKAID (Former DFID), European Union (EU), One UN, United Nations Population Fund (UNFPA), United Nations Development Programme (UNDP), United Nations Children's Fund (UNICEF) and UN Women.

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RPHC4 – Theme 08 – Characteristics of households and housing

#### List of abbreviations

CTC Census Technical Committee

EDPRS Economic Development and Poverty Reduction Strategy

EICV Integrated Housing Living Conditions Survey

EWSA Energy, Water and Sanitation Authority

GDP Gross Domestic Product

GoR Government of Rwanda

ICT Information and Communication Technologies

MDGs Millennium Development Goals

MINAFFET Ministry of Foreign Affairs

MINAGRI Ministry of Agriculture and Animal Resources

MINALOC Ministry of Local Government

MINECOFIN Ministry of Finance and Economic Planning

MINEDUC Ministry of Education

MININFRA Ministry of Infrastructure

MoH Ministry of Health

NCC National Census Commission

NISR National Institute of Statistics of Rwanda

RPHC4 Fourth Rwanda Population and Housing Census

SNR Service National de Recensement

UN United Nations

RPHC4 – Theme 08 – Ch	aracteristics of households ar	nd housing	

#### **FOREWORD**

The undertaking of Population Censuses in Rwanda goes back to the year 1978 where the first ever Census was implemented. The second and third censuses were carried out in 1991 and 2002. The 2012 Census marks the Fourth in the series. It is undoubtedly that Census information, particularly if made available on a regular basis, is indispensible for planning, policy development, evaluation and for research purposes.

The final results of the 2012 Census are published in the form of statistical tables and analytical thematic reports. Generally, the results provide population counts down to the lowest administrative level, as well as demographic and socioeconomic indicators at both national and district levels. I recommend that such invaluable information contained in the census results be used as updated benchmarks for all development planning, and in monitoring and evaluation of Rwanda's development goals.

On this occasion, I would like to seize this opportunity to thank His Excellency the President of the Republic of Rwanda for his direct support to the census, the Government of Rwanda and development partners for providing the required resources for conducting the 2012 Census. Special gratitude goes to One UN, the European Union (EU), the United Nations Population Fund (UNFPA), the World Bank (WB), the United Kingdom AID (UKAID-formerly DFID), UN Women and UNICEF.

I would also like to thank all members of the National Census Commission and the Census Technical Committee for their able guidance of the entire Census operation. The National Institute of Statistics of Rwanda (NISR) deserves special appreciation for the successful implementation of this huge statistical undertaking and releasing the final results on time.

Special gratitude goes to all respondents, field staff from NISR and other government institutions and international experts for their sincere cooperation and dedication to successfully complete the mission.

Claver GATETE

Minister of Finance and Economic Planning, and Chairperson of the National Census Commission

RPHC4 – Theme 08 – Characteristics of households and housing

#### **ACKNOWLEDGEMENTS**

The National Institute of Statistics of Rwanda (NISR) is pleased to release the final results of the Fourth Population and Housing Census (PHC4). The execution of different Census phases: preparatory works, data collection, data processing, tabulation and data analysis continued for about four years -- between 2010 and 2013.

NISR has published several Census analytical reports to be of direct help to policy makers, planners, local authorities and other users. The reports have dealt with several issues from population size and distribution, education, settlement, labour, population projections to mention but a few. NISR hopes that the analytical reports would meet the demand of Census data users at central and local levels.

On this occasion, I would like to pay our sincere gratitude to the President of the Republic of Rwanda for the Presidential Decree No. 02/01 of 07/02/2011 organizing the 4<sup>th</sup> Population and Housing Census and the Minister of Finance and Economic Planning the Chairperson of the National Census Commission for the Ministerial Order No. 001/12/10/TC of 19/01/2012 determining the administrative structure and technical organization of the 2012 Population and Housing Census. These legal instruments laid a solid foundation for all activities that followed without which not much could be achieved.

I also take this opportunity to thank the National Census Commission, the Branches of the Commission at Province and District levels and the Census Technical Committee whose invaluable guidance and advice enabled carrying out Census operations in a highly professional and timely manner.

My greatest gratitude extends to the Government of Rwanda and development partners for availing logistical and technical support.

Special recognition goes to the Ministries of Defense, Local Government, Education, Internal Security, Foreign Affairs, the National Police and National Correctional Services for the direct involvement in field data collection operations.

I also wish to express my appreciation to the local government authorities and NISR staff for their excellent operational organization and to the tens of thousands of enumerators and supervisors for their painstaking efforts throughout the data collection phase.

Finally, the people of Rwanda, residents and visitors your cooperation was crucial for the success of the census. Thank you.

**MURANGWA** Yusu

Director General,

National Institute of Statistics of Rwanda

RPHC4 – Theme 08 – Characteristics of households and housing

#### **Executive summary**

This report is one in a series of thematic reports prepared mainly from analysis of the Fourth Rwanda Population and Housing Census (RPHC4) data and aiming at improving knowledge on the social, demographic and economic characteristics of the population of Rwanda in 2012, so as to enable a better understanding of development interrelationships. This report focuses on two interlinked topics. On the one hand, it looks at households' characteristics and, on the other hand, at the characteristics of the households they live in. The report is organised into 10 main chapters, the first two of which provide the reader with an overview of the Census process and the context leading up to the analysis of the Census data and the production of the report. Chapters 3 through 6 review the characteristics of Rwandan households and chapters 7 through 10 review the characteristics of households.

## Number, spatial distribution and evolution of households between 1978 and 2012

According to the RPHC4, Rwanda accommodates a total number of 2.41 million private households. Private households account for about 99% of the total resident population. About 83% of private households are located in rural areas. The highest number of private households is observed in the Southern Province with about 600,500 and the lowest in Kigali City with about 282,100. The average mean number of private households per district is 80,000. The number of private households has increased by 37% from 2002.

#### Characteristics of heads of private households

At the national level, 71% of private households are headed by males and 29% by females. The highest percentage of female-headed households (about 33%) is found in the Southern Province. The percentage of female-headed households was found to be decreasing over time, from about 35% across Rwanda in 2002 to about 29% in 2012.

The age of household heads ranges from 12 to 85 or more, with around 40 being the mean age among male heads and around 51 among female heads. About 76% of the private household heads are aged between 25 and 59 while only 1% are aged between 12 and 19. From age 45 and above, the percentage of female-headed households is higher than male-headed households.

About 69% of household heads are currently married, 17% widowed, 11% have never been married and about 4% are separated or divorced. About 54% of female heads are widowed. The percentage of never-married household heads is three times higher in urban areas.

About 32% of household heads have no education, 55% have attended primary school and 8% and 3% have attended secondary school and university respectively. The percentage of household heads with no education is two times higher among females compared to males and is three times higher in rural areas compared to urban ones.

About 83% of household heads are employed, 2% unemployed and 15% inactive. The percentage of employed household heads is higher among males than among females.

#### Size, type and structure of private households

About 63% of private households are nuclear households while extended and composite households account for 17% and 12% respectively. One-person households represent 9% of all private households. Extended households are mostly found among female-headed households while composite households are mostly found in urban areas. Likewise, one-person households are more prevalent in urban areas than in rural areas.

About 74% of all private households have between one and two members aged five and above who are currently employed. The demographic and economic dependency ratios, at the household level, are 94.1 and 145.2 respectively. Demographic dependency ratios are lower in urban areas than in rural areas. The economic dependency ratio is above 200 among female-headed households in urban areas, particularly in Kigali City and the Western and Eastern provinces.

The mean size of private households is around four persons. The household size is higher in rural areas than in urban areas and, on average, male-headed households are one person larger than female-headed households. The mean household size decreased slightly from 4.6 persons in 1978 to 4.3 persons in 2012.

#### Households' ownership of livestock

The RPHC4 revealed that about 58% of private households own livestock. Ownership by type of livestock indicates that poultry, cattle, goats and pigs are the type of livestock mostly owned, with the percentage of private households owning this type of livestock ranging from 15% (pigs) to 32% (cattle). The largest numbers of livestock owned by private households are found in the Eastern and Southern provinces, although, the mean number of livestock per livestock-owning household is higher in Kigali than elsewhere in the country.

#### Types of habitat, occupation arrangements and housing tenure

About 49% of private households are found in clustered rural settlements (*umudugudu*), 34% in dispersed settlements, about 14% in squatter housing and 2% in planned urban housing. The first two categories are mostly found in rural areas while the last two are predominant in urban areas. The high percentage of households found in clustered rural settlements is related to the implementation of the *villagisation* policy that has been ongoing since 2002. Urban housing is dominated by squatter housing.

About 90% of private households are classified as 'house occupied by one private household' while about 9% were classified as 'house occupied by several households'. However, in urban areas, the group 'house occupied by several households' is more prevalent, accounting for about 31% of the households in this area of residence. Several buildings in a compound occupied by one or several households (*urupangu*) represents about 5% of the households in urban areas, while storey buildings occupied by one or more households are almost non-existent, even in urban areas.

While owner occupation still dominates housing tenure, accounting for about 80% of the private households, it has been falling consistently since 1978. Tenant occupation, currently at 15%, has been on the rise over these decades. In urban areas, half of the private households are tenant-occupied.

#### Physical characteristics of the main buildings occupied by households

About 95% of the private households are either built of sun-dried brick walls (about 55%) or wood/mud walls (about 36%).

About 99% of Rwanda's private households use either iron sheets (about 60%) or local tiles (about 39%) as the main material of their roof. In urban areas, about 87% of the households use iron sheet roofs compared to 54% in rural areas. Local tiles are mostly used in the Southern, Northern and Western provinces, while grass roofs have been almost eradicated.

Earth/sand is still the most commonly used material for floors, accounting for the flooring of about 78% of all households. In urban areas, about 64% of households have concrete floors compared to 11% in rural areas. The percentage of households with concrete floors has doubled from about 10% in 1991 to about 20% in 2012.

Residential promiscuity relates the size of households to the size of the households they occupy. On average, there are around two persons per bedroom across Rwanda's households.

#### Households' access to water, sanitation, hygienic facilities and energy

About 73% of the households collect their water from improved water sources, among which protected springs/wells (about 37%) and public taps outside the compound (about 28%) are the most common sources. The percentage of households using improved water sources is higher in urban areas (about 92%) than in rural areas (about 69%). Across provinces, the highest percentage of households with access to improved water sources was observed in Kigali City (about 89%) and the lowest in Eastern Province (about 60%). Access to improved water sources has increased from 51% of all households in 1978 to about 73% in 2012.

About 96% of households have toilet facilities, with unshared pit latrines being the most commonly used across the country (about 88% of those with such facilities). Although at a much lower percentage when compared with rural areas, unshared pit latrines are also the most commonly used in urban areas (about 56% compared to about 88% in rural areas).

About 42% of households use the bush for sewage disposal while 29% either uses sumps, the main sewer or cesspools. The prevalence of the bush as a mode of sewage disposal reduces considerably for households in urban areas. The percentage of households using the bush for sewage disposal in rural areas is more than double that in urban areas (about 46% compared to about 22%). The use of sumps, the main sewer and cesspools is more common in urban areas (about 60%) than in rural areas (about 23%).

About 81% of households either use compost dumping (about 57%) or farms (about 24%) as their main mode of waste disposal. The use of private dustbins gains prominence in urban areas, accounting for about 40%, although compost dumping remains an important mode of waste disposal in these areas too (about 31%).

About 57% of households rely on kerosene lamps (about 40%), candles (about 10%) or firewood (about 8%) as main sources of energy for lighting. Only about 18% of the households have access to electricity, of which 17% comes from the Energy, Water and Sanitation Authority (EWSA). In urban areas, electricity from EWSA is the single most important source of energy for lighting, accounting for about 67%, while kerosene lamps are the most commonly used source of energy for lighting in rural areas (about 44%). Use of electricity for lighting has increased tremendously from about 1% in 1978 to about 18% in 2012.

About 95% of households rely either on firewood (about 82%) or charcoal (about 13%) as main sources of energy for cooking. However, firewood is three times more likely to be used in rural areas (about 93%) than in urban areas (about 31%), while charcoal is 21 times more likely to be used in urban areas (about 63%) than in rural areas (about 3%). To alleviate the intense consumption of biomass energy, the Government of Rwanda (GoR) is promoting the installation of energy-saving stoves in households. However, only 35% of private households currently have these energy-saving stoves.

#### Households' ownership of specific assets

Radios and mobile phones are the most commonly found Information and Communication Technologies (ICT) devices in households (about 64% and 54% respectively). About 8% own a television and 2% a computer. The percentage of households with ICT devices is higher in urban areas than in rural areas. The highest percentages of households with radios and mobile phones are observed in Kigali City.

About 7% of private households have members with access to the Internet. Cyber cafes and offices or schools are the most commonly used places to access the Internet.

About 14% of all households have a bicycle while about 1% have a vehicle or a motorcycle. The percentage of households with vehicles or motorcycles is higher in urban areas (especially Kigali City) than in rural areas. Bicycles are the most commonly transportation-related asset. The highest percentage of households with bicycles is found in the Eastern Province (about 32%).

# Chapter 1: Overview of the Fourth Rwanda Population and Housing Census

#### 1.1 Context and justification

The history of the Population and Housing Census in Rwanda dates back to the 1970s. To date, four modern censuses have successfully been conducted in Rwanda, in 1978, 1991, 2002 and 2012.

The 2002 Census collected a number of demographic and socio-economic characteristics and indicated a total population of 8,128,553 people. Following the United Nations Decennial Census Program, the 2012 Census is the Fourth Rwanda Population and Housing Census (RPHC4). It indicates that the country now has a total population of 10,515,973 people.

Besides the endorsement of recommendations from major international conferences held under the auspices of the United Nations, the Government of Rwanda (GoR) has been focusing since 2000 on the long-term Vision 2020 that aims at transforming Rwanda into a middle-income country. This is being implemented through the medium-term planning framework of the Economic Development and Poverty Reduction Strategy (EDPRS) for successive five-year periods. The measurement of progress in implementing the EDPRS and the various UN recommendations calls for the availability of demographic and socio-economic statistical data to inform the selected indicators at different levels.

The RPHC4 is a reliable and comprehensive source of data, which compared to other official statistics data sources (administrative data, surveys, etc.) allows for disaggregation to the lowest geographical level.

The RPHC4 was undertaken to update the national mapping and demographic databases, to provide indicators for monitoring poverty reduction strategies and achievement of international development goals (MDGs, ICPD-PoA, NEPAD, etc.) and to strengthen the technical capacity of the National Institute of Statistics of Rwanda (NISR).

A more detailed discussion of the long- and short-term objectives of the Census is presented in Annex A of this report.

#### 1.2 Legal and institutional frameworks

As an essential precondition for Census execution, the legalization of its operations was secured by a Presidential Decree officially establishing and determining the administrative organization of the Census. In addition, a Ministerial Order of the Minister of Finance and Economic Planning has set forth the official and statutory requirements for Census activities.

The institutional framework set up for implementing the RPHC4 consists of three main bodies: the National Census Commission (NCC), the Census Technical Committee (CTC) and the decentralized branches of the NCC at province and district levels.

In order to ensure focused functioning during the whole period of Census execution, a Census Unit was created within the NISR, as an executing unit, and benefiting from other financial, logistical and technical support services from the NISR.

#### 1.3 Census phases

Following the preparatory phase of the Census, which consisted of the production of the project documents, schedule and Census budget, the following technical activities were undertaken:

- Census mapping;
- A Pilot Census;
- Questionnaire and manual development;
- Census publicity and sensitization campaign;
- Recruitment and training of field staff;
- Census enumeration; and
- Post-enumeration activities.

Further details on all Census phases can be found in Annex A of this report.

The success of the RPHC4 is attributable largely to the rigorous pre-Census planning and robust Census enumeration monitoring undertaken by the NISR as well as the remarkable support received from the Government and people of Rwanda and the generous technical and financial assistance given by international development partners.

# Chapter 2: Context, objectives and methodology of the analysis

As in previous Rwandan Censuses, data for the RPHC4 were collected at the household level. Two types of households were considered: private households and institutional households. Among others the data collected focus on the spatial distribution of households, the distribution of households by different background characteristics of household heads, and on housing characteristics. This chapter focuses on the context, objectives and methodology of the analysis.

#### 2.1 Context

Since the beginning of the 20th century, Rwanda has undergone profound social, administrative, political and economic changes that have had a large impact on the society and on housing conditions.

Rwandan society is traditionally favourable to marriage and then to the formation of a nuclear family and procreation. Social relationships have been based more on nuclear, extended families and neighbourhoods. The Rwandan family has always been considered the core of life, the cradle of the future and the pillar of happiness: it is within family that a child is conceived, born, educated and given to the community for the good of society. This is recognised by the Constitution of the Republic of Rwanda. It is also within the family that the first interpersonal relationships are tied and exchange, comparison and identification opportunities obtained.

Today, it must be noted that social links in the country have suffered greatly from the tragedies of recent years (1991-1994), such that it is not easy to have a clear picture of the changes that have taken place and thus affected the attitudes of individuals within the community. Rwandan society is becoming more individualistic, due to the influences of western education and economic hardship. Moreover, the roles of family members have changed, especially in regard to women, who are no longer limited to their traditional roles as wives and mothers and are nowadays required to undertake social and professional roles. Currently there are a large number of educated women who are heading public and private companies, while many others have started businesses and are less dependent upon males, especially in urban areas. Traditionally, the head of the family used to be an adult man. However, following the 1994 Genocide against the Tutsi there are now a large number of households headed by women or young people. For instance, according to SNR (2005c), 35% of household heads were female in 2002 compared to 25% in 1991 (SNR, 1994).

In terms of the patterns of human settlements and housing, the country has undergone tremendous changes since colonisation. Before colonisation, the population lived in scattered and untidy settlements. The household was made up of one or several huts encircled with a plant enclosure. In the 1950s, Belgian colonisers initiated the villagisation policy. The first grouped villages were created in the regions surrounding the Rugezi marshland. At the same time, the Belgians started the *Paysannat* system, marked by linear scattered housings along roads in the regions around the Akanyaru valley. The villagisation policy stopped in the mid-1950s because of the political evolution (Twarabamenye, 1991), while the *Paysannat* system continued up to the late 1970s, when it was terminated due to the lack of funds and free land. In the late 1970s and early 1980s, the Government of Rwanda (GoR) attempted to re-implement *villagisation* through pilot villages in the Gashora and Sake communes, but the programme failed because infrastructure and services were not installed in the newly created villages (Bart, 1993). Simultaneously, new building materials were adopted in these schemes that led to the abandonment of grass and wood as the

main building materials. The adoption of new building materials was facilitated by a rate of economic growth that provided enough financial resources to afford modern building materials such as burned bricks, iron sheets, local tiles, etc. Indeed, GDP per capita increased from USD 250 in the early 2000s to USD 640 by 2012.

In the meantime, rural agglomerations emerged spontaneously around religious places, schools, health centres, markets, administrative centres, etc. and were developing in a generally haphazard manner. The GoR tried to organise such developments after the mid-1970s, recommending that all services be grouped at one site to allow for the provision of basic services such as drinking water, electricity, sanitation, etc. This was operationalised under a policy called *Plan d'Action Communale*. However, there were few coercive measures (especially for non-government initiated services) and consequently the programme did not succeed.

The *villagisation* policy was again attempted in 1996 by the GoR with the goal of providing genocide against the Tutsi survivors and returning refugees with shelter. The programme, which was implemented by local and international NGOs, started in the Eastern Province on new land reclaimed from the Mutara Hunting Domain, and on two-thirds of the Akagera National Park. In 2000, the population residing in scattered settlements within the province were asked to move to new village sites. At the same time, in Musanze District in the Northern Province, thousands of people were advised by the GoR to settle in villages in order to be effectively protected by the national army which was fighting rebels from the Democratic Republic of Congo. Based on the success of these operations, the GoR decided that the grouped and planned settlements were to be the only settlement patterns accepted in Rwanda. This was made compulsory with the publication of the law governing land use in the Official Gazette of the Republic of Rwanda in 2005. Since then, local governments have been asked to implement this policy, although the results of such implementation vary from one province to another.<sup>1</sup>

The other important change in recent decades is urbanisation. The first urban centres were military posts set up by German colonisers. Some of them stagnated or even declined while others such as Musanze, Rubavu, Rusizi and Kigali prospered. During the colonial period, the level of urbanisation remained very low due to administrative restrictions and social and religious beliefs. At the time of the country's independence in 1962, less than 1% of the Rwandan population resided in urban areas. By 2008, following the suppression by the post-1994 GoR of all restrictions on settling in urban areas, the level of urbanisation reached 18%. However, urban development has again taken place in haphazard manner, leading to huge informal settlements (especially in Kigali City). This led the Government to adopt the Human Settlement Policy and National Urban Housing Development schemes in 2004 and 2009 respectively. The two policies aim at improving the living conditions of the population in rural and urban areas. Master plans and local plans for land use have been developed.

Moreover, the GoR has passed the National Policy on Water and Sanitation, the National Energy Policy and the National Energy Strategy 2008–2012. The first policy aims at raising water supply coverage to 85% of Rwandan households by 2012 and to 100% by 2020, and at ensuring safe, reliable and affordable water supply services for all urban residents by 2012. In regard to sanitation, this policy aims to raise the coverage of the basic sanitation system to 65% of all households by 2012 and 100% by 2020, as well as to promote hygiene-related behavioural change (MININFRA, 2010). The second policy aims at increasing the access of both enterprises and

<sup>&</sup>lt;sup>1</sup> Data on *villagisation* available in the 2002 report on the RHPC3 and the 2005/2006 and 2010/2011 Integrated Households Living Conditions Surveys (EICV) show that the Eastern Province is the province where the policy has been most implemented.

households to electricity (MININFRA, 2009). Moreover, to provide vulnerable households with adequate housing, the GoR initiated the Eradication of Thatched Houses programme in 2008. The GoR provides building materials such as iron sheets and nails to the most vulnerable households, while the construction work itself is done mainly by the local community.

Another factor relevant to this thematic report is that Rwanda has experienced several administrative reforms, especially since the early 1990s. The first administrative reform was the constitution of Kigali Prefecture with three communes (Kimihurura, Kacyiru and Nyarugenge) in 1991. The second was in 1995 with the constitution of Umutara Prefecture, integrating parts taken from Byumba and Kibungo prefectures. The third took place in 2000 with the merging of communes into districts, and the prefectures becoming provinces. Based on this reform, the number of communes fell from 156 to 106 districts and 11 provinces, including Kigali City. The urban areas of respective cities/towns were also enlarged. The last administrative reform occurred in late 2005 and divided the country into four provinces (the Southern, Northern, Eastern, and Western provinces) and Kigali City. This round of reforms brought the number of districts to 30. These successive administrative reforms make tracing the evolution of households and housing far from straightforward, especially at the local and district levels.

#### 2.2 Objectives

The overall objective of this report is to provide the number of households in Rwanda and to classify them by type and living conditions, giving a particular emphasis on private households. The report aims at providing evidence of the impact of a number of policies designed to improve the population's living conditions. Where possible, the RPHC4 findings will be compared with results from the previous Censuses conducted in 1978, 1991 and 2002. To this end, the report will:

- analyse the number and spatial distribution of households and the evolutions since 1978;
- describe the main characteristics of the heads of private households;
- analyse the size, type, structure and residential promiscuity of private households;
- describe the types of habitat and buildings occupied by private households and the tenure of the households:
- analyse households' access to improved water sources and basic sanitation, their hygiene practices, and the types of energy used for lighting and cooking;
- examine household members' access to the Internet as well as households' ownership of specific assets and livestock; and
- analyse the living standards of households.

#### 2.3 Methodology

Census data were coded, computer-entered and processed to produce tables. Descriptive statistics were applied to produce tables featuring statistical counts, proportions, means and medians. Maps and graphs were produced to illustrate and highlight the key findings of the report.

#### 2.4 Definition of basic concepts

**Household**: the concept of the household is based on the arrangements in regard to food or other essentials for living.

**Private household:** consists of one or more persons living together and sharing at least one daily meal. Persons in a private household may or may not be related, or may constitute a combination of persons both related and unrelated. Private households can be classified in four types: one-person households, nuclear households, extended households and composite households.

#### Types of private households:

According to the United Nations Statistics Division (UNSD), there are four types of private households.

- One-person household refers to a person who makes provision for his or her own food or other essentials for living without combining these endeavours with any other person.
- Nuclear household composed of a single family consisting of a married or unmarried couple without children or of one or both parents and their children and eventually their house employees.
- Extended household defined as a household consisting of any one of the following: (i) a single family nucleus and other persons related to the nucleus, for example a father with child(ren) and other relative(s) or a married couple with other relative(s) only; (ii) Two or more family nuclei related to each other without any other persons, for example two or more married couples with child(ren) only; (iii) two or more family nuclei related to each other plus other persons related to at least one of the nuclei, for example two or more married couples with other relative(s) only; and (iv) two or more persons related to each other, none of whom constitute a family nucleus.
- Composite household refers to a household consisting of any of the following: (i) A single family nucleus including other persons, some of whom are related to the nucleus and some are not, for example a mother with child(ren) and other relatives and non-relatives; (ii) A single family nucleus including other persons, none of whom is related to the nucleus, for example a father with child(ren) and non-relatives; (iii) Two or more family nuclei related to each other including other persons, some of whom are related to at least one of the nuclei and some of whom are not related to any of the nuclei, for example two or more couples with other relatives and non-relatives only; (iv) Two or more family nuclei related to each other including other persons, none of whom is related to any of the nuclei, for example two or more married couples, one or more of which also have child(ren) and non-relatives present; (v) Two or more family nuclei not related to each other, with or without any other persons; (vi) Two or more persons related to each other but none of whom constitute a family nucleus, plus other unrelated persons; and (vii) Non-related persons only.

**Institutional household:** comprises a group of persons who are being provided with institutionalised care, and includes educational institutions, health care institutions, military institutions, religious institutions, or institutions for the elderly or persons with disabilities. In the RPHC4, persons who were homeless on the night of the Census were also classified as belonging to an institutional household.

**Head of household**: refers to a person recognised as such by the respondent. Every private household has one and only one household head.

**Marital status:** personal status of each individual in relation to the marriage laws or customs of the country and defined in the Census in five categories: *Never married*: an individual who has never been in a union; *Married*: an individual who was in marital union at the moment of the Census, legally or not; *Divorced*: an individual who has been separated from his or her spouse through a

court decision, according to legislation; *Separated*: an individual who has separated temporarily from his/her spouse and is awaiting the court decision; *Widowed*: a man or a woman who has lost his or her spouse by death, not yet remarried. The marital status of all usual residents aged 12 and above is enquired about in the Census questionnaire.

**Demographic dependency ratio**: is measured as the ratio between those typically not in the labour force and the age group typically in the labour force. Using the national definition of working age, it is defined as the sum of persons aged 0 to 15 and elderly people aged 60 and above, divided by the population in the 16 to 59 age group, multiplied by 100. For international comparisons, age groups 0 to 14 and 65 and above are used to identify dependents.

**Unemployed population**: refers to persons who, during the seven-day period before the Census night, were without work but available for work. This constitutes the 'relaxed' definition of unemployment, as the condition of *seeking* work during the reference period is not taken into consideration.

**Economically active population/labour force:** refers to the sum of the employed and unemployed populations.

**Inactive population**: refers to persons who during the seven-day period before the Census night were without work and not available for work. These include persons looking after the house/family, students, people who have retired and persons who consider themselves too old to work.

**Housing Unit**: a separate and independent place of abode intended for habitation by a single household or more than one household at the time of the Census. The essential features of households are separateness and independence. An enclosure may be considered separate if surrounded by walls, fences, and so forth, and covered by a roof so that a person or group of persons can isolate themselves from other persons in the community for the purposes of sleeping, preparing and taking their meals, and protecting themselves from the hazards of climate and environment.

**Structure**: for Census purposes, a structure constitutes a building used for dwelling purposes. A structure can contain one or more households.

**Types of habitat**: there are five types of habitat for private households: clustered rural settlements (*umudugudu*)/old settlements, dispersed/isolated habitats, planned urban housing (cadastre), and spontaneous or squatter habitats (*Akajagari*).

**Housing tenure**: refers to legal occupation of the dwelling. Usually, occupancy here is defined as owner, tenant, hire purchase, free lodging, staff housing or refugee/temporary camp settlement.

**Room**: a space in a household enclosed by walls reaching from the floor to the ceiling or roof covering, or to a height of at least two metres, of an area large enough to hold a bed for an adult (i.e. at least four square metres). Passageways, verandas, lobbies, bathrooms and toilet rooms are not counted as rooms, even if they meet the criteria.

**Bedroom**: a room equipped with a bed and used for night rest.

**Sources of water**: have been split into improved and unimproved sources. Improved sources include internal pipe-borne water, pipe-borne water in the compound, public tap outside the compound, protected spring/well, and rain water. These categorisations are based on the definition

developed by the World Health Organization (WHO) and the United Nations Children's Fund (UNICEF) Joint Monitoring Programme in 2010. It may be noted that rain water is sometimes not considered an improved source of water in the context of Rwanda; however, this report complies with the international standard described above, and the inclusion of rain water in the improved sources of water does not affect the level of the indicator to any significant degree since less than 1% of households use it. Unimproved sources include unprotected springs/wells, rivers and lakes/streams/ponds/surface water.

**Energy-saving stove**: refers to a unit commonly known as 'Rondereza' mainly made from clay soil, grass and sand. It is used to restrain the high levels of consumption of fuel wood/charcoal which leads to deforestation.

**Sewage disposal**: refers to the system of collecting waste water. It includes sumps, courtyards, rivulets/trenches/channels, main sewers, and cesspools.

# Chapter 3: Number, spatial distribution and evolution of the households between 1978 and 2012

The number of private households is dynamic simply because a country's population is also dynamic. The changes take place in both urban and rural areas. The distribution of private households allows for a comparison to be made between administrative units and areas of residence. Data on households provide some patterns that allow the identification of contrasts between urban and rural areas. It is also used for many planning purposes. The analysis focuses mainly on the distribution of private households by household types and area of residence.

#### 3.1 Number and spatial distribution of private households

The RPHC4 reveals that there are about 2.41 million private households in Rwanda.<sup>2</sup> As one would expect, Table 1 shows that most of the private households (about 83%) are located in rural areas and that they comprise a roughly similar percentage of the total population.

Table 1 also shows that the number of private households varies considerably across provinces. The highest number of private households is observed in the Southern Province (about 600,476) and the lowest in Kigali City (about 282,131). In general, a larger share of private households lives in rural areas and represents a larger share of the resident population – Kigali City, where about 76% of the 282,000 private households live in urban areas, is an exception to this trend. In other provinces, the percentage of households located in urban areas is below 10%.

It is important to note that Table 1 (and, indeed, this entire report) distinguishes carefully between private households and private households. The numbers differ slightly. This is because there are a few households in Rwanda which are not inhabited by a resident household.

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Table 1: Distribution (number) of private households and their resident population by province and area of residence

Province and Area of	Number of Private	Number of Private	Resident population (Private	
Residence	Households	Households headed by	Households)	
		resident head of households	ŕ	
Rwanda				
Urban	416,779	408,611	1,678,786	
Rural	2,008,119	1,997,565	8,699,235	
Total	2,424,898	2,406,176	10,378,021	
Kigali City				
Urban	216,902	213,130	843,075	
Rural	69,762	69,001	271,559	
Total	286,664	282,131	1,114,634	
South				
Urban	51,946	51,133	210,711	
Rural	551,854	549,343	2,337,135	
Total	603,800	600,476	2,547,846	
West				
Urban	67,230	65,867	294,719	
Rural	476,264	474,236	2,143,636	
Total	543,494	540,103	2,438,355	
North				
Urban	34,735	33,869	147,597	
Rural	356,933	355,392	1,561,090	
Total	391,668	389,261	1,708,687	
East				
Urban	45,966	44,612	182,684	
Rural	553,306	549,593	2,385,815	
Total	599,272	594,205	2,568,499	

Source: Fourth Rwanda Population and Housing Census, 2012.

Table 2 shows that the number of private households varies greatly across districts. On average, there are about 80,000 private households per district. Gasabo, Nyagatare and Gatsibo are the districts with the highest number of private households (each with more than 95,000 households), while the lowest number of private households is observed in Nyaruguru and Nyabihu (about 63,000 and 65,000, respectively).

Table 2: Distribution (number) of households and their resident population by province and district

Province and District	Number of Households	Number of Private Households headed by	Resident population (Private Households)	
		resident head of households	Households	
Rwanda	2,424,898	2,406,176	10,378,021	
Kigali City				
Nyarugenge	72,280	71,490	280,104	
Gasabo	137,146	134,852	519,886	
Kicukiro	77,238	75,789	314,644	
South				
Nyanza	77,522	76,973	315,897	
Gisagara	77,259	76,694	321,564	
Nyaruguru	63,613	63,196	293,391	
Huye	77,915	77,451	318,737	
Nyamagabe	74,848	74,470	325,869	
Ruhango	76,968	76,580	319,607	
Muhanga	75,207	74,996	312,704	
Kamonyi	80,468	80,116	340,077	
West				
Karongi	73,326	72,825	315,153	
Rutsiro	71,267	71,007	321,761	
Rubavu	88,849	87,925	396,231	
Nyabihu	65,855	65,567	294,015	
Ngororero	78,963	78,622	333,307	
Rusizi	83,180	82,775	396,816	
Nyamasheke	82,054	81,382	381,072	
North				
Rulindo	67,453	67,110	287,081	
Gakenke	79,760	79,176	337,715	
Musanze	84,756	84,325	366,959	
Burera	73,624	72,990	335,788	
Gicumbi	86,075	85,660	381,144	
East				
Rwamagana	74,175	73,533	307,107	
Nyagatare	105,365	104,478	464,353	
Gatsibo	96,320	95,759	420,466	
Kayonza	80,517	79,652	343,496	
Kirehe	77,879	77,062	339,791	
Ngoma	79,647	79,260	334,153	
Bugesera	85,369	84,461	359,133	

Source: Fourth Rwanda Population and Housing Census.

# 3.2 Evolution between 1978 and 2012 in the number and spatial distribution of households

As shown in Table 3, the number of private households has changed dramatically since 1978; in a nearly 35-year period, the number of private households has more than doubled. The increase was particularly marked between 1978 and 1991 and between 2002 and 2012, with intercensal growth of about 42% and 37% respectively.

Table 3: Evolution between 1978 and 2012 of the number of private households and intercensal growth rate

Year	Number of private households	Intercensal growth rate
1978	1,055,950	-
1991	1,502,153	42.3%
2002	1,757,426	16.0%
2012	2,406,176	37.0%

Source: Rwanda Population and Housing Censuses 1978, 1991, 2002 and 2012.

# Chapter 4: Private household headship rates by age and sex and background characteristics of households heads

Demographic and socio-economic data collected at the household level is a useful source of information for policy-makers and planners for strategic planning because changes at this level may have an impact on the country's development. Information on the heads of private households is also important as it can inform about households' living conditions, including the characteristics of households. This chapter focuses on the characteristics of private household heads. It starts by reviewing the distribution of private household heads by sex, age and area of residence and the evolution since 1978 and, then, presents a profile of household heads by selected background characteristics such as marital status, sex, educational level and economic activity status. Particular attention is given to female-headed households, first because they are considered more likely to be vulnerable than their male-headed counterparts but also because their behaviour tend to be different. For instance, it is now well documented that children from female-headed households are more likely to attend school than children from male-headed households.

### 4.1 Distribution of the head of household by sex, age and area of residence

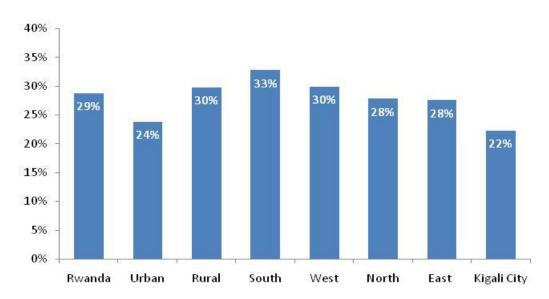
Table 4, presenting the distribution of private households by sex of the head, province and area of residence, shows that about 71% of private households, at the national level, are headed by males and about 29% are headed by females. When areas of residence are considered, the percentage of male-headed households is higher in urban areas (about 76%) than in rural areas (about 70%).

At the provincial level, the highest percentage of male-headed households is found in Kigali City (about 78%) and the lowest in the Southern Province (about 67%). The highest percentages of female-headed households are found in the Southern Province (about 33%) and the Western Province (about 30%), as Table 4 illustrates. The predominance of male headship is, among other factors, related to cultural aspects in Rwandan society, where the husband or the oldest male in the household is regarded as the household head without considering whether he is the primary source of income in the household, his authority or his fulfilment of other tasks generally attributed to the household head. This leaves females to become the heads of households only in particular circumstances, such as widowhood, or mental incapacity, imprisonment, migration of the husband, etc.

Table 4: Distribution (percentage and number) of private households by sex of the household head, province and area of residence

Province and	Sex of the head household			Number of
Area of residence	Male	Female	Both sexes	households
Rwanda				
Urban	76.3%	23.8%	100.0%	408,611
Rural	70.2%	29.8%	100.0%	1,997,565
Total	71.2%	28.8%	100.0%	2,406,176
Kigali City				
Urban	79.2%	20.8%	100.0%	213,130
Rural	73.2%	26.8%	100.0%	69,001
Total	77.8%	22.3%	100.0%	282,131
South				
Urban	70.7%	29.3%	100.0%	51,133
Rural	66.9%	33.1%	100.0%	549,343
Total	67.2%	32.8%	100.0%	600,476
West				
Urban	73.5%	26.5%	100.0%	65,867
Rural	69.7%	30.3%	100.0%	474,236
Total	70.1%	29.9%	100.0%	540,103
North				
Urban	73.3%	26.7%	100.0%	33,869
Rural	72.1%	27.9%	100.0%	355,392
Total	72.2%	27.8%	100.0%	389,261
East				
Urban	74.6%	25.4%	100.0%	44,612
Rural	72.3%	27.7%	100.0%	549,593
Total	72.5%	27.6%	100.0%	594,205

Figure 1: Percentage of female-headed private households by province and area of residence



Source: Fourth Rwanda Population and Housing Census.

Table 5, presenting the evolution in the percentage of households headed by females since 1978, shows that the percentage of households headed by females did not change between 1978 and 1991. However, during the period between 1991 and 2002, the percentage of households headed by females increased considerably to reach about one-third of all private households in the country. This evolution is probably related to the impact of the 1994 genocide against the Tutsi and its aftermath. The decrease observed in the percentage of female-headed households in the

period between 2002 and 2012 may be the beginning of a return to the situation observed in 1978-91.

Table 5: Evolution in the percentage of households headed by females from 1978 to 2012

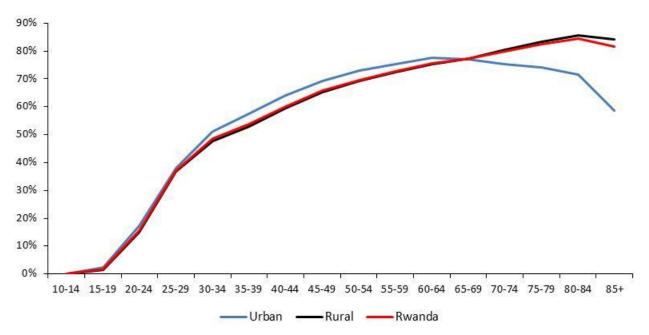
Year	Percentage of households headed by female						
	Urban	Rural	Rwanda				
1978	20.6	25.4	25.2				
1991	21.8	25.2	25.0				
2002	31.8	35.8	35.2				
2012	23.8	29.8	28.8				

Source: Rwanda Population and Housing Censuses 1978, 1991, 2002 and 2012.

#### 4.2 Household headship rate by sex, age and area of residence

Figure 2 presents household headship rates by age and area of residence. It shows that, in general, private household headship increases along with age. This means that the older the age of an individual, the higher is his or her chance of being a household head. However, when the area of residence is considered, each area displays different characteristics. First, between the ages of 12 and 29, headship rates are very similar for both urban and rural areas, ranging from 0.2% to about 38%. Second, headship rates in urban areas are slightly higher than in rural areas between the ages of 30 and 64, although on average they increase at a relatively similar rate (from 51% to 78% in urban areas and from 48% to 75% in rural areas). Then, from 65 and above they reduce from about 77% to 59% in urban areas. In contrast, headship rates in rural areas increase consistently between the ages of 30 and 84 (from about 48% to 86%), decreasing thereafter. As a result, from 65 onwards headship rates are higher in rural areas than in urban areas.

Figure 2: Household headship rates among private households by age and area of residence



Source: Fourth Rwanda Population and Housing Census. Notes: (1) See Table 47 in Annex D for details on the base population used in this figure.

Figure 3, presenting private household headship rates by age and sex, shows that when sex is considered, headship rates display sharper contrasts than those observed for areas of residence. Headship rates among male-headed households increase faster between the ages of 15 and 34 (a 29-fold increase from about 3% to 87%). Then, they slow down and stabilise. By contrast, headship rates among female-headed households increase at a relatively slower pace among

young people (from about 1% at the ages between 15 and 19 to about 13% at 30 to 34). Subsequently, they accelerate thereafter to reach the highest value of about 76% at between the ages of 80 and 84.

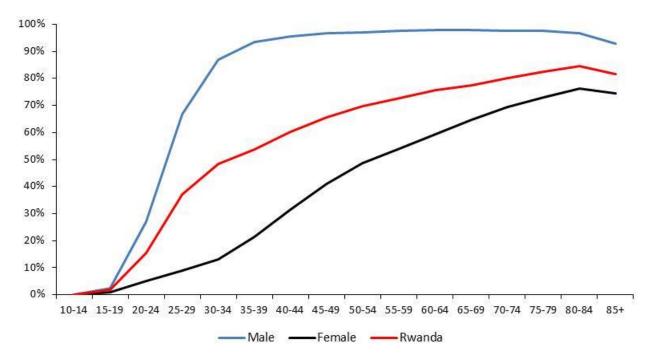


Figure 3: Household headship rates among private households by age and sex

Source: Fourth Rwanda Population and Housing Census. Notes: (1) See Table 47 in Annex D for details on the base population used in this figure.

#### 4.3 Background characteristics of household heads

Figure 4 presents the distribution, at the national level, of private household heads by age and sex. It shows that the distribution of male household heads is asymmetric, while that of female household heads is symmetric. As a result, the percentage of male household heads is higher between the ages of 20 and 39 years while that of female household heads is higher from the age of 45. This means that the percentage of households headed by individuals aged 60 and above is also higher among female heads than male heads. Finally, the percentage of households headed by younger individuals (aged between 12 and 19), at about 1% in each case, is very low. This is to be expected as the legal age of marriage in Rwanda is 21 years, although people below this threshold can be authorised to get married under some particular circumstances. Moreover, young children, especially when they are orphans, are usually hosted in relatives' households until they reach the age of 18, at which age they are considered adults.

80-84 75-79 70-74 65-69 Age (in 5-year Groups) 60-64 55-59 ■ Female 50-54 Male 45-49 40-44 35-39 30-34 25-29 20-24 15-19 10-14 0,0 4,0 6,0 8,0 10,0 12,0 14,0 16,0 18,0 20,0 2,0 % of households

Figure 4: Distribution of household heads by age and sex

Source: Fourth Rwanda Population and Housing Census. Notes: (1) See Table 49 in Annex D for details on the base population used in this figure.

Figure 5 and Figure 6 present the distribution of household heads by age, sex and area of residence. Figure 5 shows that the age—sex distribution of household heads in rural areas is similar to the one observed at the national level, with a higher percentage of male household heads being found at ages between 20 and 39 and a higher percentage of female household heads found from the age of 45 and above. Again, the percentage of household heads aged 60 and above is higher among female heads.

Figure 6 shows that, in urban areas, while the age—sex distribution of male household heads resembles the one observed at the national level, this is not the case with the distribution of female household heads. This time, it is no longer symmetric and presents a pattern closer to the one observed for male heads. However, the key contrasts observed before remain: the percentage of male household heads, although less accentuated, remains higher at ages between 20 and 39 years and the percentage of female heads is higher from the age of 45. The percentage of household heads aged 60 and above also remains higher among females (about 19% compared to 5%). In sum, male household heads tend to be younger than female household heads and this is more pronounced in rural areas.

85+ 80-84 75-79 70-74 65-69 Age (in 5-year Groups) 60-64 55-59 ■ Female 50-54 ■ Male 45-49 40-44 35-39 30-34 25-29 20-24 15-19 10-14 0,0 4,0 6,0 8,0 10,0 14,0 2,0 12,0 16,0 18,0 20,0

Figure 5: Distribution of household heads by age and sex in rural areas

Source: Fourth Rwanda Population and Housing Census. Notes: (1) See Table 49 in Annex D for details on the base population used in this figure.

% of households

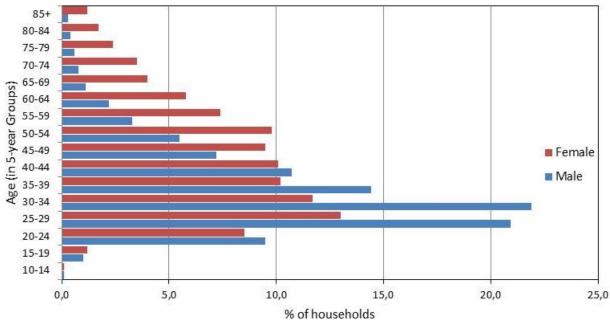


Figure 6: Distribution of household heads by age and sex in urban areas

Source: Fourth Rwanda Population and Housing Census. Notes: (1) See Table 49 in Annex D for details on the base population used in this figure.

Table 6 shows that the mean age of private household heads, at the national level, is 43 years. When the sex is considered the mean age is 40 among males and 51 among females, thus confirming the findings discussed earlier in this section of the report. At the national level, the mean age of household heads for both sexes is higher in rural areas (about 41 for males and about 52 for females) than in urban areas (about 37 for males and 44 for females).

Table 6: Mean age of private household heads by sex and area of residence

Area of residence	Male		Female	Both Sexes
Rwanda		40.4	50.8	43.4
Urban		36.6	44.2	38.4
Rural		41.2	51.8	44.4

Table 7 shows that, at the national level, the mean age of male household heads decreased slightly between 1978 and 2012 while the mean age of female household heads increased. In rural areas, for both sexes, the mean age decreased between 1978 and 1991, and then increased. Conversely, in urban areas, the mean age of male and female household heads has been decreasing since 1978. This evolution in urban areas may be related to the impact of massive rural—urban migration that has channelled young people toward urban areas since the late 1970s.

Table 7: Evolution between 1978 and 2012 of the mean age of private household heads by sex and area of residence

Area of residence	Mean age	Mean age										
	Male				Female							
	1978	1991	2002	2012	1978	1991	2002	2012				
Rwanda	41.6	40.9	40.4	40.4	48.8	46.5	43.3	50.8				
Urban	41.4	40.6	39.9	36.6	48.4	48.5	46.2	44.2				
Rural	37.8	36.7	37.4	41.2	45.2	42.3	44.0	51.8				

Source: Rwanda Population and Housing Censuses 1978, 1991, 2002 and 2012.

Table 8, presenting the distribution of household heads by marital status, sex and area of residence, shows that at the national level about 69% of household heads are married, 17% widowed, 11% have never been married and 4% are separated or divorced. It also shows that the percentage of household heads that have never been married is three times higher in urban areas than in rural areas (about 24% and 8% respectively) while widowed household heads are mostly found in rural areas rather than in urban areas (about 18% and 11% respectively). It is common to find many young urban residents sharing households as well as single adults hosting relatives. While widowhood among household heads is more common in rural areas, this phenomenon affects almost exclusively females. Across all Rwanda, there are 25 times more female household heads who are widowed than their males while, in urban areas, this is even higher; the proportion of female household heads who are widowed is 30 times higher than their male counterparts. The high prevalence of female household heads that are widowed is a common feature in Rwanda as widowed females hardly ever get remarried.

Table 8 further shows that the percentage of currently married is higher among male household heads (87%) than among their female counterparts (24%). When areas of residence are considered, this trend is slightly more pronounced among rural residents than among urban residents.

Table 8: Distribution (%) of the private household heads by current marital status by sex and area of residence

Area of residence			Sex
and Current marital	Male	Female	Both sexes
status	Maio	Temale	Dotti ockes
Rwanda			
Never married	10.0%	11.8%	10.5%
Currently married	86.5%	24.1%	68.5%
Separated	0.3%	1.7%	0.7%
Widowed	2.0%	53.9%	17.0%
Divorced	1.1%	8.3%	3.2%
Not stated	0.0%	0.2%	0.1%
Total	100.0%	100.0%	100.0%
Count	1,713,295	692,881	2,406,176
Urban			
Never married	24.3%	24.0%	24.2%
Currently married	72.8%	22.1%	60.8%
Separated	0.3%	2.2%	0.8%
Widowed	1.3%	40.4%	10.6%
Divorced	1.2%	11.1%	3.6%
Not stated	0.1%	0.2%	0.1%
Total	100.0%	100.0%	100.0%
Count	311,551	97,060	408,611
Rural			
Never married	6.8%	9.8%	7.7%
Currently married	89.5%	24.4%	70.1%
Separated	0.3%	1.7%	0.7%
Widowed	2.2%	56.0%	18.3%
Divorced	1.1%	7.9%	3.1%
Not stated	0.0%	0.2%	0.1%
Total	100.0%	100.0%	100.0%
Count	1,401,744	595,821	1,997,565

Table 9 presents the distribution of private household heads by education and area of residence. It shows that, across all Rwanda, about one-third of private household heads have no education, about half have attended either pre-school or primary school, and that about one-tenth attended secondary school or university. The high percentage of household heads who attended primary school is related to the development and affordability of primary education. For a long time, secondary and university education were elitist and expensive; therefore, access to these levels of education has not been easy and affordable for the majority of Rwandans.

When areas of residence are considered, Table 9 reveals a clear advantage for urban areas in comparison to rural areas. The percentage of household heads with no education more than doubles from urban to rural areas, while the percentage of those that have received either post-primary, secondary or university education reduces five times.

Table 9 also shows that proportion of female household heads with no education is twice as high as that of male household heads and that this disparity is higher (by about three times) when urban/rural divisions are considered. The percentage of household heads who have post-primary, secondary and university is higher among the male household heads (about 14%) than their female counterparts (about 8%).

Table 9: Distribution (%) of the private household heads by level of education by sex and area of residence

Area of residence			Sex
and Level of		F	Dath arms
education	Male	Female	Both sexes
Rwanda			
No Education	24.0%	51.7%	32.0%
Preschool	0.2%	0.2%	0.2%
Primary	60.7%	39.3%	54.6%
Post-primary	2.0%	1.7%	1.9%
Secondary	8.8%	5.0%	7.7%
University	3.5%	1.4%	2.9%
Not stated	0.7%	0.6%	0.7%
Total	100.0%	100.0%	100.0%
Count	1,713,295	692,881	2,406,176
Urban			
No Education	9.4%	27.3%	13.7%
Preschool	0.2%	0.3%	0.2%
Primary	47.9%	40.9%	46.3%
Post-primary	2.4%	3.0%	2.5%
Secondary	24.2%	19.7%	23.1%
University	15.0%	8.0%	13.3%
Not stated	0.9%	0.9%	0.9%
Total	100.0%	100.0%	100.0%
Count	311,551	97,060	408,611
Rural			
No Education	27.3%	55.7%	35.7%
Preschool	0.2%	0.2%	0.2%
Primary	63.6%	39.1%	56.3%
Post-primary	1.9%	1.5%	1.8%
Secondary	5.4%	2.6%	4.6%
University	1.0%	0.3%	0.8%
Not stated	0.6%	0.6%	0.6%
Total	100.0%	100.0%	100.0%
Count	1,401,744	595,821	1,997,565

Table 10 presents the distribution of household heads by economic activity status, sex and area of residence. At the national level, about 83% of household heads are employed, 15% inactive and 2% unemployed. The percentage of unemployed household heads in urban areas is double that observed in rural areas. The high percentage of the employment among household heads is close to the one observed in the EICV3 in 2010/2011 (about 84%).

When sex is considered, Table 10 shows that across all Rwanda, the proportion of female household heads who are inactive is twice as high than that of male household heads. When the area of residence is considered, this trend is more predominant in urban areas where the proportion of female household heads who are inactive is three times higher and twice higher when the unemployed are considered. This finding is consistent with the age—sex distribution of female household heads previously discussed when it was observed that the percentage of female household heads was higher in urban areas than rural ones (see Figure 5 and Figure 6).

Table 10: Distribution (%) of the private household heads by economic activity status by sex and area of residence

Area of residence and	Sex		
Economic activity	Male	Female	Both sexes
status			
Rwanda			
Employed	87.1%	73.0%	83.1%
Unemployed	1.9%	2.4%	2.1%
Inactive	10.9%	24.6%	14.9%
Total	100.0%	100.0%	100.0%
Count	1,713,295	692,881	2,406,176
Urban			
Employed	86.8%	63.4%	81.3%
Unemployed	3.1%	5.5%	3.7%
Inactive	10.1%	31.1%	15.1%
Total	100.0%	100.0%	100.0%
Count	311,551	97,060	408,611
Rural			
Employed	87.2%	74.5%	83.4%
Unemployed	1.7%	1.9%	1.7%
Inactive	11.1%	23.5%	14.8%
Total	100.0%	100.0%	100.0%
Count	1,401,744	595,821	1,997,565

#### Chapter 5: Size, type and structure of private households

The analysis of the size, type and structure of private households is interesting to policy-makers and social services for various reasons. First, data on the size and composition of households provide an indication of some societal norms, such as those relating to childbearing, kinship among persons in the household, etc. Second, they provide information on households' living conditions. For instance, female-headed households are usually considered to be more vulnerable than maleheaded households, while larger households with fewer employed persons tend to be more vulnerable to poverty than smaller households.

This chapter focuses on these topics and is organised into three sections. First, it starts by reviewing the distribution of private households by their size, area of residence and sex of the household head. Second, it reviews the types of private households in the country, highlighting the most common types according to area of residence and sex of the household head. Then, it reviews variation in these types by background characteristics of the household head, such as age, marital status, education and economic activity status. Finally, it reviews the structure of households by addressing topics such as the existence of specific population groups in households.

#### 5.1 Size of households

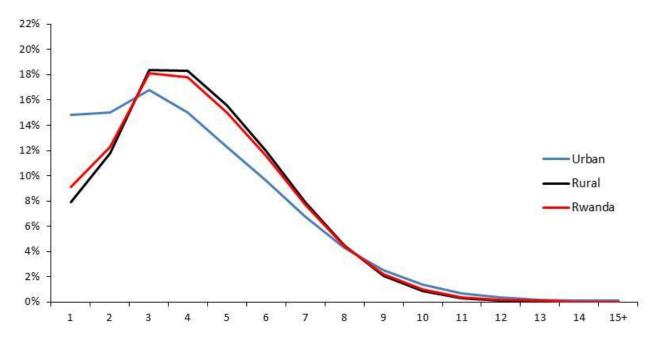
The number of individuals constituting a household, commonly referred to as the household size, is a key indicator often associated with the household's living standards. Smaller household size is generally regarded as a common characteristic of less poor households.<sup>3</sup>

Figure 7 and Figure 8 present the distribution of private households by area of residence and sex of the household head respectively. Figure 7 shows that the size of private households in Rwanda ranges between one to over 15 people per household. At the national level, about 9% and 12% of households are constituted by one and two individuals respectively, while the most common sizes vary between three and five individuals (about 51%). From this point the distribution drops substantially when the numbers reach eight individuals (about 4%) and 10 individuals or more (about 2%). Figure 7 also shows that, when the area of residence is considered, rural areas display a distribution very similar to the one observed at the national level. The percentage of households constituted by one and two individuals is higher in urban areas (about 15%, in each case, compared to 8% and 12% respectively in rural areas) but at between three and eight individuals it becomes lower and thereafter both areas of residence display very similar household sizes.

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<sup>&</sup>lt;sup>3</sup> NIRS (2011), The evolution of poverty in Rwanda from 2000 to 2011: Results from the household surveys (EICV).

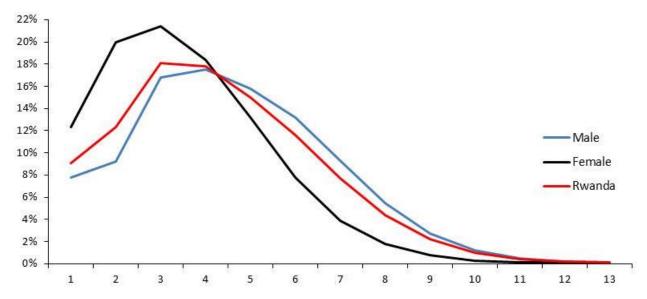
Figure 7: Distribution of private households by number of resident members (household size) and area of residence (%)



Source: Fourth Rwanda Population and Housing Census. Notes: (1) See Table 50 in Annex D for details on the base population used in this figure.

Figure 8 shows that the percentage of households with between one and four members is higher among female-headed households but that with more members it subsequently stays consistently below the percentage observed among male-headed households.

Figure 8: Distribution of private households by household size and sex of household head (%)



Source: Fourth Rwanda Population and Housing Census. Notes: (1) See Table 50 in Annex D for details on the base population used in this figure.

Based on the findings discussed in Figure 7 and Figure 8, it follows that the mean household size in Rwanda is around 4 individuals. Households tend to be slightly larger in rural areas and among male-headed households. On average, male-headed households are one individual larger than female-headed ones (Figure 9). This may be due to the absence of the spouse in female-headed households, since most such heads (about 62%) are currently either widowed or divorced (see Table 8) and they tend to take up this role at a later stage following the absence of their spouses.

The percentages of female household heads are higher than those observed for their male counterparts from the age of 60 onwards (see Figure 4). As a result, female household heads are older than their male counterparts (on average, they are aged 51 compared to 40) – see Table 6.

Figure 9, presenting the mean household size by province and sex of the household head, shows that geographic variations in the mean size are more stable among female-headed households. Among male-headed households the highest values were observed in the Western and Northern provinces (4.9 and 4.8 members per household respectively) and the lowest in Kigali City (four members per household).

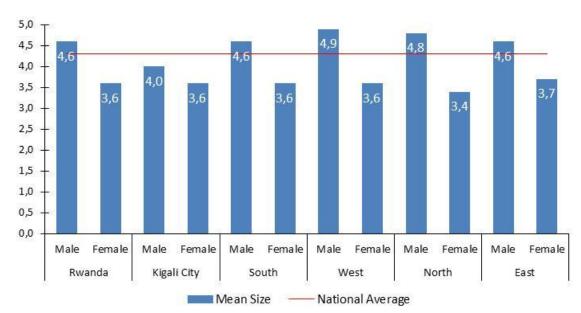


Figure 9: Mean household size among private households by province and sex of household head

Source: Fourth Rwanda Population and Housing Census. Notes: (1) See Table 52 in Annex D for details on the base population used in this figure.

Table 11, presenting the evolution in the mean size of households since 1978, shows that, at the national level, it reduced slightly from 4.5 members per household in 1978 to 4.3 in 2012, although in 1991 a slight increase was observed, from 4.5 in 1978 to 4.7 in that year.

Area of residence	Household size							
	1978	1991	2002	2012				
Rwanda	4.5	4.7	4.5	4.3				
Urban	4.4	4.3	4.6	4.1				
Rural	4.6	4.7	4.5	4.4				

Table 11: Evolution in the mean size of household by area of residence, 1978-2012

Source: Rwanda Population and Housing Censuses 1978, 1991, 2002 and 2012.

#### 5.2 Types of private households

Figure 10 presents the distribution of the resident population in private households by their relationship to the household head. It shows that, across all over the country, households are constituted mainly by the head (about 23%), spouse (about 14%) and their children (about 52%). Other relatives, including the household head's parents, siblings and grandchildren, represent about 7% of the resident population in private households while non-relatives represent just about 4%. However, when the area of residence is considered, the percentage of non-relatives is five times higher in urban households (11%) than in the rural ones (2%). When the sex of the population is considered, apart from being sons or daughters, males are most likely to be

household heads (about 35% of the male population) while females tend to be spouses (about 27% of the female population).

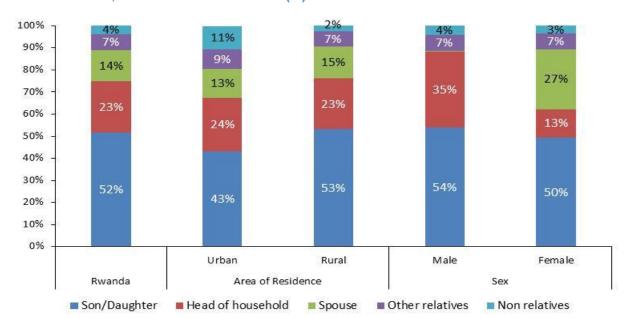


Figure 10: Distribution of resident population in private households by relationship to household head, area of residence and sex (%)

Source: Fourth Rwanda Population and Housing Census. Notes: (1) See Table 54 in Annex D for details on the base population used in this figure.

These findings are particularly important, considering that private households are classified – according to the relationship of other members to the head of the household – into four categories: one-person households, nuclear households, extended households and composite households (see section 2 of this report for further detail on this classification). From this, one can quickly conclude that households in Rwanda are mostly nuclear.

Figure 11, presenting the distribution of households by household type, area of residence and sex of the household head, confirms this finding; about 63% of private households across all Rwanda are nuclear households. About 17% are extended households while 12% and 9% are composite and one-person households respectively. A disaggregation of the data by area of residence reveals that nuclear households are less frequent in an urban setting than in a rural one. The percentage of nuclear households reduces from 67% in rural areas to 42% in urban areas. On the other hand, composite and one-person households are more common in urban areas than rural areas, at four and two times respectively. Nuclear households are also less found among femaleheaded households compared to male households; the percentage of nuclear households reduces from 69% among maleheaded households to 48% among femaleheaded households. This gap in the percentage of nuclear households is compensated for by a higher percentage of extended households is near three times higher among femaleheaded households (31%) than in maleheaded households (11%).

100% 11% 14% 17% 17% 90% 31% 13% 80% 8% 12% 29% 70% 9% 60% 50% 69% 67% 40% 48% 42% 30% 20% 10% 15% 12% 0% Male Urban Rural Female Rwanda Area of Residence Sex of Head ■ One person ■ Nuclear ■ Composite

Figure 11: Distribution (%) of private households by household type, area of residence and sex of household head

Source: Fourth Rwanda Population and Housing Census. Notes: (1) See Table 55 in Annex D for details on the base population used in this figure.

Figure 12, presenting the distribution of private households by type and province, shows that this distribution follows the patterns observed by area of residence (see Figure 11 above). Consequently, Kigali City, the main urban centre in the country, resembles the general urban characteristics and the other provinces the rural characteristics. Hence, while the lowest percentage of nuclear households is found in Kigali (about 40%), the highest percentage of composite households (about 31%) is also found there.

Table 12: Distribution (%) of the private households by household typology/living arrangement by sex of the household head and province

Province and Sex		Ho	usehold typology/L	iving arrangement		Count
of the household	One-person	Nuclear	Composite	Extended	Total	
head	-					
Rwanda						
Male	7.8%	68.8%	12.8%	10.6%	100.0%	1,713,295
Female	12.3%	47.8%	8.5%	31.4%	100.0%	692,881
Both sexes	9.1%	62.8%	11.6%	16.6%	100.0%	2,406,176
Kigali City						
Male	16.0%	40.8%	33.4%	9.8%	100.0%	219,353
Female	14.9%	38.0%	22.0%	25.1%	100.0%	62,778
Both sexes	15.8%	40.2%	30.9%	13.2%	100.0%	282,131
South						
Male	7.8%	69.7%	11.3%	11.2%	100.0%	403,640
Female	11.4%	47.6%	8.1%	33.0%	100.0%	196,836
Both sexes	9.0%	62.4%	10.3%	18.3%	100.0%	600,476
West						
Male	4.7%	75.3%	9.0%	11.0%	100.0%	378,753
Female	12.1%	50.6%	6.3%	31.0%	100.0%	161,350
Both sexes	6.9%	67.9%	8.2%	17.0%	100.0%	540,103
North						
Male	4.7%	77.8%	6.9%	10.6%	100.0%	281,055
Female	14.6%	48.7%	5.2%	31.6%	100.0%	108,206
Both sexes	7.4%	69.7%	6.5%	16.4%	100.0%	389,261
East						
Male	8.4%	70.6%	11.0%	10.1%	100.0%	430,494
Female	10.9%	48.6%	8.2%	32.3%	100.0%	163,711
Both sexes	9.1%	64.6%	10.2%	16.2%	100.0%	594,205

Figures 12 through 20 present a review of variations in household type across selected household head characteristics, such as age, marital status, education and economic activity status. In some cases the data will be disaggregated further by area of residence and sex of the household head to highlight how key features observed at the national level vary according to these aspects.

Figure 12, presenting the distribution of private households by household type and age of the household head, shows that nuclear households are the norm when the household head is aged between 20 and 24 years of age (about 57%) and between 55 and 59 (about 52%). Between these two age groups the percentage of nuclear households increases to reach the highest value of about 76% when the household head is aged between 35 and 44. However, it then starts decreasing to reach its lowest levels when the household head is aged between 80 and 84 (about 22%) and 85 and above (about 21%). From the point where the percentage of nuclear households reaches its peak (i.e. when household heads are aged between 35 and 39 years), households start transitioning to an extended type of living arrangement by taking in other relatives. The percentage of extended households increases 10 times from about 5% at that point to 50% when household heads are between 75 and 79 years of age, stabilising at around 45% to 48% thereafter. From about the same point referred to before, one-person households display a similar pattern. This setup increases five times from about 4% (when the household heads are aged between 40 and 44) to about 26% (when household heads are 85 and above), suggesting that as the household head gets older his/her likelihood of living alone increases. However, the highest percentages of oneperson households were observed among household heads aged between 15 and 19 (about 42%) and between 10 and 14 (about 29%), meaning that between one in every three and two in every five individuals aged 10 to 19 tend to live alone.

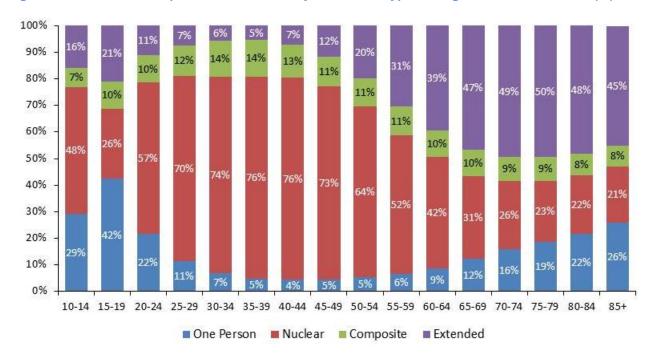


Figure 12: Distribution of private households by household type and age of household head (%)

Source: Fourth Rwanda Population and Housing Census. Notes: (1) See Table 56 in Annex D for details on the base population used in this figure.

Figure 13 presents the distribution of private households by household type and the current marital status of the household head. It can be seen that one-person households are more common among household heads that have never married than among heads with all other marital statuses. In fact, the percentage of one-person households reduces 23 times from those that never married (about 45%) to those who are currently married (about 2%). Conversely, nuclear households are more common among household heads who are currently married than among heads with other marital statuses, notably those that never married. The percentage of nuclear households reduces four times from heads currently married (about 76%) to heads that never married (about 18%).

Furthermore, the prevalence of composite households is also relatively higher among households headed by individuals that have never been married. This represents more than double the percentage observed among households headed by individuals who are currently divorced, separated or widowed, meaning that about one in every five households headed by an individual that has never been married tends to live with non-relatives. Finally, households headed by people who are widowed are more likely to be extended than households headed by individuals currently in other marital statuses. Two in five households headed by widowed individuals are classified as extended households, which represents at least double the percentage observed among households headed by individuals with other marital statuses.

100% 11% 17% 90% 20% 12% 7% 38% 80% 7% 18% 70% 60% 8% 18% 50% 55% 40% 76% 41% 30% 45% 20% 21% 10% 14% 0% Currently married Never married Divorced Separated Widowed One Person ■ Nuclear ■ Composite Extended

Figure 13: Distribution of private households by household type and current marital status of household head (%)

Source: Fourth Rwanda Population and Housing Census. Notes: (1) See Table 44 in Annex D for details on the base population used in this figure.

Figure 14 presents the distribution of private households by household type, current marital status of the household head and area of residence. While it confirms that composite households are more common in urban areas than in rural areas (see also Figure 11), it reveals that for some categories of the private households (such as those headed by individuals currently divorced or separated) the percentages are substantially below the national average in both urban and rural areas. It also shows that the contrasts between urban and rural areas among households headed by individuals currently divorced or separated are slightly higher than the average.

100% 10% 11% 15% 16% 16% 18% 90% 22% 9% 4% 34% 38% 80% 4% 19% 17% 31% 9% 70% 32% 60% 6% 24% 21% 50% 57% 63% 47% 50% 79% 40% 41% 30% 45% 45% 20% 21% 10% 21% 19% 18% 15% 0% Urban Rural Urban Rural Urban Rural Urban Rural Urban Rural Never married Divorced Separated Widowed Currently married One Person ■ Nuclear ■ Composite **■** Extended

Figure 14: Distribution of private households by household type, current marital status of household head and area of residence (%)

Source: Fourth Rwanda Population and Housing Census. Notes: (1) See Table 60 in Annex D for details on the base population used in this figure.

Figure 15, presenting a similar analysis by sex of the household head, also confirm that the percentage of extended households is higher among female-headed households than their male counterparts. However, it also shows that the level of contrasts observed at the national level (see Figure 11) are less evident for certain specific categories of households, such as households headed by individuals currently divorced, married or who never married.

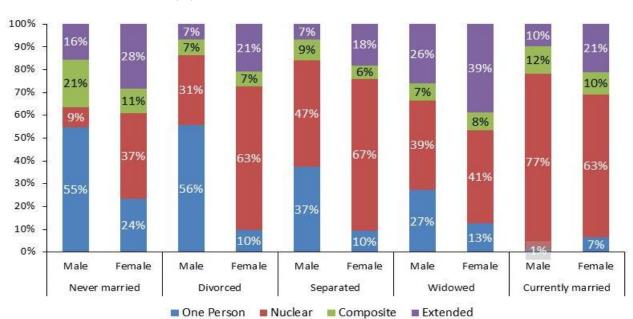


Figure 15: Distribution of private households by household type, sex and current marital status of household head (%)

Source: Fourth Rwanda Population and Housing Census. Notes: (1) See Table 59 in Annex D for details on the base population used in this figure.

Figure 16 and Figure 17 present the distribution of private households by household type and education of the household head. Figure 17 disaggregates the data further by sex of the household head. The prevalence of composite households increases substantially with the level of education of the head while that of nuclear households decreases. The percentage of composite households increases nearly six times from households headed by individuals that attended primary school (about 10%) to households headed by individuals that attended university (about 55%). Conversely, the percentage of nuclear households decreases almost four times from households headed by those that attended primary school to those who attended university. Extended households seem to be particularly important among households headed by individuals that never attended school.

100% 12% 12% 13% 13% 14% 90% 25% 10% 9% 80% 16% 28% 7% 70% 55% 60% 50% 68% 70% 40% 58% 67% 45% 30% 19% 20% 10% 15% 14% 11% 7% 0% No Education Preschool Primary Post-primary Secondary University ■ One Person ■ Nuclear ■ Composite ■ Extended

Figure 16: Distribution of private households by household type and level of education of household head (%)

Source: Fourth Rwanda Population and Housing Census. Notes: (1) See Table 57 in Annex D for details on the base population used in this figure.

A further disaggregation of the data by sex of the household head indicates that, among households headed by individuals that attended university, composite households are more predominantly male-headed. This means that male heads are more likely to take non-relatives into their households than female heads. On the other hand, extended households are mainly female-headed, though their relative importance reduces when the level of education of the head increases. For example, while among uneducated household heads for each extended male-headed household there are almost three female-headed households, among household heads with university attendance there are almost two female-headed households for each male-headed one. Finally, the percentage of one-person households among heads that attended university is substantially higher among female heads (about 27%) when compared with their male counterparts (about 13%).

100% 14% 18% 90% 24% 25% 10% 28% 10% 17% 7% 38% 80% 29% 9% 70% 7% 16% 26% 57% 60% 43% 6% 50% 73% 72% 40% 54% 58% 47% 42% 36% 12% 30% 20% 20% 27% 10% 17% 15% 14% 13% 11% 8% 8% 0% Female Male Female Male Male Male Female Male Female Female Male Female No Education Preschool Primary Post-primary Secondary University ■ One Person ■ Nuclear ■ Composite ■ Extended

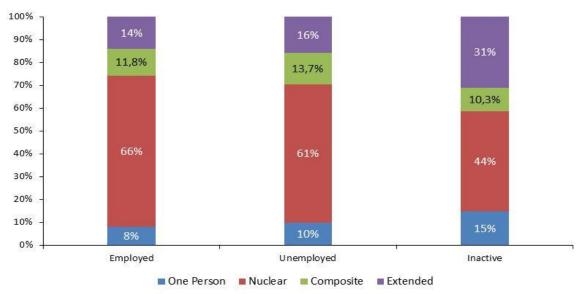
Figure 17: Distribution of private households by household type, sex and level of education of household head (%)

Source: Fourth Rwanda Population and Housing Census. Notes: (1) See Table 57 in Annex D for details on the base population used in this figure.

Figure 18 and Figure 19 present the distribution of private households by household type and the economic activity status of the household head. Figures 18 and 19 disaggregate the data further by area of residence and sex of the household head respectively.

Figure 18 shows that the percentage of extended households is two times higher among households headed by inactive individuals (31%) against 14% among households headed by employed individuals and 16% among the ones headed by unemployed households. This trend is mainly driven by rural areas where this type of household (about 32%) is more predominant than in urban areas (about 25%) (see Figure 19). This is further explained by the fact that, when the household head is over 65 in rural areas, headship rates are still quite high (ranging between 77% and 86%). Indeed, headship rates at these ages are higher in rural areas than in urban areas (see Figure 2).

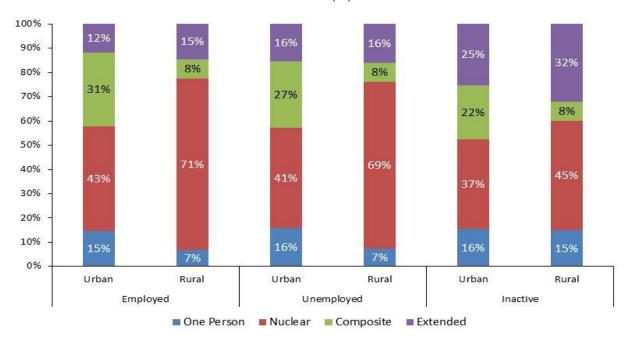
Figure 18: Distribution of private households by household type and economic activity status of household head (%)



Source: Fourth Rwanda Population and Housing Census. Notes: (1) See Table 61 in Annex D for details on the base population used in this figure.

Figure 19 also shows that, as discussed before in this report, that the percentage of composite households is about three times higher in urban areas than in rural areas. This trend is even more evident when households headed by employed persons are considered (among this group, the percentage of composite households is four times higher in urban areas than rural areas) and less when households headed by inactive persons are considered.

Figure 19: Distribution of private households by household type, economic activity status of household head and area of residence (%)



Source: Fourth Rwanda Population and Housing Census. Notes: (1) See Table 62 in Annex D for details on the base population used in this figure.

Figure 20 shows that the percentage of composite households is higher among households headed by female than their male counterparts that were observed at the national level (see Figure 18) reduce when households headed by inactive people are considered. This is because the percentage of extended male-headed households among inactive heads (about 21%) is double the percentage observed at the national level (about 11%), while the percentage of extended female-headed households among inactive heads (about 42%) increases just 11 percentage points from the percentage observed at the national level (about 31%).

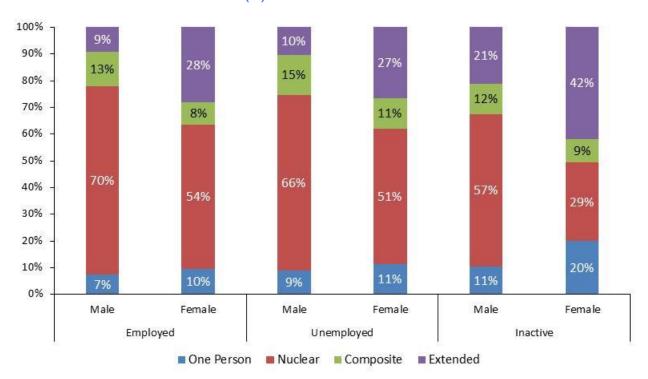


Figure 20: Distribution of private households by household type, economic activity status of household head and sex (%)

Source: Fourth Rwanda Population and Housing Census. Notes: (1) See Table 61 in Annex D for details on the base population used in this figure.

#### 5.3 Structure of private households

This section focuses on the structure of private households by addressing the existence or not of policy-specific target population groups in these households. These groups include, for example, children under one or five years of age (target groups for vaccination programmes and infant and under-five mortality prevention programmes), children aged between seven and 12 or the population aged 15 and above (target groups for primary education and adult literacy programmes respectively), or women aged between 15 and 49 years (a target group for reproductive health programmes). This section also reviews the data on the existence of economically active as well as employed people in private households and further reviews both the demographic and economic dependency rates based on these data.

Table 13 and Table 14 present the counts and percentages of private households with members belonging to specific policy-related population groups by area of residence and province respectively. Table 13 shows that, at the national level, about 13% of private households have at least one member aged under one while 42% have at least one member aged between one and four. About 48% of private households have at least a member under five years of age while all households have at least a member who is aged 15 or above.

Table 13: Number and percentage of private households with members belonging to specific age groups by area of residence

Age-groups			Count			Percentage
(Years)	Urban	Rural	Rwanda	Urban	Rural	Rwanda
<1	47,965	254,127	302,092	11.7%	12.7%	12.6%
1-4	143,563	858,458	1,002,021	35.1%	43.0%	41.6%
0-4	170,178	983,152	1,153,330	41.7%	49.2%	47.9%
7-12	138,967	930,261	1,069,228	34.0%	46.6%	44.4%
15-49 (Women)	304,658	1,623,286	1,927,944	74.6%	81.3%	80.1%
0-14	255,584	1,520,186	1,775,770	62.6%	76.1%	73.8%
15 +	408,394	1,996,683	2,405,077	100.0%	100.0%	100.0%
15-64	403,465	1,920,452	2,323,917	98.7%	96.1%	96.6%
65 +	26,784	253,843	280,627	6.6%	12.7%	11.7%

Table 14, presenting a similar analysis by province, shows Kigali City as standing out from the other provinces with the lowest numbers of households with members belonging to almost all selected age-specific groups, particularly with regard to the population aged between 0 and 14 and the population aged 65 and above, for which the proportion observed in Kigali is about half of those observed elsewhere. Conversely, the highest proportions were observed in the Western (population aged between seven and 12 years; women aged between 15 and 49 years; and population aged between 0 and 14 years), Eastern (population aged between one and four, and under five, respectively; and population aged between 0 and 14 years) and Northern provinces (population aged between seven and 12 years; women aged between 15 and 49 years; and population aged 65 years and above).

Table 14: Number and percentage of private households with members belonging to specific age groups by province

Age-groups	Count					Percentage	е			
(Years)	Kigali City	South	West	North	East	Kigali City	South	West	North	East
<1	33,278	69,492	75,397	45,553	78,372	11.8%	11.6%	14.0%	11.7%	13.2%
1-4	98,401	246,155	236,967	154,982	265,516	34.9%	41.0%	43.9%	39.8%	44.7%
0-4	116,744	280,328	271,132	180,392	304,734	41.4%	46.7%	50.2%	46.3%	51.3%
7-12	85,227	271,789	258,312	182,319	271,581	30.2%	45.3%	47.8%	46.8%	45.7%
15-49 (Women)	205,184	474,624	449,411	319,012	479,713	72.7%	79.0%	83.2%	82.0%	80.7%
0-14	169,458	446,465	414,407	293,584	451,856	60.1%	74.4%	76.7%	75.4%	76.0%
15 & +	281,976	600,251	539,809	389,086	593,955	100.0%	100.0%	100.0%	100.0%	100.0%
15-64	279,157	577,179	519,506	370,959	577,116	99.0%	96.1%	96.2%	95.3%	97.1%
65 & +	15,971	79,076	65,785	53,429	66,366	5.7%	13.2%	12.2%	13.7%	11.2%

Source: Fourth Rwanda Population and Housing Census.

Table 15 presents the distribution of private households by the number of members aged five and above who are economically active by area of residence and sex of the household head. It shows that the average household in Rwanda has two members who are economically active (i.e. about 47% of all households). The disaggregation of the data by area of residence and sex of the household head reveals two important aspects. First, the trend observed at the national level is mainly driven by rural areas as the percentage of households with two economically active members in urban areas is substantially lower (about 36%). Second, the chances of finding a household with two members who are economically active are twice as high among male-headed households. These findings are further explained by three other findings discussed earlier in this report. First, nuclear households are the most common household type in the country (about 63%). Second, male-headed households, which constitute about 71% of private households in the country, have heads that are relatively young (about 40 years on average). Third, the percentage

of inactive female household heads is twice as high as the proportion of their male counterparts (see Tables 4, 7 and 10; Figure 11).

Table 15: Distribution (count and %) of the private households by the number of their members aged five years and above economically active by area of residence and sex of the head

Area of			Count			Percentage
Residence and						
number of	Mala	Famala.	Doth saves	Mala	F	Both
economically	Male	Female	Both sexes	Male	Female	sexes
active members						
Rwanda						
0	100,536	105,088	205,624	5.9%	15.2%	8.6%
1	318,193	321,834	640,027	18.6%	46.5%	26.6%
2	967,165	169,412	1,136,577	56.5%	24.5%	47.2%
3	210,204	69,070	279,274	12.3%	10.0%	11.6%
4	81,339	20,610	101,949	4.8%	3.0%	4.2%
5+	35,858	6,867	42,725	2.1%	1.0%	1.8%
Total	1,713,295	692,881	2,406,176	100.0%	100.0%	100.0%
Urban						
0	17,854	18,300	36,154	5.7%	18.9%	8.9%
1	98,158	45,717	143,875	31.5%	47.1%	35.2%
2	127,355	20,793	148,148	40.9%	21.4%	36.3%
3	44,370	7,980	52,350	14.2%	8.2%	12.8%
4	16,389	2,849	19,238	5.3%	2.9%	4.7%
5+	7,425	1,421	8,846	2.4%	1.5%	2.2%
Total	311,551	97,060	408,611	100.0%	100.0%	100.0%
Rural						
0	82,682	86,788	169,470	5.9%	14.6%	8.5%
1	220,035	276,117	496,152	15.7%	46.3%	24.8%
2	839,810	148,619	988,429	59.9%	24.9%	49.5%
3	165,834	61,090	226,924	11.8%	10.3%	11.4%
4	64,950	17,761	82,711	4.6%	3.0%	4.1%
5+	28,433	5,446	33,879	2.0%	0.9%	1.7%
Total	1,401,744	595,821	1,997,565	100.0%	100.0%	100.0%

Source: Fourth Rwanda Population and Housing Census.

Table 16, presenting the distribution of private households by the number of members aged five and above who are currently employed – a subset of the economically active population – shows similar results, as it is to be expected.

Table 16: Distribution (count and %) of the private households by the number of their members aged years and above currently employed by area of residence and sex of the head

Area of residence	Count			Percentage				
and Number of employed members	Male	Female	Both sexes	Male	Female	Both sexes		
Rwanda								
0	123,275	119,807	243,082	7.2%	17.3%	10.1%		
1	350,282	320,506	670,788	20.4%	46.3%	27.9%		
2	934,473	163,006	1,097,479	54.5%	23.5%	45.6%		
3	198,052	64,915	262,967	11.6%	9.4%	10.9%		
4	75,460	18,754	94,214	4.4%	2.7%	3.9%		
5+	31,753	5,893	37,646	1.9%	0.9%	1.6%		
Total	1,713,295	692,881	2,406,176	100.0%	100.0%	100.0%		
Urban								
0	24,267	23,061	47,328	7.8%	23.8%	11.6%		
1	111,489	45,302	156,791	35.8%	46.7%	38.4%		
2	116,824	18,892	135,716	37.5%	19.5%	33.2%		
3	39,534	6,677	46,211	12.7%	6.9%	11.3%		
4	13,970	2,197	16,167	4.5%	2.3%	4.0%		
5+	5,467	931	6,398	1.8%	1.0%	1.6%		
Total	311,551	97,060	408,611	100.0%	100.0%	100.0%		
Rural								
0	99,008	96,746	195,754	7.1%	16.2%	9.8%		
1	238,793	275,204	513,997	17.0%	46.2%	25.7%		
2	817,649	144,114	961,763	58.3%	24.2%	48.2%		
3	158,518	58,238	216,756	11.3%	9.8%	10.9%		
4	61,490	16,557	78,047	4.4%	2.8%	3.9%		
5+	26,286	4,962	31,248	1.9%	0.8%	1.6%		
Total	1,401,744	595,821	1,997,565	100.0%	100.0%	100.0%		

#### 5.4 Dependency ratios

Table 17 shows the age and economic dependency ratios calculated at the level of private households. Age dependency ratio, in the context of Rwanda, is defined as the sum of members aged between 0 and 15 and aged 60 and above, divided by the total number of members aged between 16 and 59 and multiplied by 100.<sup>4</sup> On the other hand, an economic dependency ratio is defined as the ratio between economically dependent members (the sum of the unemployed, inactive and children below the age of five) and employed members, multiplied by 100.

The demographic dependency ratio values can be below, equal to or above 100. A value of 100 indicates that the sum of members aged 0–15 and 60 and above equals the number of members aged 16–59. A value below or above 100 indicates that the sum of members aged 0–15 and 60 and above is, respectively, greater than or less than the number of members aged 16–59. Table 12 shows that, at the national level, the demographic dependency ratio is about 94. In rural areas the ratio is 100 while it is 68 in urban areas. When the sex of the household head is considered, the ratio does not display major contrasts between male- and female-headed households. At the provincial level, the highest demographic dependency ratios are observed in the Western Province (about 101) and the Eastern Province (about 99), with the lowest being in Kigali City (about 63).

The economic dependency ratio values can be equal to or above 100, with the value of 100 indicating that the sum of members of the household who are unemployed, inactive or children under five years of age is equal to the number of household members who are employed. This means that one employed member in the household supports another member who is

<sup>4</sup> See RPHC4 thematic report on population size, structure and distribution for alternative measures.

economically dependent. When this value is above 100, the number of members of the household who are unemployed, inactive or children under five is greater than the number of employed people in the household. Hence, the further above 100 this value gets, the higher is the number of individuals in the household depending on the members who are employed. Table 12 shows that, at the national level, the economic dependency ratio is about 145. This means that two employed people have to support about three economically dependent people. This ratio is higher among households living in urban areas (about 152) and among female-headed households (about 161). The economic dependency ratio is above 200 in households headed by females in urban areas of Kigali City, the Western and the Eastern Provinces. At the provincial level, the highest values were observed in the Southern and Western provinces (about 152 and 151 respectively) and the lowest in the Northern Province (at 127).

Table 17: Age and economic dependency ratio of private households by province, area of residence and sex of the household head

Province and Area of	Number of households headed by	(Members ag	Dependency Raged 0-15 and 60 ged 16-59)x100	)+/Members	Economic Dependency Ratio (Unemployed, Inactive and children under-5 years/Employed members)x100		
residence	resident heads of households	Male	Female	Both sexes	Male	Female	Both sexes
Rwanda							
Urban	408,611	67.6	71.2	68.3	140.2	206.0	151.7
Rural	1,997,565	100.4	98.8	100.0	140.7	154.8	144.0
Total	2,406,176	94.0	94.3	94.1	140.6	161.1	145.2
Kigali City							
Urban	213,130	55.7	58.5	56.2	129.7	211.5	141.9
Rural	69,001	87.6	90.4	88.3	162.5	197.3	170.1
Total	282,131	62.1	66.5	63.0	136.6	207.3	148.3
South							
Urban	51,133	73.1	78.2	74.4	131.0	184.7	143.1
Rural	549,343	98.5	99.0	98.7	147.7	166.6	152.6
Total	600,476	96.1	97.2	96.4	146.2	168.0	151.8
West							
Urban	65,867	89.7	88.0	89.3	189.6	248.9	201.0
Rural	474,236	104.2	98.1	102.7	144.0	151.3	145.7
Total	540,103	102.3	96.9	101.0	148.8	159.5	151.2
North							
Urban	33,869	84.6	79.3	83.4	137.1	158.2	141.4
Rural	355,392	100.1	93.7	98.7	126.2	124.1	125.8
Total	389,261	98.6	92.3	97.2	127.1	126.8	127.0
East							
Urban	44,612	79.8	86.8	81.4	139.8	200.6	151.5
Rural	549,593	100.5	103.5	101.2	139.5	161.8	144.4
Total	594,205	98.9	102.2	99.6	139.5	164.2	144.9

Source: Fourth Rwanda Population and Housing Census.

#### Chapter 6: Households' ownership of livestock

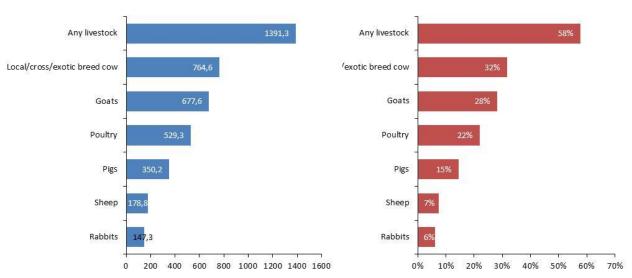
Animal husbandry is one of the most important activities in the lives of Rwandans and therefore finding a household owning livestock is not so uncommon. Information on livestock is interesting in the sense that possession of any livestock, especially cattle, provides an indication of a household's wealth level or of its ability to fight malnutrition. Moreover, owning livestock creates the possibility of having manure that can be used in agriculture. Collecting information on cow ownership also allows to assess the level of implementation of the One Cow per Family Programme, which was initiated by the President of the Republic in 2006 and which, ultimately, seeks to replace the local cow breed *Ankole* with exotic and cross-breed cows. The RPHC4 collected data that helps to investigate further the percentage of households owning livestock by type and number. Thus, this chapter focuses on households' ownership of livestock and contains two sections. The first reviews the number and percentage of private households owning livestock and the spatial variations therein. The second focuses on estimating the number of livestock owned by private households in Rwanda and the variations across Provinces of the country.

#### 6.1 Households' ownership of livestock

#### 6.1.1 Prevalence of livestock ownership among private households

Figure 21 presents the number (in thousands) and percentage of private households possessing livestock by type of livestock. It shows that, at the national level, about 1.39 million households possess some livestock. This represents about 58% of the 2.41 million private households resident in Rwanda. The analysis by type of livestock owned reveals that the top four most commonly owned types of livestock are cattle (owned by 32% of the households), goats (owned by about 28% of households), poultry (owned by about 22% of households), and pigs (owned by about 15%).

Figure 21: Number (in thousands) and percentage of private households possessing livestock by type of livestock



Source: Fourth Rwanda Population and Housing Census.

Figure 22 presents the percentage of private households possessing the top four most commonly owned livestock in Rwanda by province. It shows that the lowest percentages of households owning livestock are found in Kigali City (where about 15% own cattle and 2% pigs) and the highest in the Northern Province (where 44% own cattle and 14% pigs) and the Southern Province (where 38% own cattle and 24% pigs).

Figure 22: Percentage of private households possessing livestock by the four most owned types of livestock, by province

Source: Fourth Rwanda Population and Housing Census. Notes: (1) See Table 67 in Annex D for details on the base population used in this figure.

#### 6.1.2 Number of livestock owned by private households

Figure 23 presents the total number (in thousands) of livestock owned by private households by type of livestock at the national level and in rural areas. It shows that poultry, cattle and goats constitute the largest livestock types owned by private households across all Rwanda. Counted among private households owning livestock are about 1.91 million units of poultry, 1.55 million cows and 1.53 million goats. Figure 23 also shows that most of this livestock is found in rural areas. For instance, about 1.72 million out of the 1.91 million units of poultry are owned by private households living in rural areas. This represents about 90% of this livestock at the national level. Similarly, 1.31 million (about 85%) of the total 1.55 million cows and 1.42 million (about 93%) of the total 1.53 million goats are owned by rural households.

Figure 23: Among private households possessing livestock, total number (in thousands) of livestock possessed (all Rwanda and rural areas)

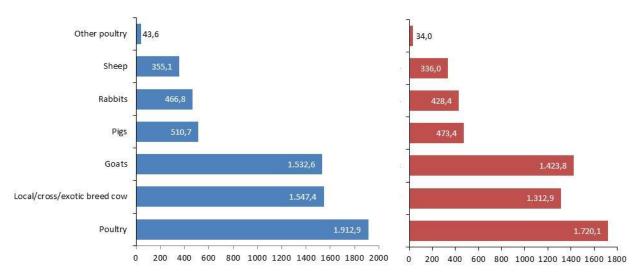


Figure 24 presents the total number (in thousands) of livestock owned by private households by type in the top four ranked provinces. First, it pairs these provinces according to their livestock size for comparability reasons. As a result, the Southern and Eastern provinces and the Western and Northern provinces were paired together. This pairing exercise allows for a direct comparison by type of livestock. In the first case, while comparing the number of livestock by type in the Southern and Eastern provinces, it becomes clear that the numbers of poultry, goats and exotic breeds of cow are substantially higher in the Eastern Province (about 710,000, 552,000 and 42,000 respectively) than in the Southern Province (about 524,000, 419,000 and 28,000 respectively). Similarly, the numbers of local breed and cross-breed cows are slightly higher in the Eastern Province (about 250,000 and 134,000 respectively) than in the Southern Province (about 230,000 and 132,000 respectively). On the other hand, the numbers of pigs and rabbits are substantially larger in the Southern Province (about 195,000 and 146,000 respectively) than in the Eastern Province (about 104,000 and 108,000 respectively), while the numbers of sheep and other poultry are slightly larger in the Southern Province (about 49,000 and 13,000 respectively) than in the Eastern Province (about 47,000 and 11,000 respectively). A similar analysis is carried out to compare the Western and Northern provinces' livestock.

8,6 Other poultry 11,0 4,3 32,1 28.1 Exotic breed cow 26,4 151,7 Rabbits Pigs 80,7 132,4 Cross breed cow Local breed cow 133,0 199,9 Poultry 251,4 0 100 200 300 500 600 700 100 200 300 ■ South ■ East ■ West ■ North

Figure 24: Among private households possessing livestock, total number (in thousands) of livestock possessed by type of livestock and province (excluding Kigali City)

Table 18 presents the mean number of livestock owned by private households by type of livestock. It shows that, across all Rwanda, the average private household owning livestock owns about four units of poultry, two goats, two local breed cows and two cross-breed cows, just to mention the top four. This means that small rearing is prevailing in the country. Table 18 also shows that the mean numbers across all type of livestock are consistently lower in rural areas than in urban areas, suggesting that, while the numbers of livestock are higher in rural areas, these livestock are shared between a larger population than in urban areas.

At the provincial level, Kigali City stands out as the province where private households own, on average, more livestock than elsewhere. The average household owning livestock in Kigali owns five units of poultry, five rabbits, three goats, four local breed cows and three cross-breed cows. The numbers observed in Kigali are always higher or are at least similar to the ones observed in the Southern Province, where the largest numbers of livestock owned by private households are located. The lowest mean values for each of the top four types of livestock are consistently observed in the Western Province.

Table 18: Among private households possessing livestock, mean number of livestock possessed by type of livestock by province and area of residence of the livestock owner

Province and									Li	vestock
Area of residence	Local breed cow	Cross breed cow	Exotic breed cow	Any cow	Goats	Sheep	Pigs	Rabbits	Poultry	Other poultr
Rwanda										
Urban	4.2	2.9	3.5	4.2	2.7	2.4	2.7	5.1	5.2	6.0
Rural	1.7	1.6	1.6	1.9	2.2	2.0	1.4	3.1	3.5	3.6
Total	1.8	1.8	2.0	2.0	2.3	2.0	1.5	3.2	3.6	3.9
Kigali City										
Urban	5.6	3.9	4.5	5.7	3.4	3.4	5.7	6.9	6.4	7.1
Rural	1.8	1.7	1.9	2.0	2.5	2.2	1.9	4.2	4.4	4.0
Total	3.8	2.7	3.7	4.0	2.8	2.7	3.4	5.2	5.2	6.3
South										
Urban	2.6	2.0	2.3	2.7	2.3	2.2	1.9	4.4	4.4	3.4
Rural	1.5	1.5	1.5	1.7	2.1	1.9	1.3	2.9	3.3	3.3
Total	1.6	1.6	1.6	1.7	2.1	1.9	1.3	2.9	3.4	3.3
West										
Urban	2.9	2.2	3.1	3.0	2.3	2.0	1.8	3.7	4.4	6.4
Rural	1.5	1.5	1.5	1.6	2.0	1.9	1.4	2.6	2.7	3.4
Total	1.5	1.5	1.8	1.7	2.0	1.9	1.4	2.7	2.8	3.8
North										
Urban	2.5	2.0	2.5	2.5	2.4	2.1	2.5	4.0	4.8	3.4
Rural	1.5	1.5	1.5	1.7	2.1	1.9	1.5	3.2	3.0	3.3
Total	1.5	1.6	1.6	1.7	2.1	2.0	1.5	3.2	3.1	3.3
East										
Urban	4.1	3.4	3.0	4.6	2.8	3.4	2.3	4.8	5.1	5.2
Rural	2.2	2.0	1.9	2.5	2.6	2.3	1.5	3.6	4.3	4.2
Total	2.3	2.1	2.0	2.6	2.6	2.3	1.5	3.6	4.3	4.2

## Chapter 7: Types of habitat, occupation arrangements and housing tenure

Access to adequate shelter and basic services in households is an important indicator of the population's living conditions. How promptly these services can be provided is, to a certain extent, related to the way human settlements are structured and how they have evolved over time. To ensure the population's easier access to basic services, the government has been promoting a shift in the habitat structure in Rwanda from traditional rural scattered settlements to other more clustered units, as well as attempting to ensure the provision of adequate housing to vulnerable families. In urban areas, the government has been committed to modernising all urban areas by controlling urban development and limiting the development of squatter settlements. At the same time, the government acknowledges the right to shelter for every citizen. The Census provides a valuable opportunity to assess the effect of public policies in improving housing standards in the country.

This chapter focuses on reviewing the distribution of private households by existing types of habitat in the country, sex of the household head, area of residence and province. It also reviews the type of building private households live in as well as their living arrangements and the type of tenure of Rwandan households. It is worth noting here that while the private household was the unit of analysis in the previous four chapters (chapters 3 to 6), the private household will be the unit of analysis here and in the three subsequent chapters (chapters 8 to 10). The immediate implication of this change in focus is that the base population numbers will be slightly different as the number of private households does not necessarily coincide with the number of private households. This is because not all private households are inhabited by usual residents – some of them are inhabited by visitor-only households (e.g. a household that was found for the Census interview in their holiday home). In chapters 3 through 6 visitor-only households were excluded from the analysis but the private households they were found in are included in chapters 7 through 10 (see also Table 1 for further detail on the difference between private households and private households).

#### 7.1 Type of habitat

In Rwanda, there are four main types of habitat:

- i) Clustered rural settlements or grouped rural settlements, also referred to as *Umudugudu* in the national language;
- ii) Dispersed/isolated housing, also referred to as scattered settlements;
- iii) Planned urban housing; and
- iv) Spontaneous/squatter housing or informal settlements also referred to as *akajagari* in the national language.

Table 19 presents the distribution of private households by type of habitat, sex of the household head and area of residence. It shows that, out of a total of 2.42 million households in Rwanda, about 1.20 million (or about 49%) are found in *umudugudu* and about 817,000 (about 34%) are classified as part of dispersed/isolated housing. A third group, representing about 14% of the private households, is classified as spontaneous/squatter housing. The percentage of private households classified as part of *umudugudu* settlements represents an improvement as compared to the 38% reported by the EICV2 survey (NISR, 2005/06).

Table 19 also shows that the percentage of households in rural areas classified as part of *umudugudu* is three times higher than the one observed in urban areas. This is a result of the implementation of the national settlement policy, which was passed in 2000. This policy ruled that the official rural settlement was the planned and grouped settlement and, therefore, all local authorities were to implement the *villagisation* policy. Since its adoption, most of the private households that were once settled in scattered settlements have been re-grouped, while a large number of new households were built on village sites identified by the relevant local authority for *umudugudu* development. On the other hand, the percentage of households in urban areas classified as spontaneous/squatter housing is about 12 times higher the percentage observed in rural areas. The predominance of spontaneous housing in urban areas is a result of among other factors the past insufficiency in urban planning and implementation of adopted urban development plan, the low incomes of urban dwellers and high rural—urban migration flows combined (Twarabamenye and Mukashema, 2012).

Table 19: Distribution (number and percentage) of private households by type of habitat by sex of the household head and area of residence

Sex of the household head and Type	Count			Percentage		
of habitat	Rwanda	Urban	Rural	Rwanda	Urban	Rural
Both sexes						
Umudugudu (Clustered rural						
settlement)	1,196,911	79,534	1,117,377	49.4%	19.1%	55.6%
Dispersed/Isolated housing	816,913	45,471	771,442	33.7%	10.9%	38.4%
Planned urban housing	53,776	46,597	7,179	2.2%	11.2%	0.4%
Spontaneous/squatter housing	340,877	241,122	99,755	14.1%	57.9%	5.0%
Other type of housing	13,928	2,823	11,105	0.6%	0.7%	0.6%
Not stated	2,493	1,232	1,261	0.1%	0.3%	0.1%
Total	2,424,898	416,779	2,008,119	100.0%	100.0%	100.0%
Male						
Umudugudu (Clustered rural						
settlement)	848,732	57,903	790,829	49.1%	18.2%	56.1%
Dispersed/Isolated housing	566,560	33,183	533,377	32.8%	10.4%	37.8%
Planned urban housing	42,329	37,139	5,190	2.5%	11.7%	0.4%
Spontaneous/squatter housing	259,460	187,116	72,344	15.0%	58.8%	5.1%
Other type of housing	9,973	2,182	7,791	0.6%	0.7%	0.6%
Not stated	1,891	980	911	0.1%	0.3%	0.19
Total	1,728,945	318,503	1,410,442	100.0%	100.0%	100.0%
Female						
Umudugudu (Clustered rural						
settlement)	348,179	21,631	326,548	50.0%	22.0%	54.6%
Dispersed/Isolated housing	250,353	12,288	238,065	36.0%	12.5%	39.8%
Planned urban housing	11,447	9,458	1,989	1.6%	9.6%	0.3%
Spontaneous/squatter housing	81,417	54,006	27,411	11.7%	55.0%	4.6%
Other type of housing	3,955	641	3,314	0.6%	0.7%	0.6%
Not stated	602	252	350	0.1%	0.3%	0.19
Total	695,953	98,276	597,677	100.0%	100.0%	100.0%

Source: Fourth Rwanda Population and Housing Census.

Table 20, presenting the distribution of private households by type of habitat and province, shows that the habitat patterns differ considerably across provinces (something also observed in both the EICV2 and EICV3 reports). For instance, the highest percentage of households in clustered settlements (about 78% – a value closer to the one observed in EICV2) and the lowest percentage of households in dispersed/isolated housing (about 15%) are found in the Eastern Province. The second highest percentage of households in clustered settlements (about 58%) is found in the Northern Province but the percentage still in dispersed/isolated housing (about 38%) is still markedly high in this province. shows that the East Province has the highest percentage of households living in clustered settlement (79.2% closer the value observed in EICV2) and only 15.0% living in isolated rural housing. It is indeed in this province that the implementation of the villagisation started in late 1994 with the construction of dwelling for Rwanda returnees and later all

the population were advised by administrative authorities to join the new villages. In the South and the West Provinces, still less of half of households are in dispersed settlements. In the latter provinces, the majority of households are still scattered. Kigali City, being the largest urban centre in the country, registered the highest percentage of spontaneous/squatter housing (about 66%) and the lowest percentage of households in clustered settlements (about 4%).

Table 20: Distribution (Count and %) of the private households by Type of habitat by Province and Area of residence

Drawings and Type of habitat			Count	Percentage			
Province and Type of habitat	Urban	Rural	Rwanda	Urban	Rural	Rwanda	
Rwanda							
Umudugudu (Clustered rural settlement)	79,534	1,117,377	1,196,911	19.1%	55.6%	49.4%	
Dispersed/Isolated housing	45,471	771,442	816,913	10.9%	38.4%	33.7%	
Planned urban housing	46,597	7,179	53,776	11.2%	0.4%	2.2%	
Spontaneous/squatter housing	241,122	99,755	340,877	57.9%	5.0%	14.1%	
Other type of housing	2,823	11,105	13,928	0.7%	0.6%	0.6%	
Not stated	1,232	1,261	2,493	0.3%	0.1%	0.1%	
Total	416,779	2,008,119	2,424,898	100.0%	100.0%	100.0%	
Kigali City							
Umudugudu (Clustered rural settlement)	7,040	3,090	10,130	3.3%	4.4%	3.5%	
Dispersed/Isolated housing	13,881	45,315	59,196	6.4%	65.0%	20.7%	
Planned urban housing	24,851	1,769	26,620	11.5%	2.5%	9.3%	
Spontaneous/squatter housing	169,156	19,090	188,246	78.0%	27.4%	65.7%	
Other type of housing	1,033	386	1,419	0.5%	0.6%	0.5%	
Not stated	941	112	1,053	0.4%	0.2%	0.4%	
Total	216,902	69,762	286,664	100.0%	100.0%	100.0%	
South							
Umudugudu (Clustered rural settlement)	13,852	265,270	279,122	26.7%	48.1%	46.2%	
Dispersed/Isolated housing	12,557	260,524	273,081	24.2%	47.2%	45.2%	
Planned urban housing	2,829	1,625	4,454	5.5%	0.3%	0.7%	
Spontaneous/squatter housing	22,194	19,928	42,122	42.7%	3.6%	7.0%	
Other type of housing	438	4,201	4,639	0.8%	0.8%	0.8%	
Not stated	76	306	382	0.2%	0.1%	0.1%	
Total	51,946	551,854	603,800	100.0%	100.0%	100.0%	
West	-	·	·				
Umudugudu (Clustered rural settlement)	19,113	198,451	217,564	28.4%	41.7%	40.0%	
Dispersed/Isolated housing	8,238	249,874	258,112	12.3%	52.5%	47.5%	
Planned urban housing	12,569	1,785	14,354	18.7%	0.4%	2.6%	
Spontaneous/squatter housing	26,498	23,152	49,650	39.4%	4.9%	9.1%	
Other type of housing	709	2,655	3,364	1.1%	0.6%	0.6%	
Not stated	103	347	450	0.2%	0.1%	0.1%	
Total	67,230	476,264	543,494	100.0%	100.0%	100.0%	
North		·	·				
Umudugudu (Clustered rural settlement)	13,130	212,065	225,195	37.8%	59.4%	57.5%	
Dispersed/Isolated housing	5,400	133,669	139,069	15.6%	37.5%	35.5%	
Planned urban housing	4,006	671	4,677	11.5%	0.2%	1.2%	
Spontaneous/squatter housing	11,854	9,418	21,272	34.1%	2.6%	5.4%	
Other type of housing	277	905	1,182	0.8%	0.3%	0.3%	
Not stated	68	205	273	0.2%	0.1%	0.1%	
Total	34,735	356,933	391,668	100.0%	100.0%	100.0%	
East	,	,	•	<del>-</del>			
Umudugudu (Clustered rural settlement)	26,399	438,501	464,900	57.4%	79.3%	77.6%	
Dispersed/Isolated housing	5,395	82,060	87,455	11.7%	14.8%	14.6%	
Planned urban housing	2,342	1,329	3,671	5.1%	0.2%	0.6%	
Spontaneous/squatter housing	11,420	28,167	39,587	24.8%	5.1%	6.6%	
Other type of housing	366	2,958	3,324	0.8%	0.5%	0.6%	
Not stated	44	291	335	0.1%	0.1%	0.1%	
Total	45,966	553,306	599,272	100.0%	100.0%	100.0%	

Source: Fourth Rwanda Population and Housing Census. Notes: (1) See Table 56 in Annex D for details on the base population used in this figure.

Figure 25 presents the percentage of private households in clustered settlements by sector. The shades of the colour vary, with lighter shades indicating lower percentages and darker shades indicating higher percentages. For example, Kigali City stands out as the lightest area on the map while darker shades can be observed in certain districts of the Eastern Province.

Percentage of private housing units assified as Umudugudu/Old settlement 81.1 - 91.8 61,4 - 71,2 52,1 - 61,4 42,8-52,1 32.8 - 42.8 21,6-32,8 9.4 - 21.6 Open water

Figure 25: Percentage of private households in clustered settlements by sector

Source: Fourth Rwanda Population and Housing Census.

Figure 26, presenting the evolution in the distribution of private households by type of habitat since 2002, shows that the percentage of private households in scattered settlement is decreasing while the percentage of those in clustered settlements ('umudugudu') is increasing. As discussed before, this evolution is related to the implementation of the national settlement policy and the construction of households for vulnerable households in sites identified for umudugudu development. The percentage of households in spontaneous/squatter settlements, which reached about 14% in 2012 is a reflection of rapid ongoing urbanisation.

100% 90% 80% 70% 60% 67% 50% 40% 30% 20% 10% 0% 2002 2005/06 2012 Dispersed settlement ■ Umudugudu Planned urban settlement ■ Spontaneous/squatter housing ■ Other type of settlement

Figure 26: Evolution in the distribution of private households by type of habitat, 2002–2012 (%)

Source: Rwanda Population and Housing Censuses 2002 and 2012, and EICV 2005/06.

# 7.2 Type of building/living arrangement

The RPHC4 classifies all private households into four main types of building:

- i) House occupied by one household;
- ii) House occupied by several households;
- iii) Storey building occupied by one or more households; and
- iv) Several buildings in a compound occupied by several households.

Table 21, presenting the distribution of private households by type of building, sex of the household head and area of residence, shows that across all Rwanda 90% of the 2.42 million private households are each occupied by just one household while about 9% are occupied by several households. The households in the category 'Several buildings in a compound occupied by several households' are rare in the country, representing just 1%. Table 21 also shows that about 63% of the households in urban areas are classified as houses occupied by one household while this percentage is about 96% in rural areas. The importance of private households classified as houses occupied by several households rises substantially in urban areas (about 31%) when compared to the percentage observed at the national level.

Table 21: Distribution (number and percentage) of the private households by type of building by sex of the household head and area of residence

Sex of the household head and	Count			Percentage			
Type of building	Rwanda	Urban	Rural	Rwanda	Urban	Rural	
Both sexes							
House occupied by one household	2,183,377	263,725	1,919,652	90.0%	63.3%	95.6%	
House occupied by several							
households	206,121	127,712	78,409	8.5%	30.6%	3.9%	
Storey building occupied by one or							
more households	2,016	1,395	621	0.1%	0.3%	0.0%	
Several buildings in a compound							
occupied by several households	25,489	20,874	4,615	1.1%	5.0%	0.2%	
Other type of building	1,138	513	625	0.1%	0.1%	0.0%	
Not stated	6,757	2,560	4,197	0.3%	0.6%	0.2%	
Total	2,424,898	416,779	2,008,119	100.0%	100.0%	100.0%	
Male							
House occupied by one household	1,550,763	199,886	1,350,877	89.7%	62.8%	95.8%	
House occupied by several							
households	151,418	98,848	52,570	8.8%	31.0%	3.7%	
Storey building occupied by one or							
more households	1,523	1,089	434	0.1%	0.3%	0.0%	
Several buildings in a compound							
occupied by several households	19,549	16,260	3,289	1.1%	5.1%	0.2%	
Other type of building	881	431	450	0.1%	0.1%	0.0%	
Not stated	4,811	1,989	2,822	0.3%	0.6%	0.2%	
Total	1,728,945	318,503	1,410,442	100.0%	100.0%	100.0%	
Female							
House occupied by one household	632,614	63,839	568,775	90.9%	65.0%	95.2%	
House occupied by several							
households	54,703	28,864	25,839	7.9%	29.4%	4.3%	
Storey building occupied by one or							
more households	493	306	187	0.1%	0.3%	0.0%	
Several buildings in a compound							
occupied by several households	5,940	4,614	1,326	0.9%	4.7%	0.2%	
Other type of building	257	82	175	0.0%	0.1%	0.0%	
Not stated	1,946	571	1,375	0.3%	0.6%	0.2%	
Total	695,953	98,276	597,677	100.0%	100.0%	100.0%	

Table 22 presents the distribution of private households by type of building and province. It confirms that 'houses occupied by one household' is the most common type of building across the country, mainly explained by urban/rural differences. For this reason, the lowest percentage of this type of building (about 59%) was observed in Kigali, the main urban centre, while elsewhere it ranges from 93% (in the Southern Province) and 97% (in the Northern Province). Conversely, the highest percentage of households classified as 'house occupied by several households' is found in Kigali City (about 35%), a percentage around six times higher than the second highest (about 6%), which is observed in the Southern and Eastern provinces. Most of the households classified as 'Several buildings in a compound occupied by several households' in the country are found in Kigali City (about 5% of Kigali's households) and the Southern Province (about 1%).

Table 22: Distribution (Count and %) of the private households by type of building by province and area of residence

Province and Type of building	Count			Percentage		
	Urban	Rural	Rwanda	Urban	Rural	Rwanda
Rwanda						
House occupied by one household	263,725	1,919,652	2,183,377	63.3%	95.6%	90.0%
House occupied by several households	127,712	78,409	206,121	30.6%	3.9%	8.5%
Storey building occupied by one or more						
households	1,395	621	2,016	0.3%	0.0%	0.1%
Several buildings in a compound						
occupied by several households	20,874	4,615	25,489	5.0%	0.2%	1.1%
Other type of building	513	625	1,138	0.1%	0.0%	0.1%
Not stated	2,560	4,197	6,757	0.6%	0.2%	0.3%
Total	416,779	2,008,119	2,424,898	100.0%	100.0%	100.0%
Kigali City						
House occupied by one household	109,427	59,139	168,566	50.5%	84.8%	58.8%
House occupied by several households	89,568	9,489	99,057	41.3%	13.6%	34.6%
Storey building occupied by one or more						
households	1,158	70	1,228	0.5%	0.1%	0.4%
Several buildings in a compound						
occupied by several households	14,802	712	15,514	6.8%	1.0%	5.4%
Other type of building	292	39	331	0.1%	0.1%	0.1%
Not stated	1,655	313	1,968	0.8%	0.5%	0.7%
Total	216,902	69,762	286,664	100.0%	100.0%	100.0%
South						
House occupied by one household	40,114	522,274	562,388	77.2%	94.6%	93.1%
House occupied by several households	8,682	25,952	34,634	16.7%	4.7%	5.7%
Storey building occupied by one or more	-	·	·			
households	66	156	222	0.1%	0.0%	0.0%
Several buildings in a compound						
occupied by several households	2,765	2,049	4,814	5.3%	0.4%	0.8%
Other type of building	58	210	268	0.1%	0.0%	0.0%
Not stated	261	1,213	1,474	0.5%	0.2%	0.2%
Total	51,946	551,854	603,800	100.0%	100.0%	100.0%
West						
House occupied by one household	50,766	460,907	511,673	75.5%	96.8%	94.2%
House occupied by several households	14,435	13,464	27,899	21.5%	2.8%	5.1%
Storey building occupied by one or more						
households	100	161	261	0.2%	0.0%	0.1%
Several buildings in a compound						
occupied by several households	1,518	432	1,950	2.3%	0.1%	0.4%
Other type of building	103	108	211	0.2%	0.0%	0.0%
Not stated	308	1,192	1,500	0.5%	0.3%	0.3%
Total	67,230	476,264	543,494	100.0%	100.0%	100.0%
North						
House occupied by one household	28,965	350,358	379,323	83.4%	98.2%	96.9%
House occupied by several households	4,760	5,512	10,272	13.7%	1.5%	2.6%
Storey building occupied by one or more						
households	26	94	120	0.1%	0.0%	0.0%
Several buildings in a compound						
occupied by several households	766	349	1,115	2.2%	0.1%	0.3%
Other type of building	26	79	105	0.1%	0.0%	0.0%
Not stated	192	541	733	0.6%	0.2%	0.2%
Total	34,735	356,933	391,668	100.0%	100.0%	100.0%
East						
House occupied by one household	34,453	526,974	561,427	75.0%	95.2%	93.7%
House occupied by several households	10,267	23,992	34,259	22.3%	4.3%	5.7%
Storey building occupied by one or more						
households	45	140	185	0.1%	0.0%	0.0%
Several buildings in a compound						
occupied by several households	1,023	1,073	2,096	2.2%	0.2%	0.4%
Other type of building	34	189	223	0.1%	0.0%	0.0%
Not stated	144	938	1,082	0.3%	0.2%	0.2%
	1		599,272		1	1

## 7.3 Housing tenure

In Rwanda, there are six types of legal tenures under which a household can occupy a household. These are:

- i) Owner occupation;
- ii) Tenant occupation;
- iii) Hire purchase;
- iv) Free lodging;
- v) Staff housing; and
- vi) Refuge/temporary camp settlement.

Table 23 shows that in Rwanda about 80% of the 2.42 million private households are owned by the households occupying them, while about 15% are occupied by tenants and 4% are free lodging. The analysis by area of residence reveals that, in urban areas, households occupied by tenants (about 50%) are slightly more common than owner-occupied households (about 45%). On the other hand, in rural areas the percentage of owner-occupied households (about 87%) is slightly above the national average while the percentage of tenant-occupied households (about 8%) is about half the national average. The high prevalence of owner-occupied households in rural areas is related to Rwandan culture, according to which every household head must own his household in order to be highly regarded by the community. Besides, households in rural areas are built with rudimentary building materials that are readily available locally and are therefore generally affordable. On the contrary, construction in urban areas is regulated. Cheap building materials are banned and construction works are expensive. The wealthy therefore invest in housing development to generate a rental income. Moreover, urban areas are the preferred destination of migrants who then live in rented housing until they can afford to own their own dwelling (see the RPHC4 thematic report on migration for more analysis in this vein).

When the sex of the household head is considered, we see that owner-occupied households are more prevalent among female-headed households (about 83% among female-headed compared to 79% among male-headed households) while tenant-occupied households dominate among male-headed households (17% among male-headed compared to 11% among female-headed households) (Table 23).

Table 23: Distribution of private households by tenure of the household by sex of the household head and area of residence (%)

Sex of the household head and Tenure of the			Count		Pe	ercentage
household	Rwanda	Urban	Rural	Rwanda	Urban	Rural
Both sexes						
Owner	1,940,922	185,992	1,754,930	80.0%	44.6%	87.4%
Tenant	358,420	208,067	150,353	14.8%	49.9%	7.5%
Hire purchase	2,362	606	1,756	0.1%	0.2%	0.1%
Free lodging	101,930	15,332	86,598	4.2%	3.7%	4.3%
Staff housing	14,260	5,309	8,951	0.6%	1.3%	0.5%
Refuge/Temporary camp settlement	60	14	46	0.0%	0.0%	0.0%
Other	4,535	578	3,957	0.2%	0.1%	0.2%
Not stated	2,409	881	1,528	0.1%	0.2%	0.1%
Total	2,424,898	416,779	2,008,119	100.0%	100.0%	100.0%
Male						
Owner	1,361,873	132,919	1,228,954	78.8%	41.7%	87.1%
Tenant	284,598	168,827	115,771	16.5%	53.0%	8.2%
Hire purchase	1,784	491	1,293	0.1%	0.2%	0.1%
Free lodging	64,080	10,456	53,624	3.7%	3.3%	3.8%
Staff housing	12,512	4,759	7,753	0.7%	1.5%	0.6%
Refuge/Temporary camp settlement	45	11	34	0.0%	0.0%	0.0%
Other	2,366	371	1,995	0.1%	0.1%	0.1%
Not stated	1,687	669	1,018	0.1%	0.2%	0.1%
Total	1,728,945	318,503	1,410,442	100.0%	100.0%	100.0%
Female						
Owner	579,049	53,073	525,976	83.2%	54.0%	88.0%
Tenant	73,822	39,240	34,582	10.6%	39.9%	5.8%
Hire purchase	578	115	463	0.1%	0.1%	0.1%
Free lodging	37,850	4,876	32,974	5.4%	5.0%	5.5%
Staff housing	1,748	550	1,198	0.3%	0.6%	0.2%
Refuge/Temporary camp settlement	15	3	12	0.0%	0.0%	0.0%
Other	2,169	207	1,962	0.3%	0.2%	0.3%
Not stated	722	212	510	0.1%	0.2%	0.1%
Total	695,953	98,276	597,677	100.0%	100.0%	100.0%

Table 24, which shows the distribution of private households by tenure and province, shows that the province-level picture follows the pattern observed for area of residence, with the lowest percentage of owner-occupied households (about 42%) found in Kigali City, at about half the second lowest (about 83%) that is observed in the Southern and Eastern provinces. The highest percentage of owner-occupied households (about 92%) is observed in the Northern Province. Tenant-occupied households are predominantly found in Kigali City – the largest urban centre in the country. At 53%, the level is at least four times higher than the percentages observed elsewhere in the country.

Table 24: Distribution of the private households by tenure of the household by province and area of residence

Province and Tanura of the household		Count			Percentage	
Province and Tenure of the household	Urban	Rural	Rwanda	Urban	Rural	Rwanda
Rwanda						
Owner	185,992	1,754,930	1,940,922	44.6%	87.4%	80.0%
Tenant	208,067	150,353	358,420	49.9%	7.5%	14.8%
Hire purchase	606	1,756	2,362	0.2%	0.1%	0.1%
Free lodging	15,332	86,598	101,930	3.7%	4.3%	4.2%
Staff housing	5,309	8,951	14,260	1.3%	0.5%	0.6%
Refuge/Temporary camp settlement	14	46	60	0.0%	0.0%	0.0%
Other	578	3,957	4,535	0.1%	0.2%	0.2%
Not stated	881	1,528	2,409	0.2%	0.1%	0.1%
Total	416,779	2,008,119	2,424,898	100.0%	100.0%	100.0%
Kigali City						
Owner	70,236	49,127	119,363	32.4%	70.4%	41.6%
Tenant	135,736	15,802	151,538	62.6%	22.7%	52.9%
Hire purchase	394	47	441	0.2%	0.1%	0.2%
Free lodging	6,509	3,644	10,153	3.0%	5.2%	3.5%
Staff housing	3,196	769	3,965	1.5%	1.1%	1.4%
Refuge/Temporary camp settlement	8	9	17	0.0%	0.0%	0.0%
Other	259	279	538	0.1%	0.4%	0.2%
Not stated	564	85	649	0.3%	0.1%	0.2%
Total	216,902	69,762	286,664	100.0%	100.0%	100.0%
South						
Owner	27,849	470,332	498,181	53.6%	85.2%	82.5%
Tenant	20,151	40,586	60,737	38.8%	7.4%	10.1%
Hire purchase	62	538	600	0.1%	0.1%	0.1%
Free lodging	2,937	35,765	38,702	5.7%	6.5%	6.4%
Staff housing	780	2,075	2,855	1.5%	0.4%	0.5%
Refuge/Temporary camp settlement	1	7	8	0.0%	0.0%	0.0%
Other	93	2,043	2,136	0.2%	0.4%	0.4%
Not stated	73	508	581	0.1%	0.1%	0.1%
Total	51,946	551,854	603,800	100.0%	100.0%	100.0%
West						
Owner	39,213	428,908	468,121	58.3%	90.1%	86.1%
Tenant	24,162	23,650	47,812	35.9%	5.0%	8.8%
Hire purchase	71	469	540	0.1%	0.1%	0.1%
Free lodging	3,073	21,139	24,212	4.6%	4.4%	4.5%
Staff housing	421	1,172	1,593	0.6%	0.3%	0.3%
Refuge/Temporary camp settlement	2	10	12	0.0%	0.0%	0.0%
Other	151	543	694	0.2%	0.1%	0.1%
Not stated	137	373	510	0.2%	0.1%	0.1%
Total	67,230	476,264	543,494	100.0%	100.0%	100.0%
North						
Owner	23,884	336,226	360,110	68.8%	94.2%	91.9%
Tenant	9,482	9,680	19,162	27.3%	2.7%	4.9%
Hire purchase	26	169	195	0.1%	0.1%	0.1%
Free lodging	950	9,306	10,256	2.7%	2.6%	2.6%
Staff housing	291	906	1,197	0.8%	0.3%	0.3%
Refuge/Temporary camp settlement	1	3	4	0.0%	0.0%	0.0%
Other	38	405	443	0.1%	0.1%	0.1%
Not stated	63	238	301	0.2%	0.1%	0.1%
Total	34,735	356,933	391,668	100.0%	100.0%	100.0%
East	01,700	333,333	001,000	100.070	100.070	100.070
Owner	24,810	470,337	495,147	54.0%	85.0%	82.6%
Tenant	18,536	60,635	79,171	40.3%	11.0%	13.2%
Hire purchase	53	533	586	0.1%	0.1%	0.1%
Free lodging	1,863	16,744	18,607	4.1%	3.0%	3.1%
Staff housing	621	4,029	4,650	1.4%	0.7%	0.8%
Refuge/Temporary camp settlement	2	17	19	0.0%	0.7%	0.0%
Other	37	687	724	0.0%	0.0%	0.0%
	31	007	147	J. 1 /0	0.170	J. 1 /0
Not stated	44	324	368	0.1%	0.1%	0.1%

Figure 27 presents the evolution in the distribution of households by housing tenure since 1978. It shows that, at the national level, the percentage of owner-occupied households has been decreasing since 1978. It reduced from about 96% in that year to about 80% in 2012. Conversely, the percentage of tenant-occupied households has been increasing (from about 2% in 1978 to 15% in 2012). This is again related to the urbanisation process taking place in the country.

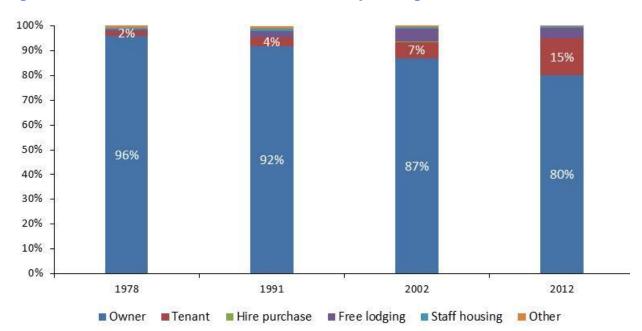


Figure 27: Evolution in the distribution of households by housing tenure, 1978–2012

Source: Rwanda Population and Housing Censuses 1978, 1991, 2002 and 2012.

# Chapter 8: Physical characteristics of the main buildings used by households

The physical characteristics of private households are closely related to the living conditions of the household occupying the unit. This chapter outlines the current status of the physical characteristics of private households, focusing on the materials used to build the walls, roof and floor of the main building. It starts by presenting the distribution of private households by building materials according to area of residence and provinces and then reviews variations in these characteristics by the highest level of education attended by the household head and the household's living standards. Wherever possible, a perspective on the evolution in the distribution of households by these characteristics over time is also offered. Finally, the chapter looks at residential promiscuity, a topic that has not been analysed by previous Censuses.

### 8.1 Main material of the walls

Table 25 presents the distribution of private households by main building material of the walls, area of residence and sex of the household head. It shows that, across all Rwanda, about 91% of the 2.42 million private households are built with walls made of either sun-dried bricks (about 55%) or wood/mud (about 36%). A third group, representing about 4% of all private households, are built of wood/cement mud. Durable building materials, such as cement blocks, concrete, burnt bricks, stone and timber, are used in the walls of only 4% of the households in Rwanda. While sun-dried bricks remain the most prevalent construction material for walls, when the data are disaggregated by area of residence, the percentage is higher in urban areas (about 66%) than in rural areas (about 53%). Households with walls built of wood/mud remain the second largest group across both areas of residence but the percentage observed in rural areas (about 40%) is around three times higher than that observed in urban areas (about 13%).

Sun-dried bricks and wood/mud are the most used because they abound across the whole country and are affordable – sun-dried bricks, for instance, can be produced by anyone and construction using such materials does not require any specific skills. On the other hand, the use of durable building materials is expensive and thus less affordable to the majority of the Rwandan population.

Table 25 also shows that the percentage of households with wood/mud walls is relatively higher among female-headed households (41% among female-headed compared to 34% among male-headed households) and that the percentage of those with sun-dried brick walls is a little higher among male-headed households (about 57% among male-headed as compared to 52% among female-headed households).

Table 25: Distribution (number and percentage) of private households by main material of the walls of the household by sex of the household head and area of residence

Sex of the household head and Main	Count			Percentage	Percentage			
material of the walls	Urban	Rural	Rwanda	Urban	Rural	Rwanda		
Both sexes								
Wood/Mud	53,155	809,513	862,668	12.8%	40.3%	35.6%		
Wood/ Cement mud	32,171	66,403	98,574	7.7%	3.3%	4.1%		
Sundried bricks	274,174	1,066,992	1,341,166	65.8%	53.1%	55.3%		
Plastic sheeting/Cardboard	458	1,943	2,401	0.1%	0.1%	0.1%		
Cement Blocks/Concrete	13,462	4,599	18,061	3.2%	0.2%	0.7%		
Stone	1,298	4,724	6,022	0.3%	0.2%	0.3%		
Timber	1,193	17,128	18,321	0.3%	0.9%	0.8%		
Burnt bricks	37,696	24,944	62,640	9.0%	1.2%	2.6%		
Other	876	6,309	7,185	0.2%	0.3%	0.3%		
Not stated	2,296	5,564	7,860	0.6%	0.3%	0.3%		
Total	416,779	2,008,119	2,424,898	100.0%	100.0%	100.0%		
Male								
Wood/Mud	36,353	543,506	579,859	11.4%	38.5%	33.5%		
Wood/ Cement mud	24,007	47,959	71,966	7.5%	3.4%	4.29		
Sundried bricks	211,825	770,917	982,742	66.5%	54.7%	56.8%		
Plastic sheeting/Cardboard	385	1,483	1,868	0.1%	0.1%	0.19		
Cement Blocks/Concrete	11,259	3,431	14,690	3.5%	0.2%	0.9%		
Stone	875	3,203	4,078	0.3%	0.2%	0.2%		
Timber	976	12,831	13,807	0.3%	0.9%	0.8%		
Burnt bricks	30,282	18,979	49,261	9.5%	1.4%	2.9%		
Other	762	4,303	5,065	0.2%	0.3%	0.3%		
Not stated	1,779	3,830	5,609	0.6%	0.3%	0.3%		
Total	318,503	1,410,442	1,728,945	100.0%	100.0%	100.0%		
Female								
Wood/Mud	16,802	266,007	282,809	17.1%	44.5%	40.6%		
Wood/ Cement mud	8,164	18,444	26,608	8.3%	3.1%	3.8%		
Sundried bricks	62,349	296,075	358,424	63.4%	49.5%	51.5%		
Plastic sheeting/Cardboard	73	460	533	0.1%	0.1%	0.19		
Cement Blocks/Concrete	2,203	1,168	3,371	2.2%	0.2%	0.5%		
Stone	423	1,521	1,944	0.4%	0.3%	0.3%		
Timber	217	4,297	4,514	0.2%	0.7%	0.7%		
Burnt bricks	7,414	5,965	13,379	7.5%	1.0%	1.99		
Other	114	2,006	2,120	0.1%	0.3%	0.3%		
Not stated	517	1,734	2,251	0.5%	0.3%	0.3%		
Total	98,276	597,677	695,953	100.0%	100.0%	100.0%		

Table 26 presents the distribution of private households by the main building material of the walls across the provinces. It shows that the percentage of households with walls built of sun-dried bricks or wood/mud and wood/cement mud varies between 90% (Kigali City) and 98% (Eastern Province). The highest percentage of households with walls built of sun-dried bricks (about 70%) was found in the Western Province and the lowest (about 47%) in the Southern Province. On the other hand, the highest percentage of households with walls built of wood/mud and wood/cement mud (about 50%) was found in the Southern and Eastern provinces and the lowest (about 23%) in the Western Province. The high percentage of households with walls made of wood in the Southern province may be related to the population's poverty<sup>5</sup>. In the case of the Eastern province, it may be related to the high proportion of immigrants as well as the large use of wood/mud with or without cement by NGOs and the local population in the villagisation process that started in early 1995.

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<sup>&</sup>lt;sup>5</sup> The Southern Province is reported to be the poorest of the country according to recent poverty assessments (NISR, 2012).

Table 26: Distribution (count and %) of the private households by main material of the walls of the household by province and area of residence

Province and Main material of the walls	Count			Percentage		
	Urban	Rural	Rwanda	Urban	Rural	Rwanda
Rwanda						
Wood/Mud	53,155	809,513	862,668	12.8%	40.3%	35.6%
Wood/ Cement mud	32,171	66,403	98,574	7.7%	3.3%	4.1%
Sundried bricks	274,174	1,066,992	1,341,166	65.8%	53.1%	55.3%
Plastic sheeting/Cardboard	458	1,943	2,401	0.1%	0.1%	0.1%
Cement Blocks/Concrete	13,462	4,599	18,061	3.2%	0.2%	0.7%
Stone	1,298	4,724	6,022	0.3%	0.2%	0.3%
Timber	1,193	17,128	18,321	0.3%	0.9%	0.8%
Burnt bricks	37,696	24,944	62,640	9.0%	1.2%	2.6%
Other	876	6,309	7,185	0.2%	0.3%	0.3%
Not stated	2,296	5,564	7,860	0.6%	0.3%	0.3%
Total	416,779	2,008,119	2,424,898	100.0%	100.0%	100.0%
Kigali City						
Wood/Mud	21,545	34,379	55,924	9.9%	49.3%	19.5%
Wood/ Cement mud	22,971	8,465	31,436	10.6%	12.1%	11.0%
Sundried bricks	142,277	25,339	167,616	65.6%	36.3%	58.5%
Plastic sheeting/Cardboard	254	58	312	0.1%	0.1%	0.1%
Cement Blocks/Concrete	11,001	424	11,425	5.1%	0.6%	4.0%
Stone	177	43	220	0.1%	0.1%	0.1%
Timber	298	25	323	0.1%	0.0%	0.1%
Burnt bricks	16,395	702	17,097	7.6%	1.0%	6.0%
Other	616	95	711	0.3%	0.1%	0.3%
Not stated	1,368	232	1,600	0.6%	0.3%	0.6%
Total	216,902	69,762	286,664	100.0%	100.0%	100.0%
South						
Wood/Mud	8,685	267,703	276,388	16.7%	48.5%	45.8%
Wood/ Cement mud	2,031	22,248	24,279	3.9%	4.0%	4.0%
Sundried bricks	33,734	252,149	285,883	64.9%	45.7%	47.4%
Plastic sheeting/Cardboard	31	201	232	0.1%	0.0%	0.0%
Cement Blocks/Concrete	517	1,023	1,540	1.0%	0.2%	0.3%
Stone	29	67	96	0.1%	0.0%	0.0%
Timber	38	31	69	0.1%	0.0%	0.0%
Burnt bricks	6,609	6,389	12,998	12.7%	1.2%	2.2%
Other	32	229	261	0.1%	0.0%	0.0%
Not stated	240	1,814	2,054	0.5%	0.3%	0.3%
Total	51,946	551,854	603,800	100.0%	100.0%	100.0%
West						
Wood/Mud	4,744	117,133	121,877	7.1%	24.6%	22.4%
Wood/ Cement mud	1,347	3,602	4,949	2.0%	0.8%	0.9%
Sundried bricks	54,206	324,644	378,850	80.6%	68.2%	69.7%
Plastic sheeting/Cardboard	89	483	572	0.1%	0.1%	0.1%
Cement Blocks/Concrete	608	983	1,591	0.9%	0.2%	0.3%
Stone	227	1,830	2,057	0.3%	0.4%	0.4%
Timber	822	16,984	17,806	1.2%	3.6%	3.3%
Burnt bricks	4,784	7,795	12,579	7.1%	1.6%	2.3%
Other	74	1,279	1,353	0.1%	0.3%	0.3%
Not stated	329	1,531	1,860	0.5%	0.3%	0.3%
Total	67,230	476,264	543,494	100.0%	100.0%	100.0%
North						
Wood/Mud	7,517	131,558	139,075	21.6%	36.9%	35.5%
Wood/ Cement mud	1,534	8,313	9,847	4.4%	2.3%	2.5%
Sundried bricks	19,118	203,674	222,792	55.0%	57.1%	56.9%
Plastic sheeting/Cardboard	40	265	305	0.1%	0.1%	0.1%
Cement Blocks/Concrete	117	434	551	0.3%	0.1%	0.1%
Stone	817	2,350	3,167	2.4%	0.7%	0.8%
Timber	24	34	58	0.1%	0.0%	0.0%
	5,282	5,296	10,578	15.2%	1.5%	2.7%
Burnt bricks	5,262	0,200				
Other						1.1%
	115	4,131 878	4,246 1,049	0.3% 0.5%	1.2% 0.3%	1.1% 0.3%

RPHC4 – Theme 08 – Characteristics of households and housing

Province and Main material of the walls	Count			Percentage			
	Urban	Rural	Rwanda	Urban	Rural	Rwanda	
East							
Wood/Mud	10,664	258,740	269,404	23.2%	46.8%	45.0%	
Wood/ Cement mud	4,288	23,775	28,063	9.3%	4.3%	4.7%	
Sundried bricks	24,839	261,186	286,025	54.0%	47.2%	47.7%	
Plastic sheeting/Cardboard	44	936	980	0.1%	0.2%	0.2%	
Cement Blocks/Concrete	1,219	1,735	2,954	2.7%	0.3%	0.5%	
Stone	48	434	482	0.1%	0.1%	0.1%	
Timber	11	54	65	0.0%	0.0%	0.0%	
Burnt bricks	4,626	4,762	9,388	10.1%	0.9%	1.6%	
Other	39	575	614	0.1%	0.1%	0.1%	
Not stated	188	1,109	1,297	0.4%	0.2%	0.2%	
Total	45,966	553,306	599,272	100.0%	100.0%	100.0%	

Table 27, presenting the distribution of private households by main building material of the walls and the highest level of education attended by the household head, shows that the household head's level of education is an important factor in explaining the distribution of households by the main material used in the walls of the household they occupy. It shows that the percentage of households headed by uneducated individuals living in households built of cement blocks/concrete or burnt brick walls is low (about 7% and 8% respectively) while there is a high percentage of uneducated heads who live in households built of plastic sheeting/cardboard or wood/mud (about 37% and 40%, respectively). Likewise the percentage of household heads with post primary, secondary or university that live in a household built of cement blocks/concrete or burnt bricks is higher (about 61% and 54% respectively).

Table 27: Distribution (count and %) of the private households by main material of the walls of the household, sex and level of education attained by the household head

Sex of the	Percentages								
household head	No	Pre-	Primary	Post-	Secondary	University	Not	Total	Count
and Main	Education	School		primary	-		Stated		
material of the									
roof									
Both Sexes									
Wood/Mud	40.4%	0.2%	53.5%	1.5%	3.1%	0.3%	1.0%	100.0%	862,668
Wood/ Cement mud	19.5%	0.2%	56.6%	3.4%	14.5%	4.0%	1.8%	100.0%	98,574
Sundried bricks	28.5%	0.2%	55.8%	2.1%	9.1%	2.8%	1.5%	100.0%	1,341,166
Plastic				=::,;					1,011,100
sheeting/Cardbo ard	36.7%	0.3%	48.6%	1.3%	7.5%	2.3%	3.4%	100.0%	2,401
Cement Blocks/Concrete	6.9%	0.2%	28.3%	2.0%	24.2%	35.0%	3.3%	100.0%	18,061
Stone	30.8%	0.3%	49.7%	1.8%	11.9%	3.9%	1.6%	100.0%	6,022
Timber	29.2%	0.4%	59.5%	1.9%	6.0%	1.4%	1.6%	100.0%	18,321
Burnt bricks	8.0%	0.1%	32.6%	2.6%	22.8%	29.2%	4.7%	100.0%	62,640
Other	40.9%	0.3%	50.3%	1.1%	4.2%	1.4%	1.9%	100.0%	7,185
Not stated	30.0%	0.2%	48.8%	1.7%	10.0%	5.7%	3.5%	100.0%	7,860
Total	31.7%	0.2%	54.2%	1.9%	7.6%	2.9%	1.4%	100.0%	2,424,898
Males									
Wood/Mud	31.5%	0.2%	61.4%	1.6%	3.8%	0.4%	1.1%	100.0%	579,859
Wood/ Cement mud	13.3%	0.2%	60.9%	3.3%	15.8%	4.6%	1.9%	100.0%	71,966
Sundried bricks	21.2%	0.2%	61.3%	2.2%	10.2%	3.3%	1.6%	100.0%	982,742
Plastic sheeting/Cardbo ard	30.7%	0.4%	53.1%	1.1%	8.3%	2.5%	4.0%	100.0%	1,868
Cement Blocks/Concrete	4.7%	0.2%	28.2%	1.9%	23.9%	37.8%	3.4%	100.0%	14,690
Stone	19.7%	0.3%	57.7%	1.6%	13.6%	5.1%	2.1%	100.0%	4,078
Timber	22.0%	0.4%	65.4%	2.1%	6.7%	1.6%	1.8%	100.0%	13,807
Burnt bricks	5.3%	0.1%	33.3%	2.4%	22.1%	32.0%	4.7%	100.0%	49,261
Other	31.0%	0.3%	58.7%	1.0%	4.9%	1.6%	2.4%	100.0%	5,065
Not stated	21.8%	0.2%	54.2%	1.9%	11.2%	6.7%	4.0%	100.0%	5,609
Total	23.8%	0.2%	60.2%	2.0%	8.7%	3.5%	1.6%	100.0%	1,728,945
Females									
Wood/Mud	58.8%	0.2%	37.2%	1.2%	1.7%	0.1%	0.7%	100.0%	282,809
Wood/ Cement mud	36.2%	0.2%	45.1%	3.6%	11.2%	2.1%	1.5%	100.0%	26,608
Sundried bricks	48.4%	0.2%	40.8%	1.9%	6.1%	1.4%	1.1%	100.0%	358,424
Plastic sheeting/Cardbo	57.6%	0.2%	32.8%	2.1%	4.5%	1.7%	1.1%	100.0%	533
ard Cement	40.70/	0.407	20.007	0.007	05.007	20.72	0.407	400.007	0.077
Blocks/Concrete	16.7%	0.4%	29.0%	2.6%	25.6%	22.7%	3.1%	100.0%	3,371
Stone	54.1%	0.4%	33.0%	2.3%	8.3%	1.3%	0.6%	100.0%	1,944
Timber	51.4%	0.2%	41.4%	1.5%	3.9%	0.6%	1.1%	100.0%	4,514
Burnt bricks	18.0%	0.1%	30.0%	3.3%	25.2%	18.6%	4.8%	100.0%	13,379
Other	64.5%	0.0%	30.2%	1.2%	2.3%	1.0%	0.7%	100.0%	2,120
Not stated	50.3%	0.2%	35.5%	1.2%	7.1%	3.3%	2.4%	100.0%	2,251
Total	51.5%	0.2%	39.2%	1.7%	5.0%	1.4%	1.1%	100.0%	695,953

Figure 28 below presents the evolution in the distribution of households by the main building material of the walls since 1978. It shows that the percentage of private households with walls built of wood/mud more than halved between 1978 and 2012, from 92% of the total in 1978 to 40% in 2012. In the same period, the percentage of households built of sun-dried brick walls registered a 14-fold increase from about 4% of all houses in 1978 to about 55% in 2012. This large expansion

in the use of sun-dried bricks in the last three decades is related to, among other factors, the abundance of the raw material (soil) almost throughout the country (with the exception of the area near the volcanoes), the relatively low production cost and the implementation of the *villagisation* policy.

■ Wood/Mud, Wood/Mud Cement Sundried bricks Burnt bricks Other materials

Figure 28: Evolution in the distribution of households by the main building material of the walls, 1978–2012

Source: Rwanda Population and Housing Censuses 1978, 1991, 2002 and 2012, and EICV 2005/06.

#### 8.2 Main material of the roof

Table 28 presents the distribution of the private households by the main material of the roof and area of residence and the sex of the household head. It shows that, across all Rwanda, about 99% of the 2.42 million private households use as their main material of the roof either iron sheets (about 60%) or local tiles (about 39%). This represents a significant change when compared to the EICV3 results, which estimated these percentages at about 54% and 43% respectively (NISR, 2012b). Iron sheets are used more in urban households (about 87%) than in rural areas (about 54%), while local tiles are more predominant in rural areas (about 45% compared to 11%).

Table 28: Distribution (number and percentage) of private households by main material of the roof of the main building by sex of the household head and area of residence

Sex of the household head and Main		Count			Percentage	
material of the roof	Rwanda	Urban	Rural	Rwanda	Urban	Rural
Both sexes						
Iron sheets	1,443,868	364,067	1,079,801	59.5%	87.4%	53.8%
Local tiles	953,837	45,448	908,389	39.3%	10.9%	45.2%
Industrial tiles	12,377	3,891	8,486	0.5%	0.9%	0.4%
Asbestos	2,777	1,400	1,377	0.1%	0.3%	0.1%
Concrete	531	343	188	0.0%	0.1%	0.0%
Cartoons/Sheathing	5,346	425	4,921	0.2%	0.1%	0.3%
Grass	1,983	64	1,919	0.1%	0.0%	0.1%
Other material	1,000	252	748	0.0%	0.1%	0.0%
Not stated	3,179	889	2,290	0.1%	0.2%	0.1%
Total	2,424,898	416,779	2,008,119	100.0%	100.0%	100.0%
Male						
Iron sheets	1,044,491	281,036	763,455	60.4%	88.2%	54.1%
Local tiles	664,657	31,734	632,923	38.4%	10.0%	44.9%
Industrial tiles	9,137	3,179	5,958	0.5%	1.0%	0.4%
Asbestos	1,965	1,018	947	0.1%	0.3%	0.1%
Concrete	423	278	145	0.0%	0.1%	0.0%
Cartoons/Sheathing	3,990	328	3,662	0.2%	0.1%	0.3%
Grass	1,326	43	1,283	0.1%	0.0%	0.1%
Other material	712	193	519	0.0%	0.1%	0.0%
Not stated	2,244	694	1,550	0.1%	0.2%	0.1%
Total	1,728,945	318,503	1,410,442	100.0%	100.0%	100.0%
Female						
Iron sheets	399,377	83,031	316,346	57.4%	84.5%	52.9%
Local tiles	289,180	13,714	275,466	41.6%	14.0%	46.1%
Industrial tiles	3,240	712	2,528	0.5%	0.7%	0.4%
Asbestos	812	382	430	0.1%	0.4%	0.1%
Concrete	108	65	43	0.0%	0.1%	0.0%
Cartoons/Sheathing	1,356	97	1,259	0.2%	0.1%	0.2%
Grass	657	21	636	0.1%	0.0%	0.1%
Other material	288	59	229	0.0%	0.1%	0.0%
Not stated	935	195	740	0.1%	0.2%	0.1%
Total	695,953	98,276	597,677	100.0%	100.0%	100.0%

Table 29 shows the distribution of households by the main material of the roof and by province, indicating that the highest percentages of households with iron sheet roofs are to be found in Kigali City (about 97%) and the Eastern Province (about 96%) while the lowest (about 20%) is in the Southern Province. On the other hand, the highest percentage of households with local tile roofs (about 79%) is found in the Southern Province and the lowest two in Kigali City (about 1%) and the Eastern Province (about 3%). The widespread use of local tiles in the Southern Province is related to the availability of clay in the valleys of this province. The high percentage of households covered with iron sheets is related to the construction of dwelling for returnees in early 1995 and the implementation of the villagisation which both privileged iron sheets since there is a very limited number of clay valleys in this province.

Table 29: Distribution (count and %) of the private households by main material of the roof of the household by province and area of residence

Province and Main material of the roof	Count			Percentage		
	Urban	Rural	Rwanda	Urban	Rural	Rwanda
Rwanda						
Iron sheets	364,067	1,079,801	1,443,868	87.4%	53.8%	59.5%
Local tiles	45,448	908,389	953,837	10.9%	45.2%	39.3%
Industrial tiles	3,891	8,486	12,377	0.9%	0.4%	0.5%
Asbestos	1,400	1,377	2,777	0.3%	0.1%	0.1%
Concrete	343	188	531	0.1%	0.0%	0.0%
Cartoons/Sheathing	425	4,921	5,346	0.1%	0.3%	0.2%
Grass	64	1,919	1,983	0.0%	0.1%	0.1%
Other material	252	748	1,000	0.1%	0.0%	0.0%
Not stated	889	2,290	3,179	0.2%	0.1%	0.1%
Total	416,779	2,008,119	2,424,898	100.0%	100.0%	100.0%
Kigali City						
Iron sheets	211,167	66,246	277,413	97.4%	95.0%	96.8%
Local tiles	1,027	3,098	4,125	0.5%	4.4%	1.4%
Industrial tiles	2,773	151	2,924	1.3%	0.2%	1.0%
Asbestos	858	32	890	0.4%	0.1%	0.3%
Concrete	275	4	279	0.1%	0.0%	0.1%
Cartoons/Sheathing	126	86	212	0.1%	0.1%	0.1%
Grass	5	18	23	0.0%	0.0%	0.0%
Other material	117	9	126	0.1%	0.0%	0.0%
Not stated	554	118	672	0.3%	0.2%	0.2%
Total	216,902	69,762	286,664	100.0%	100.0%	100.0%
South	20, 204	02.442	440 744	FO C0/	40.00/	40.00/
Iron sheets	26,301	93,443	119,744	50.6%	16.9%	19.8%
Local tiles	24,740	452,250	476,990	47.6%	82.0%	79.0%
Industrial tiles Asbestos	382 309	2,461 296	2,843 605	0.7% 0.6%	0.5% 0.1%	0.5% 0.1%
Concrete	16	296 54	70	0.6%	0.1%	0.1%
Cartoons/Sheathing	74	1,470	1,544	0.0%	0.0%	0.0%
Grass	13	724	737	0.1%	0.5%	0.1%
Other material	41	354	395	0.0%	0.1%	0.1%
Not stated	70	802	872	0.1%	0.1%	0.1%
Total	51,946	551,854	603,800	100.0%	100.0%	100.0%
West	01,010	001,001	000,000	100.070	100.070	100.070
Iron sheets	51,922	199,311	251,233	77.2%	41.9%	46.2%
Local tiles	14,487	272,536	287,023	21.6%	57.2%	52.8%
Industrial tiles	419	2,406	2,825	0.6%	0.5%	0.5%
Asbestos	103	203	306	0.2%	0.0%	0.1%
Concrete	23	36	59	0.0%	0.0%	0.0%
Cartoons/Sheathing	93	614	707	0.1%	0.1%	0.1%
Grass	25	448	473	0.0%	0.1%	0.1%
Other material	44	102	146	0.1%	0.0%	0.0%
Not stated	114	608	722	0.2%	0.1%	0.1%
Total	67,230	476,264	543,494	100.0%	100.0%	100.0%
North						
Iron sheets	29,469	192,463	221,932	84.8%	53.9%	56.7%
Local tiles	4,883	161,165	166,048	14.1%	45.2%	42.4%
Industrial tiles	158	1,828	1,986	0.5%	0.5%	0.5%
Asbestos	63	273	336	0.2%	0.1%	0.1%
Concrete	10	12	22	0.0%	0.0%	0.0%
Cartoons/Sheathing	40	500	540	0.1%	0.1%	0.1%
Grass	9	292	301	0.0%	0.1%	0.1%
Other material	26	113	139	0.1%	0.0%	0.0%
Not stated	77	287	364	0.2%	0.1%	0.1%
Total	34,735	356,933	391,668	100.0%	100.0%	100.0%
East	1					
Iron sheets	45,208	528,338	573,546	98.4%	95.5%	95.7%
Local tiles	311	19,340	19,651	0.7%	3.5%	3.3%
Industrial tiles	159	1,640	1,799	0.4%	0.3%	0.3%
Asbestos	67	573	640	0.2%	0.1%	0.1%

Province and Main material of the roof	Count			Percentage			
	Urban	Rural	Rwanda	Urban	Rural	Rwanda	
Concrete	19	82	101	0.0%	0.0%	0.0%	
Cartoons/Sheathing	92	2,251	2,343	0.2%	0.4%	0.4%	
Grass	12	437	449	0.0%	0.1%	0.1%	
Other material	24	170	194	0.1%	0.0%	0.0%	
Not stated	74	475	549	0.2%	0.1%	0.1%	
Total	45,966	553,306	599,272	100.0%	100.0%	100.0%	

Table 30, presenting the distribution of households by the highest level of education attended by the household head and the main material of the roof, indicates that higher proportions of households headed by uneducated individuals are found living in households with grass or cartoons roof (about 54% and 46%, respectively) than in household with concrete or asbestos roof (about 14% and 15% respectively). Conversely, higher proportions of households headed by individuals that attended post-primary, secondary or university education are found living in households with concrete or asbestos roof (about 46% and 47% respectively) than in households with cartoon/sheathing or grass roofs (about 3% in both cases). The percentage of households headed by individuals with at least post-primary education living in households with roofs built of the most common materials – i.e. iron sheets and local tiles – amount to 16% and 7% respectively.

Table 30: Distribution (count and %) of private households by main material of the roof of the household, sex and level of education attained by the household head

Sex of the	Percentage								
household head and	No	Pre-	Primary	Post	Secondary	University	Not	Total	Count
Main material of the	Education	School		Primary			stated		
roof									
Both Sexes									
Iron sheets	28.8%	0.2%	52.8%	1.9%	10.3%	4.2%	1.7%	100.0%	1,443,868
Local tiles	36.2%	0.2%	56.4%	1.9%	3.6%	0.6%	1.0%	100.0%	953,837
Industrial tiles	26.7%	0.2%	45.1%	1.7%	9.2%	15.4%	1.8%	100.0%	12,377
Asbestos	15.4%	0.1%	31.1%	2.0%	15.9%	28.5%	6.8%	100.0%	2,777
Concrete	14.1%	0.4%	35.6%	2.1%	16.2%	27.9%	3.8%	100.0%	531
Cartoons/Sheathing	45.6%	0.2%	48.8%	0.7%	2.5%	0.2%	1.9%	100.0%	5,346
Grass	54.0%	0.3%	41.9%	0.7%	2.1%	0.1%	1.0%	100.0%	1,983
Other material	37.7%	0.0%	42.7%	1.6%	8.4%	6.9%	2.7%	100.0%	1,000
Not stated	32.2%	0.3%	47.0%	1.5%	8.9%	5.7%	4.4%	100.0%	3,179
Total	31.7%	0.2%	54.2%	1.9%	7.6%	2.9%	1.4%	100.0%	2,424,898
Males									
Iron sheets	21.2%	0.3%	58.1%	2.0%	11.6%	5.0%	1.9%	100.0%	1,044,491
Local tiles	27.8%	0.2%	63.8%	2.1%	4.3%	0.8%	1.0%	100.0%	664,657
Industrial tiles	19.2%	0.2%	48.7%	1.7%	9.9%	18.4%	1.8%	100.0%	9,137
Asbestos	11.9%	0.1%	32.8%	1.9%	15.3%	31.5%	6.6%	100.0%	1,965
Concrete	11.1%	0.2%	38.5%	2.1%	15.6%	27.7%	4.7%	100.0%	423
Cartoons/Sheathing	41.1%	0.3%	52.3%	0.8%	3.0%	0.3%	2.4%	100.0%	3,990
Grass	49.0%	0.3%	45.9%	0.8%	2.7%	0.2%	1.2%	100.0%	1,326
Other material	31.6%	0.0%	47.2%	1.4%	9.6%	7.2%	3.1%	100.0%	712
Not stated	23.4%	0.3%	51.6%	1.8%	10.4%	7.0%	5.5%	100.0%	2,244
Total	23.8%	0.2%	60.2%	2.0%	8.7%	3.5%	1.6%	100.0%	1,728,945
Females									
Iron sheets	48.6%	0.2%	39.0%	1.8%	7.0%	2.1%	1.3%	100.0%	399,377
Local tiles	55.5%	0.2%	39.5%	1.6%	2.2%	0.2%	0.8%	100.0%	289,180
Industrial tiles	47.6%	0.2%	34.8%	1.8%	7.1%	7.0%	1.6%	100.0%	3,240
Asbestos	24.1%	0.2%	27.1%	2.3%	17.4%	21.3%	7.5%	100.0%	812
Concrete	25.9%	0.9%	24.1%	1.9%	18.5%	28.7%	0.0%	100.0%	108
Cartoons/Sheathing	58.9%	0.1%	38.6%	0.4%	1.3%	0.1%	0.6%	100.0%	1,356
Grass	63.9%	0.2%	33.9%	0.6%	0.8%	0.0%	0.6%	100.0%	657
Other material	52.8%	0.0%	31.6%	2.1%	5.6%	6.3%	1.7%	100.0%	288
Not stated	53.2%	0.2%	35.9%	0.7%	5.5%	2.7%	1.8%	100.0%	935
Total	51.5%	0.2%	39.2%	1.7%	5.0%	1.4%	1.1%	100.0%	695,953

Figure 29 below presents the evolution in the distribution of private households by main material of the roof since 1978. It shows that there has been a profound change in the use of building materials for roofing since the first Census. While in 1978, thatch/grass was the most used building material for roofing (about 62%), in 2012 the percentage of households with thatch/grass roofs has fallen to almost 0%. The most remarkable falls in the use of thatch/grass roofs took place between 1978 and 1991 (a three-fold reduction from 62% to 23%) and between 2005 and 2012 (a ten-fold reduction from 10% to almost 0%). On the other hand, iron sheets and local tiles became the most predominant building materials used. In 2005, the percentages of households with iron sheet and local tile roofs were close (about 44% and 43% respectively). From that point on, however, iron sheets became the single most used material for roofing in Rwanda.

This change can be explained by a number of factors. First, since 2006, REMA has banned the use of burning wood for cooking local tiles. As a result, the price of local tiles more than doubled and this made iron sheets relatively more attractive. Second, iron sheets are the preferred building material in the implementation of the *villagisation* policy and, during the eradication of thatched housing campaign initiated in late 2008, the Government and NGOs opted for the use and distribution of iron sheets to the most vulnerable households. Iron sheets is also privileged by the population because there require structural framework, are easy to set down and more waterproof than local tiles.

■ Iron sheets
■ Local tiles
■ Grass
■ Other materials
■ Not stated

Figure 29: Evolution in use of building materials for the roof of the main building of the household, 1978–2012

Source: Rwanda Population and Housing Censuses 1978, 1991, 2002 and 2012, and EICV 2005/06.

#### 8.3 Main material of the floor

Table 31 presents the distribution of private households by type of floor, area of residence and sex of the household head. It shows that, across all Rwanda, about 98% of all private households have floors built of either earth/sand (about 78%) or concrete (about 20%). Households with floors built of concrete are most likely to be found in urban areas (about 64% compared to 11% found in rural areas), whereas households with floors built of earth/sand are more likely to be found in rural areas (about 87% compared with 33% found in urban areas).

When the sex of the household head is considered, the percentage of households with earth/sand floors is higher among female-headed households (about 82%) than among male-headed households (76%), whereas households with concrete floors are more prevalent among male-headed households (about 21%) than among female-headed households (about 16%).

Table 31: Distribution (number and percentage) of private households by type of floor of the household, sex of the household head and area of residence

Sex of the household head and Type	Count			Percentage				
of floor	Rwanda	Urban	Rural	Rwanda	Urban	Rural		
Both sexes								
Earth/Sand	1,883,363	139,303	1,744,060	77.7%	33.4%	86.9%		
Concrete	480,789	265,473	215,316	19.8%	63.7%	10.7%		
Stone	20,127	4,100	16,027	0.8%	1.0%	0.8%		
Burn Bricks	26,050	3,646	22,404	1.1%	0.9%	1.1%		
Timber	1,755	333	1,422	0.1%	0.1%	0.1%		
Other	2,577	1,574	1,003	0.1%	0.4%	0.1%		
Not stated	10,237	2,350	7,887	0.4%	0.6%	0.4%		
Total	2,424,898	416,779	2,008,119	100.0%	100.0%	100.0%		
Male								
Earth/Sand	1,313,395	99,484	1,213,911	76.0%	31.2%	86.1%		
Concrete	370,240	209,778	160,462	21.4%	65.9%	11.4%		
Stone	15,315	3,180	12,135	0.9%	1.0%	0.9%		
Burn Bricks	19,484	2,682	16,802	1.1%	0.8%	1.2%		
Timber	1,285	246	1,039	0.1%	0.1%	0.1%		
Other	2,091	1,349	742	0.1%	0.4%	0.1%		
Not stated	7,135	1,784	5,351	0.4%	0.6%	0.4%		
Total	1,728,945	318,503	1,410,442	100.0%	100.0%	100.0%		
Female								
Earth/Sand	569,968	39,819	530,149	81.9%	40.5%	88.7%		
Concrete	110,549	55,695	54,854	15.9%	56.7%	9.2%		
Stone	4,812	920	3,892	0.7%	0.9%	0.7%		
Burn Bricks	6,566	964	5,602	0.9%	1.0%	0.9%		
Timber	470	87	383	0.1%	0.1%	0.1%		
Other	486	225	261	0.1%	0.2%	0.0%		
Not stated	3,102	566	2,536	0.5%	0.6%	0.4%		
Total	695,953	98,276	597,677	100.0%	100.0%	100.0%		

Source: Fourth Rwanda Population and Housing Census.

Table 32, presenting the distribution of private households by type of floor and by province, shows that the picture follows the pattern observed by area of residence, with households with earth/sand floors being most common outside Kigali City. The highest percentages of households with earth/sand floors are found in the Northern (about 86%) and Western provinces (about 85%) and the lowest in Kigali City (about 33%). Concrete is the most common type of floor found in Kigali, covering the floors of about 65% of the households in this province. The large use of earth/sand is related to its free availability all over the country. In contrast, concrete floor is expensive and limited number of households can afford it.

Table 32: Distribution (count and %) of the private households by type of floor of the household by province and area of residence

Province and Type of floor		Count		Percentage			
	Urban	Rural	Rwanda	Urban	Rural	Rwanda	
Rwanda							
Earth/Sand	139,303	1,744,060	1,883,363	33.4%	86.9%	77.7%	
Concrete	265,473	215,316	480,789	63.7%	10.7%	19.8%	
Stone	4,100	16,027	20,127	1.0%	0.8%	0.8%	
Burn Bricks	3,646	22,404	26,050	0.9%	1.1%	1.1%	
Timber	333	1,422	1,755	0.1%	0.1%	0.1%	
Other	1,574	1,003	2,577	0.4%	0.1%	0.1%	
Not stated	2,350	7,887	10,237	0.6%	0.4%	0.4%	
Total	416,779	2,008,119	2,424,898	100.0%	100.0%	100.0%	
Kigali City							
Earth/Sand	42,082	52,266	94,348	19.4%	74.9%	32.9%	
Concrete	169,725	16,683	186,408	78.3%	23.9%	65.0%	
Stone	1,512	220	1,732	0.7%	0.3%	0.6%	
Burn Bricks	857	208	1,065	0.4%	0.3%	0.4%	
Timber	173	46	219	0.1%	0.1%	0.1%	
Other	1,234	52	1,286	0.6%	0.1%	0.5%	
Not stated	1,319	287	1,606	0.6%	0.4%	0.6%	
Total	216,902	69,762	286,664	100.0%	100.0%	100.0%	
South							
Earth/Sand	21,149	467,442	488,591	40.7%	84.7%	80.9%	
Concrete	28,203	66,208	94,411	54.3%	12.0%	15.6%	
Stone	373	2,573	2,946	0.7%	0.5%	0.5%	
Burn Bricks	1,922	12,775	14,697	3.7%	2.3%	2.4%	
Timber	22	244	266	0.0%	0.0%	0.0%	
Other	59	296	355	0.1%	0.1%	0.1%	
Not stated	218	2,316	2,534	0.4%	0.4%	0.4%	
Total	51,946	551,854	603,800	100.0%	100.0%	100.0%	
West		·	·				
Earth/Sand	36,368	423,308	459,676	54.1%	88.9%	84.6%	
Concrete	28,691	36,726	65,417	42.7%	7.7%	12.0%	
Stone	969	6,653	7,622	1.4%	1.4%	1.4%	
Burn Bricks	649	6,878	7,527	1.0%	1.4%	1.4%	
Timber	41	424	465	0.1%	0.1%	0.1%	
Other	139	185	324	0.2%	0.0%	0.1%	
Not stated	373	2,090	2,463	0.6%	0.4%	0.5%	
Total	67,230	476,264	543,494	100.0%	100.0%	100.0%	
North		·	·				
Earth/Sand	16,963	318,593	335,556	48.8%	89.3%	85.7%	
Concrete	16,527	30,895	47,422	47.6%	8.7%	12.1%	
Stone	864	3,975	4,839	2.5%	1.1%	1.2%	
Burn Bricks	74	1,615	1,689	0.2%	0.5%	0.4%	
Timber	50	317	367	0.1%	0.1%	0.1%	
Other	47	167	214	0.1%	0.1%	0.1%	
Not stated	210	1,371	1,581	0.6%	0.4%	0.4%	
Total	34,735	356,933	391,668	100.0%	100.0%	100.0%	
East							
Earth/Sand	22,741	482,451	505,192	49.5%	87.2%	84.3%	
Concrete	22,327	64,804	87,131	48.6%	11.7%	14.5%	
Stone	382	2,606	2,988	0.8%	0.5%	0.5%	
Burn Bricks	144	928	1,072	0.3%	0.2%	0.2%	
Timber	47	391	438	0.1%	0.1%	0.1%	
Other	95	303	398	0.2%	0.1%	0.1%	
Not stated	230	1,823	2,053	0.5%	0.3%	0.3%	
Total	45,966	553,306	599,272	100.0%	100.0%	100.0%	

Table 33 presents the distribution of households by the highest level of education attended by the household head and the type of floor of the household. First, it shows that the percentage of households headed by an uneducated individual increases three-fold when one moves from a household with floors built of durable materials such as concrete or burnt bricks (about 11% and

19% respectively) to floors built of less durable materials such as timber and earth/sand (about 27% and 37% respectively). Second, the percentage of households headed by individuals that attended either post-primary, secondary or university education increases up to eight times when one moves from a household with earth/sand floor (about 5%) to a household with a floor built from more durable materials such as concrete (about 40%).

Table 33: Distribution (count and %) of the private households by type of floor of the household by level of education attained by the household head

Sex of the					Percentages				
household	No	Pre-	Primary	Post-	Secondary	Universit	Not	Total	Count
head and Type	Education	School		primary		у	Stated		
of Floor									
Both Sexes									
Earth/Sand	37.3%	0.2%	56.2%	1.5%	3.5%	0.2%	1.0%	100.0%	1,883,363
Concrete	10.9%	0.2%	45.8%	3.3%	23.7%	13.1%	3.0%	100.0%	480,789
Stone	24.4%	0.4%	58.0%	2.1%	10.9%	3.0%	1.4%	100.0%	20,127
Burn Bricks	18.9%	0.2%	64.7%	4.4%	8.6%	1.9%	1.3%	100.0%	26,050
Timber	27.4%	0.6%	54.5%	1.9%	8.3%	5.5%	1.8%	100.0%	1,755
Other	14.0%	0.1%	40.4%	2.1%	16.6%	24.8%	1.9%	100.0%	2,577
Not stated	34.2%	0.3%	48.4%	1.6%	8.0%	4.5%	3.1%	100.0%	10,237
Total	31.7%	0.2%	54.2%	1.9%	7.6%	2.9%	1.4%	100.0%	2,424,898
Males									
Earth/Sand	28.8%	0.2%	63.7%	1.7%	4.2%	0.3%	1.1%	100.0%	1,313,395
Concrete	7.0%	0.2%	47.4%	3.1%	24.5%	14.7%	3.1%	100.0%	370,240
Stone	17.3%	0.4%	63.2%	2.1%	12.2%	3.5%	1.4%	100.0%	15,315
Burn Bricks	14.0%	0.2%	68.5%	4.3%	9.3%	2.2%	1.4%	100.0%	19,484
Timber	20.7%	0.5%	58.5%	2.3%	9.8%	6.5%	1.6%	100.0%	1,285
Other	10.3%	0.0%	40.7%	2.2%	17.2%	27.6%	2.1%	100.0%	2,091
Not stated	25.6%	0.3%	54.0%	1.7%	9.2%	5.5%	3.7%	100.0%	7,135
Total	23.8%	0.2%	60.2%	2.0%	8.7%	3.5%	1.6%	100.0%	1,728,945
Females									
Earth/Sand	57.1%	0.2%	38.8%	1.2%	1.8%	0.1%	0.8%	100.0%	569,968
Concrete	23.9%	0.2%	40.2%	4.0%	21.0%	8.0%	2.6%	100.0%	110,549
Stone	47.0%	0.3%	41.3%	2.0%	6.9%	1.4%	1.1%	100.0%	4,812
Burn Bricks	33.3%	0.2%	53.4%	4.5%	6.5%	1.1%	1.1%	100.0%	6,566
Timber	45.5%	0.9%	43.6%	1.1%	4.0%	2.8%	2.1%	100.0%	470
Other	29.8%	0.2%	39.3%	2.1%	14.4%	13.0%	1.2%	100.0%	486
Not stated	54.0%	0.2%	35.5%	1.2%	5.2%	2.3%	1.6%	100.0%	3,102
Total	51.5%	0.2%	39.2%	1.7%	5.0%	1.4%	1.1%	100.0%	695,953

Source: Fourth Rwanda Population and Housing Census.

Figure 30 presents the evolution in the percentage of households with floors built of concrete since 1991. It shows that the percentage of households with floors built of concrete has doubled from about 10% in 1991 to about 20% in 2012.

2002

2012

Figure 30: Evolution in the percentage of private households with floors built of concrete, 1991–2012

Source: Rwanda Population and Housing Censuses 1991, 2002 and 2012.

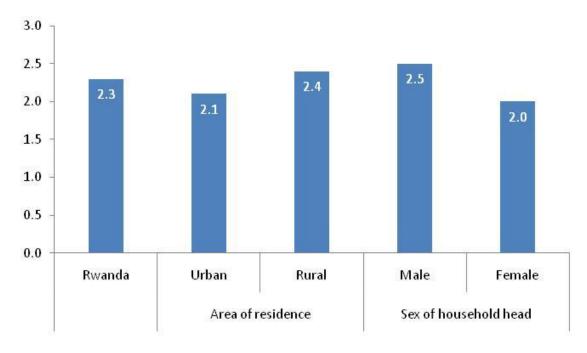
1991

## 8.4 Residential promiscuity

2% 0%

Residential promiscuity relates the size of households to the size of the households they occupy by dividing the number of members of the household by the number of number of bedrooms existing in the household. Figure 31 presents the mean number of persons per bedroom by area of residence and sex of the household head. It shows that, at the national level, there are 2.3 persons per bedroom, meaning that in an average household one bedroom is shared by two individuals. The number of persons per bedroom varies slightly by area of residence, with the rural areas showing a relatively higher number of persons per bedroom than the urban areas. When the sex of the household head is considered, female-headed households have a lower number of persons per bedroom (because of their smaller household size and approximately the same number of bedrooms).

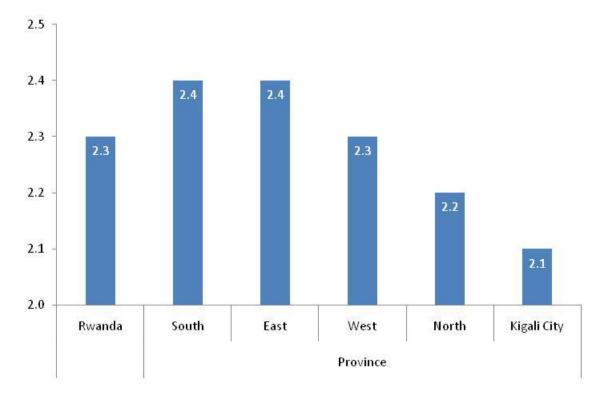
Figure 31: Mean number of persons per bedroom (residential promiscuity index) of private households by area of residence and sex of household head



Source: Fourth Rwanda Population and Housing Census. Notes: (1) See Table 53 in Annex D for details on the base population used in this figure.

Figure 32 presents the mean number of persons per bedroom by province. It shows that it ranges from 2.1 in Kigali City to 2.4 in the Southern and Eastern provinces. These findings are consistent with the EICV3 findings (NISR, 2012b).

Figure 32: Mean number of persons per bedroom (residential promiscuity index) of private households by province



Source: Fourth Rwanda Population and Housing Census. Notes: (1) See Table 53 in Annex D for details on the base population used in this figure.

# Chapter 9: Households' access to water, sanitation, hygienic facilities and energy

In order to improve social and economic development and public health conditions, Rwanda has committed to improving the coverage of adequate water, sanitation and hygienic facilities among the population by 2020. This is in relation to the attainment of goals 4, 5, 6 and 7 of the MDGs. To that end, the GoR defined its policy targets to increase by 2012 the access to drinking water and to adequate sanitation to 85% and 65% of the population, respectively (EDPRS). The GoR has also committed to increasing the population's access to electricity (MININFRA, 2009) as well as to improving hygiene conditions in rural and urban areas through various initiatives (e.g. providing safe sanitation to vulnerable households, promoting rubbish collection, especially in urban areas, etc.).

This chapter reviews households' current level of access to these services across the country. Organised into two sections, it starts by outlining the level of access to improved water sources, use of toilet facilities and main modes of sewage and waste disposal. Second, it addresses the population's level of access to sources of energy for lighting and for cooking, paying particular attention to the availability of energy-saving stoves. Wherever possible, the chapter presents a perspective on the progress made by the country on each of these matters by comparing the RPHC4 data with data from previous Censuses and surveys.

# 9.1 Households' access to water, sanitation and hygiene

#### 9.1.1 Main sources of water

Table 34 presents the distribution of private households by main source of water, sex of the household head and area of residence. It shows that across all Rwanda about 73% of the 2.42 million households collect water from improved water sources, among which protected springs/wells (37%) and public taps outside the compound (about 28%) are the most common. These results are consistent with the EICV3 findings that estimated this percentage at about 74% in 2010/2011. Households collecting water from unimproved water sources use mostly unprotected springs/wells (13%), rivers (about 6%) and lakes/streams/ponds/surface water (about 6%). The percentage of households using improved water sources is higher in urban areas (about 92%) than in rural areas (about 69%). Furthermore, urban and rural areas rely on improved sources in different ways: while about 78% of the households in urban areas use mostly a public tap outside the compound (about 44%) and pipe-borne water inside the compound (about 34%), in rural areas about 67% of the households use mostly protected springs/wells (about 42%) and public taps outside the compound (about 24%). Figure 35 provides a summary of the results discussed in Table 34.

Goal 5: Improving maternal health

Goal 6: Combating HIV/AIDS, malaria, and other diseases

Goal 7: Ensuring environmental sustainability

<sup>&</sup>lt;sup>6</sup> Goal 4: Reducing child mortality rates

Table 34: Distribution of private households by main source of water, sex of the household head and area of residence (%)

Sex of the household head and Main	Count			Percentage			
source of water	Rwanda	Urban	Rural	Rwanda	Urban	Rural	
Both sexes							
Improved Sources							
Internal pipe-borne water	12,086	9,249	2,837	0.5%	2.2%	0.1%	
Pipe-borne water in the compound	172,092	142,815	29,277	7.1%	34.3%	1.5%	
Public tap out of the compound	670,767	183,379	487,388	27.7%	44.0%	24.3%	
Protected spring/Well	897,405	45,770	851,635	37.0%	11.0%	42.4%	
Rain water	17,173	320	16,853	0.7%	0.1%	0.8%	
Unimproved Sources							
Unprotected Spring/Well	315,203	14,835	300,368	13.0%	3.6%	15.0%	
River	155,208	8,064	147,144	6.4%	1.9%	7.3%	
Lake/Stream/Pond/Surface Water	154,659	6,035	148,624	6.4%	1.5%	7.4%	
Other	3,742	567	3,175	0.2%	0.1%	0.2%	
Not stated	26,563	5,745	20,818	1.1%	1.4%	1.0%	
Total	2,424,898	416,779	2,008,119	100.0%	100.0%	100.0%	
Male							
Improved Sources							
Internal pipe-borne water	9,725	7,510	2,215	0.6%	2.4%	0.2%	
Pipe-borne water in the compound	137,869	114,695	23,174	8.0%	36.0%	1.6%	
Public tap out of the compound	485,004	137,984	347,020	28.1%	43.3%	24.6%	
Protected spring/Well	619,990	32,338	587,652	35.9%	10.2%	41.7%	
Rain water	12,736	229	12,507	0.7%	0.1%	0.9%	
Unimproved Sources							
Unprotected Spring/Well	221,587	10,710	210,877	12.8%	3.4%	15.0%	
River	110,215	5,939	104,276	6.4%	1.9%	7.4%	
Lake/Stream/Pond/Surface Water	110,276	4,307	105,969	6.4%	1.4%	7.5%	
Other	2,684	407	2,277	0.2%	0.1%	0.2%	
Not stated	18,859	4,384	14,475	1.1%	1.4%	1.0%	
Total	1,728,945	318,503	1,410,442	100.0%	100.0%	100.0%	
Female							
Improved Sources							
Internal pipe-borne water	2,361	1,739	622	0.3%	1.8%	0.1%	
Pipe-borne water in the compound	34,223	28,120	6,103	4.9%	28.6%	1.0%	
Public tap out of the compound	185,763	45,395	140,368	26.7%	46.2%	23.5%	
Protected spring/Well	277,415	13,432	263,983	39.9%	13.7%	44.2%	
Rain water	4,437	91	4,346	0.6%	0.1%	0.7%	
Unimproved Sources							
Unprotected Spring/Well	93,616	4,125	89,491	13.5%	4.2%	15.0%	
River	44,993	2,125	42,868	6.5%	2.2%	7.2%	
Lake/Stream/Pond/Surface Water	44,383	1,728	42,655	6.4%	1.8%	7.1%	
Other	1,058	160	898	0.2%	0.2%	0.2%	
Not stated	7,704	1,361	6,343	1.1%	1.4%	1.1%	
Total	695,953	98,276	597,677	100.0%	100.0%	100.0%	

100% 90% 27% 28% 27% 31% 80% 70% 60% 50% 92% 40% 73% 72% 69% 30% 20% 10% 0% Urban Rural Male Female Rwanda Area of Residence Sex of household head ■ Improved Sources Unimproved Sources

Figure 33: Distribution of private households by access to improved sources of water, area of residence and sex of the household head (%)

Figure 34 presents the distribution of the private households by main source of water across the provinces. As one would expect, the highest percentage of households using improved water sources (about 89%) was observed in Kigali City while the lowest (about 60%) was observed in the Eastern Province. It thus follows that the highest percentage of households using unimproved sources of water (about 40%) was found in the Eastern Province, a percentage that is about four times higher than the one observed in Kigali City. The low percentage of households with access to improved sources in the East Province is related to among other factors the very limited number of sources in the province and the flat terrain that does not allow easy water distribution by gravity. Moreover, this can be related to the recent settlement of a great part of the province that was part of the Akagera National Park and then without any improved sources.

100% 11% 90% 25% 27% 27% 80% 40% 70% 60% 50% 89% 40% 78% 76% 73% 30% 60% 20% 10% 0% Kigali City South North West East Provinces Rwanda ■ Improved Sources ■ Unimproved Sources

Figure 34: Distribution of private households by access to improved sources of water and province (%)

Source: Fourth Rwanda Population and Housing Census. Notes: (1) See Table 69 in Annex D for details on the base population used in this figure.

Figure 35 presents a spatial distribution of private households with access to improved sources of water by sector. This time, the darker the colour the lower the percentage of households with access to improved water sources. It confirms the results that appear in Figure 36 by showing darker shades in most of the sectors in the Eastern Province. Darker shades can also be seen in parts of the Southern and Western provinces and along the Congo-Nile Ridge.

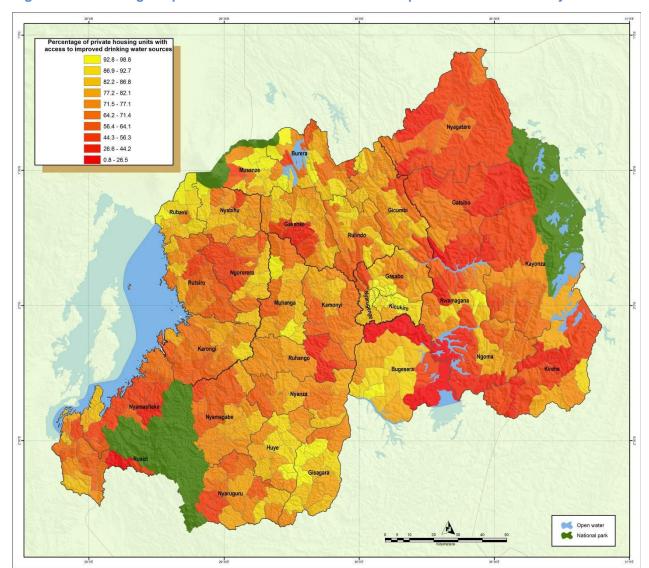


Figure 35: Percentage of private households with access to improved water sources by sector

Figure 36 presents the distribution of private households by access to improved sources of water and the highest level of education attended by the household head. It shows that access to improved sources of water increases with the level of education attended by the household head. About 68% of those households that are occupied by households headed by individuals with no education have access to improved sources of water compared to about 95% of the households occupied by households headed by individuals that attended university. As a result, the percentage of households with access to unimproved water sources among households headed by uneducated individuals (about 31%) is 10 times higher than among households headed by former university students (about 3%).

100% 13% 90% 21% 27% 31% 80% 70% 60% 50% 86% 40% 78% 72% 30% 20% 10% 0% No Education Primary Post-primary Secondary University Education of the household head Improved Sources ■ Unimproved Sources ■ Not stated

Figure 36: Distribution of private households by access to improved sources of water and the highest level of education attended by the household head (%)

Source: Fourth Rwanda Population and Housing Census. Notes: (1) See Table 74 in Annex D for details on the base population used in this figure.

Figure 37, presenting the evolution in the distribution of private households by access to improved water sources since 1978, shows that the percentage of households with access to improved water sources has been increasing since that year. In 1978, about 51% of private households had access to improved water sources, while in 2012 this percentage had increased to about 73%.

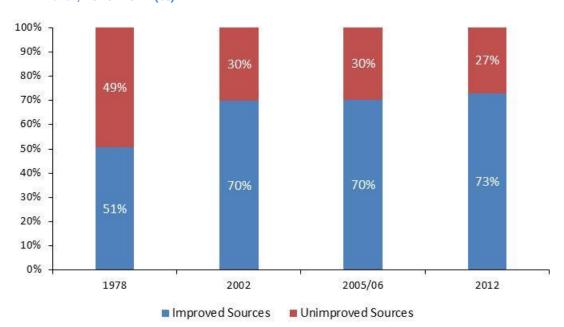


Figure 37: Evolution in the distribution of private households by access to improved sources of water, 1978–2012 (%)

Source: Rwanda Population and Housing Censuses 1978, 2002 and 2012, and EICV 2005/06.

### 9.1.2 Types of toilet facilities

The WHO/UNICEF Joint Monitoring Programme (JMP) for Water Supply and Sanitation recommends a classification for improved and unimproved types of sanitation. Unfortunately, these definitions could not be applied in the Census analysis because the RPHC4 questionnaire does not distinguish between different types of pit latrines. According to the JMP, pit latrines are considered improved if they have slabs or if they are ventilated, and not improved if they have no slab. Given that the Census does not measure these differences, this report makes no grouping into improved and unimproved sanitation, but rather presents the full distribution of responses as measured by the RPHC4.

Table 35 presents the distribution of private households by type of toilet facility, sex of the household head and area of residence. It shows that, at the national level, about 95% of the 2.42 million private households use pit latrines, of which the most commonly used are those not shared (about 82%) and the rest are shared (about 12%). Although at a much lower percentage, when compared with rural areas, unshared pit latrines are the most commonly used type of toilet facility in urban areas (about 56% compared to about 88% in rural areas). The second most used type of toilet facility in urban areas is the shared pit latrine (about 35%), a percentage which is five times higher than that observed in rural areas (about 8%). Flush toilets are very uncommon in Rwanda, representing about 1% at the national level and about 5% in urban areas. The high percentage of households with unshared pit latrines in rural areas is related to the availability of space and less crowding. In urban areas (especially in squatter housing), households often use shared toilet facilities due to lack of space or due to limited financial resources.

Table 35: Distribution (number and percentage) of private households by type of toilet facility by sex of the household head and area of residence

Sex of the household head and	Count			Percentage			
Type of toilet facility	Total	Urban	Rural	Total	Urban	Rural	
Both sexes							
Flush toilet/Water closet (WC)							
system	20,426	19,208	1,218	0.8%	4.6%	0.1%	
Pit latrine- not shared	1,997,786	232,073	1,765,713	82.4%	55.7%	87.9%	
Pit latrine-shared	300,577	147,452	153,125	12.4%	35.4%	7.6%	
Bush	22,839	1,377	21,462	0.9%	0.3%	1.1%	
Other	40,927	2,740	38,187	1.7%	0.7%	1.9%	
Not stated	42,343	13,929	28,414	1.8%	3.3%	1.4%	
Total	2,424,898	416,779	2,008,119	100.0%	100.0%	100.0%	
Male							
Flush toilet/Water closet (WC)							
system	16,944	15,931	1,013	1.0%	5.0%	0.1%	
Pit latrine- not shared	1,430,550	174,730	1,255,820	82.7%	54.9%	89.0%	
Pit latrine-shared	214,893	114,282	100,611	12.4%	35.9%	7.1%	
Bush	12,781	844	11,937	0.7%	0.3%	0.9%	
Other	22,614	1,668	20,946	1.3%	0.5%	1.5%	
Not stated	31,163	11,048	20,115	1.8%	3.5%	1.4%	
Total	1,728,945	318,503	1,410,442	100.0%	100.0%	100.0%	
Female							
Flush toilet/Water closet (WC)							
system	3,482	3,277	205	0.5%	3.3%	0.0%	
Pit latrine- not shared	567,236	57,343	509,893	81.5%	58.4%	85.3%	
Pit latrine-shared	85,684	33,170	52,514	12.3%	33.8%	8.8%	
Bush	10,058	533	9,525	1.5%	0.5%	1.6%	
Other	18,313	1,072	17,241	2.6%	1.1%	2.9%	
Not stated	11,180	2,881	8,299	1.6%	2.9%	1.4%	
Total	695,953	98,276	597,677	100.0%	100.0%	100.0%	

Table 36 presents the distribution of private households by type of toilet facility and province. As expected, it follows the patterns observed by area of residence, with Kigali City displaying a pattern similar to the one observed in urban areas and the other provinces' patterns being very similar to the one observed in rural areas. While in Kigali only about 50% of the households use unshared pit latrines, elsewhere it is the single most used type of toilet facility; the percentage of households using it varies from about 84% in Western Province to about 91% in the Northern Province. In Kigali, shared pit latrines dominate and account for about 41% of the households, a percentage which is at least four times higher than those observed elsewhere.

Table 36: Distribution (Count and %) of the private households by type of toilet facility by province and area of residence

Province and Type of toilet facility	Count			Percentage			
	Urban	Rural	Total	Urban	Rural	Total	
Rwanda							
Flush toilet/Water closet (WC) system	19,208	1,218	20,426	4.6%	0.1%	0.8%	
Pit latrine - not shared	232,073	1,765,713	1,997,786	55.7%	87.9%	82.4%	
Pit latrine - shared	147,452	153,125	300,577	35.4%	7.6%	12.4%	
Bush	1,377	21,462	22,839	0.3%	1.1%	0.9%	
Other	2,740	38,187	40,927	0.7%	1.9%	1.7%	
Not stated	13,929	28,414	42,343	3.3%	1.4%	1.8%	
Total	416,779	2,008,119	2,424,898	100.0%	100.0%	100.0%	
Kigali City							
Flush toilet/Water closet (WC) system	14,077	55	14,132	6.5%	0.1%	4.9%	
Pit latrine - not shared	87,129	56,074	143,203	40.2%	80.4%	50.0%	
Pit latrine - shared	106,059	11,675	117,734	48.9%	16.7%	41.1%	
Bush	313	283	596	0.1%	0.4%	0.2%	
Other	507	707	1,214	0.2%	1.0%	0.4%	
Not stated	8,817	968	9,785	4.1%	1.4%	3.4%	
Total	216,902	69,762	286,664	100.0%	100.0%	100.0%	
South							
Flush toilet/Water closet (WC) system	2,085	226	2,311	4.0%	0.0%	0.4%	
Pit latrine - not shared	37,020	478,038	515,058	71.3%	86.6%	85.3%	
Pit latrine - shared	10,978	49,811	60,789	21.1%	9.0%	10.1%	
Bush	187	5,977	6,164	0.4%	1.1%	1.0%	
Other	565	11,296	11,861	1.1%	2.1%	2.0%	
Not stated	1,111	6,506	7,617	2.1%	1.2%	1.3%	
Total	51,946	551,854	603,800	100.0%	100.0%	100.0%	
West							
Flush toilet/Water closet (WC) system	1,477	447	1,924	2.2%	0.1%	0.4%	
Pit latrine - not shared	46,145	410,737	456,882	68.6%	86.2%	84.1%	
Pit latrine - shared	15,576	41,063	56,639	23.2%	8.6%	10.4%	
Bush	609	6,832	7,441	0.9%	1.4%	1.4%	
Other	1,014	8,750	9,764	1.5%	1.8%	1.8%	
Not stated	2,409	8,435	10,844	3.6%	1.8%	2.0%	
Total	67,230	476,264	543,494	100.0%	100.0%	100.0%	
North							
Flush toilet/Water closet (WC) system	931	250	1,181	2.7%	0.1%	0.3%	
Pit latrine - not shared	27,500	326,812	354,312	79.2%	91.6%	90.5%	
Pit latrine - shared	4,999	13,478	18,477	14.4%	3.8%	4.7%	
Bush	120	3,766	3,886	0.4%	1.1%	1.0%	
Other	295	7,063	7,358	0.9%	2.0%	1.9%	
Not stated	890	5,564	6,454	2.6%	1.6%	1.7%	
Total	34,735	356,933	391,668	100.0%	100.0%	100.0%	
East							
Flush toilet/Water closet (WC) system	638	240	878	1.4%	0.0%	0.2%	
Pit latrine - not shared	34,279	494,052	528,331	74.6%	89.3%	88.2%	
Pit latrine - shared	9,840	37,098	46,938	21.4%	6.7%	7.8%	
Bush	148	4,604	4,752	0.3%	0.8%	0.8%	
Other	359	10,371	10,730	0.8%	1.9%	1.8%	
Not stated	702	6,941	7,643	1.5%	1.3%	1.3%	
Total	45,966	553,306	599,272	100.0%	100.0%	100.0%	

Table 37 presents the distribution of private households by the highest level of education attended by the household head and the type of toilet facility used in the household. It shows that, while flush toilets are very uncommon in Rwanda (about 1% of all private households), about 84% of the households using this type of toilet facility are occupied by households headed by individuals that attended post-primary, secondary or university-level education. Households headed by individuals with either no education or who have not gone beyond primary school are mostly found occupying households using pit latrines, either shared (about 75%) or not shared (about 89%). These households occupy most of the households that use the bush (about 96%). Hence, these results show a strong relationship between the education level of the household head and the type of toilet facility used by the households they occupy.

Table 37: Distribution (%) of the private households by type of toilet facility by level of education of the household head and area of residence

Sex of the	Percentage	s							
household	No	Pre-	Primary	Post-	Secondary	University	Not	Total	Count
head and Type	Education	School	,	primary	,		Stated		
of Toilet									
Facility									
Both sexes									
Flush									
toilet/Water	1.4%	0.1%	9.7%	1.2%	22.0%	61.3%	4.3%	100.0%	20,426
closet (WC)									
system Pit latrine - not									
	32.9%	0.2%	55.5%	2.0%	6.4%	1.9%	1.2%	100.0%	1,997,786
shared Pit latrine -									
shared	23.1%	0.3%	51.9%	1.6%	15.5%	4.6%	2.9%	100.0%	300,577
Bush	55.0%	0.2%	41.0%	0.6%	2.0%	0.1%	1.0%	100.0%	22,839
Other	46.9%	0.3%	47.4%	0.9%	2.9%	0.2%	1.3%	100.0%	40,927
Not stated	26.9%	0.2%	43.6%	2.0%	12.1%	13.1%	2.1%	100.0%	42,343
Total	31.7%	0.2%	54.2%	1.9%	7.6%	2.9%	1.4%	100.0%	2,424,898
Male									, ,
Flush									
toilet/Water	0.00/	0.40/	0.20/	4.00/	10.00/	64.70/	4 20/	100.00/	16.044
closet (WC)	0.9%	0.1%	9.3%	1.0%	19.8%	64.7%	4.3%	100.0%	16,944
system									
Pit latrine - not	24.9%	0.2%	61.9%	2.1%	7.3%	2.3%	1.3%	100.0%	1,430,550
shared	24.570	0.270	01.570	2.170	7.570	2.570	1.570	100.070	1,430,330
Pit latrine -	16.4%	0.3%	56.0%	1.6%	17.2%	5.1%	3.4%	100.0%	214,893
shared									
Bush	45.6%	0.3%	49.1%	0.6%	2.9%	0.2%	1.4%	100.0%	12,781
Other	35.9%	0.3%	56.6%	0.9%	4.1%	0.4%	1.8%	100.0%	22,614
Not stated	19.6%	0.2%	47.2%	1.9%	13.1%	15.6%	2.3%	100.0%	31,163
Total	23.8%	0.2%	60.2%	2.0%	8.7%	3.5%	1.6%	100.0%	1,728,945
Female									
Flush									
toilet/Water closet (WC)	3.8%	0.1%	11.9%	2.1%	33.0%	44.9%	4.2%	100.0%	3,482
closet (WC) system									
Pit latrine - not									
shared	53.1%	0.2%	39.3%	1.8%	4.0%	0.8%	0.9%	100.0%	567,236
Pit latrine -									
shared	39.9%	0.2%	41.7%	1.7%	11.3%	3.3%	1.9%	100.0%	85,684
Bush	67.0%	0.1%	30.8%	0.5%	0.8%	0.1%	0.6%	100.0%	10,058
Other	60.4%	0.1%	36.2%	0.8%	1.5%	0.1%	0.8%	100.0%	18,313
Not stated	47.0%	0.2%	33.5%	2.1%	9.5%	6.2%	1.6%	100.0%	11,180
Total	51.5%	0.2%	39.2%	1.7%	5.0%	1.4%	1.1%	100.0%	695,953
	31.070	J.2 /J	33.E/3	1.1 /0	0.070	1.170	11170	. 55.570	555,555

### 9.1.3 Modes of sewage disposal

Table 38 presents the distribution of households by main mode of sewage disposal, also disaggregating by sex of the household head and area of residence. It shows that, across Rwanda, 42% of the households use the bush for sewage disposal. About 29% of the households either use sumps (about 14%), the main sewer (about 6%) or cesspools (about 9%), while a third group (accounting for 11% of the private households) use the courtyard. The importance of the bush for sewage disposal reduces considerably among households in urban areas. The percentage of households in rural areas using the bush for sewage disposal (about 46%) is double the one observed among urban households (about 22%). As expected, the use of modern modes of sewage disposal (sumps, cesspools and the main sewer system) is more common in urban areas (about 60%) than in rural areas (about 23%).

Table 38: Distribution (number and percentage) of private households by main mode of household sewage disposal by sex of the household head and area of residence

Sex of the household head and Main	Count			Percentage			
mode of household sewage disposal	Rwanda	Urban	Rural	Rwanda	Urban	Rural	
Both sexes							
Sump	348,553	93,598	254,955	14.4%	22.5%	12.7%	
In the courtyard	273,454	34,076	239,378	11.3%	8.2%	11.9%	
Rivulet/Trench/Channels	16,036	13,839	2,197	0.7%	3.3%	0.1%	
In the street	13,822	5,736	8,086	0.6%	1.4%	0.4%	
Main sewer	143,018	27,697	115,321	5.9%	6.7%	5.7%	
Cesspool	213,234	128,190	85,044	8.8%	30.8%	4.2%	
Bush	1,018,677	89,502	929,175	42.0%	21.5%	46.3%	
Other	384,764	21,427	363,337	15.9%	5.1%	18.1%	
Not stated	13,340	2,714	10,626	0.6%	0.7%	0.5%	
Total	2,424,898	416,779	2,008,119	100.0%	100.0%	100.0%	
Male							
Sump	262,409	73,074	189,335	15.2%	22.9%	13.4%	
In the courtyard	192,901	25,154	167,747	11.2%	7.9%	11.9%	
Rivulet/Trench/Channels	12,304	10,738	1,566	0.7%	3.4%	0.1%	
In the street	9,669	4,154	5,515	0.6%	1.3%	0.4%	
Main sewer	103,991	21,354	82,637	6.0%	6.7%	5.9%	
Cesspool	166,932	102,368	64,564	9.7%	32.1%	4.6%	
Bush	707,960	64,364	643,596	41.0%	20.2%	45.6%	
Other	263,443	15,192	248,251	15.2%	4.8%	17.6%	
Not stated	9,336	2,105	7,231	0.5%	0.7%	0.5%	
Total	1,728,945	318,503	1,410,442	100.0%	100.0%	100.0%	
Female							
Sump	86,144	20,524	65,620	12.4%	20.9%	11.0%	
In the courtyard	80,553	8,922	71,631	11.6%	9.1%	12.0%	
Rivulet/Trench/Channels	3,732	3,101	631	0.5%	3.2%	0.1%	
In the street	4,153	1,582	2,571	0.6%	1.6%	0.4%	
Main sewer	39,027	6,343	32,684	5.6%	6.5%	5.5%	
Cesspool	46,302	25,822	20,480	6.7%	26.3%	3.4%	
Bush	310,717	25,138	285,579	44.7%	25.6%	47.8%	
Other	121,321	6,235	115,086	17.4%	6.3%	19.3%	
Not stated	4,004	609	3,395	0.6%	0.6%	0.6%	
Total	695,953	98,276	597,677	100.0%	100.0%	100.0%	

Source: Fourth Rwanda Population and Housing Census.

Table 39 presents the distribution of private households by the main mode of sewage disposal used by the occupying households, disaggregating the data by province. It shows that the use of the bush for sewage disposal is found across all provinces with varying degrees of prevalence. The highest percentages of households using this mode of sewage disposal are found in the Eastern and Western provinces (about 53% and 46% respectively) and the lowest in Kigali City and the

Southern Province (about 24% and 35% respectively). When modern modes of sewage disposal such as sumps, cesspools and the main sewer system are bundled together, Kigali City clearly stands out from the other provinces. About 58% of the households in this province use sumps (about 20%), cesspools (about 32%) or the main sewer (about 6%). In comparison, the second highest percentage for these three modes (about 31%) was observed in the Western Province (sump - 18%; cesspool - 7% and mains sewer - 6%).

Table 39: Distribution of private households by main mode of household sewage disposal by province

Province and main mode of househol		1	Percentage			
sewage disposal	Urban	Rural	Rwanda	Urban	Rural	Rwanda
Rwanda						
Sump	93,598	254,955	348,553	22.5%	12.7%	14.4%
In the courtyard	34,076	239,378	273,454	8.2%	11.9%	11.3%
Rivulet/Trench/Channels/In the street	19,575	10,283	29,858	4.7%	0.5%	1.3%
Main sewer	27,697	115,321	143,018	6.7%	5.7%	5.9%
Cesspool	128,190	85,044	213,234	30.8%	4.2%	8.8%
Bush	89,502	929,175	1,018,677	21.5%	46.3%	42.0%
Other	21,427	363,337	384,764	5.1%	18.1%	15.9%
Not stated	2,714	10,626	13,340	0.7%	0.5%	0.6%
Total	416,779	2,008,119	2,424,898	100.0%	100.0%	100.0%
Kigali City						
Sump	46,578	11,285	57,863	21.5%	16.2%	20.29
In the courtyard	14,417	5,613	20,030	6.7%	8.1%	7.09
Rivulet/Trench/Channels/In the street	16,376	756	17,132	7.5%	1.1%	6.09
Main sewer	14,040	1,923	15,963	6.5%	2.8%	5.69
Cesspool	87,802	4,231	92,033	40.5%	6.1%	32.19
Bush	30,658	38,473	69,131	14.1%	55.2%	24.19
Other	5,632	7,125	12,757	2.6%	10.2%	4.5
Not stated	1,399	356	1,755	0.6%	0.5%	0.6
Total	216,902	69,762	286,664	100.0%	100.0%	100.0
South						
Sump	7,338	40,936	48,274	14.1%	7.4%	8.09
In the courtyard	9,564	101,758	111,322	18.4%	18.4%	18.4
Rivulet/Trench/Channels/In the street	959	3,090	4,049	1.9%	0.5%	0.79
Main sewer	6,225	59,866	66,091	12.0%	10.9%	11.0
Cesspool	10,087	14,249	24,336	19.4%	2.6%	4.09
Bush	12,773	197,448	210,221	24.6%	35.8%	34.89
Other	4,717	131,741	136,458	9.1%	23.9%	22.69
Not stated	283	2,766	3,049	0.5%	0.5%	0.59
Total	51,946	551,854	603,800	100.0%	100.0%	100.09
West						
Sump	18,684	78,230	96,914	27.8%	16.4%	17.89
In the courtyard	4,805	59,108	63,913	7.2%	12.4%	11.8
Rivulet/Trench/Channels/In the street	1,287	2,687	3,974	1.9%	0.6%	0.79
Main sewer	3,543	27,502	31,045	5.3%	5.8%	5.79
Cesspool	15,267	24,205	39,472	22.7%	5.1%	7.3
Bush	19,399	232,588	251,987	28.9%	48.8%	46.4
Other	3,858	49,415	53,273	5.7%	10.4%	9.89
Not stated	387	2,529	2,916	0.6%	0.5%	0.59
Total	67,230	476,264	543,494	100.0%	100.0%	100.09
North						
Sump	9,020	46,724	55,744	26.0%	13.1%	14.29
In the courtyard	3,184	52,675	55,859	9.2%	14.8%	14.3
Rivulet/Trench/Channels/In the street	315	1,437	1,752	0.9%	0.4%	0.5
Main sewer	1,757	15,117	16,874	5.1%	4.2%	4.3
Cesspool	8,901	16,645	25,546	25.6%	4.7%	6.5
Bush	8,988	160,205	169,193	25.9%	44.9%	43.2
Other	2,272	62,204	64,476	6.5%	17.4%	16.5
Not stated	298	1,926	2,224	0.9%	0.5%	0.6
Total	34,735	356,933	391,668	100.0%	100.0%	100.0
East	,	,	,			
Sump	11,978	77,780	89,758	26.1%	14.1%	15.0
In the courtyard	2,106	20,224	22,330	4.6%	3.7%	3.7
Rivulet/Trench/Channels/In the street	638	2,313	2,951	1.4%	0.4%	0.5
Main sewer	2,132	10,913	13,045	4.6%	2.0%	2.2
Cesspool	6,133	25,714	31,847	13.3%	4.7%	5.3
Bush	17,684	300,461	318,145	38.5%	54.3%	53.1
Other	4,948	112,852	117,800	10.8%	20.4%	19.7
Not stated	347	3,049	3,396	0.8%	0.6%	0.6
				100.0%		
Total	45,966	553,306	599,272		100.0%	100.0

Source: Fourth Rwanda Population and Housing Census. Notes: (1) See Table 70 in Annex D for details on the base population used in this figure.

#### 9.1.4 Modes of waste disposal

Table 40, presenting the distribution of households by main mode of household waste disposal, offers an overall outline of the use of waste-management facilities by households. Across all Rwanda, about 81% of the households either use compost dumping (about 57%) or farms (about 24%) as their main mode of waste disposal. Another group, comprising about 16% of the households, uses private dustbins (about 9%) or the bush (about 7%). These findings are consistent with results from the EICV3. When the data are disaggregated by area of residence, it is revealed that the use of private dustbins increases among households in urban areas, becoming the most commonly used mode of waste disposal. It accounts for about 40% of the households in urban areas (compared to just 2% in rural areas). Nevertheless, compost dumping still remains very common among households in urban areas (about 31%), while compost dumping (about 63%) and farms (about 26%) remain the dominant modes of household waste disposal in rural areas.

Table 40: Distribution (number and percentage) of private households by main mode of household waste disposal by sex of the household head and area of residence

Sex of the household head and Main	Count			Percentage		
mode of household waste disposal	Rwanda	Urban	Rural	Rwanda	Urban	Rural
Both sexes						
Compost dumping	1,388,126	128,597	1,259,529	57.2%	30.9%	62.7%
Private dust bins	209,835	165,238	44,597	8.7%	39.7%	2.2%
Public refuse dumps	29,697	23,719	5,978	1.2%	5.7%	0.3%
In the bush	167,682	28,709	138,973	6.9%	6.9%	6.9%
On the farms	574,464	60,555	513,909	23.7%	14.5%	25.6%
In a river/Stream/Drain/Gutter	2,030	888	1,142	0.1%	0.2%	0.1%
Other	30,625	5,108	25,517	1.3%	1.2%	1.3%
Not stated	22,439	3,965	18,474	0.9%	1.0%	0.9%
Total	2,424,898	416,779	2,008,119	100.0%	100.0%	100.0%
Male						
Compost dumping	1,013,293	97,081	916,212	58.6%	30.5%	65.0%
Private dust bins	163,732	130,476	33,256	9.5%	41.0%	2.4%
Public refuse dumps	23,280	18,807	4,473	1.4%	5.9%	0.3%
In the bush	113,774	21,269	92,505	6.6%	6.7%	6.6%
On the farms	376,739	43,086	333,653	21.8%	13.5%	23.7%
In a river/Stream/Drain/Gutter	1,500	697	803	0.1%	0.2%	0.1%
Other	20,927	4,006	16,921	1.2%	1.3%	1.2%
Not stated	15,700	3,081	12,619	0.9%	1.0%	0.9%
Total	1,728,945	318,503	1,410,442	100.0%	100.0%	100.0%
Female						
Compost dumping	374,833	31,516	343,317	53.9%	32.1%	57.4%
Private dust bins	46,103	34,762	11,341	6.6%	35.4%	1.9%
Public refuse dumps	6,417	4,912	1,505	0.9%	5.0%	0.3%
In the bush	53,908	7,440	46,468	7.8%	7.6%	7.8%
On the farms	197,725	17,469	180,256	28.4%	17.8%	30.2%
In a river/Stream/Drain/Gutter	530	191	339	0.1%	0.2%	0.1%
Other	9,698	1,102	8,596	1.4%	1.1%	1.4%
Not stated	6,739	884	5,855	1.0%	0.9%	1.0%
Total	695,953	98,276	597,677	100.0%	100.0%	100.0%

Source: Fourth Rwanda Population and Housing Census.

Table 41 presents the distribution of private households by their main mode of waste disposal according to province. It shows that, while compost dumping is the most predominant mode of waste disposal used outside Kigali (ranging from about 58% in the Southern Province to about 66% in the Northern Province), in Kigali City, private dustbins (about 45%) are the main mode used for waste disposal, although compost dumping and farms are also fairly widely used (23% and 18% respectively) there. Forests are the second most important mode of waste disposal used

outside Kigali City, with the percentage of households using such a mode varying from 18% in the Eastern Province to 33% in the Southern Province.

Table 41: Distribution (count and %) of the private households by main mode of household waste disposal by province and area of residence

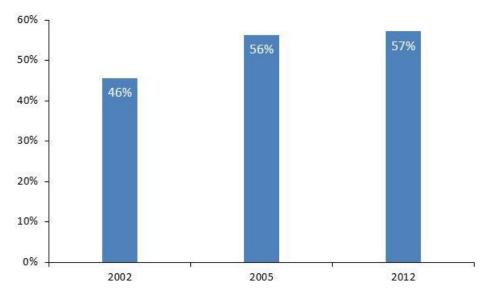
Province and Main mode of household	Count	D	T-4-1	Percentage	D	Takel
waste disposal	Urban	Rural	Total	Urban	Rural	Total
Rwanda			1 000 100	22.22/	00.70/	== 00/
Compost dumping	128,597	1,259,529	1,388,126	30.9%	62.7%	57.2%
Private dust bins	165,238	44,597	209,835	39.7%	2.2%	8.7%
Public refuse dumps	23,719	5,978	29,697	5.7%	0.3%	1.2%
In the bush	28,709	138,973	167,682	6.9%	6.9%	6.9%
On the farms	60,555	513,909	574,464	14.5%	25.6%	23.7%
In a river/Stream/Drain/Gutter	888	1,142	2,030	0.2%	0.1%	0.1%
Other	5,108	25,517	30,625	1.2%	1.3%	1.3%
Not stated	3,965	18,474	22,439	1.0%	0.9%	0.9%
Total	416,779	2,008,119	2,424,898	100.0%	100.0%	100.0%
Kigali City						
Compost dumping	29,810	36,222	66,032	13.7%	51.9%	23.0%
Private dust bins	124,978	3,075	128,053	57.6%	4.4%	44.7%
Public refuse dumps	17,728	470	18,198	8.2%	0.7%	6.4%
In the bush	11,996	5,397	17,393	5.5%	7.7%	6.1%
On the farms	26,957	23,659	50,616	12.4%	33.9%	17.7%
In a river/Stream/Drain/Gutter	597	48	645	0.3%	0.1%	0.2%
Other	2,733	382	3,115	1.3%	0.6%	1.1%
Not stated	2,103	509	2,612	1.0%	0.7%	0.9%
Total	216,902	69,762	286,664	100.0%	100.0%	100.0%
South						
Compost dumping	26,378	323,413	349,791	50.8%	58.6%	57.9%
Private dust bins	7,980	6,132	14,112	15.4%	1.1%	2.3%
Public refuse dumps	1,995	1,462	3,457	3.8%	0.3%	0.6%
In the bush	2,628	18,746	21,374	5.1%	3.4%	3.5%
On the farms	11,935	189,399	201,334	23.0%	34.3%	33.3%
In a river/Stream/Drain/Gutter	56	137	193	0.1%	0.0%	0.0%
Other	590	7,544	8,134	1.1%	1.4%	1.4%
Not stated	384	5,021	5,405	0.7%	0.9%	0.9%
Total	51,946	551,854	603,800	100.0%	100.0%	100.0%
West	·					
Compost dumping	28,646	299,761	328,407	42.6%	62.9%	60.4%
Private dust bins	15,963	6,269	22,232	23.7%	1.3%	4.1%
Public refuse dumps	1,981	763	2,744	3.0%	0.2%	0.5%
In the bush	7,944	42,467	50,411	11.8%	8.9%	9.3%
On the farms	11,053	118,006	129,059	16.4%	24.8%	23.8%
In a river/Stream/Drain/Gutter	123	364	487	0.2%	0.1%	0.1%
Other	875	3,939	4,814	1.3%	0.8%	0.9%
Not stated	645	4,695	5,340	1.0%	1.0%	1.0%
Total	67,230	476,264	543,494	100.0%	100.0%	100.0%
North	,	,	,			
Compost dumping	18,709	238,054	256,763	53.9%	66.7%	65.6%
Private dust bins	6,772	4,386	11,158	19.5%	1.2%	2.9%
Public refuse dumps	789	443	1,232	2.3%	0.1%	0.3%
In the bush	3,024	26,291	29,315	8.7%	7.4%	7.5%
On the farms	4,608	79,232	83,840	13.3%	22.2%	21.4%
In a river/Stream/Drain/Gutter	66	223	289	0.2%	0.1%	0.1%
Other	377	5,251	5,628	1.1%	1.5%	1.4%
Not stated	390	3,053	3,443	1.1%	0.9%	0.9%
Total	34,735	356,933	391,668	100.0%	100.0%	100.0%
East	04,700	330,333	331,000	100.070	100.070	100.070
Compost dumping	25,054	362,079	387,133	54.5%	65.4%	64.6%
Private dust bins	9,545	24,735	34,280	20.8%	4.5%	5.7%
Public refuse dumps	1,226	2,840	4,066	2.7%	0.5%	0.7%
In the bush	3,117	46,072	49,189	6.8%	8.3%	8.2%
			109,615	13.1%	18.7%	
	6.000			1.3.1%	1 187%	18.3%
On the farms	6,002	103,613				
On the farms In a river/Stream/Drain/Gutter	46	370	416	0.1%	0.1%	0.1%
On the farms						

Source: Fourth Rwanda Population and Housing Census.

Figure 38 presents the evolution in the percentage of private households using compost dumping as the main mode of waste disposal since 2002. It shows that this percentage increased faster

during the period between 2002 and 2005 (from 46% in 2002 to 56% in 2005) but slowed down and stabilised in the more recent period between 2005 and 2012 at around 56–57%.

Figure 38: Evolution in the percentage of private households using compost dumping as main mode of household waste disposal, 2002–2012



Source: Rwanda Population and Housing Censuses 2002 and 2012, and EICV 2005/06.

### 9.2 Sources of energy for lighting and cooking

#### 9.2.1 Sources of energy for lighting

Table 42 presents the distribution of private households by main source of energy for lighting, sex of the household head and area of residence. It shows that, across Rwanda, about 57% of households rely on either kerosene lamps (about 40%), candles (about 10%) or firewood (about 8%) as sources of energy for lighting. At national level, only about 18% of the private households have access to electricity, (this mostly comes from EWSA - 17%). As expected, electricity is the single most important source of energy for lighting among private households in urban areas, accounting for about 67%, a percentage around 10 times higher than the one observed in rural areas (about 7%). Kerosene lamps are the most commonly used source for lighting among households in rural areas, accounting for about 44%, which is a percentage almost three times higher than the one observed in urban areas (about 18%). A substantial percentage of the households in rural areas reported using other unspecified sources of energy for lighting. This may be related to the use of dry cell fed lamps often found among households in rural areas (Muhizi et al., 2013). Table 42 also shows that the use of electricity for lighting is higher among male-headed households (at about 19% of the total) than among female-headed households (about 12% of that total).

Table 42: Distribution (number and percentage) of private households by main source of energy for lighting by sex of the household head and area of residence

Sex of the household head and Main	Count			Percentage	Percentage		
source of energy for lighting	Rwanda	Urban	Rural	Rwanda	Urban	Rural	
Both sexes							
Electricity by EWSA	407,818	279,102	128,716	16.8%	67.0%	6.4%	
Hydro-electric or other private source	3,871	457	3,414	0.2%	0.1%	0.2%	
Solar power	9,470	407	9,063	0.4%	0.1%	0.5%	
Generator	1,798	224	1,574	0.1%	0.1%	0.1%	
Kerosene lamp	959,512	74,029	885,483	39.6%	17.8%	44.1%	
Paraffin	31,933	1,743	30,190	1.3%	0.4%	1.5%	
Biogas	910	77	833	0.0%	0.0%	0.0%	
Candle	234,388	42,300	192,088	9.7%	10.2%	9.6%	
Firewood	192,628	3,723	188,905	7.9%	0.9%	9.4%	
Other	571,651	12,613	559,038	23.6%	3.0%	27.8%	
Not stated	10,919	2,104	8,815	0.5%	0.5%	0.4%	
Total	2,424,898	416,779	2,008,119	100.0%	100.0%	100.0%	
Male							
Electricity by EWSA	324,819	223,710	101,109	18.8%	70.2%	7.2%	
Hydro-electric or other private source	2,963	350	2,613	0.2%	0.1%	0.29	
Solar power	7,712	311	7,401	0.5%	0.1%	0.5%	
Generator	1,461	161	1,300	0.1%	0.1%	0.19	
Kerosene lamp	673,096	49,494	623,602	38.9%	15.5%	44.2%	
Paraffin	21,977	1,160	20,817	1.3%	0.4%	1.5%	
Biogas	736	58	678	0.0%	0.0%	0.19	
Candle	172,590	30,797	141,793	10.0%	9.7%	10.19	
Firewood	102,652	1,770	100,882	5.9%	0.6%	7.2%	
Other	413,259	9,093	404,166	23.9%	2.9%	28.7%	
Not stated	7,680	1,599	6,081	0.4%	0.5%	0.4%	
Total	1,728,945	318,503	1,410,442	100.0%	100.0%	100.0%	
Female							
Electricity by EWSA	82,999	55,392	27,607	11.9%	56.4%	4.6%	
Hydro-electric or other private source	908	107	801	0.1%	0.1%	0.19	
Solar power	1,758	96	1,662	0.3%	0.1%	0.3%	
Generator	337	63	274	0.1%	0.1%	0.19	
Kerosene lamp	286,416	24,535	261,881	41.2%	25.0%	43.8%	
Paraffin	9,956	583	9,373	1.4%	0.6%	1.6%	
Biogas	174	19	155	0.0%	0.0%	0.0%	
Candle	61,798	11,503	50,295	8.9%	11.7%	8.49	
Firewood	89,976	1,953	88,023	12.9%	2.0%	14.79	
Other	158,392	3,520	154,872	22.8%	3.6%	25.9%	
Not stated	3,239	505	2,734	0.5%	0.5%	0.5%	
Total	695,953	98,276	597,677	100.0%	100.0%	100.0%	

Table 43 presents the distribution of the private households by main source of energy for lighting and by province. As expected, it shows patterns that are similar to the ones observed with reference to areas of residence. Kerosene lamps are the main source of energy for lighting outside Kigali City, with percentages ranging from 30% in the Northern Province to 47% in the Southern and 53% in the Eastern provinces, while access to electricity is mainly concentrated in the capital, accounting for about 67% of households in Kigali.

Table 43: Distribution (count and %) of the private households by main source of energy for lighting by province and area of residence

Province and Main source of energy	Count			Percentage		
for lighting	Urban	Rural	Total	Urban	Rural	Total
Rwanda						
Electricity by EWSA	279,102	128,716	407,818	67.0%	6.4%	16.8%
Hydro-electric or other private source	457	3,414	3,871	0.1%	0.2%	0.2%
Solar power	407	9,063	9,470	0.1%	0.5%	0.4%
Generator	224	1,574	1,798	0.1%	0.1%	0.1%
Kerosene lamp	74,029	885,483	959,512	17.8%	44.1%	39.6%
Paraffin	1,743	30,190	31,933	0.4%	1.5%	1.3%
Biogas	77	833	910	0.0%	0.0%	0.0%
Candle	42,300	192,088	234,388	10.2%	9.6%	9.7%
Firewood	3,723	188,905	192,628	0.9%	9.4%	7.9%
Other	12,613	559,038	571,651	3.0%	27.8%	23.6%
Not stated	2,104	8,815	10,919	0.5%	0.4%	0.5%
Total	416,779	2,008,119	2,424,898	100.0%	100.0%	100.0%
Kigali City	,		, ,			
Electricity by EWSA	179,211	13,196	192,407	82.6%	18.9%	67.1%
Hydro-electric or other private source	224	49	273	0.1%	0.1%	0.1%
Solar power	87	319	406	0.0%	0.5%	0.1%
Generator	106	98	204	0.1%	0.1%	0.1%
Kerosene lamp	15,080	29,513	44,593	7.0%	42.3%	15.6%
Paraffin	199	1,134	1,333	0.1%	1.6%	0.5%
Biogas	24	50	74	0.0%	0.1%	0.0%
Candle	19,318	15,297	34,615	8.9%	21.9%	12.1%
Firewood	119	461	580	0.1%	0.7%	0.2%
Other	1,436	9,316	10,752	0.7%	13.4%	3.8%
Not stated	1,098	329	1,427	0.5%	0.5%	0.5%
Total	216,902	69,762	286,664	100.0%	100.0%	100.0%
South	2.0,002	00,102	200,001	1001070	1001070	100.070
Electricity by EWSA	26,316	18,042	44,358	50.7%	3.3%	7.4%
Hydro-electric or other private source	40	682	722	0.1%	0.1%	0.1%
Solar power	163	2,808	2,971	0.3%	0.5%	0.5%
Generator	37	328	365	0.1%	0.1%	0.1%
Kerosene lamp	15,968	270,092	286,060	30.7%	48.9%	47.4%
Paraffin	725	7,344	8,069	1.4%	1.3%	1.3%
Biogas	8	165	173	0.0%	0.0%	0.0%
Candle	4,482	31,481	35,963	8.6%	5.7%	6.0%
Firewood	1,011	62,510	63,521	2.0%	11.3%	10.5%
Other	2,983	156,347	159,330	5.7%	28.3%	26.4%
Not stated	213	2,055	2,268	0.4%	0.4%	0.4%
Total	51,946	551,854	603,800	100.0%	100.0%	100.0%
West	31,340	331,034	003,000	100.070	100.070	100.070
Electricity by EWSA	34,949	27,000	61,949	52.0%	5.7%	11.4%
Hydro-electric or other private source	70	782	852	0.1%	0.2%	0.2%
Solar power	42	2,167	2,209	0.1%	0.5%	0.4%
Generator	33	2,107	250	0.1%	0.1%	0.1%
Kerosene lamp	19,546	175,846	195,392	29.1%	36.9%	36.0%
Paraffin	338	2,096	2,434	0.5%	0.4%	0.5%
Biogas	12	115	127	0.0%	0.4%	0.0%
Candle	7,506	50,483	57,989	11.2%	10.6%	10.7%
Firewood	1,625	88,071	89,696	2.4%	18.5%	16.5%
Other	2,765	127,245	130,010	4.1%	26.7%	23.9%
Not stated Total	344 67,230	2,242 476,264	2,586 543,494	0.5% 100.0%	0.5% 100.0%	0.5% 100.0%
North	01,230	470,204	545,484	100.0%	100.0%	100.0%
Electricity by EWSA	17,615	14,329	31,944	50.7%	4.0%	8.2%
* *						
Hydro-electric or other private source	80	1,315	1,395	0.2%	0.4%	0.4%
Solar power	36	1,712	1,748	0.1%	0.5%	0.5%
Generator	16	269	285	0.1%	0.1%	0.1%
Kerosene lamp	7,669	108,940	116,609	22.1%	30.5%	29.8%
Paraffin	212	9,365	9,577	0.6%	2.6%	2.5%
Biogas	18	197	215	0.1%	0.1%	0.1%

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Province and Main source of energy	Count			Percentage		
for lighting	Urban	Rural	Total	Urban	Rural	Total
Candle	5,503	50,822	56,325	15.8%	14.2%	14.4%
Firewood	822	31,171	31,993	2.4%	8.7%	8.2%
Other	2,514	137,013	139,527	7.2%	38.4%	35.6%
Not stated	250	1,800	2,050	0.7%	0.5%	0.5%
Total	34,735	356,933	391,668	100.0%	100.0%	100.0%
East						
Electricity by EWSA	21,011	56,149	77,160	45.7%	10.2%	12.9%
Hydro-electric or other private source	43	586	629	0.1%	0.1%	0.1%
Solar power	79	2,057	2,136	0.2%	0.4%	0.4%
Generator	32	662	694	0.1%	0.1%	0.1%
Kerosene lamp	15,766	301,092	316,858	34.3%	54.4%	52.9%
Paraffin	269	10,251	10,520	0.6%	1.9%	1.8%
Biogas	15	306	321	0.0%	0.1%	0.1%
Candle	5,491	44,005	49,496	12.0%	8.0%	8.3%
Firewood	146	6,692	6,838	0.3%	1.2%	1.1%
Other	2,915	129,117	132,032	6.3%	23.3%	22.0%
Not stated	199	2,389	2,588	0.4%	0.4%	0.4%
Total	45,966	553,306	599,272	100.0%	100.0%	100.0%

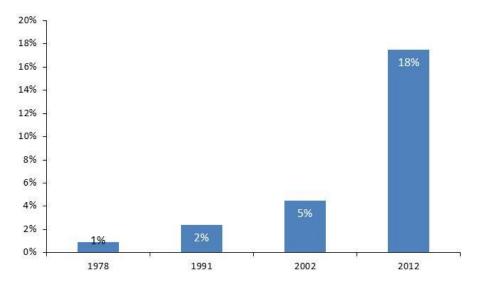
Figure 39 presents a map showing the percentage of households using electricity as the main source of energy for lighting across the sectors of Rwanda. The darker the colour, the higher the percentage of households with access to electricity. With the exception of the Eastern Province, it shows as a general picture patches of darker shades surrounded by huge areas of lighter shades, a clear indication of the urban/rural disparity shaping access to electricity.

Percentage of private housing units with electricity as main source of energy for lighting 63,3 - 94,6 29.2 - 41.4 15,1 - 21,7 10,5 - 15,1 7,3-10,5 4.4 - 7.3 0,1-1,9 Open water National park

Figure 39: Percentage of private households with electricity as main source of energy for lighting by sectors

Figure 40 below presents the evolution in the percentage of households using electricity as the main source of energy for lighting since 1978. It shows that access to electricity for lighting among households is improving remarkably, increasing from about 1% at the time of the first Census through to about 5% in 2002 and about 18% in 2012.

Figure 40: Evolution in the percentage of households using electricity as main source of energy for lighting, 1978–2012 (%)



Source: Rwanda Population and Housing Censuses 1978, 1991, 2002 and 2012.

#### 9.2.2 Sources of energy for cooking

Table 44 presents the distribution of private households by main sources of energy for cooking, sex of household head and area of residence. It shows that, across all Rwanda, about 95% of the households rely either on firewood (about 82%) or charcoal (about 13%) as sources of energy for cooking. A third group, accounting for about 3%, uses grass/leaves. This means that at national level about 98% of households use energy from biomass for cooking. Such an intense use of energy from biomass for cooking may have a negative effect on both the environment and on people's health (Muhizi et al., 2012). Firewood is three times more likely to be used in rural areas (93%) than in urban areas (about 31%), while charcoal is 21 times more likely to be used in urban areas (about 63%) than in rural areas (about 3%).

Table 44: Distribution (number and percentage) of private households by main source of energy for cooking by sex of the household head and area of residence

Sex of the household head and		Count			Percentage	
Main source of energy for cooking	Rwanda	Urban	Rural	Rwanda	Urban	Rural
Both sexes						
Electricity	3,688	2,756	932	0.2%	0.7%	0.1%
Gas	5,885	4,369	1,516	0.2%	1.1%	0.1%
Biogas	3,548	582	2,966	0.2%	0.1%	0.2%
Kerosene	3,440	2,166	1,274	0.1%	0.5%	0.1%
Firewood	1,992,784	131,045	1,861,739	82.2%	31.4%	92.7%
Charcoal	319,198	261,424	57,774	13.2%	62.7%	2.9%
Grass/Leaves	65,449	2,431	63,018	2.7%	0.6%	3.1%
Other	15,009	8,663	6,346	0.6%	2.1%	0.3%
Not stated	15,897	3,343	12,554	0.7%	0.8%	0.6%
Total	2,424,898	416,779	2,008,119	100.0%	100.0%	100.0%
Male						
Electricity	3,050	2,291	759	0.2%	0.7%	0.1%
Gas	4,651	3,542	1,109	0.3%	1.1%	0.1%
Biogas	2,633	463	2,170	0.2%	0.2%	0.2%
Kerosene	2,755	1,812	943	0.2%	0.6%	0.1%
Firewood	1,396,315	90,762	1,305,553	80.8%	28.5%	92.6%
Charcoal	254,354	207,250	47,104	14.7%	65.1%	3.3%
Grass/Leaves	39,656	1,405	38,251	2.3%	0.4%	2.7%
Other	13,759	8,201	5,558	0.8%	2.6%	0.4%
Not stated	11,772	2,777	8,995	0.7%	0.9%	0.6%
Total	1,728,945	318,503	1,410,442	100.0%	100.0%	100.0%
Female						
Electricity	638	465	173	0.1%	0.5%	0.0%
Gas	1,234	827	407	0.2%	0.8%	0.1%
Biogas	915	119	796	0.1%	0.1%	0.1%
Kerosene	685	354	331	0.1%	0.4%	0.1%
Firewood	596,469	40,283	556,186	85.7%	41.0%	93.1%
Charcoal	64,844	54,174	10,670	9.3%	55.1%	1.8%
Grass/Leaves	25,793	1,026	24,767	3.7%	1.0%	4.1%
Other	1,250	462	788	0.2%	0.5%	0.1%
Not stated	4,125	566	3,559	0.6%	0.6%	0.6%
Total	695,953	98,276	597,677	100.0%	100.0%	100.0%

Table 45 presents the distribution of private households by main source of energy for cooking by province. It shows that firewood is the predominant source of energy for cooking outside Kigali City, with the percentages of households relying on this source of energy ranging from about 88% in the Northern Province to about 92% in the Southern Province. Charcoal is the most predominant source of energy for cooking in Kigali City, being used by about 67% of the households in this province.

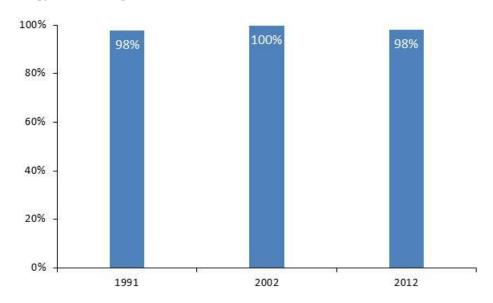
Table 45: Distribution (count and %) of the private households by main source of energy for cooking by province and area of residence

Province and Main source of energy			Count			Percentage
for cooking	Urban	Rural	Total	Urban	Rural	Total
Rwanda						
Electricity	2,756	932	3,688	0.7%	0.1%	0.2%
Gas	4,369	1,516	5,885	1.1%	0.1%	0.2%
Biogas	582	2,966	3,548	0.1%	0.2%	0.2%
Kerosene	2,166	1,274	3,440	0.1%	0.1%	0.1%
Firewood	131,045	1,861,739	1,992,784	31.4%	92.7%	82.2%
Charcoal	261,424	57,774	319,198	62.7%	2.9%	13.2%
Grass/Leaves	2,431	63,018	65,449	0.6%	3.1%	2.7%
Other	8,663	6,346	15,009	2.1%	0.3%	0.6%
Not stated	3,343	12,554	15,897	0.8%	0.6%	0.7%
Total	416,779	2,008,119	2,424,898	100.0%	100.0%	100.0%
Kigali City						
Electricity	1,986	61	2,047	0.9%	0.1%	0.7%
Gas	3,806	162	3,968	1.8%	0.2%	1.4%
Biogas	233	171	404	0.1%	0.3%	0.1%
Kerosene	1,604	36	1,640	0.7%	0.1%	0.6%
Firewood	22,265	54,433	76,698	10.3%	78.0%	26.8%
Charcoal	179,679	13,457	193,136	82.8%	19.3%	67.4%
Grass/Leaves	179,079	517	683	0.1%	0.7%	0.2%
Other	5,202	469	5,671	2.4%	0.7%	2.0%
Not stated	1,961	456	2,417	0.9%	0.7%	0.8%
Total	216,902	69,762	286,664	100.0%	100.0%	100.0%
South						
Electricity	177	167	344	0.3%	0.0%	0.1%
Gas	212	412	624	0.4%	0.1%	0.1%
Biogas	67	449	516	0.1%	0.1%	0.1%
Kerosene	162	334	496	0.3%	0.1%	0.1%
Firewood	29,915	525,638	555,553	57.6%	95.3%	92.0%
Charcoal	19,376	8,958	28,334	37.3%	1.6%	4.7%
Grass/Leaves	404	11,357	11,761	0.8%	2.1%	2.0%
Other	1,292	1,560	2,852	2.5%	0.3%	0.5%
Not stated	341	2,979	3,320	0.7%	0.5%	0.6%
Total	51,946	551,854	603,800	100.0%	100.0%	100.0%
West	31,940	331,034	003,000	100.076	100.076	100.070
	204	040	540	0.50/	0.40/	0.40/
Electricity	301	218	519	0.5%	0.1%	0.1%
Gas	135	359	494	0.2%	0.1%	0.1%
Biogas	88	519	607	0.1%	0.1%	0.1%
Kerosene	111	255	366	0.2%	0.1%	0.1%
Firewood	31,531	449,807	481,338	46.9%	94.4%	88.6%
Charcoal	33,381	11,934	45,315	49.7%	2.5%	8.3%
Grass/Leaves	524	9,283	9,807	0.8%	2.0%	1.8%
Other	733	962	1,695	1.1%	0.2%	0.3%
Not stated	426	2,927	3,353	0.6%	0.6%	0.6%
Total	67,230	476,264	543,494	100.0%	100.0%	100.0%
North	,	, -	, -			
Electricity	149	180	329	0.4%	0.1%	0.1%
Gas	134	228	362	0.4%	0.1%	0.1%
Biogas	58	710	768	0.4%	0.1%	0.176
Kerosene	63	244	307			0.2%
				0.2%	0.1%	
Firewood	19,607	323,246	342,853	56.5%	90.6%	87.5%
Charcoal	13,616	6,294	19,910	39.2%	1.8%	5.1%
Grass/Leaves	501	22,890	23,391	1.4%	6.4%	6.0%
Other	328	850	1,178	0.9%	0.2%	0.3%
Not stated	279	2,291	2,570	0.8%	0.6%	0.7%
Total	34,735	356,933	391,668	100.0%	100.0%	100.0%
East						
Electricity	143	306	449	0.3%	0.1%	0.1%
Gas	82	355	437	0.2%	0.1%	0.1%
Biogas	136	1,117	1,253	0.3%	0.2%	0.2%
Kerosene	226	405	631	0.5%	0.2%	0.276
INGIUSCIIC	220	400	031	0.5%	U. I 70	0.19

Province and Main source of energy			Count			Percentage
for cooking	Urban	Rural	Total	Urban	Rural	Total
Firewood	27,727	508,615	536,342	60.3%	91.9%	89.5%
Charcoal	15,372	17,131	32,503	33.4%	3.1%	5.4%
Grass/Leaves	836	18,971	19,807	1.8%	3.4%	3.3%
Other	1,108	2,505	3,613	2.4%	0.5%	0.6%
Not stated	336	3,901	4,237	0.7%	0.7%	0.7%
Total	45,966	553,306	599,272	100.0%	100.0%	100.0%

Figure 43 presents the evolution in the percentage of private households using biomass as the main source of energy for cooking since 1991. It shows that the level has not changed much and that it remains the overwhelmingly dominant source of energy for cooking in Rwanda. Modern sources of energy are not used in cooking for various following reasons: high cost of the sources itself, high cost of cooking equipment, high cost of biogas and solar energy units, etc.

Figure 41: Evolution in the percentage of private households using biomass as main source of energy for cooking, 1991–2012

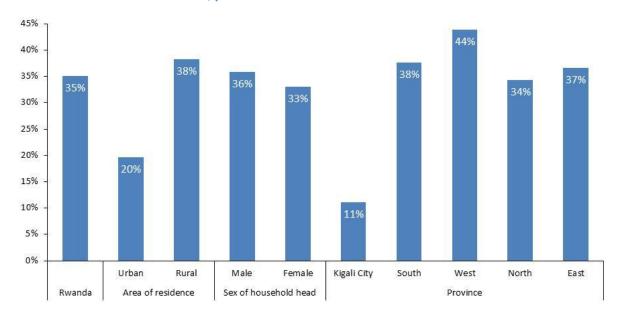


Source: Rwanda Population and Housing Censuses 1991, 2002 and 2012.

### 9.2.1.1 Availability of energy-saving stoves in households

In order to reduce the level of firewood consumption, the GoR has been promoting the installation and use of energy-saving stoves in private households. Figure 42: shows that, at the national level, about 35% of the private households have these energy-saving stoves installed. This is still far from the target of ensuring universal access to energy-saving stoves (MININFRA, 2009). Energy-saving stoves are more popular in rural areas (about 38%) than in urban areas (about 20%). At the provincial level, the highest percentage of households with an energy-saving stove is found in the Western Province (about 44%) and the lowest in Kigali City (about 11%), although in Kigali most households do already use charcoal instead of firewood.

Figure 42: Number and percentage of private households possessing an energy-saving stove by sex of the household head, province and area of residence



Source: Fourth Rwanda Population and Housing Census. Notes: (1) See Table 77 in Annex D for details on the base population used in this figure.

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### Chapter 10: Households' ownership of specific assets

The RPHC4 captured data on specific assets, including on ICT devices (such as radios, televisions, mobile phones or computers) and means of transport (such as bicycles, motorcycles or vehicles, etc.). The analysis of ownership of specific assets is interesting in that it provides an indication of the population's living conditions, given that the use of these assets is increasingly significant in contemporary societies and plays an active part in the welfare of households. This chapter reviews the data on ownership of these assets,

### 10.1 Ownership of ICT devices

Figure 43 presents the percentage of private households with radios and those with mobile telephones by area of residence, sex of the household head and province. Across all Rwanda, about 64% of the private households have a radio set. This percentage is higher in urban areas (about 72%) than in rural areas (about 62%), but is substantially higher among households occupied by male-headed households (about 71%) than among those occupied by female-headed ones (about 47%).

Across provinces the highest percentage of households with a radio is found in Kigali City (about 73%) and the lowest in the Western Province (about 56%).

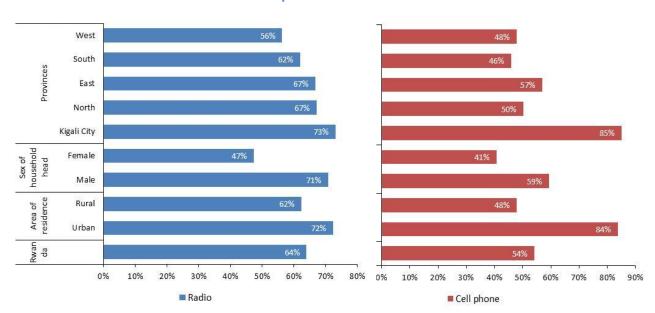


Figure 43: Percentage of private households with radios and mobile telephones by area of residence, sex of the household head and province

Source: Fourth Rwanda Population and Housing Census. Notes: (1) See Tables 79 through 81 in Annex D for details on the base population used in this figure.

Figure 43 also shows that about 54% of households have mobile telephones. This percentage is about double in urban areas (about 84% of all urban households) compared to rural areas (about 48%) and also higher among households occupied by male-headed households (about 59%) as opposed to households occupied by female-headed households (about 41%). When provinces are considered, the highest percentage (about 85% of all Kigali households) is observed in Kigali and the lowest (about 46%) in the Southern Province, thus realising a two-fold gap between these two provinces.

Figure 44 shows the percentage of private households that own a radio by sector. The darker the colour on the map, the higher the percentage of households with a radio is. It can be seen that Kigali and the surrounding regions toward the Northern and Eastern provinces are of a darker colour, indicating that the sectors in these areas have a higher percentage of households with a radio than elsewhere in the country.

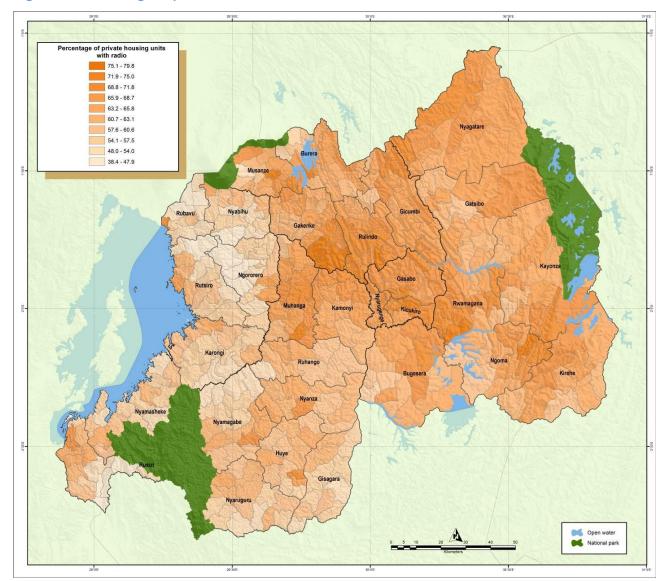


Figure 44: Percentage of private households with a radio

Source: Fourth Rwanda Population and Housing Census.

Figure 45, presenting a map with the percentage of private households with mobile phones by sector, offers a similar reading. Darker shades represent sectors with higher proportions of households with mobile phones, with. Once again, Kigali City and the surrounding areas and the Eastern and Northern provinces clearly stand out.

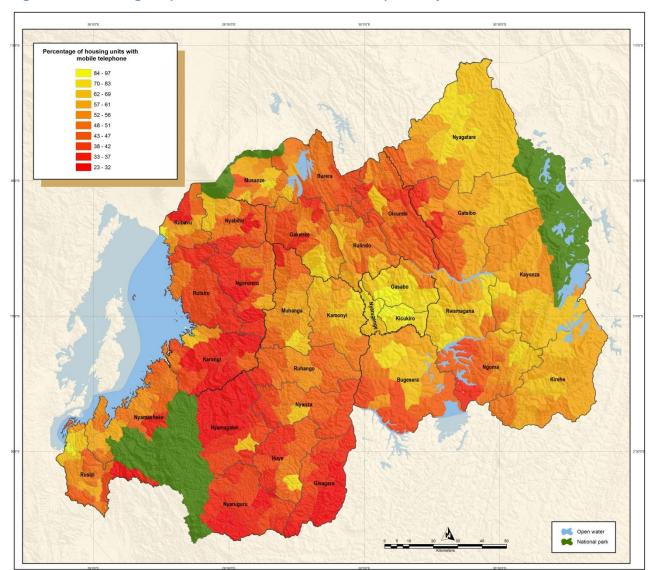


Figure 45: Percentage of private households with a mobile phone by sector

Figure 46 presents the percentage of households with televisions and computers by area of residence, sex of the household head and province. It shows that while the percentage of households with televisions is low nationwide, accounting for just 8%, the percentage of households with a computer is even lower, accounting for just 2%. The urban/rural gap is substantial in both cases, reaching an 18-fold difference in the case of televisions and at least a 30-fold difference in the case of computers. The contrasts between female- and male-headed households occupying households with these assets are less evident, reaching about a two-fold difference in the case of television and a three-fold difference in the case of computers. Interestingly, when provinces are considered, the gap between Kigali City the rest of the country is similar. There are 13 times more chances of a private household having a television (about 38% in Kigali as opposed to 4% in the Northern and Western provinces) as having a computer in Kigali (about 13% as opposed to 1% elsewhere).

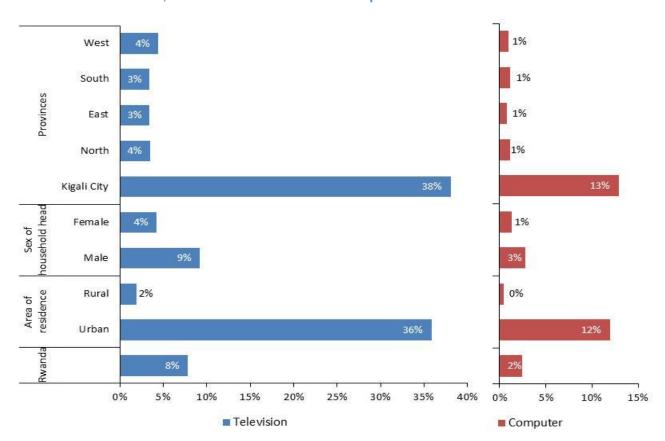


Figure 46: Percentage of private households with, respectively, a television and a computer by area of residence, sex of the household head and province

Source: Fourth Rwanda Population and Housing Census. Notes: (1) See Tables 79 through 81 in Annex D for details on the base population used in this figure.

#### 10.2 Households' access to the Internet

Since 2000, Rwanda has been resolutely committed to the development and use of ICT in several domains of both the public and private sectors so as to speed up economic development and transform the country into a competitive and information-rich knowledge-based economy (MINECOFIN, 2002). For this reason, the ICT sector is regarded as a key element in regard to national development. Indicators of the level of penetration of ICT in Rwandan society usually refer to ownership of computers and access to the Internet. Since the RPHC4 used different units of observation for each of the indicators, they are presented separately in this report. This section focuses on the latter and is organised into two sections. In the first, it reviews the level of access to the Internet. In the second, the places mostly used by the population to access the Internet are considered. In each case the data will be reviewed against cross-cutting characteristics such as area of residence and sex of the household head.

#### 10.2.1 Prevalence of households with access to the Internet

Figure 47 presents the percentage of private households whose members have access to the Internet by area of residence and sex of the household head. It shows that, at the national level, about 7% of private households have members with access to the Internet. As expected, the percentage of private households with access to the Internet is higher in urban areas (about 28%) than in rural areas (about 2%). This represents a 14-fold gap between urban and rural areas. Members from male-headed households are relatively better served than their counterparts from

female-headed households in regard to access to the Internet (about 7% compared to 5%). It should also be noted that the figures obtained in the RPHC4 are higher than those observed in 2010/2011 in the EICV3 (NISR, 2012).

30% 28% 25% 20% 15% 10% 5% 7% 2% 0% Urban Rural Male Female Rwanda Area of residence Sex of household head

Figure 47: Percentage of private households with members who have access to the Internet by area of residence and sex of household head

Source: Fourth Rwanda Population and Housing Census. Notes: (1) See Table 63 in Annex D for details on the base population used in this figure.

Figure 48 presents the percentage of private households with members who have access to the Internet by province. It shows that the percentage of private households with access to the Internet varies from one province to another. As expected, the highest percentage of households with members with access to the Internet is observed in Kigali City, where about 28% of households have such access. Percentages outside Kigali City are around 3% in the Eastern Province and around 4% (Southern, Western and Northern provinces). The gap between Kigali City and the other provinces is at least seven-fold.

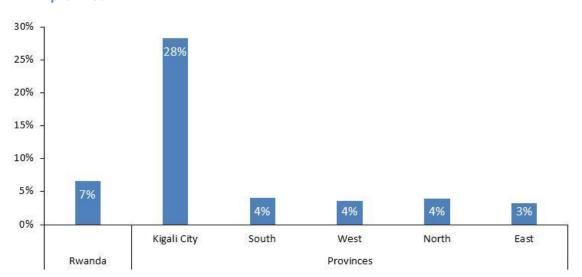


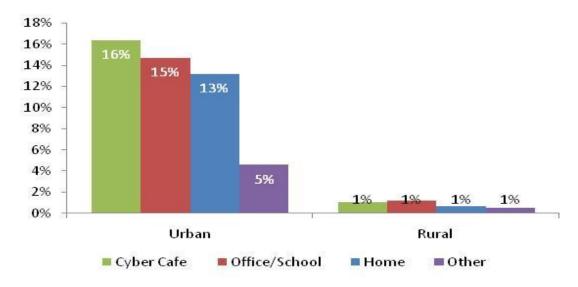
Figure 48: Percentage of private households whose members have access to the Internet by province

Source: Fourth Rwanda Population and Housing Census. Notes: (1) See Table 63 in Annex D for details on the base population used in this figure.

#### 10.2.2 Places used to access the Internet

Figure 49 presents the percentage of private households with members who have access to the Internet from specific places by area of residence. It shows that cyber cafes are the most commonly used sites for accessing the Internet by household members (by about 16% of private households in urban areas), although they do not clearly stand out from the other places used in urban areas (i.e. the office/school at about 15% and the home at about 13%). In rural areas there is no place standing out from others.

Figure 49: Percentage of private households with members who have access to the Internet from specific places by area of residence



Source: Fourth Rwanda Population and Housing Census. Notes: (1) See Table 64 in Annex D for details on the base population used in this figure.

Figure 49 presents the percentage of private households with members who have access to the Internet from specific places by sex of the household head. It shows that members from male-headed households are more likely to be found accessing the Internet from cyber cafes and the office/school, while those from female-headed households are more likely to access the Internet from home or from cyber cafes.

Female

Office/School

Figure 50: Percentage of private households with members who have access to the Internet from specific places by sex of the household head

Source: Fourth Rwanda Population and Housing Census. Notes: (1) See Table 65 in Annex D for details on the base population used in this figure.

Male

Cyber Cafe

Female

Male

Other

Female

### 10.3 Ownership of means of transport

Male

Female

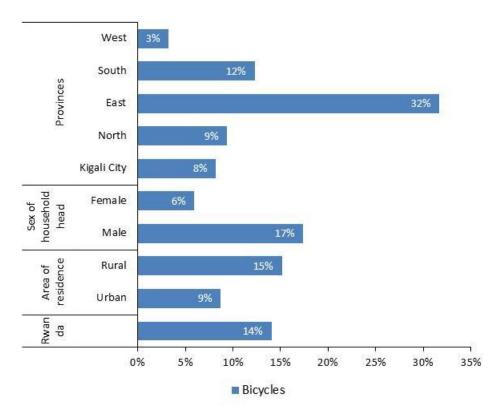
Male

Home

Figure 51 presents the percentage of private households with bicycles by area of residence, sex of the household head and province. It shows that, across all Rwanda, about 14% of private households have bicycles. When area of residence is considered, the data reveal that bicycles are more prevalent as means of transport in rural areas (about 15% of the total rural population have one) than in urban areas (where about 9% have one). In regard to the sex of the household head, households occupied by male-headed households are three times more likely to have a bicycle than a female-headed household (about 17% as opposed to about 6%).

When the data are viewed by province, the Eastern Province clearly stands out as having the highest percentage (about 32%) of its private households with bicycles, a percentage which is about four times higher than the one found in Kigali (about 8%).

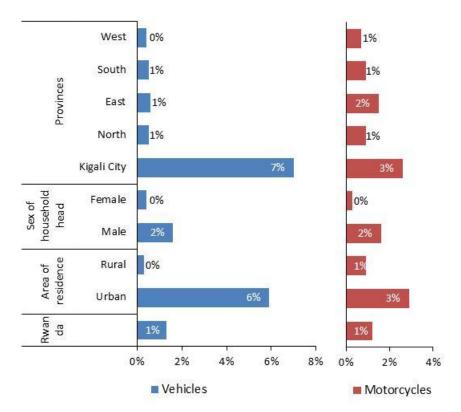
Figure 51: Percentage of private households with a bicycle by area of residence, sex of the household head and province



Source: Fourth Rwanda Population and Housing Census. Notes: (1) See Tables 79 through 81 in Annex D for details on the base population used in this figure.

Figure 52 presents the percentage of private households with vehicles and motorcycles by area of residence, sex of the household head and province. It shows that the data reveal many similarities among households' ownership of these assets. First, at the national level the percentage of households with vehicles (about 1%) is similar to the one with motorcycles (again about 1%). Second, across areas of residence, both are predominantly found in urban areas, although vehicles are twice as likely to be found in these areas (about 6%) than motorcycles (about 3%). Third, the percentage of households with vehicles among male-headed households is similar. Finally, in Kigali City the percentage of households with vehicles (about 7%) is more than double the percentage of households with vehicles observed in urban areas (about 3%).

Figure 52: Percentage of private households with vehicles and motorcycles, respectively, by area of residence, sex of the household head and province



Source: Fourth Rwanda Population and Housing Census. Notes: (1) See Tables 79 through to 81 in Annex D for details on the base population used in this figure.

Table 46 shows that the percentage of households with communication devices has sharply increased from 1978 to 2012, especially in regard to mobile phones and televisions. The percentage of households with a radio has more than doubled, from about 27% in 1978 to about 64% in 2012, while that of households with mobile phones increased 27 times between 2002 and 2012. These gains are related to factors such as the rise in imports of cheap ICT devices from Asia, especially from China and India, coupled with the suppression of all taxes on mobile telephones by the Government in 2005. Although the GoR also suppressed taxes on computers, they remain a prohibitively expensive item for the majority of private households and are not considered a basic tool in everyday life.

Table 46: Evolution in the proportion of private households with specific assets, 1978–2012

Year	Household ass	Household assets								
	Radio	Television	Cell phone	Computer	Vehicles	Motorcycles	Bicycles			
1978	27.1	-	-	-	-	-	-			
1991	29.0	-	-	-	-	-	-			
2002	41.9	0.1	1.8	0.1	0.7	0.3	8.6			
2012	64.0	7.8	54.1	2.4	1.3	1.2	14.1			

Source: Rwanda Population and Housing Censuses 1978, 1991, 2002 and 2012.

### Conclusion

The analysis of data from the RPHC4 has revealed the following key findings in regard to households' characteristics and housing.

The number of households has been increasing over time. In 2012, it reached about 2.42 million private households. About 83% of the private households are located in rural areas.

At the national level, about 71% of the private households are headed by males and 29% by females. The percentage of private households headed by females, which stood at about 35% in 2002, fell to about 29% in 2012. Female household heads tend to be, on average, older than male household heads; the mean age of female household heads is 51 while for male household heads it is 40. From age 45 and above, the percentage of female-headed households is higher than male-headed households. About 69% of household heads are currently married, 17% widowed, 11% have never been married and 4% are separated or divorced. However, when disaggregated by sex, the data reveal that the percentage of female household heads that are widowed (about 54% of all female heads) is noticeably high. About 32% of household heads have no education, 55% have attended primary school and about 8% and 3% have attended secondary school and university respectively. About 83% of the household heads are employed, 2% are unemployed and 15% are inactive.

About 63% of the private households in Rwanda are classified as nuclear households. Extended and composite households make up about 17% and 12% respectively, while one-person households represent about 9% of all private households. About 74% of the private households have between one and two members aged five and above who are currently employed. The demographic and economic dependency ratios, at the household level, are 94.1 and 145.2 respectively. However, the economic dependency ratio is above 200 among female-headed households in urban areas, particularly in Kigali City and the Western and Eastern provinces. The mean size of private households is 4.3 persons, and has remained stable since 1978.

The RPHC4 revealed that about 58% of private households own livestock. Ownership by type of livestock indicates that poultry, cattle, goats and pigs are the types of livestock that dominate, with the percentage of private households owning this type of livestock ranging from 15% (pigs) to 32% (cattle). The largest numbers of livestock owned by private households are to be found in the Eastern and Southern provinces, although, on average, private households in Kigali own more livestock than elsewhere in the country.

The RPHC4 indicates that the implementation of the *villagisation* policy is progressing well. About 49% of the private households were found in clustered rural settlements. The Census also indicates that urban development is dominated by squatter housing. The 'house occupied by one private household' category is the most common type of building, accounting for about 90% of the total private households, while storey buildings are almost non-existent even in urban areas. Although owner occupation still dominates housing tenure, accounting for about 80% of all private households, it has been falling consistently since 1978 while tenant occupation has been on the rise.

Sun-dried bricks and wood/mud, covered or not with cement, are the most commonly used building materials for walls, accounting for about 95% of private households in the country. Iron sheets and local tiles are the most commonly used materials for roofing, accounting for about 99% of the households. Thatched houses have been eradicated across the country. Earth/sand remains the

mostly used material for floors, especially in rural areas. At the national level it accounts for 78% of all private households. Across all private households there are, on average, two persons per bedroom.

About 73% of the households have access to water from improved water sources. The percentage of households with access to improved sources of water is substantially higher in urban areas (about 92%) than in rural areas (about 69%), while across the provinces the lowest percentage was observed in the Eastern Province (about 60%).

About 96% of Rwanda's households have toilet facilities, of which about 88% are unshared pit latrines. The use of flush toilets is very limited and accounts for only about 5% of the households in urban areas alone. About 42% of all households use the bush as the main mode for sewage disposal while compost dumping is the main mode of waste disposal, being used by 57% of all households.

The RPHC4 revealed that kerosene lamps are the main source of energy for lighting, especially in rural areas. It also showed that access to electricity is still limited to about 18% of the households in the country but that this level has improved since 2002, when only about 5% of the households had access to electricity. Energy for cooking comes almost exclusively from the use of biomass, even in urban areas, and only about 35% of the households have energy-saving stoves installed.

More than half of Rwandan households own ICT devices such as radios and mobile phones. Television and computers are confined to urban areas, where they are still limited to a few households.

About 7% of private households have members with access to the Internet. Cyber cafes and offices or schools are the most commonly used places to access the Internet.

Bicycles can be found in about 14% of the households, while motorcycles and vehicles can be found in just 2%. As expected, the percentage of households with vehicles and motorcycles is higher in Kigali City than elsewhere in Rwanda.

### References

- 1. Bart, F. (1993): Montagnes d'Afrique, Terres Paysannes: Cas du Rwanda. Bordeaux. Centre d'Etudes de Géographie Tropicale, Presses Universitaires de Bordeaux.
- 2. Bureau National de Recensement (1984): Recensement Général de la Population et de l'Habitat. Volume VI: Analyse. Kigali.
- 3. Haupt, A., Kane, T.T., and Haub, C. (2011): Population Reference Bureau's Population Handbook (Sixth Edition).
- 4. Havugimana, E. (2009): State policies and Livelihoods. Rwandan Human Settlement Policy Case Study of Ngera and Nyagahuru Villages. Thesis. University of Gothenburg: School of Global Studies. Gothenburg.
- 5. Itumanaho.com (2012): 'History of Telecom Companies in Rwanda'. Online. Available at http://itumanaho.com/2012/02/history-of-telecom-companies-in-rwanda/. Accessed 2 March 2013.
- 6. MINAGRI (2004): Agricultural National Policy, Kigali.
- 7. MINAGRI (2009): Strategic Plan for the Transformation of Agriculture in Rwanda Phase II (PSTA II). Final Report, Kigali: MINAGRI.
- 8. MINECOFIN (2002): Rwanda Vision 2020. Kigali.
- 9. MINECOFIN (2005): Atlas géo-démographique du Rwanda. Kigali.
- 10. MININFRA (2004): National Human Settlement Policy in Rwanda. Kigali.
- 11. MININFRA (2008): National Urban Housing Policy for Rwanda, Kigali.
- 12. MININFRA (2009): National Policy & Strategy for Water Supply and Sanitation Services. Kigali.
- 13. MININFRA (2010): National Energy Policy and National Energy Strategy 2008–2012. Kigali.
- 14. Muhizi, T., Twarabamenye, E., Ndahayo, F., Hakizimana, A., Ntaganda J. and Nyagahakwa, V. (2013): Analysis of barriers to adoption of new energy solutions by rural end-users perspective in Southern Province, Rwanda. *Journal of Environmental Management and Safety*. Vol. 4, No. 2, 37–50.
- 15. National Institute of Statistics of Rwanda (2012a): EICV3 Thematic Report. Economic Activity. Kigali.
- 16. National Institute of Statistics of Rwanda (2012b): EICV3 Thematic Report. Utilities and amenities: Water and Sanitation. Energy. Housing. Transport. ICT. Kigali
- 17. National Institute of Statistics of Rwanda (2012c): The Evolution of Poverty in Rwanda from 2000 to 2011: Results from the Household Surveys (EICV). Kigali.

- 18. National Institute of Statistics of Rwanda (2013): Fourth Rwanda Population and Housing Census, Thematic Report: Migration and Spatial Movements. National Institute of Statistics Rwanda: Kigali.
- 19. National Institute of Statistics of Rwanda, MoH and ICF International (2012): Rwanda Demographic and Health Survey 2010. Calverton, Maryland, USA: NISR, MOH, and ICF International.
- 20. Republic of Rwanda (2005): National Policy for Family Promotion. Kigali.
- 21. SNR (1994): Recensement Général de la Population et de l'Habitat au 15 août 1991. Résultats définitifs.
- 22. SNR, MINECOFIN (2005a): 3<sup>ème</sup> Recensement général de la population et de l'habitat. Analyse des résultats. Caractéristiques des ménages ordinaires. Kigali.
- 23. SNR, MINECOFIN, (2005b): Recensement général de la population et de l'habitation. Analyse des résultats. Habitat et son environnement. Kigali.
- 24. SNR, MINECOFIN. (2005c): 3<sup>ème</sup> Recensement Général de la Population et de l'Habitat au 15 août 2002. Analyse des résultats. Habitat et son environnement. Kigali.
- 25. Twarabamenye, E. (1991): L'habitat rural dans la Préfecture de Ruhengeri. Thèse de Doctorat. Institut de Géographie. Talence: Université de Bordeaux III.
- 26. Twarabamenye, E. and Mukashema, A. (2012): Long-run Trend of Cities' Informal Housing: A Solution for the Majority of Kigali Urban Dwellers and a Challenge to Urban Development in Rwanda, *Journal of Environment Management Safety*, Vol. 3, No. 2, 35–56.
- 27. United Nations (2008): Principles and Recommendations for Population and Housing Censuses Revision 2. New York.
- 28. UN Habitat (2008): Country Programme Document 2008–2009 Rwanda. Unon Publishing Services Section, Nairobi. Available athttp://www.UN- Habitat.org, accessed 20 July 2010.

# Annex A Census objectives, methodology and data quality assessment

### A.1 Objectives of the Census

The long-term objective of the Fourth Rwanda Population and Housing Census (RPHC4) is to contribute to:

- i. Improving the level of knowledge on the social, demographic and economic characteristics of the population of Rwanda;
- ii. Enabling a better understanding of population and development interrelationships; and
- iii. Reinforcing the National Institute of Statistics of Rwanda's (NISR) human and technical capacity.

In the short term, the objectives of the Census are to:

- i. Determine the current size of the population of Rwanda and its spatial distribution among provinces, districts, sectors, cells and villages and among rural and urban areas;
- ii. Determine the present demographic, social, economic and cultural characteristics of the population of Rwanda;
- iii. Determine the level, structure and trends in regard to fertility, mortality and migration among the population in order to come up with the natural and overall growth rates of the population of Rwanda;
- iv. Provide indicators to enable advocacy for particular groups of the population such as women, children, youth, the elderly and disabled persons;
- v. Determine the characteristics of households, housing conditions and household welfare in Rwanda to further use this information for a more elaborate poverty mapping of the country;
- vi. Produce national population projections using updated demographic data and other information on population dynamics to enhance future planning;
- vii. Update the relevant databases, providing information right down to the smallest administrative unit in order to enhance the current government policy on 'village clusters';
- viii. Provide clear details of the current statutory boundaries of all administrative units of the country to which appropriate geographical codes can then be assigned;
- ix. Constitute an updated sampling frame for Rwanda and produce maps for each enumeration area for future sample surveys; and
- x. Promote the use of Census data at national and local level in formulating, monitoring and evaluation of development programmes.

### A.2 Methodology and Census phases

As mentioned in Chapter 1 of this report, following the preparatory phase of the Census which consisted of the production of the project documents, schedule and Census budget, the following technical activities were undertaken.

#### A.2.1 Census mapping

The purpose of the Census mapping is to divide the whole country into well-delineated enumeration areas that constitute the smallest operational Census units to be assigned to each enumerator during the enumeration period.

The Census mapping operation lasted for about a year (from February 2011 to March 2012), which enabled the NISR to better estimate the number of staff to be recruited (e.g. enumerators, team leaders, supervisors, etc.) and the other Census infrastructure and facilities necessary for planning robust field activities. The outcomes of the Census mapping include the production of a new sampling frame for future surveys and an updated administrative area boundary map for Rwanda. In total, the country was delineated into 16,728 enumeration areas within the current boundaries of administrative units, consisting of five provinces, 30 districts and 416 sectors. This allows for the easy compilation of Census results in these administrative entities.

#### A.2.2 Pilot Census

Prior to the conducting of the RPHC4, a Pilot Census designed for testing the Census questionnaires, other Census data-collection tools, enumeration time requirements and the state-of-preparedness of the entire field work organisation was carried out. This test was conducted on a sample of 75 enumeration areas throughout all the districts of the country, from 16 to 30 August 2011, exactly one year before the actual Census.

The Pilot Census was a dress rehearsal for the actual Census during which the various methods and procedures for field organisation were tested as well as the Census publicity/awareness campaign, Census map products and data-coding and data-entry equipment.

The lessons learnt from the Pilot Census exercise were used to revise some Census procedures and instruments necessary for a smooth/successful implementation of the actual Census enumeration work.

#### A.2.3 Questionnaires and manuals

The first draft of Census questionnaires prepared by the NISR was submitted to the Census Technical Committee (CTC) for review before its approval by the National Census Commission (NCC). The CTC-reviewed Census questionnaires and related manuals were tested during the Pilot Census.

The lessons learnt during the Pilot Census were used by the NISR to improve and finalise the Census questionnaires, containing 77 variables, as well as to revise the manuals of instructions for all Census functionaries accordingly. The revised Census questionnaires and manuals were again reviewed and approved by the CTC before final approval was granted by the NCC to use the Census questionnaire for the RPHC4.

The questionnaires used to collect data are presented in Annex B of this report. Two different types of questionnaires were administered – one for private households and one for institutional households. The questionnaire for private households contained a person record, a household record and a mortality record. The questionnaire for institutional households contained only a person record.

#### A.2.4 Census publicity and sensitisation campaign

Prior to the conducting of Census enumeration a national publicity and sensitisation campaign was implemented in order to inform the public about the importance and relevance of the fourth Rwanda RPHC4, as well as to seek their active participation and the involvement and collaboration of administrative authorities during the Census enumeration period. A subtle and targeted publicity and awareness campaign was conducted before the Pilot Census, which was later intensified and diversified to cover all of the country as the actual Census enumeration period approached.

The active collaboration and participation of Census commissions at both provincial and district levels in campaign activities contributed significantly to the success of the Census enumeration.

The innovative mass-communication mix that was used to inform the public about the Census and, at the same time, to ask for their full participation in the RPHC4, included the following:

- (i) Census Commission meetings;
- (ii) Articles in local newspapers;
- (iii) Radio and television programmes;
- (iv) Outdoor billboards, banners, publicity spots and press releases; and
- (v) Monthly village community development meetings (Umuganda).

The Census results published in this report attest to the high level of cooperation of the political and administrative authorities and the effective participation of the general public in the entire Census enumeration process.

#### A.2.5 Recruitment and training of field staff

The RPHC4 was conducted by personnel from various institutions: the NISR (the Census executing agency), MINECOFIN, MINALOC (districts and sectors), MINAFFET, the Rwanda Defence Force, the Rwanda National Police, the Rwanda Correctional Services and MINEDUC (heads of secondary schools and teachers). The recruitment of Census functionaries was done by each institution according to the needs (i.e. number and categories of staff) of the NISR, except in the case of teachers whose recruitment was done by the NISR in collaboration with administrative authorities at the district, sector and cell levels.

At each stage of Census implementation, the necessary induction and mandatory training for NISR staff and Census functionaries took place. For example, the Census mapping phase was preceded by the training of cartographers, while the Pilot Census and the actual Census enumeration were preceded by training of enumerators and their supervisors.

About eight weeks prior to the commencement of actual Census enumeration cascading training was organised for all categories of Census functionaries, namely:

- (i) Core master trainers' dialogue;
- (ii) Training for 275 master trainers;
- (iii) Training for 1,004 trainers organised in five training centres, one centre per province; and
- (iv) Training for 24,426 enumerators in 68 training centres spread across all districts of the country.

The Census training sessions focused on the understanding of Census enumeration processes and the correct completion of Census questionnaires, reading and interpretation of Census maps,

practical role plays, and field practice. All the trainers and trainees were subjected to mandatory qualifying tests which they had to pass before being appointed.

In order to mitigate the risk of declining quality of training at the various cascading training levels, the comprehensive enumerator training was voice-over simulated by core master trainers at a recording studio. The audio recorded training session was mass-recorded on CDs and distributed to all the training classes as a reference source for the trainers.

#### A.2.6 Actual Census enumeration

As initially planned, the actual Census enumeration of the population in private and institutional households was conducted across the country from 16 to 30 August to 2012, immediately after the Census reference night.

Although data-collection activities were carried out by well-trained enumerators, quality assurance of the Census enumeration was ensured through close supervision by line managers at various levels. The Census functionaries deployed for the RPHC4 comprised the following personnel:

- (i) Enumerators and support staff;
- (ii) Team supervisors, covering an average of five enumeration areas each;
- (iii) Sector controllers;
- (iv) Zonal supervisors, covering between two and five administrative sectors;
- (v) District coordinators;
- (vi) Province coordinators; and
- (vii)National coordinators.

In accordance with the instructions contained in the Census Manual, each manager oversaw and ensured the operations of daily Census activities within his/her area of supervision. Enumerators were accountable for the work done on a daily basis to their team leaders, who carried out the verification of completed questionnaires and also resolved to the best of their ability challenges and/or problems encountered.

The team leaders communicated their daily progress achieved to the innovative Census Command and Control Centre (CC&CC) established at the NISR using a SMS (i.e. Short Message Service) system. The CC&CC system was an open source and web-based system that allowed NISR senior management and authorised staff to continually monitor the progress of Census enumeration in all the 16,728 enumeration areas via the Internet. These officials were also able to contact each other through a MTN Closed User Group.

Prior to the conducting of Census enumeration, a robust field operations plan with worst case scenarios and risk analyses was established to facilitate hitch-free data collection and supervision of the work. Appropriate logistical support was made available to field staff, such as bicycles, motorcycles, vehicles and other necessary equipment. The mechanism utilised for the distribution of Census material for data collection as well as the repatriation of questionnaires and other materials to NISR headquarters was mainly facilitated by Rwanda Defence Force trucks.

#### A.2.7 Post-enumeration activities

The logistical arrangement employed for the repatriation, inventory of Census questionnaires and collating of Census counts was swift and seamless, which enabled the rapid publishing of the Provisional Census Report within 90 days of Census enumeration being concluded. The other

post-enumeration activities included: the Post-Enumeration Survey (PES); data coding; data processing; the release of final results; thematic analysis; and the dissemination of Census results.

The PES was conducted from 19 September to 3 October 2012. The aim of the PES was to assess the coverage and quality of Census data gathered during the actual Census. A total of 120 enumeration areas was sampled from across all districts of the country.

The data-coding and data-processing activities were done concurrently and completed within six months. The Census data-cleaning, data-editing and data-stabilisation processes were completed in two months, after which approximately 1,000 basic Census data tables were generated. The final results were subjected to an in-depth analysis across 17 generic themes (one of which is presented in this report) in accordance with the analysis plan developed for each theme. Census monographs for each of the 30 districts will also be produced.

### A.3 Data quality assessment

An independent quality review (available as an internal report to NISR) was conducted in parallel with the thematic analysis. This investigated the work done prior, during, and after enumeration to maximise the data quality. The assessment confirmed the strong planning and quality assurance throughout the enumeration to maximise representation of the population; but also found potentially weaker direct quality assurance during the data processing phase. The overall conclusion of the assessment is that the RPHC4 was implemented with strong quality control and gives an excellent representation of the population of Rwanda with generally good measurement of its structure both in terms of spread and demographic and socio-economic characteristics.

The claim of high quality with respect to representation is confirmed by the Post-Enumeration Survey (PES), which measured the net-coverage of the household population in the RPHC4 to be over 99% nationally with little variation across regions and by age and sex. Gross under-coverage was around 1.5% while gross over-coverage (erroneous inclusions) was around 0.6%. The conclusion of excellent representation is also consistent with the plausible growth rate for the population over the inter-censal period implied by the national results.

Analysis of the demographic and socio-economic information contained in the final RPHC4 database and triangulation with other data sources also confirm that for most areas, the RPHC4 gives a reliable and comprehensive representation of the population. However, some issues were found with respect to measurement of population characteristics: some possible under-reporting of males (especially at young ages), some age-heaping around the digits 0 and 2 as well as particular irregularities around the ages 2 and 12. Moreover, despite careful testing of the questionnaire with explicit enumerator instructions regarding these sections, there is also evidence of under-reporting of mortality, and to a lesser extent fertility. Indirect estimation may be appropriate in these two thematic areas. However, apart from these issues the analysis of the RPHC4 database supports the assertion of good quality with respect to measurement.

## Annex B Census questionnaire

This annex provides the key pages of the Census questionnaires. The full questionnaires including all cover sheets can be obtained from the NISR.

As mentioned above, two different types of questionnaires were administered, one for private households and one for institutional households. The questionnaire for private households contained a person record, a household record and a mortality record. The questionnaire for institutional households contained only a person record.

#### Private households: person record **B.1**

FORM: 001

#### **REPUBLIC OF RWANDA**

S/N: 0000000

MINISTRY OF FINANCE AND ECONOMIC PLANNING



NATIONAL CENSUS COMMISSION

NATIONAL INSTITUTE OF STATISTICS OF RWANDA P.O. Box 6139 Kigali. Tel.: (+250)252571035 Fax: (+250)252570705 E-mail :info@statistics.gov.rw

# **GENERAL POPULATION AND HOUSING CENSUS**

16 – 30 AUGUST 2012							
Legal Basis: Presidential decree No, 02/01 of 28/02/2011							
CENSUS QUESTIONNAIRE (PRIVATE HOUSEHOLD)							
I. SECTION L - LOCALIZATION AND IDENTIF	I. SECTION L - LOCALIZATION AND IDENTIFICATION OF HOUSEHOLD						
L01. PROVINCE / KIGALI CITY:							
L02. DISTRICT:							
L03. SECTOR:							
L04. CELL:							
L05. VILLAGE:							
L06. ENUMERATION AREA (N° EA):							
L07. AREA OF RESIDENCE: (Urban = 1, Rural = 2):							
L08. BUILDING NUMBER:							
L09. HOUSEHOLD NUMBER:							
L10.TYPE OF HOUSEHOLD:			1 0 0				
L11. NUMBER OF QUESTIONNAIRES FILLED IN THIS	S HOUSEHOLD:		/				
H SECTIONS HOUSEHOLD SHIMMARY T	ADLE TO DE EU	LED IN AFTER					
II. SECTION S - HOUSEHOLD SUMMARY TA							
DDECENT DECIDENTS (DD)	MALE	FEMALE	TOTAL				
PRESENT RESIDENTS (PR)							
ABSENT RESIDENTS (AR)							
TOTAL RESIDENTS (PR + AR)							
VISITORS (VIS)							
TOTAL ENUMERATED							
RESIDENTS ABOVE 18 YEARS OLD							
	CONTROL SHEET						
ENUMERATOR		TEAM SUPER	VISOR				
Enumeration Date:	Date of V	erification:					
Observations: Observations:							
Name of Enumerator: Name of Team Supervisor:							
Signature: Signature:							
CODER							
Name :		Name:					
Date: Date:		Date:					
Signature: Signature	Signature: Signature: Code:   _						

N°	Name and First Name (P01)	Relationship to the Head of Sex Age at las Household (P02) (P03) birthday (P05)
	Resident household members  Write the names of all resident members who were present or absent during the census night: (15-16/08/2012) according to the following	What is [NAME]'s Relationship to the head of the household? [NAME]'s [NAME] at his sex? her Last Birthday?
	order:  - The Head of the Household;  - Unmarried resident children of the head of the household whose mothers /fathers are not resident in the same household beginning with the eldest;  - The first Spouse, followed by her unmarried children resident in the household beginning with the eldest;  - The second, third, Spouses, followed by their unmarried children resident in the household beginning with the eldest;  - Married resident children of the head of the household followed by their resident spouses and children;  - Children unrelated to the head being brought up within the household;  - Other resident persons who are related either to the head of the household or to his spouse or spouses;  - Other resident persons who are unrelated either to the head of the household or to his spouse or spouses;  - Names of all other residents who did not spend the census night within the household;  2. Visitors  Record the names of all visitors who spent the census night within the household (if any).	Circle the code corresponding to the response options found at the bottom of the page, depending on the declaration of the respondent.  Circle the code corresponding to the response options found at the bottom of the page, depending on the declaration of the respondent.  Circle the not know the axact age; which match-Use the histor cal calendar provided to estimate his/hage.
1	(. 20)	1. HH 3. SD 5. FM 7. GC 9. NR 1. Male 2. SP 4. UC 6. BS 8. OR 2. Female
2		1. HH 3. SD 5. FM 7. GC 9. NR 2. SP 4. UC 6. BS 8. OR 2. Female
3		1. HH 3. SD 5. FM 7. GC 9. NR 2. SP 4. UC 6. BS 8. OR 2. Female
4		1. HH 3. SD 5. FM 7. GC 9. NR 2. SP 4. UC 6. BS 8. OR 2. Female
5		1. HH 3. SD 5. FM 7. GC 9. NR 2. SP 4. UC 6. BS 8. OR 1. Male 2. Female
6		1. HH 3. SD 5. FM 7. GC 9. NR 1. Male 2. SP 4. UC 6. BS 8. OR 2. Female
7		1. HH 3. SD 5. FM 7. GC 9. NR 1. Male 2. SP 4. UC 6. BS 8. OR 2. Female
8		1. HH 3. SD 5. FM 7. GC 9. NR 1. Male 2. SP 4. UC 6. BS 8. OR 2. Female
9		1. HH 3. SD 5. FM 7. GC 9. NR 1. Male 2. SP 4. UC 6. BS 8. OR 2. Female
10		1. HH 3. SD 5. FM 7. GC 9. NR 1. Male 2. SP 4. UC 6. BS 8. OR 2. Female
11		1. HH 3. SD 5. FM 7. GC 9. NR 1. Male 2. SP 4. UC 6. BS 8. OR 2. Female
12		1. HH 3. SD 5. FM 7. GC 9. NR 2. SP 4. UC 6. BS 8. OR 2. Female

Relationship to the head 1. HH: Head of Household

2. SP: Spouse
3. SD: Son/Daughter
4. UC: Unrelated child
5. FM: Father/ Mother

6. BS: Brother/ Sister 7. GC: Grand child

8. OR: Non Relative 9. NR: Other relative

SECTIO	N P – CHARACTERISTICS OF POPULA	THON
FOR ALL MEMBERS OF HOUSEHOLD	F OR RESIDENTS LESS THAN 18 YEARS OLD	P23 - Is [NAME] available to work?
P01 – Serial Number of the person	P14 – Parental survivorship and residence	1. Yes 2. No → Go to P29
NAME:	P14s - Is [NAME]'s natural mother 1. Yes 2. No alive? 3. Don't know	P24 – Has [NAME] been seeking for work during the last 7 days (08-14/08/2012)?
	P14b - If yes, does [NAME]'s 1. Yes	0. No
P02 — What is [NAME]'s relationship to the Head of Household?	natural mother live in this 2. No household?	1. Yes, 1 <sup>st</sup> job
1. Head of Household	P14c - Is [NAME]'s natural father 1. Yes 2. No	FOR RESIDENTS WHO ARE CURRENTLY
P03 – Is [NAME] male or female?	alive? 3. Don't know	WORKING or HAVE EVER WORKED
1. Male 2. Female	P14d - If yes, does [NAME]'s natural 1. Yes father live in this household? 2. No	P25 - What was [NAME]'s main occupation
P04 - In what month and year was [NAME] born?	P15 – Was [NAME]'s birth registered?	(type of work) during the last 7 days preceding the census night or during the last time he/she
Month:Year:	1. Yes 2. No 3. Don't know	worked?
P05 – How old was [NAME] at his/her last birthday?	FOR RESIDENTS AGED 3 YEARS or OLDER	
Record age in completed years	PIG – Can [NAME] read and write with under standing in the following languages?	P26 – What is [NAME]'s status in employment?
P06 – What is residence status of [NAME]?	Kinyarwanda 1 Record the SUM of the codes circled	1. Employee 5. Producers' cooperative
1. Present Resident – PR	French 2	2. Employer member
2. Absent Resident - AR	English 4	3. Self-employed 6. Other
3. Visitor - VIS	Other 8 None 0	4. Contributing family worker P27 – What is the main product, service or
FOR USUAL RESIDENTS	P17 - Has [NAME] ever attended school?	activity of [NAME]'s place of work?
P07 – Where [NAME] was born?	<ol> <li>Has never attended → Go to P20</li> <li>Has ever attended</li> </ol>	
Province:	3. Is currently attending school	P28 - What is [NAME]'s institutional sector of
District:	P18a – What is the highest level of education [NAME] attended?	employment?  1. Public 3. Non-profit institution
Foreign Country:	Level Level	2. Private 4. Household
P08 - What is [NAME]'s Nationality?	Preschool 0 Secondary 3 Primary 1 University 4	F OR RESIDENTS AGED 12 YEARS or OLDER
	Post Primary 2	P29 - What is [NAME]'s marital status?
1st Nationality:	P18b - How many years of school did [NAME]	1. Never married 3. Separated 5. Divorced
	complete successfully at that level?	2. Married 4. Widowed
2 <sup>nd</sup> Nationality:	Level Years Completed	If never married and FEMALE -> P33
Foreigner:	Preschool 0 1 2 3 Primary 0 1 2 3 4 5 6	If Widowed or Divorced -> P32
(Record the name of the country)	Post primary 0 1 2 3	If never married and MALE - Next Person
P09 – Where was [NAME] residing previously?	Secondary 0 1 2 3 4 5 6 7	P30 - How many spouses [NAME] have?
Province:	University 0 1 2 3 4 5 6 7+	(For men only)
District: Foreign Country:	P19 – What is the highest certificate/degree [NAME] obtained?	Current number of spouses:
7	0. None 5. Al: Bacc/Dinloma	P31 - What is the rank of [NAME] to the
P10 – How long has [NAME] been living continuously in this District?	1. CE/FM 2. EMA/ENTA 6. A0: Bachelor	spouse? (For women only)
Record 000 if less than 1 year;	7. MA: Master	Current rank as spouse:
Record 999 if the residence has not changed since birth	4. A2/D6/D7 8. PhD: Doctorate	P32 – How old was [NAME] when he/she first got married or lived together with partner?
P11 - What is [NAME]'s Religion?	P20 – Aside from his/her own housework, did	Haddon-cal minority visiting engineering
1. Catholic 4. Muslim 7. No Religion	[NAME] work at least 1 hour during the last 7	Age at first marriage :
Protestant 5. Jehovah Witness 8. Other      Adventist 6. Tradit/Animist	days preceding the census night (8-14/08/2012)?	FOR RESIDENT WOMEN AGED 12 YEARS or OLDER
P12 - Does [NAME] have any difficulty or problem	1. Yes — Go to P25 2. No	P33 - How many live births [NAME] has ever
as listed below? If yes, what were the causes?	2. No P21 - Why [NAME] did not work during the	had?
Type of disability (D) Causes (C)	last 7 days (8-14/8/12)?	If none, write 00 for each sex and proceed to the next
1. Seeing 1. Congenital 2. Hearing 2. Disease/Illness	0. Home worker	person
2. Hearing 2. Disease/Illness 3. Speaking 3. Injury/Accident	Non-worker (Never worked)     Non-worker (Ever worked)	Male F emale
4. War/Mines  4. War/Mines	3. On leave, but has job Go to P25	P34 - Among those children, how many are still
5. Learning/Concentrating 5. Genocide	4. Retired	alive?
6. Other	5. Old age	Male F emale
	7. Other:	P35 – How many live births has [NAME] had
If None (Write 0 in first D	P22 – Did [NAME] do one of the following activities during the last 7 days (8-14/08/2012)?	during the last 12 months (from 15/08/2011 to 15/08/2012)?
	1. Farming/Rearing animals/Fishing	Male F emale
P13 - What is [NAME]'s Medical insurance?	2. Production 3. Services/Selling Go to P25	P36 – Among those children, how many are still
1. Mutuelle 2. RAMA 3. MMI 4. FARG	4. House worker at someone's house	alive?
5. Insurance Cie 6. School 7. NGO 8. Employer	5. Home worker at own house 6. None	Male Female
9. None 10. Other	o. Nuite	

SECTION P – CHARACTERISTICS OF POPULATION					
FOR ALL MEMBERS OF HOUSEHOLD	FOR RESIDENTS LESS THAN 18 YEARS OLD	P23 – Is [NAME] available to work?			
P01 – Serial Number of the person	P14 – Parental survivorship and residence	1. Yes 2. No			
NAME:	P14a - Is [NAME]'s natural mother 1. Yes 2. No alive? 3. Don't know	during the last 7 days (8-14/08/2012)?			
	P14b - If yes, does [NAME]'s 1. Yes	0. No 1. Yes, 1 <sup>st</sup> job			
P02 – What is [NAME]'s relationship to the Head of Household?	natural mother live in this 2. No household?	1. Yes, 1 <sup>st</sup> job			
2. Spouse 6. Brother/Sister	P14c - Is [NAME]'s natural father 1. Yes 2. No	FOR RESIDENTS WHO ARE CURRENTLY			
3. Son/Daughter 7. Grandchild 4. Unrelated Child 8. Other Relative	alive? 3. Don't know	WORKING OF HAVE EVER WORKED			
4. Unrelated Child 8. Other Relative 5. Father/Mother 9. Non Relative	P14d - If yes, does [NAME]'s natural 1. Yes father live in this household? 2. No	(type of work) during the last 7 days preceding			
P03 – Is [NAME] male or female?	P15 – Was [NAME]'s birth registered?	the census night or during the last time he/she			
1. Male 2. Female	1. Yes 2. No 3. Don't know	worked?			
P04 – In what month and year was [NAME] born?	FOR RESIDENTS AGED 3 YEARS or OLDER				
Month: Year:	PI6 – Can [NAME] read and write with understanding in the following languages?	P26 – What is [NAME]'s status in employment?			
P05 - How old was [NAME] at his/her last birthday?	Kinyarwanda 1 Record the SUM of the codes circled	1. Employee 5. Producers' cooperative			
Record age in completed years	French 2	2. Employer member 3. Self-employed 6. Other			
P06 – What is residence status of [NAME]?	English 4 Other 8	4. Contributing family worker			
1. Present Resident – PR	None 0	P27 – What is the main product, service or			
2. Absent Resident - AR 3. Visitor – VIS	P17 – Has [NAME] ever attended school?	activity of [NAME]'s place of work?			
	1. Has never attended → Go to P20 2. Has ever attended				
FOR USUAL RESIDENTS	3. Is currently attending school	P28 – What is [NAME]'s institutional sector of			
P07 - Where [NAME] was born?	P18a – What is the highest level of education	employment?  1. Public 3. Non-profit institution			
Province:	[NAME] attended?  Level Level	2. Private 4. Household			
District: Foreign Country:	Preschool 0 Secondary 3	FOR RESIDENTS AGED 12 YEARS or OLDER			
	Primary 1 University 4 Post Primary 2	P29 – What is [NAME]'s marital status?			
POS – What is [NAME]'s Nationality?	P18b – How many years of school did [NAME]	1. Never married 3. Separated 5. Divorced			
1 <sup>st</sup> Nationality:	complete at that level?  Level Years Completed	2. Married 4. Widowed  If never married and FEMALE			
Foreigner:	Level Years Completed Preschool 0 1 2 3	If Widowed or Divorced P32			
(Record the name of the country)	Primary 0 1 2 3 4 5 6	If never married and MALE Next Person			
P09 – Where was [NAME] residing previously?	Post primary 0 1 2 3 Secondary 0 1 2 3 4 5 6 7	P30 – How many spouses [NAME] have?			
Province:	University 0 1 2 3 4 5 6 7+	(For men only)			
District:	P19 – What is the highest certificate/degree	Current number of spouses:			
Foreign Country:	[NAME] obtained?	P31 – What is the rank of [NAME] to the			
P10 – How long has [NAME] been living	1. CE/FM 5. A1: Bacc/Diploma 6. A0: Bachelor	spouse? (For women only)			
continuously in this District?	2. EMA/ENTA 7. MA: Master 3. A3/D4/D5	Current rank as spouse:			
Record 000 if less than 1 year; Record 999 if the residence has	4. A2/D6/D7 8. PhD: Doctorate	P32 – How old was [NAME] when he/she first			
not changed since birth P11 - What is [NAME]'s Religion?	FOR RESIDENTS AGED 5 YEARS or OLDER	got married or lived together with partner?  Age at first marriage:			
1. Catholic 4. Muslim 7. No Religion	[NAME] work at least 1 hour during the last 7	FOR DECIDENT WOMEN ACED 12 VEADS			
Protestant 5. Jehovah Witness 8. Other      Adventist 6. Tradit/Animist	days preceding the census night (8-14/08/2012)?	FOR RESIDENT WOMEN AGED 12 YEARS or OLDER			
P12 – Does [NAME] have any difficulty or problem	1. Yes Go to P25 2. No	P33 – How many live births [NAME] has ever			
as listed below? If yes, what were the causes?	2. No P21 – Why [NAME] did not work during the	had?  If none, write 00 for each sex and proceed to the next			
Type of disability (D) Causes (C)  1. Seeing 1. Congenital	last 7 days (8-14/08/2012)?	person			
1. Seeing 1. Congenital 2. Hearing 2. Disease/Illness	Home worker     Non-worker (Never worked)	Male Female			
3. Speaking  3. Injury/Accident	2. Non-worker (Ever worked)	P34 – Among those children, how many are still			
5. Learning/Concentrating	3. On leave, but has job P25 4. Retired	alive?			
6. Other	5. Oldness 6. Student Go to P23	Male Female			
If None (Write 0 in first D > P13)	7. Other:	P35 – How many live births has [NAME] had during the last 12 months (from 15 August 2011			
DC DC DC DC DC	P22 – Did [NAME] do one of the following	to 15 August 2012)?			
	activities during the last 7 days (8-14/08/2012)?	Male Female			
P13 – What is [NAME]'s Medical insurance?	1. Farming/Rearing animals/Fishing 2. Production Go to P25	P36 – Among those children, how many are still			
1. Mutuelle 2. RAMA 3. MMI 4. FARG 5. Insurance Cie 6. School 7. NGO 8. Employer	Services/Selling     House worker at someone's house	alive?			
9. None 10. Other	5. Home worker at own house	Male			
	6. None	<del></del>			

### B.2 Private households: household record and mortality record

SECTION H: HOUSING UNITS CHARACTERISTICS	What is the main type of toilet facility used by the	H17-H25 – HOUSEHOLE How many does the house	ehold have of the	
HOI - TYPE OF HABITAT	members of the household?  1. Flush to ilet/Water Closet (WC) system	following assets in functio	ning condition?	
Um ud ug ud u (clustered rural settlement)     Old settlement	Private p it latrine	Radio		
3. Dispersed/I solated housing	3. Public pit latrine	H18 – Television		
4. Planned urban housing	4. Bush 5. Other	H19 - Telephone (fixed line)		
Spontaneous/Squatter housing     Other type of housing	H12 – MAIN SOURCE OF ENERGY FOR	H20 - Cell phone		
HO2 – TYPE OF BUILDING	LIGHTING	H21 - Refrigerator/Freezer		
1. House occupied by one household	What is the main source of energy the household	H22 - Computer		
House occupied by several households     Storey building occupied by one or more households	uses for lighting?  1. Electricity by EWSA	H23 - Vehicles		
Storey building occupied by one or more households     Several buildings in a compound occupied by several	2. Hydro-electric or other private source	H24 - Motorcycles		
household s	3. Solar power 4. Generator	H25 -Bicycles		
5. Other type of building  H03 – TENURE OF THE HOUSING UNIT	5. Kerosene lamp 6. Paraffin	H26 - INTERNET ACCE	SS: Does any member	
1. Owner 5. Staff housing	7. Biogas 8. Candle 9. Firewood 10. Other	of this household have acc	AND DESCRIPTION OF THE PROPERTY OF THE PROPERT	
2. Tenant 6. Refuge/Temporary 3. Hirenurchase camp settlement	H13 – MAIN SOURCE OF ENERGY FOR	1. Yes 2. No — H27 – Where do you acce	Go to H28-H34	
3. Hirepurchase camp settlement 4. Free lodging 7. Other	COOKING		Record the SUM of the	
HO4 – MAIN MATERIAL OF THE ROOF	What is the main source of energy the household		codes circled	
What is the main material used for the roof?	uses for cooking?  1. Electricity 5. Firewood		4	
(In case of a storey building, consider the roof of the last floor)	2. Gas 6. Charcoal	Other	8	
1. Iron Sheets 5. Concrete	3. Biogas 7. Grass/Leaves	H28-H34 - How many cat	ttle, goats, sheep, pigs,	
2. Local Tiles 6. Cartoons/Sheathing	4. Kerosene 8. Other	poultry/fowl and rabbits of	do you have in this	
3. Industrial Tiles 7. Grass 4. Asbestos 8. Other material	Do you have an energy saving stove in this house?	household?		
HOS – MAIN MATERIAL OF THE WALLS	1. Yes, and it is used 2. Yes, but it is not used	H28b - Cross b reed cow		
What is the main material used for the walls?	3. No H15 – MODE OF WASTE DISPOSAL	H28c - Exotic b reed cow		
1. Wood/Mud 6. Stone	What is the main mode of household waste	H29 - Goats		
2. Wood/Cemented mud 7. Timber 3. Sundried bricks 8. Burnt bricks	disposal used?	H30 - Sheep		
4. Plastic Sheathing/Cardboard 9. Other	1. Compost dumping 2. Private dust bins	H31 - Pigs		
5. Cement blocks/Concrete	Public refuse dumps 4. In the bush     On the farms	H32 - Rabbits		
H06 – MAIN MATERIAL OF THE FLOOR	6. In a River/Stream /D rain/Gutter	H33 - Poultry		
What is the main material used for the floor?	7. Other	H34 - Other poultry		
1. Earth/Sand 4. Burn bricks	H16 – MODE OF SEWAGE DISPOSAL What is the main mode of sewage disposal used by	15/08/2012), has any me		
2. Concrete 5. Timber 3. Stone 6. Other	the household?	done agriculture activity of		
25 00 (2010) - 720 (2010) (201	1. Sump 5. Main sewer	1. Yes, in his own land	*	
HOY – NUMBER OF ROOMS  How many rooms do the housing units have,	In the courtyard 6. Cesspool     Rivulet/Trench/Channels 7. Bush	2. Yes, in land he rented		
including bathrooms, toilets, kitchen, store	4. In the street 8. Other	No, he/she has rented it out     No, he/she has not rented it		
rooms?	<u> </u>	5. No, without land		
	SECTION M: MORTALITY		10	
HOS - NUMBER OF BED ROOMS			л -	
How many of these rooms are used for sleeping?	Please record information on deaths that occurred in th Do not forget the children.	e nousenoid during the last 12 mon	iths.	
	MI - Is there any member of the household who died du	rring the last 12 months (15/08/201	1-15/08/2012)?	
HO9 – NUMBER OF OCCUPANTS	1. Yes 2. No End of the interview  M2 - Specify the sex, age and cause of death.			
How many persons usually sleep in the housing	Sex Age at death Cause	If death of Woma	an aged 12-49,	
unit?	(Record 000 if 1. Accident	Did the death Did the death	Did the death occur during	
	i 1. Male 2. Mulder 3. Violence	occur while occur during pregnant? childbirth?	the 6 weeks period following the termination	
H10 - MAIN SOURCE OF WATER	Z 2. Female 4. Suicide 5. Injury 6. Illness	Marit	of pregnancy, irrespective of the way the pregnancy	
What is the main source of water supply for members of the household?	6. Illness		was terminated?	
State State Co.	If 1-5 and →	1. Yes 1. Yes	1. Yes	
Internal pipe-born water     Pipe-born water in the compound	Next Person	2. No 2. No	2.No	
3. Public tap out of the compound				
4. Protected Spring/Well				
5. Unprotected Spring/Well				
6. Rain water 7. River				
8. Lake/Stream/Pond/Surface water		十一十一		
9. Other				

### **B.3** Institutional households: person record

FORM: 002

### REPUBLIC OF RWANDA

S/N: 0000000

MINISTRY OF FINANCE AND **ECONOMIC PLANNING** 



NATIONAL CENSUS COMMISSION

NATIONAL INSTITUTE OF STATISTICS OF RWANDA
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### **GENERAL POPULATION AND HOUSING CENSUS** 16 - 30 AUGUST 2012

Legal Basis	: Presidenti	ial de	cree No, 02	/01 of 28	3/02/201	1			
CENSUS QUEST	TONNAI	RE	(INSTITUT	TONAL	HOUS	EHOLD	)		
I. SECTION L - LOCALIZATION AND I	DENTIFIC	ATIO	ON OF HO	USEHO	LD				
L01. PROVINCE / KIGALI CITY:									
L02. DISTRICT:									
L03. SECTOR:									
L04. CELL:									
L05. VILLAGE:									-
L06. ENUMERATION AREA (N° EA):									·  _
L07. AREA OF RESIDENCE: (Urban = 1, Rura	195 Se 1 - 185 Se 1 -								
L08. BUILDING NUMBER:									
L09. HOUSEHOLD NUMBER:									
L10.TYPE OF HOUSEHOLD:									
L11. NUMBER OF QUESTIONNAIRES FILLE	D IN THIS H	OUSI	EHOLD:					1_	
II. SECTION S - HOUSEHOLD SUMMARY TABLE TO BE FILLED IN AFTER									
		MA	LE	-	FEMALE			TOTAL	
PRESENT RESIDENTS (PR)		_				_			
ABSENT RESIDENTS (AR)									
TOTAL RESIDENTS (PR + AR)									
VISITORS (VIS)									
TOTAL ENUMERATED									è
RESIDENTS ABOVE 18 YEARS OLD						0		0 0	
	C	ONTE	ROL SHEET						
ENUMERATOR					TEAM	SUPER	/ISOR		
Enumeration Date:			Date of Ve	rification:					
Observations:			Observat	ions:					
materi Materia Is.				N/ SP/RN	200				
Name of Enumerator:			Name of T	eam Sup	ervisor:				
Signature:			Signature:						
CODER		٧	ERIFIER			DA	TA ENTR	Y CLERK	
Name :	Name :				Na	me:			
Date:	Date:				Da	te:			
Signature:	Signature:					nature:			

		S	SECTION P - CHAR	ACTERISTIC	S OF POPULA	TION	
N°	Name and First Name	Is [NAME] male or female?	In what month and year was [NAME] born?	How old was [NAME] at his/her last birthday?	What is residence status of [NAME]?	Where [NAME] was born? (Province and District or Country)	What is [NAME]'s Nationality?
	P01	P03	P04	P05	P06	P07	P08
1		1. Male 2. Female	_ _/  _		Present Resident     Absent Resident     Visitor		
2		1. Male 2. Female	_ _/		Present Resident     Absent Resident     Visitor		
3		1. Male 2. Female	_ _ /   _	_ _	Present Resident     Absent Resident     Visitor		
4		1. Male 2. Female	_ _ /  _ _	_ _	Present Resident     Absent Resident     Visitor		
5		1. Male 2. Female	_ _ /  _ _	_ _	Present Resident     Absent Resident     Visitor		
6		1. Male 2. Female	_ _ /  _ _	_ _	Present Resident     Absent Resident     Visitor		
7		1. Male 2. Female	_V   _	_ _	Present Resident     Absent Resident     Visitor		
8		1. Male 2. Female	_V	_ _	Present Resident     Absent Resident     Visitor		
9		1. Male 2. Female	_ _V _ _	_ _	Present Resident     Absent Resident     Visitor		
10		1. Male 2. Female	_ _ /   _	_	Present Resident     Absent Resident     Visitor		
11		1. Male 2. Female	_ _ /   _	_ _	Present Resident     Absent Resident     Visitor		
12		1. Male 2. Female	_ _ /  _ _	_ _	Present Resident     Absent Resident     Visitor		
13		1. Male 2. Female	_ _ /  _ _	_	Present Resident     Absent Resident     Visitor		
14		1. Male 2. Female	_V   _	_	Present Resident     Absent Resident     Visitor		
15		1. Male 2. Female	_V	_ _	Present Resident     Absent Resident     Visitor		

		SECTION P - CHARAC	CTERISTICS OF PO	PULATI	ON (cont	'd)
	QUESTIONS ADDRESS	ED TO ALL HOUSEHOLD MEMBERS	FOR MEMBERS A		ARS or	MEMBERS AGED 12 YEARS or ABOVE
	Where was [NAME] Residing previously? (District and Province or Country)	Does [NAME] have any disability? If yes, what were the causes? If None (Write 0 in D and Go to P17)	Has [NAME] ever attended preschool, school or literacy program? If P17 = 1 Go to P29	What is highest level of school or literacy program [NAME] attended ?	How many years of school did [NAME] complete at that level?	What is [NAME]'s marital status?
Ш	P09	P12	P17	P18a	P18b	P29
1			Has never attended     Has ever attended     Is currently attended			<ol> <li>Never married</li> <li>Married</li> <li>Separated</li> <li>Widowed</li> <li>Divorced</li> </ol>
2			Has never attended     Has ever attended     Is currently attended			<ol> <li>Never married</li> <li>Married</li> <li>Separated</li> <li>Widowed</li> <li>Divorced</li> </ol>
3			Has never attended     Has ever attended     Is currently attended			<ol> <li>Never married</li> <li>Married</li> <li>Separated</li> <li>Widowed</li> <li>Divorced</li> </ol>
4			Has never attended     Has ever attended     Is currently attended			<ol> <li>Never married</li> <li>Married</li> <li>Separated</li> <li>Widowed</li> <li>Divorced</li> </ol>
5			Has never attended     Has ever attended     Is currently attended			Never married 2. Married     Separated 4. Widowed     Divorced
6			Has never attended     Has ever attended     Is currently attended			Never married 2. Married     Separated 4. Widowed     Divorced
7			Has never attended     Has ever attended     Is currently attended			Never married 2. Married     Separated 4. Widowed     Divorced
8			Has never attended     Has ever attended     Is currently attended			Never married 2. Married     Separated 4. Widowed     Divorced
9			Has never attended     Has ever attended     Is currently attended			Never married 2. Married     Separated 4. Widowed     Divorced
10			Has never attended     Has ever attended     Is currently attended			Never married 2. Married     Separated 4. Widowed     Divorced
11			Has never attended     Has ever attended     Is currently attended			Never married 2. Married     Separated 4. Widowed     Divorced
12			Has never attended     Has ever attended     Is currently attended			Never married 2. Married     Separated 4. Widowed     Divorced
13			Has never attended     Has ever attended     Is currently attended	<u>  </u>		Never married 2. Married     Separated 4. Widowed     Divorced
14			Has never attended     Has ever attended     Is currently attended			Never married 2. Married     Separated 4. Widowed     Divorced
15			Has never attended     Has never attended     Is currently attended			Never married 2. Married     Separated 4. Widowed     Divorced
	P12: Type of di	sability (D) Causes (C	) P18a: L	ovol	D10l	Year completed

P12: Type of disability (D)

- 1. Seeing
  2. Hearing
  3. Speaking
  4. Walking/Climbing
  5. Learning/Concentrating
  6. Other

Causes (C)

- 1. Congenital
- Congenital
   Consease/Illness
   Injury/Accidents
   War/Mines
   Genocide
   Not known
   Other

P18a: <u>Level</u>

- 0. Preschool
- 1. Primary
  2. Post-primary
  3. Secondary
  4. University

P18b Year completed

- 0 1 2 3 0 1 2 3 4 5 6 0 1 2 3 0 1 2 3 4 5 6 7 0 1 2 3 4 5 6 7+

## **Annex C** Glossary of key terms and definitions

This Glossary provides definitions of key concepts and indicators used in the thematic reports of the Fourth Rwanda Population and Housing Census (RPHC4). Readers are referred to the methodological sections of the respective reports for a more detailed technical explanation of indicators.

### C.1 Population and demographic characteristics

**Residents:** persons who have lived for more than six months in the place where they were enumerated or who intended to live for more than six months in that place. They represent the population usually living in a place. Residents could be:

- Present residents: present in their place of usual residence on the reference night; or
- **Absent residents:** not present in their place of usual residence on the reference night. The person must be absent for a period shorter than or equal to six months.

**Visitors**: persons who were not usual residents of the household. They might be residents in another place in Rwanda, and thus absent residents in that place, or non-residents of the country, for example tourists present at the moment of the Census.

**De facto population** (present residents + visitors): includes all persons physically present in the country or area at the reference date.

**De jure population** (present residents + absent residents): includes all usual residents of the given country or area, whether or not they were physically present in the area at the reference date. The de jure population is also referred to as the (usual) resident population. Most of the analysis presented in these thematic reports is based on the de jure population.

**Disability status:** characterises the population into those with and without a disability. The 'International Classification of Functioning, Disability and Health' defines disability as 'an umbrella term for impairments, activity limitations and participation restrictions. It denotes the negative aspects of the interaction between an individual (with a health condition) and that individual's contextual factors (environmental and personal factors).' The following limitations in activity functioning are considered in the RPHC4: seeing, hearing, speaking, walking/climbing, learning/concentrating and another type of difficulty/disability.

**Marital status:** personal status of each individual in relation to the marriage laws or customs of the country and defined in the Census in five categories: *Never married*: an individual who has never been in a union; *Married*: an individual who was in marital union at the moment of the Census, legally or not; *Divorced*: an individual who has been separated from his or her spouse through a court decision, according to legislation; *Separated*: an individual who has separated temporarily from his/her spouse and is awaiting the court decision; *Widowed*: a man or a woman who has lost his or her spouse by death, not yet remarried. The marital status of all usual residents aged 12 and above is enquired about in the Census questionnaire.

### **C.2** Housing and household characteristics

**Household**: a separate and independent place of abode intended for habitation by a single household or one not intended for habitation but occupied by a household at the time of the Census. The essential features of households are separateness and independence.

**Household**: the concept of the household is based on the arrangements in regard to food or other essentials for living. One household occupies a single household.

**Private household:** consists of one or more persons living together and sharing at least one daily meal. Persons in a private household may or may not be related, or may constitute a combination of persons both related and unrelated. In order to facilitate analysis of the de jure population (usual residents) across thematic reports, private households were further categorised as follows:

- a) Households where there is at least one usual resident in the household (present or absent resident); and
- b) Households consisting only of visitors (e.g. households found during the Census in their holiday homes, etc.)

Subsequently, and across all thematic reports, any analysis of the characteristics of 'private households' will refer to the definition in (a) above, whereas analysis of 'private households' will refer to households under both (a) and (b).

#### Types of private households:

- One-person household: consists only of the head of the household.
- Nuclear household: refers to a household consisting entirely of a single family nucleus. It
  may be classified into married couple, family with children or without children or single
  parent with children only.
- **Extended household:** people related to each other and living together but who do not form a nuclear family.
- **Composite household:** people not related to each other living together; extended or nuclear family living with non-relatives.

**Institutional household:** comprises a group of persons who are being provided with institutionalised care, and includes educational institutions, health care institutions, military institutions, religious institutions, or institutions for the elderly or persons with disabilities. In the RPHC4, persons who were homeless on the night of the Census were also classified as belonging to an institutional household.

**Head of household**: refers to a person recognised as such by the respondent. Every private household has one and only one household head.

**Structure**: for Census purposes, a structure constitutes a building used for dwelling purposes. A structure can contain one or more dwelling units.

**Types of habitat**: there are five types of habitat for private households: clustered rural settlement (*umudugudu*)/old settlement, dispersed/isolated habitat, planned urban housing (cadastre), and spontaneous or squatter habitat (*Akajagari*).

**Sources of water**: have been split into improved and unimproved sources. Improved sources include internal pipe-borne water, pipe-borne water in the compound, public tap outside the compound, protected spring/well, and rain water. These categorisations are based on the definition developed by the World Health Organization (WHO) and the United Nations Children's Fund (UNICEF) Joint Monitoring Programme (NISR, n.d.) in 2010. Unimproved sources include unprotected springs/wells, rivers and lakes/streams/ponds/surface water.

**Housing tenure**: refers to legal occupation of the dwelling. Usually, occupancy here is defined as owner, tenant, hire purchase, free lodging, staff housing or refugee/temporary camp settlement.

### **C.3** Migration and spatial mobility

Lifetime migrant: is a person whose place of residence at birth (district) differs from the place of current residence (district). The number stated in this case is, however, an underestimation of the extent of migration that has occurred during the lifetime of the population. People who moved from their place of birth to a given destination and then returned before the Census date as well as people who moved but died before the Census date will not be counted. Figures at the provincial level have been aggregated from the district level, i.e. they do not necessarily mean that the person has moved between provinces.

**International lifetime migrant:** is, in the context of the thematic analysis of the RPHC4, defined as a person whose country of birth is not Rwanda (i.e. foreign born).

**Recent migrant**: is a person who moved to his/her current district of residence five years or less prior to the Census.

**International recent migrant:** is a person who was previously living abroad and has been living in Rwanda for five years or less.

**Internal migration**: human movement within the borders of a country usually measured across regional, district or municipality boundaries resulting in a change of usual place of residence. For the thematic report on migration, the district will be the geographic partition to be considered.

**Net migration**: refers to the total number of in-migrants to a geographical area (e.g. district, province or country) minus the number of out-migrants over a specified period. Net migration is presented in terms of net lifetime migration as well as net recent migration.

#### C.4 Education

**Education system (Rwanda) and degrees/certificates:** the education system in Rwanda is organised in four levels:

- Pre-primary education: is organised in nursery schools for a period of three years for children between the ages of three and six.
- Primary education: lasts for six years and the official age at this level is seven to 12.
- **Secondary education:** lasts for six years and the official age for this level is 13 to 18. It is composed of lower secondary (the first three years often referred to as Tronc Commun) and upper secondary (the second three years). The following certificates and/or diplomas were or are currently awarded at this level of education:

- i) ENTA: (Ecole Normale Technique Auxiliaire) a certificate awarded upon successful completion of five years of secondary school. This type of certificate is no longer available.
- ii) A3/D4/D5: certificates awarded upon successful completion of three, four or five years of secondary school. This type of certificate is no longer available.
- iii) **A2/D6/D7**: certificates awarded upon successful completion of six or seven years of secondary school.

Previously, **post-primary education** constituted an alternative to lower secondary school that targeted specialised fields of study and allowed students, after successfully completing three years of study, to either: i) enter upper secondary level or ii) enter the labour market. Some disaggregations by highest level attended may group post-primary and secondary education. The following certificates and/or diplomas were awarded at this level of education:

- i) **EMA** (*Ecole des Moniteurs Auxiliaire*): a certificate awarded upon successful completion of two years of post-primary education, when this level existed in the education system.
- ii) **CE/FM** (*Centre d'Enseignement Rural Artisanal Integré/Certificat d'Etude Familiale*): a certificate awarded upon successful completion of three years of post-primary education.
- **Tertiary education:** the duration of tertiary education varies between three and six years according to the institution and the field of study. The following certificates and/or diplomas were or are currently awarded at this level of education:
  - i) **Bacc/diploma**: a degree previously awarded upon successful completion of two years of university. It is no longer available.
  - ii) **Bachelor's**: a degree awarded upon successful completion of four years of university.
  - iii) **Master's**: a degree awarded to a university graduate upon his/her successful completion of at least one year of post-graduate studies.
  - iv) **PhD**: a degree awarded to a university graduate upon his/her successful completion of a doctoral programme, usually lasting between three and four years.

**Highest level of education attended:** current or previous attendance at any regular accredited educational institution or programme, public or private, for organised learning at pre-school, primary, post-primary, secondary, university level – or none.

**Net Attendance Ratio (NAR):** attendance of the official age group for a given level of education expressed as a percentage of the corresponding school-age population.

**Gross Attendance Ratio (GAR)**: total attendance in a specific level of education, regardless of age, expressed as a percentage of the corresponding school-age population.

**Gender Parity Index (GPI)**: ratio of number or proportion of female population to male population for a given indicator. It measures gender equality between girls' and boys' performance in school.

**Literacy:** the ability to both read and write with understanding (self-reported). A literate person is one who can both read and write a short, simple statement on his or her everyday life. An illiterate person is one who cannot, with understanding, both read and write such a statement. Hence, a person capable of reading and writing only figures and his or her own name should be considered illiterate, as should a person who can read but not write as well as one who can read and write only a ritual phrase that has been memorised. Literacy is recorded in the following languages: Kinyarwanda, English, French and Other.

### C.5 Employment/economic activity

**Working age:** even though the minimum working age specified in the labour law of Rwanda is 16, the 2012 RPHC collected data on the economic activities of persons aged five and above. The official retirement age is 60, but there is no upper limit to the working age in the Rwandan context. Employment indicators are computed for the resident population aged 16 and above, except for the analysis of children in employment.

**Employed population:** refers to persons who worked at least one hour in the seven-day period before the Census night, or who were temporarily absent from a job, or who were engaged in productive activities during the reference period, including: farming/rearing animals/fishing; production; services/selling; and domestic work at someone else's house.

**Unemployed population**: refers to persons who, during the seven-day period before the Census night, were without work but available for work. This constitutes the 'relaxed' definition of unemployment, as the condition of seeking work during the reference period is not taken into consideration.

**Economically active population/labour force:** refers to the sum of the employed and unemployed populations.

**Inactive population**: refers to persons who during the seven-day period before the Census night were without work and not available for work. These include persons looking after the house/family, students, people who have retired and persons who consider themselves too old to work.

**Labour force participation rate (LFPR)**: defined as the ratio of the active population to the sum of the active and inactive population, expressed in percentage terms. Persons whose economic activity status has not been stated are excluded from the calculation of the LFPR.

**Unemployment rate:** defined as the ratio of unemployed to the labour force, expressed in percentage terms.

**Status in employment:** the International Standard Classification of status in employment identifies the following statuses: *employees* are persons working in paid (wage/salary, in-kind) employment; *employers* are persons on own account or with one or a number of partners in a self-employed job who engage one or more employees on a continuous basis; the *self-employed* are persons on own account or with one or a number of partners in a self-employed job not engaging any employee on a continuous basis; *contributing family workers* are persons working for an establishment operated by a household member who cannot be regarded as a partner; and *members of producers' cooperatives* are persons working in a cooperative producing goods and services, in a self-employed job, not engaging any employee on a continuous basis.

**Main industry and main occupation:** the classifications of the main branch of economic activity are based on the International Standard Industrial Classification (ISIC), version 4 and the classifications of the main occupation are based on the International Standard Classification of Occupations (ISCO), version 4.

**Economic dependency ratio:** is measured as the ratio between economically dependent persons (sum of unemployed, inactive, and children aged five and under) and employed persons, multiplied

by 100. An economic dependency ratio of 100 would imply that one employed person has to support one economically dependent person.

### C.6 Socio-cultural characteristics

**Religion**: the following nine response options were offered to measure religious affiliation in Rwanda: Catholic, Protestant, Adventist, Jehovah's Witness, other Christian religion, Muslim, traditionalist/animist, other religion and no religious affiliation

**Nationality:** nationality means the state of being legally a citizen of a particular country or the legal right of belonging to a particular nation whether by birth or naturalisation. Types of nationality are identified as single and dual nationality, which refers to the state of being a citizen of two countries. Article 7 of the Constitution of Rwanda specifies that persons of Rwandan origin, along with their descendants, have the right to acquire Rwandan nationality on demand. The same article provides allowance for dual nationality.

# **Annex D** Supplementary tables

Table 47: Household headship rates among private households by five-year age-group and by sex and area of residence

5-year age-	Urban			Rural			Rwanda		
group (Years)	Male	Female	Both	Male	Female	Both	Male	Female	Both sexes
			sexes			sexes			
0-4	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
5-9	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
10-14	0.4%	0.1%	0.2%	0.2%	0.1%	0.2%	0.2%	0.1%	0.2%
15-19	3.7%	1.2%	2.3%	2.3%	0.9%	1.6%	2.5%	1.0%	1.7%
20-24	27.2%	7.6%	17.4%	26.8%	4.4%	15.0%	26.9%	5.0%	15.5%
25-29	59.4%	13.4%	38.1%	69.3%	7.9%	36.9%	66.9%	9.0%	37.2%
30-34	80.3%	16.2%	51.2%	89.0%	12.5%	47.8%	86.9%	13.1%	48.5%
35-39	89.7%	21.9%	57.5%	94.4%	21.2%	52.9%	93.4%	21.3%	53.8%
40-44	93.1%	31.1%	64.1%	95.9%	31.5%	59.5%	95.4%	31.5%	60.2%
45-49	94.3%	42.0%	69.2%	97.0%	40.9%	65.2%	96.6%	41.0%	65.7%
50-54	94.3%	51.7%	73.0%	97.6%	48.2%	69.3%	97.1%	48.6%	69.7%
55-59	94.7%	58.0%	75.2%	98.0%	53.6%	72.5%	97.7%	54.0%	72.8%
60-64	95.3%	63.4%	77.7%	98.3%	58.8%	75.3%	98.0%	59.2%	75.5%
65-69	94.6%	65.7%	76.9%	98.2%	64.7%	77.4%	97.8%	64.8%	77.4%
70-74	93.6%	65.6%	75.4%	98.0%	69.9%	80.4%	97.6%	69.5%	80.0%
75-79	92.4%	63.9%	74.1%	98.2%	73.9%	83.3%	97.7%	72.9%	82.4%
80-84	90.2%	62.2%	71.5%	97.3%	77.7%	85.6%	96.8%	76.2%	84.4%
85+	76.9%	50.2%	58.6%	94.4%	77.6%	84.1%	92.9%	74.6%	81.6%
Total	36.9%	11.6%	24.3%	34.0%	13.0%	23.0%	34.5%	12.8%	23.2%
Count	845,177	833,609	1,678,786	4,119,377	4,579,858	8,699,235	4,964,554	5,413,467	10,378,021

Table 48: Household headship rates by five-year age-group and by sex and province

Sex and 5-year			Pro	ovince			
age-group (Years)	Kigali City	South	West	North	East	Rwanda	
Both Sexes							
0-4	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
5-9	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
10-14	0.3%	0.1%	0.2%	0.2%	0.2%	0.2%	
15-19	2.7%	1.2%	1.8%	1.6%	1.9%	1.7%	
20-24	18.2%	11.9%	15.5%	15.5%	17.3%	15.5%	
25-29	38.2%	33.7%	37.6%	37.1%	39.7%	37.2%	
30-34	51.8%	47.1%	47.9%	47.2%	49.4%	48.5%	
35-39	57.4%	52.5%	53.8%	52.1%	54.3%	53.8%	
40-44	63.7%	59.1%	60.3%	59.5%	60.3%	60.2%	
45-49	69.7%	65.5%	64.8%	64.4%	66.1%	65.7%	
50-54	74.0%	70.7%	68.3%	67.3%	70.4%	69.7%	
55-59	76.3%	73.9%	71.6%	69.9%	73.8%	72.8%	
60-64	78.4%	76.5%	75.1%	71.8%	77.0%	75.5%	
65-69	77.1%	78.7%	76.7%	74.0%	79.2%	77.4%	
70-74			79.7%				
	75.6%	81.5%		77.3%	81.7%	80.0%	
75-79	74.3%	84.3%	82.1%	81.4%	83.3%	82.4%	
80-84	72.6%	86.8%	84.3%	85.9%	82.8%	84.4%	
85+	58.2%	85.4%	83.3%	87.0%	75.1%	81.6%	
Total	25.3%	23.6%	22.2%	22.8%	23.1%	23.2%	
Count	1,114,634	2,547,846	2,438,355	1,708,687	2,568,499	10,378,021	
Male							
0-4	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
5-9	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
10-14	0.4%	0.2%	0.3%	0.2%	0.2%	0.2%	
15-19	4.4%	1.7%	2.4%	2.2%	2.9%	2.5%	
20-24	28.3%	20.1%	27.6%	27.9%	30.7%	26.9%	
25-29	58.9%	61.7%	71.0%	70.0%	72.2%	66.9%	
30-34	79.5%	85.3%	90.3%	89.7%	89.4%	86.9%	
35-39	88.4%	92.5%	95.4%	95.5%	94.3%	93.4%	
40-44	91.9%	94.8%	96.8%	96.8%	95.7%	95.4%	
45-49	93.6%	96.3%	97.4%	97.6%	96.8%	96.6%	
50-54	93.8%	97.1%	97.9%	98.2%	97.0%	97.1%	
55-59	94.5%	97.8%	98.0%	98.5%	97.6%	97.7%	
60-64	95.0%	98.0%	98.3%	98.7%	97.8%	98.0%	
65-69	94.0%	98.0%	98.0%	98.8%	97.6%	97.8%	
70-74	92.9%	97.9%	97.6%	98.7%	97.3%	97.6%	
75-79	92.2%	98.3%	97.9%	98.7%	97.1%	97.7%	
80-84	91.2%	97.6%	97.2%	98.0%	95.3%	96.8%	
85+	75.5%	94.9%	94.6%	94.9%	90.3%	92.9%	
Total	38.5%	33.6%	33.0%	34.8%	34.8%	34.5%	
Count	569,944	1,202,054	1,146,334	807,973	1,238,249	4,964,554	
Female	0.00/	0.004	0.00/	0.007	0.007	0.007	
0-4	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
5-9	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
10-14	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	
15-19	1.3%	0.7%	1.2%	1.0%	0.9%	1.0%	
20-24	7.7%	4.4%	5.0%	4.0%	4.7%	5.0%	
25-29	12.9%	8.5%	8.5%	6.8%	9.1%	9.0%	
30-34	15.9%	13.0%	13.1%	10.8%	13.4%	13.1%	
35-39	21.1%	21.6%	22.5%	19.4%	21.3%	21.3%	
40-44	30.8%	32.3%	32.3%	30.1%	30.9%	31.5%	
45-49	42.6%	43.0%	40.2%	38.2%	40.9%	41.0%	
50-54	53.0%	51.5%	46.9%	43.4%	49.2%	48.6%	
55-59	58.7%	57.3%	52.3%	48.0%	55.1%	54.0%	
60-64	63.7%	62.3%	58.4%	52.3%	60.6%	59.2%	
65-69	65.5%	68.0%	64.0%	58.3%	66.4%	64.8%	
70-74	65.9%	72.9%	69.4%	64.1%	70.8%	69.5%	
75-79	64.4%	76.0%	72.9%	70.5%	73.7%	72.9%	
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80-84	63.5%	79.4%	76.3%	78.1%	73.4%	76.2%	

Sex and 5-year	Province						
age-group (Years)	Kigali City	South	West	North	East	Rwanda	
Total	11.5%	14.6%	12.5%	12.0%	12.3%	12.8%	
Count	544,690	1,345,792	1,292,021	900,714	1,330,250	5,413,467	

Table 49: Age-sex distribution (%) of the private household heads by area of residence

5-year age-	Urban			Rural			Rwanda		
group	Male	Female	Both	Male	Female	Both	Male	Female	Both
			sexes			sexes			sexes
12-14	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
15-19	1.0%	1.2%	1.1%	0.7%	0.7%	0.7%	0.8%	0.8%	0.8%
20-24	9.5%	8.5%	9.3%	7.2%	3.1%	7.2%	7.6%	3.8%	6.5%
25-29	20.9%	13.0%	19.0%	16.6%	5.0%	16.6%	17.4%	6.1%	14.1%
30-34	21.9%	11.7%	19.5%	17.5%	6.7%	17.5%	18.3%	7.4%	15.2%
35-39	14.4%	10.2%	13.4%	11.8%	8.2%	11.8%	12.3%	8.5%	11.2%
40-44	10.7%	10.1%	10.5%	10.1%	10.1%	10.1%	10.2%	10.1%	10.2%
45-49	7.2%	9.5%	7.8%	8.5%	11.1%	8.5%	8.3%	10.9%	9.0%
50-54	5.5%	9.8%	6.5%	8.7%	13.5%	8.7%	8.1%	13.0%	9.5%
55-59	3.3%	7.4%	4.3%	6.3%	10.9%	6.3%	5.7%	10.4%	7.1%
60-64	2.2%	5.8%	3.1%	4.5%	8.9%	4.5%	4.1%	8.5%	5.4%
65-69	1.1%	4.0%	1.8%	2.4%	6.1%	2.4%	2.2%	5.8%	3.2%
70-74	0.8%	3.5%	1.5%	2.2%	6.0%	2.2%	1.9%	5.7%	3.0%
75-79	0.6%	2.4%	1.0%	1.4%	4.1%	1.4%	1.3%	3.8%	2.0%
80-84	0.4%	1.7%	0.7%	1.1%	3.1%	1.1%	1.0%	2.9%	1.6%
85+	0.3%	1.2%	0.5%	0.8%	2.5%	0.8%	0.7%	2.3%	1.2%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Count	311,551	97,060	408,611	1,401,744	595,821	1,401,744	1,713,295	692,881	2,406,176

Source: Fourth Rwanda Population and Housing Census.

Table 50: Distribution (%) of the private households by their size (number of residents members) by area of residence and sex of the head

Size of the	Urban			Rural			Rwanda		
household	Male	Female	Both	Male	Female	Both	Male	Female	Both
			sexes			sexes			sexes
1	14.9%	14.6%	14.8%	6.2%	11.9%	7.9%	7.8%	12.3%	9.1%
2	13.7%	19.4%	15.0%	8.3%	20.1%	11.8%	9.2%	20.0%	12.3%
3	16.0%	19.2%	16.8%	17.0%	21.7%	18.4%	16.8%	21.4%	18.1%
4	14.6%	16.3%	15.0%	18.2%	18.8%	18.3%	17.5%	18.4%	17.8%
5	12.3%	12.2%	12.3%	16.6%	13.3%	15.6%	15.8%	13.2%	15.0%
6	10.1%	7.9%	9.6%	13.9%	7.7%	12.0%	13.2%	7.8%	11.6%
7	7.4%	4.7%	6.8%	9.7%	3.8%	7.9%	9.3%	3.9%	7.7%
8	4.9%	2.6%	4.3%	5.6%	1.7%	4.5%	5.5%	1.8%	4.4%
9	2.9%	1.4%	2.5%	2.7%	0.6%	2.1%	2.7%	0.8%	2.2%
10	1.6%	0.7%	1.4%	1.2%	0.2%	0.9%	1.2%	0.3%	1.0%
11	0.8%	0.4%	0.7%	0.4%	0.1%	0.3%	0.5%	0.1%	0.4%
12	0.5%	0.2%	0.4%	0.2%	0.0%	0.1%	0.2%	0.1%	0.2%
13	0.2%	0.1%	0.2%	0.1%	0.0%	0.0%	0.1%	0.0%	0.1%
14	0.1%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
15+	0.1%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Count	311,551	97,060	408,611	1,401,744	595,821	1,997,565	1,713,295	692,881	2,406,176

Table 51: Min, max, mean and median size of the private household by sex of the head and province

Area of residence	Household size			
and Sex of household head	Min	Max	Mean	Median
Rwanda				
Male	1.0	35.0	4.6	4.0
Female	1.0	34.0	3.6	3.0
Both sexes	1.0	35.0	4.3	4.0
Urban				
Male	1.0	25.0	4.2	4.0
Female	1.0	34.0	3.7	3.0
Both sexes	1.0	34.0	4.1	4.0
Rural				
Male	1.0	35.0	4.7	5.0
Female	1.0	23.0	3.6	3.0
Both sexes	1.0	35.0	4.4	4.0

Table 52: Mean size of the private household by sex of the head and province and area of residence

Province and	Sex of the household head		
Area of residence	Male	Female	Both sexes
Rwanda			
Urban	4.2	3.7	4.1
Rural	4.7	3.6	4.4
Total	4.6	3.6	4.3
Kigali City			
Urban	4.0	3.7	4.0
Rural	4.1	3.5	3.9
Total	4.0	3.6	4.0
South			
Urban	4.3	3.7	4.1
Rural	4.6	3.5	4.3
Total	4.6	3.6	4.2
West			
Urban	4.7	3.8	4.5
Rural	4.9	3.6	4.5
Total	4.9	3.6	4.5
North			
Urban	4.6	3.6	4.4
Rural	4.8	3.4	4.4
Total	4.8	3.4	4.4
East			
Urban	4.2	3.7	4.1
Rural	4.6	3.7	4.3
Total	4.6	3.7	4.3

Table 53: Mean number of person per bedroom (residential promiscuity index) of the private household by sex of the head and province and area of residence

Province and	Sex of the household head		
Area o	Male	Female	Both sexes
residence			
Rwanda			
Urban	2.1	1.9	2.1
Rural	2.5	2.0	2.4
Total	2.5	2.0	2.3
Kigali City			
Urban	2.1	2.0	2.1
Rural	2.4	2.0	2.2
Total	2.2	2.0	2.1
South			
Urban	2.1	1.9	2.0
Rural	2.6	2.0	2.4
Total	2.5	2.0	2.4
West			
Urban	2.2	1.9	2.2
Rural	2.5	1.9	2.3
Total	2.5	1.9	2.3
North			
Urban	2.1	1.7	2.0
Rural	2.5	1.8	2.3
Total	2.4	1.8	2.2
East			
Urban	2.2	2.0	2.2
Rural	2.5	2.0	2.4
Total	2.5	2.0	2.4

Table 54: Distribution (%) of the resident population in private households by relationship to head of household by sex and area of residence

Province and Area of	Sex		
residence	Male	Female	Both sexes
Rwanda			
Head of Household	34.5%	12.8%	23.2%
Spouse	0.3%	27.1%	14.3%
Son/Daughter	53.8%	49.5%	51.6%
Unrelated Child	0.5%	0.6%	0.5%
Father/Mother	0.0%	0.2%	0.1%
Brother/Sister	1.2%	1.1%	1.1%
Grandchild	4.8%	4.6%	4.7%
Other Relative	1.3%	1.3%	1.3%
Non Relative	3.6%	2.8%	3.2%
Total	100.0%	100.0%	100.0%
Count	4,964,554	5,413,467	10,378,021
Urban			
Head of Household	36.9%	11.6%	24.3%
Spouse	0.4%	26.0%	13.1%
Son/Daughter	43.1%	43.3%	43.2%
Unrelated Child	0.7%	0.9%	0.8%
Father/Mother	0.1%	0.4%	0.2%
Brother/Sister	2.8%	2.4%	2.6%
Grandchild	3.0%	3.0%	3.0%
Other Relative	2.9%	2.8%	2.8%
Non Relative	10.2%	9.6%	9.9%
Total	100.0%	100.0%	100.0%
Count	845,177	833,609	1,678,786
Rural			
Head of Household	34.0%	13.0%	23.0%
Spouse	0.3%	27.3%	14.5%
Son/Daughter	56.0%	50.6%	53.2%
Unrelated Child	0.5%	0.5%	0.5%
Father/Mother	0.0%	0.2%	0.1%
Brother/Sister	0.8%	0.8%	0.8%
Grandchild	5.2%	4.9%	5.0%
Other Relative	1.0%	1.1%	1.0%
Non Relative	2.2%	1.6%	1.9%
Total	100.0%	100.0%	100.0%
Count	4,119,377	4,579,858	8,699,235

Table 55: Distribution (Count and %) of the private households by household typology/living arrangement by sex of the household head and area of residence

Household	Urban			Rural			Rwanda		
typology/Living	Male	Female	Both	Male	Female	Both	Male	Female	Both
arrangement			sexes			sexes			sexes
Number of									
households									
One person	46,362	14,185	60,547	87,141	70,730	157,871	133,503	84,915	218,418
Nuclear	134,336	37,708	172,044	1,044,200	293,662	1,337,862	1,178,536	331,370	1,509,906
Composite	99,414	19,923	119,337	120,482	38,874	159,356	219,896	58,797	278,693
Extended	31,439	25,244	56,683	149,921	192,555	342,476	181,360	217,799	399,159
Total	311,551	97,060	408,611	1,401,744	595,821	1,997,565	1,713,295	692,881	2,406,176
Percentage of									
households									
One person	14.9%	14.6%	14.8%	6.2%	11.9%	7.9%	7.8%	12.3%	9.1%
Nuclear	43.1%	38.9%	42.1%	74.5%	49.3%	67.0%	68.8%	47.8%	62.8%
Composite	31.9%	20.5%	29.2%	8.6%	6.5%	8.0%	12.8%	8.5%	11.6%
Extended	10.1%	26.0%	13.9%	10.7%	32.3%	17.1%	10.6%	31.4%	16.6%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 56: Distribution (%) of the private households by their typology/living arrangement by sex and age-group of the head

Age-		Male						Female						Both sexe	es			
group (Years)	One Person	Nuclear	Comp osite	Extended	Total	Count	One Person	Nuclear	Compo site	Extend ed	Total	Count	One Person	Nuclear	Comp osite	Exten ded	Total	Count
12-14	29.5%	50.8%	7.5%	12.3%	100.0%	1,539	28.6%	38.7%	6.5%	26.3%	100.0%	543	29.3%	47.6%	7.2%	16.0%	100.0%	2,082
15-19	45.9%	25.5%	12.0%	16.6%	100.0%	13,561	33.4%	28.2%	6.1%	32.3%	100.0%	5,430	42.4%	26.3%	10.3%	21.1%	100.0%	18,991
20-24	21.4%	59.6%	10.4%	8.7%	100.0%	130,919	23.0%	43.9%	9.8%	23.2%	100.0%	26,396	21.7%	56.9%	10.3%	11.1%	100.0%	157,315
25-29	10.9%	71.6%	11.6%	5.9%	100.0%	298,260	14.7%	57.3%	11.4%	16.7%	100.0%	42,087	11.3%	69.8%	11.6%	7.3%	100.0%	340,347
30-34	6.4%	74.6%	14.2%	4.8%	100.0%	313,373	8.2%	70.6%	9.6%	11.7%	100.0%	51,287	6.7%	74.1%	13.5%	5.7%	100.0%	364,660
35-39	4.8%	75.7%	15.3%	4.3%	100.0%	210,809	5.0%	77.3%	8.2%	9.6%	100.0%	58,660	4.8%	76.0%	13.8%	5.4%	100.0%	269,469
40-44	4.3%	76.6%	14.5%	4.6%	100.0%	174,174	4.4%	75.1%	7.7%	12.9%	100.0%	70,136	4.3%	76.2%	12.5%	7.0%	100.0%	244,310
45-49	4.2%	76.1%	12.9%	6.8%	100.0%	141,992	5.0%	65.9%	8.3%	20.8%	100.0%	75,447	4.5%	72.6%	11.3%	11.6%	100.0%	217,439
50-54	4.4%	71.3%	11.7%	12.6%	100.0%	138,771	6.6%	53.6%	8.6%	31.3%	100.0%	89,784	5.3%	64.3%	10.5%	19.9%	100.0%	228,555
55-59	4.4%	61.6%	11.8%	22.1%	100.0%	97,910	9.1%	39.7%	9.2%	42.0%	100.0%	72,118	6.4%	52.4%	10.7%	30.6%	100.0%	170,028
60-64	4.9%	53.0%	11.8%	30.4%	100.0%	70,521	13.3%	28.3%	8.4%	50.0%	100.0%	58,662	8.7%	41.8%	10.2%	39.3%	100.0%	129,183
65-69	5.7%	45.6%	11.8%	37.0%	100.0%	37,393	18.5%	17.4%	8.6%	55.5%	100.0%	40,124	12.3%	31.0%	10.1%	46.6%	100.0%	77,517
70-74	6.6%	42.5%	11.1%	39.9%	100.0%	32,724	23.5%	11.7%	7.5%	57.3%	100.0%	39,251	15.8%	25.7%	9.1%	49.4%	100.0%	71,975
75-79	7.2%	40.3%	11.0%	41.4%	100.0%	22,041	27.8%	8.8%	7.1%	56.3%	100.0%	26,590	18.5%	23.1%	8.9%	49.6%	100.0%	48,631
80-84	9.3%	39.5%	10.3%	40.9%	100.0%	16,996	32.0%	7.4%	6.4%	54.3%	100.0%	20,299	21.6%	22.0%	8.2%	48.2%	100.0%	37,295
85+	12.3%	38.6%	9.9%	39.3%	100.0%	12,312	36.6%	7.6%	6.3%	49.6%	100.0%	16,067	26.0%	21.0%	7.8%	45.1%	100.0%	28,379
Total	7.8%	68.8%	12.8%	10.6%	100.0%	1,713,295	12.3%	47.8%	8.5%	31.4%	100.0%	692,881	9.1%	62.8%	11.6%	16.6%	100.0%	2,406,176

Table 57: Distribution (%) of the private households by their typology/living arrangement by sex and level of education of the head

Sex of the head and Level of	Typology/Living Arr	angement				
education	One Person	Nuclear	Composite	Extended	Total	Count
Male						
No Education	7.1%	72.1%	7.2%	13.6%	100.0%	411,473
Preschool	8.4%	72.8%	9.5%	9.3%	100.0%	4,013
Primary	7.0%	73.4%	10.1%	9.4%	100.0%	1,040,733
Post-primary	4.0%	71.7%	16.6%	7.7%	100.0%	34,652
Secondary	13.8%	46.7%	28.6%	10.9%	100.0%	150,652
University	13.1%	19.9%	56.5%	10.5%	100.0%	60,126
Not stated	9.8%	63.6%	15.2%	11.3%	100.0%	11,646
Total	7.8%	68.8%	12.8%	10.6%	100.0%	1,713,295
Female						
No Education	14.6%	41.7%	5.6%	38.2%	100.0%	358,408
Preschool	11.0%	53.8%	6.9%	28.4%	100.0%	1,343
Primary	8.4%	58.4%	8.5%	24.7%	100.0%	272,607
Post-primary	5.6%	55.0%	15.7%	23.8%	100.0%	11,926
Secondary	16.6%	36.1%	26.2%	21.1%	100.0%	34,708
University	27.0%	12.1%	42.6%	18.3%	100.0%	9,484
Not stated	15.0%	44.7%	10.3%	30.1%	100.0%	4,405
Total	12.3%	47.8%	8.5%	31.4%	100.0%	692,881
Both Sexes						
No Education	10.6%	57.9%	6.5%	25.0%	100.0%	769,881
Preschool	9.0%	68.1%	8.8%	14.1%	100.0%	5,356
Primary	7.3%	70.3%	9.8%	12.6%	100.0%	1,313,340
Post-primary	4.4%	67.4%	16.4%	11.8%	100.0%	46,578
Secondary	14.3%	44.7%	28.1%	12.8%	100.0%	185,360
University	15.0%	18.8%	54.6%	11.6%	100.0%	69,610
Not stated	11.3%	58.4%	13.9%	16.5%	100.0%	16,051
Total	9.1%	62.8%	11.6%	16.6%	100.0%	2,406,176

Table 58: Distribution (%) of the private households by their typology/living arrangement by area of residence and level of education of the head

Area of	Typology/Living Arr	angement				
Residence and Level of education	One Person	Nuclear	Composite	Extended	Total	Count
Urban						
No Education	14.3%	48.9%	12.9%	23.9%	100.0%	55,891
Preschool	16.2%	50.8%	19.1%	13.9%	100.0%	964
Primary	14.6%	51.4%	21.9%	12.2%	100.0%	188,971
Post-primary	7.2%	48.7%	31.0%	13.1%	100.0%	10,299
Secondary	16.4%	34.0%	36.8%	12.8%	100.0%	94,378
University	14.8%	15.8%	57.9%	11.5%	100.0%	54,329
Not stated	16.4%	39.9%	30.5%	13.2%	100.0%	3,779
Total	14.8%	42.1%	29.2%	13.9%	100.0%	408,611
Rural						
No Education	10.3%	58.6%	6.0%	25.1%	100.0%	713,990
Preschool	7.5%	71.8%	6.6%	14.1%	100.0%	4,392
Primary	6.1%	73.5%	7.8%	12.7%	100.0%	1,124,369
Post-primary	3.6%	72.7%	12.2%	11.5%	100.0%	36,279
Secondary	12.2%	55.9%	19.1%	12.9%	100.0%	90,982
University	15.7%	29.5%	43.0%	11.8%	100.0%	15,281
Not stated	9.7%	64.2%	8.7%	17.5%	100.0%	12,272
Total	7.9%	67.0%	8.0%	17.1%	100.0%	1,997,565
Rwanda						
No Education	10.6%	57.9%	6.5%	25.0%	100.0%	769,881
Preschool	9.0%	68.1%	8.8%	14.1%	100.0%	5,356
Primary	7.3%	70.3%	9.8%	12.6%	100.0%	1,313,340
Post-primary	4.4%	67.4%	16.4%	11.8%	100.0%	46,578
Secondary	14.3%	44.7%	28.1%	12.8%	100.0%	185,360
University	15.0%	18.8%	54.6%	11.6%	100.0%	69,610
Not stated	11.3%	58.4%	13.9%	16.5%	100.0%	16,051
Total	9.1%	62.8%	11.6%	16.6%	100.0%	2,406,176

Table 59: Distribution (%) of the private households by their typology/living arrangement by sex and current marital status of the head

Sex and Marital Status	Typology/Living	Arrangement				
Status	One Person	Nuclear	Composite	Extended	Total	Count
Male						
Never married	54.7%	8.8%	21.0%	15.6%	100.0%	171,318
Currently						
married	1.2%	77.0%	12.1%	9.7%	100.0%	1,481,927
Separated	37.4%	46.8%	9.2%	6.6%	100.0%	5,577
Widowed	27.2%	39.4%	7.3%	26.1%	100.0%	34,986
Divorced	55.7%	30.7%	6.7%	6.9%	100.0%	18,772
Not stated	12.0%	61.5%	11.8%	14.7%	100.0%	715
Total	7.8%	68.8%	12.8%	10.6%	100.0%	1,713,295
Female						
Never married	23.6%	37.4%	10.8%	28.2%	100.0%	81,856
Currently						
married	6.6%	62.6%	9.7%	21.1%	100.0%	166,835
Separated	9.5%	66.6%	5.8%	18.1%	100.0%	11,932
Widowed	12.7%	40.6%	7.9%	38.8%	100.0%	373,145
Divorced	9.9%	62.8%	6.5%	20.8%	100.0%	57,581
Not stated	14.6%	39.6%	8.4%	37.5%	100.0%	1,532
Total	12.3%	47.8%	8.5%	31.4%	100.0%	692,881
Both Sexes						
Never married	44.6%	18.0%	17.7%	19.7%	100.0%	253,174
Currently						
married	1.7%	75.5%	11.9%	10.9%	100.0%	1,648,762
Separated	18.4%	60.3%	6.9%	14.5%	100.0%	17,509
Widowed	14.0%	40.5%	7.8%	37.7%	100.0%	408,131
Divorced	21.2%	54.9%	6.5%	17.4%	100.0%	76,353
Not stated	13.8%	46.6%	9.4%	30.2%	100.0%	2,247
Total	9.1%	62.8%	11.6%	16.6%	100.0%	2,406,176

Table 60: Distribution (%) of the private households by their typology/living arrangement by area of residence and current marital status of the head

Area of Residence	Typology/Living Arr	angement					
and Marital Status	One Person	Nuclear	Composite	Extended	Total	Count	
Urban							
Never married	44.7%	8.2%	31.5%	15.6%	100.0%	98,913	
Currently married	3.4%	56.4%	30.7%	9.5%	100.0%	248,279	
Separated	18.7%	49.6%	18.5%	13.2%	100.0%	3,167	
Widowed	10.1%	35.4%	20.5%	34.1%	100.0%	43,372	
Divorced	20.6%	46.5%	17.3%	15.7%	100.0%	14,552	
Not stated	10.1%	39.6%	25.3%	25.0%	100.0%	328	
Total	14.8%	42.1%	29.2%	13.9%	100.0%	408,611	
Rural							
Never married	44.6%	24.3%	8.9%	22.3%	100.0%	154,261	
Currently married	1.5%	78.9%	8.5%	11.1%	100.0%	1,400,483	
Separated	18.4%	62.6%	4.3%	14.8%	100.0%	14,342	
Widowed	14.5%	41.1%	6.3%	38.1%	100.0%	364,759	
Divorced	21.3%	56.9%	4.0%	17.8%	100.0%	61,801	
Not stated	14.4%	47.8%	6.7%	31.1%	100.0%	1,919	
Total	7.9%	67.0%	8.0%	17.1%	100.0%	1,997,565	
Rwanda							
Never married	44.6%	18.0%	17.7%	19.7%	100.0%	253,174	
Currently married	1.7%	75.5%	11.9%	10.9%	100.0%	1,648,762	
Separated	18.4%	60.3%	6.9%	14.5%	100.0%	17,509	
Widowed	14.0%	40.5%	7.8%	37.7%	100.0%	408,131	
Divorced	21.2%	54.9%	6.5%	17.4%	100.0%	76,353	
Not stated	13.8%	46.6%	9.4%	30.2%	100.0%	2,247	
Total	9.1%	62.8%	11.6%	16.6%	100.0%	2,406,176	

Table 61: Distribution (%) of the private households by their typology/living arrangement by sex and economic activity status of the head

Sex and	Typology/Living Arr	angement					
Economic Activity Status	One Person	Nuclear	Nuclear Composite		Total	Count	
Male							
Employed	7.4%	70.4%	12.9%	9.3%	100.0%	1,492,874	
Unemployed	9.0%	65.7%	15.0%	10.3%	100.0%	32,958	
Inactive	10.6%	56.7%	11.6%	21.1%	100.0%	187,463	
Total	7.8%	68.8%	12.8%	10.6%	100.0%	1,713,295	
Female							
Employed	9.7%	53.9%	8.3%	28.1%	100.0%	505,666	
Unemployed	11.3%	50.8%	11.3%	26.7%	100.0%	16,805	
Inactive	19.9%	29.4%	8.9%	41.8%	100.0%	170,410	
Total	12.3%	47.8%	8.5%	31.4%	100.0%	692,881	
Both Sexes							
Employed	8.0%	66.2%	11.8%	14.0%	100.0%	1,998,540	
Unemployed	9.8%	60.7%	13.7%	15.8%	100.0%	49,763	
Inactive	15.0%	43.7%	10.3%	31.0%	100.0%	357,873	
Total	9.1%	62.8%	11.6%	16.6%	100.0%	2,406,176	

Table 62: Distribution (%) of the private households by their typology/living arrangement by area of residence and economic activity status of the head

Area of Residence and	Typology/Living Arr	angement				
Economic	One Person	Nuclear	Composite	Extended	Total	Count
Activity Status						
Urban						
Employed	14.6%	43.1%	30.6%	11.7%	100.0%	332,009
Unemployed	15.7%	41.4%	27.4%	15.5%	100.0%	14,958
Inactive	15.6%	36.8%	22.4%	25.2%	100.0%	61,644
Total	14.8%	42.1%	29.2%	13.9%	100.0%	408,611
Rural						
Employed	6.7%	70.8%	8.0%	14.5%	100.0%	1,666,531
Unemployed	7.2%	69.0%	7.9%	15.9%	100.0%	34,805
Inactive	14.9%	45.2%	7.8%	32.2%	100.0%	296,229
Total	7.9%	67.0%	8.0%	17.1%	100.0%	1,997,565
Rwanda						
Employed	8.0%	66.2%	11.8%	14.0%	100.0%	1,998,540
Unemployed	9.8%	60.7%	13.7%	15.8%	100.0%	49,763
Inactive	15.0%	43.7%	10.3%	31.0%	100.0%	357,873
Total	9.1%	62.8%	11.6%	16.6%	100.0%	2,406,176

Table 63: Number and percentage of private households whose members have access to Internet by sex of the household head, province and area of residence

Province and	Male		Female		Both sexes		
Area of residence	Number of private households whose members have	% of households whose members have access to	Number of private households whose members have	% of households whose members have access to	Number of private households whose members have	% of households whose members have access to	
	access to Internet	Internet	access to Internet	Internet	access to Internet	Internet	
Rwanda							
Urban	90,349	29.0%	23,374	24.1%	113,723	27.8%	
Rural	32,447	2.3%	12,630	2.1%	45,077	2.3%	
Total	122,796	7.2%	36,004	5.2%	158,800	6.6%	
Kigali City							
Urban	61,080	36.2%	15,708	35.5%	76,788	36.0%	
Rural	2,238	4.4%	759	4.1%	2,997	4.3%	
Total	63,318	28.9%	16,467	26.2%	79,785	28.3%	
South							
Urban	9,611	26.6%	2,774	18.5%	12,385	24.2%	
Rural	8,381	2.3%	4,076	2.2%	12,457	2.3%	
Total	17,992	4.5%	6,850	3.5%	24,842	4.1%	
West							
Urban	8,064	16.7%	1,983	11.4%	10,047	15.3%	
Rural	6,917	2.1%	2,439	1.7%	9,356	2.0%	
Total	14,981	4.0%	4,422	2.7%	19,403	3.6%	
North							
Urban	5,733	23.1%	1,392	15.4%	7,125	21.0%	
Rural	6,091	2.4%	2,031	2.1%	8,122	2.3%	
Total	11,824	4.2%	3,423	3.2%	15,247	3.9%	
East							
Urban	5,861	17.6%	1,517	13.4%	7,378	16.5%	
Rural	8,820	2.2%	3,325	2.2%	12,145	2.2%	
Total	14,681	3.4%	4,842	3.0%	19,523	3.3%	

Table 64: Percentage of private households whose members have access to Internet from specific places by province and area of residence

Province and	Place from where	household membe	rs have access to Ir	nternet		Number of
Area of residence	Home	Office/School	Cyber Cafe	Other	Not stated	private households
Rwanda						
Urban	13.2%	14.7%	16.4%	4.6%	0.2%	408,611
Rural	0.7%	1.2%	1.1%	0.5%	0.0%	1,997,565
Total	2.8%	3.5%	3.7%	1.2%	0.0%	2,406,176
Kigali City						
Urban	18.5%	19.4%	20.3%	5.8%	0.2%	213,130
Rural	1.3%	1.8%	2.4%	0.9%	0.0%	69,001
Total	14.3%	15.1%	15.9%	4.6%	0.2%	282,131
South						
Urban	9.8%	12.8%	16.1%	4.5%	0.1%	51,133
Rural	0.6%	1.2%	1.1%	0.5%	0.0%	549,343
Total	1.3%	2.2%	2.4%	0.8%	0.0%	600,476
West						
Urban	5.8%	6.9%	9.5%	2.3%	0.1%	65,867
Rural	0.6%	1.0%	0.9%	0.4%	0.0%	474,236
Total	1.2%	1.7%	2.0%	0.6%	0.0%	540,103
North						
Urban	8.7%	10.9%	14.6%	2.8%	0.1%	33,869
Rural	0.7%	1.3%	1.1%	0.4%	0.0%	355,392
Total	1.4%	2.1%	2.2%	0.6%	0.0%	389,261
East						
Urban	6.4%	8.4%	9.5%	3.3%	0.1%	44,612
Rural	0.7%	1.1%	1.0%	0.5%	0.0%	549,593
Total	1.1%	1.7%	1.6%	0.7%	0.0%	594,205

Table 65: Percentage of private households whose members have access to Internet from specific places by province and sex of the household head

Province and	Place from w	vhere household memb	ers have access to	Internet		Number of
Sex	Home	Office/School	Cyber Cafe	Other	Not stated	private households
Rwanda						
Male	3.2%	3.8%	3.9%	1.3%	0.0%	1,713,295
Female	1.8%	2.6%	3.0%	0.9%	0.0%	692,881
Both sexes	2.8%	3.5%	3.7%	1.2%	0.0%	2,406,176
Kigali City						
Male	15.1%	15.9%	15.8%	4.8%	0.2%	219,353
Female	11.6%	12.6%	16.3%	3.9%	0.2%	62,778
Both sexes	14.3%	15.1%	15.9%	4.6%	0.2%	282,131
South						
Male	1.6%	2.4%	2.6%	0.9%	0.0%	403,640
Female	0.9%	1.8%	2.0%	0.6%	0.0%	196,836
Both sexes	1.3%	2.2%	2.4%	0.8%	0.0%	600,476
West						
Male	1.4%	1.9%	2.2%	0.7%	0.0%	378,753
Female	0.8%	1.4%	1.6%	0.5%	0.0%	161,350
Both sexes	1.2%	1.7%	2.0%	0.6%	0.0%	540,103
North						
Male	1.6%	2.3%	2.4%	0.7%	0.0%	281,055
Female	0.9%	1.7%	1.8%	0.5%	0.0%	108,206
Both sexes	1.4%	2.1%	2.2%	0.6%	0.0%	389,261
East						
Male	1.2%	1.7%	1.7%	0.8%	0.0%	430,494
Female	0.8%	1.6%	1.5%	0.6%	0.0%	163,711
Both sexes	1.1%	1.7%	1.6%	0.7%	0.0%	594,205

Table 66: Percentage of private households possessing livestock by type of livestock by province and area of residence

Province and										Livestock
Area of residence	Local breed cow	Cross breed cow	Exotic breed cow	Any cow	Goats	Sheep	Pigs	Rabbits	Poultry	Other poultry
Rwanda										
Urban	6.6%	6.2%	3.4%	13.7%	9.8%	1.9%	3.4%	1.9%	9.1%	0.4%
Rural	22.0%	14.1%	3.4%	35.5%	31.9%	8.6%	16.8%	7.0%	24.6%	0.5%
Total	19.4%	12.7%	3.4%	31.8%	28.2%	7.4%	14.6%	6.1%	22.0%	0.5%
Kigali City										
Urban	5.4%	4.2%	2.7%	10.2%	5.3%	0.6%	1.2%	1.1%	5.3%	0.4%
Rural	14.1%	14.4%	3.8%	28.3%	30.4%	2.5%	5.6%	6.2%	24.2%	0.5%
Total	7.5%	6.7%	3.0%	14.7%	11.4%	1.1%	2.2%	2.4%	9.9%	0.4%
South										
Urban	10.3%	9.5%	3.2%	20.2%	16.4%	1.4%	9.0%	3.9%	16.4%	0.5%
Rural	25.8%	14.5%	2.9%	39.1%	34.9%	4.7%	25.6%	8.7%	26.7%	0.7%
Total	24.5%	14.0%	3.0%	37.5%	33.3%	4.4%	24.2%	8.3%	25.8%	0.7%
West										
Urban	4.2%	5.4%	3.9%	12.0%	12.1%	3.0%	4.3%	1.7%	10.7%	0.4%
Rural	20.8%	10.8%	3.3%	32.6%	26.8%	10.5%	15.9%	6.3%	19.6%	0.4%
Total	18.8%	10.1%	3.4%	30.1%	25.0%	9.5%	14.5%	5.7%	18.5%	0.4%
North										
Urban	7.5%	10.3%	5.2%	20.9%	14.7%	9.7%	6.9%	2.8%	10.5%	0.3%
Rural	23.8%	23.2%	4.1%	46.5%	25.4%	20.9%	14.1%	8.2%	21.7%	0.3%
Total	22.4%	22.1%	4.2%	44.3%	24.5%	19.9%	13.5%	7.7%	20.7%	0.3%
East			Ì							
Urban	10.9%	9.9%	4.4%	19.6%	16.6%	1.3%	3.5%	2.7%	15.6%	0.4%
Rural	19.3%	10.6%	3.4%	28.1%	37.9%	3.6%	12.1%	5.2%	28.9%	0.4%
Total	18.6%	10.6%	3.5%	27.5%	36.3%	3.4%	11.5%	5.0%	27.9%	0.4%

Table 67: Among private households possessing livestock, mean number of livestock possessed by type of livestock by Province and Area of residence

Province and										ivestock
Area of residence	Local breed cow	Cross breed cow	Exotic breed cow	Any cow	Goats	Sheep	Pigs	Rabbits	Poultry	Other poultry
Rwanda										
Urban	4.2	2.9	3.5	4.2	2.7	2.4	2.7	5.1	5.2	6.0
Rural	1.7	1.6	1.6	1.9	2.2	2.0	1.4	3.1	3.5	3.6
Total	1.8	1.8	2.0	2.0	2.3	2.0	1.5	3.2	3.6	3.9
Kigali City										
Urban	5.6	3.9	4.5	5.7	3.4	3.4	5.7	6.9	6.4	7.1
Rural	1.8	1.7	1.9	2.0	2.5	2.2	1.9	4.2	4.4	4.0
Total	3.8	2.7	3.7	4.0	2.8	2.7	3.4	5.2	5.2	6.3
South										
Urban	2.6	2.0	2.3	2.7	2.3	2.2	1.9	4.4	4.4	3.4
Rural	1.5	1.5	1.5	1.7	2.1	1.9	1.3	2.9	3.3	3.3
Total	1.6	1.6	1.6	1.7	2.1	1.9	1.3	2.9	3.4	3.3
West										
Urban	2.9	2.2	3.1	3.0	2.3	2.0	1.8	3.7	4.4	6.4
Rural	1.5	1.5	1.5	1.6	2.0	1.9	1.4	2.6	2.7	3.4
Total	1.5	1.5	1.8	1.7	2.0	1.9	1.4	2.7	2.8	3.8
North										
Urban	2.5	2.0	2.5	2.5	2.4	2.1	2.5	4.0	4.8	3.4
Rural	1.5	1.5	1.5	1.7	2.1	1.9	1.5	3.2	3.0	3.3
Total	1.5	1.6	1.6	1.7	2.1	2.0	1.5	3.2	3.1	3.3
East										
Urban	4.1	3.4	3.0	4.6	2.8	3.4	2.3	4.8	5.1	5.2
Rural	2.2	2.0	1.9	2.5	2.6	2.3	1.5	3.6	4.3	4.2
Total	2.3	2.1	2.0	2.6	2.6	2.3	1.5	3.6	4.3	4.2

Table 68: Distribution (count and %) of the private households by type of habitat by sex of the household head and area of residence

Sex of the household head and Type of			Count			Percentage
habitat	Urban	Rural	Rwanda	Urban	Rural	Rwanda
Both sexes						
Umudugudu (Clustered rural settlement)	79,534	1,117,377	1,196,911	19.1%	55.6%	49.4%
Dispersed/Isolated housing	45,471	771,442	816,913	10.9%	38.4%	33.7%
Planned urban housing	46,597	7,179	53,776	11.2%	0.4%	2.2%
Spontaneous/squatter housing	241,122	99,755	340,877	57.9%	5.0%	14.1%
Other type of housing	2,823	11,105	13,928	0.7%	0.6%	0.6%
Not stated	1,232	1,261	2,493	0.3%	0.1%	0.1%
Total	416,779	2,008,119	2,424,898	100.0%	100.0%	100.0%
Male						
Umudugudu (Clustered rural settlement)	57,903	790,829	848,732	18.2%	56.1%	49.1%
Dispersed/Isolated housing	33,183	533,377	566,560	10.4%	37.8%	32.8%
Planned urban housing	37,139	5,190	42,329	11.7%	0.4%	2.5%
Spontaneous/squatter housing	187,116	72,344	259,460	58.8%	5.1%	15.0%
Other type of housing	2,182	7,791	9,973	0.7%	0.6%	0.6%
Not stated	980	911	1,891	0.3%	0.1%	0.1%
Total	318,503	1,410,442	1,728,945	100.0%	100.0%	100.0%
Female						
Umudugudu (Clustered rural settlement)	21,631	326,548	348,179	22.0%	54.6%	50.0%
Dispersed/Isolated housing	12,288	238,065	250,353	12.5%	39.8%	36.0%
Planned urban housing	9,458	1,989	11,447	9.6%	0.3%	1.6%
Spontaneous/squatter housing	54,006	27,411	81,417	55.0%	4.6%	11.7%
Other type of housing	641	3,314	3,955	0.7%	0.6%	0.6%
Not stated	252	350	602	0.3%	0.1%	0.1%
Total	98,276	597,677	695,953	100.0%	100.0%	100.0%

Table 69: Distribution (count and %) of the private households by type of habitat by province and area of residence

Province and Type of habitat			Count			Percentage
	Urban	Rural	Rwanda	Urban	Rural	Rwanda
Rwanda						
Umudugudu (Clustered rural settlement)	79,534	1,117,377	1,196,911	19.1%	55.6%	49.4%
Dispersed/Isolated housing	45,471	771,442	816,913	10.9%	38.4%	33.7%
Planned urban housing	46,597	7,179	53,776	11.2%	0.4%	2.2%
Spontaneous/squatter housing	241,122	99,755	340,877	57.9%	5.0%	14.1%
Other type of housing	2,823	11,105	13,928	0.7%	0.6%	0.6%
Not stated	1,232	1,261	2,493	0.3%	0.1%	0.1%
Total	416,779	2,008,119	2,424,898	100.0%	100.0%	100.0%
Kigali City						
Umudugudu (Clustered rural settlement)	7,040	3,090	10,130	3.3%	4.4%	3.5%
Dispersed/Isolated housing	13,881	45,315	59,196	6.4%	65.0%	20.7%
Planned urban housing	24,851	1,769	26,620	11.5%	2.5%	9.3%
Spontaneous/squatter housing	169,156	19,090	188,246	78.0%	27.4%	65.7%
Other type of housing	1,033	386	1,419	0.5%	0.6%	0.5%
Not stated	941	112	1,053	0.4%	0.2%	0.4%
Total	216,902	69,762	286,664	100.0%	100.0%	100.0%
South	·	,	,			
Umudugudu (Clustered rural settlement)	13,852	265,270	279,122	26.7%	48.1%	46.2%
Dispersed/Isolated housing	12,557	260,524	273,081	24.2%	47.2%	45.2%
Planned urban housing	2,829	1,625	4,454	5.5%	0.3%	0.7%
Spontaneous/squatter housing	22,194	19,928	42,122	42.7%	3.6%	7.0%
Other type of housing	438	4,201	4,639	0.8%	0.8%	0.8%
Not stated	76	306	382	0.2%	0.1%	0.1%
Total	51,946	551,854	603,800	100.0%	100.0%	100.0%
West	- ,	,,,,,	,			
Umudugudu (Clustered rural settlement)	19,113	198,451	217,564	28.4%	41.7%	40.0%
Dispersed/Isolated housing	8,238	249,874	258,112	12.3%	52.5%	47.5%
Planned urban housing	12,569	1,785	14,354	18.7%	0.4%	2.6%
Spontaneous/squatter housing	26,498	23,152	49,650	39.4%	4.9%	9.1%
Other type of housing	709	2,655	3,364	1.1%	0.6%	0.6%
Not stated	103	347	450	0.2%	0.1%	0.1%
Total	67,230	476,264	543,494	100.0%	100.0%	100.0%
North	- ,	-, -	, -			
Umudugudu (Clustered rural settlement)	13,130	212,065	225,195	37.8%	59.4%	57.5%
Dispersed/Isolated housing	5,400	133,669	139,069	15.6%	37.5%	35.5%
Planned urban housing	4,006	671	4,677	11.5%	0.2%	1.2%
Spontaneous/squatter housing	11,854	9,418	21,272	34.1%	2.6%	5.4%
Other type of housing	277	905	1,182	0.8%	0.3%	0.3%
Not stated	68	205	273	0.2%	0.1%	0.1%
Total	34,735	356,933	391,668	100.0%	100.0%	100.0%
East	- ,		,,,,,,			
Umudugudu (Clustered rural settlement)	26,399	438,501	464,900	57.4%	79.3%	77.6%
Dispersed/Isolated housing	5,395	82,060	87,455	11.7%	14.8%	14.6%
Planned urban housing	2,342	1,329	3,671	5.1%	0.2%	0.6%
Spontaneous/squatter housing	11,420	28,167	39,587	24.8%	5.1%	6.6%
Other type of housing	366	2,958	3,324	0.8%	0.5%	0.6%
Not stated	44	291	335	0.1%	0.1%	0.1%
Total	45,966	553,306	599,272	100.0%	100.0%	100.0%

Table 70: Distribution (count and %) of the private households by type of building by sex of the household head and area of residence

Sex of the household head and Type of			Count			Percentage
building	Urban	Rural	Rwanda	Urban	Rural	Rwanda
Both sexes						
House occupied by one household	263,725	1,919,652	2,183,377	63.3%	95.6%	90.0%
House occupied by several households	127,712	78,409	206,121	30.6%	3.9%	8.5%
Storey building occupied by one or more						
households	1,395	621	2,016	0.3%	0.0%	0.1%
Several buildings in a compound						
occupied by several households	20,874	4,615	25,489	5.0%	0.2%	1.1%
Other type of building	513	625	1,138	0.1%	0.0%	0.1%
Not stated	2,560	4,197	6,757	0.6%	0.2%	0.3%
Total	416,779	2,008,119	2,424,898	100.0%	100.0%	100.0%
Male						
House occupied by one household	199,886	1,350,877	1,550,763	62.8%	95.8%	89.7%
House occupied by several households	98,848	52,570	151,418	31.0%	3.7%	8.8%
Storey building occupied by one or more						
households	1,089	434	1,523	0.3%	0.0%	0.1%
Several buildings in a compound						
occupied by several households	16,260	3,289	19,549	5.1%	0.2%	1.1%
Other type of building	431	450	881	0.1%	0.0%	0.1%
Not stated	1,989	2,822	4,811	0.6%	0.2%	0.3%
Total	318,503	1,410,442	1,728,945	100.0%	100.0%	100.0%
Female						
House occupied by one household	63,839	568,775	632,614	65.0%	95.2%	90.9%
House occupied by several households	28,864	25,839	54,703	29.4%	4.3%	7.9%
Storey building occupied by one or more						
households	306	187	493	0.3%	0.0%	0.1%
Several buildings in a compound						
occupied by several households	4,614	1,326	5,940	4.7%	0.2%	0.9%
Other type of building	82	175	257	0.1%	0.0%	0.0%
Not stated	571	1,375	1,946	0.6%	0.2%	0.3%
Total	98,276	597,677	695,953	100.0%	100.0%	100.0%

Table 71: Distribution (%) of the private households by tenure of the household by province and area of residence

Province and Tenure of the household		·	Count	·		Percentage
	Urban	Rural	Rwanda	Urban	Rural	Rwanda
Rwanda						
Owner	185,992	1,754,930	1,940,922	44.6%	87.4%	80.0%
Tenant	208,067	150,353	358,420	49.9%	7.5%	14.8%
Hire purchase	606	1,756	2,362	0.2%	0.1%	0.1%
Free lodging	15,332	86,598	101,930	3.7%	4.3%	4.2%
Staff housing	5,309	8,951	14,260	1.3%	0.5%	0.6%
Refuge/Temporary camp settlement	14	46	60	0.0%	0.0%	0.0%
Other	578	3,957	4,535	0.1%	0.2%	0.2%
Not stated	881	1,528	2,409	0.2%	0.1%	0.1%
Total	416,779	2,008,119	2,424,898	100.0%	100.0%	100.0%
Kigali City	-, -	,,	, ,			
Owner	70,236	49,127	119,363	32.4%	70.4%	41.6%
Tenant	135,736	15,802	151,538	62.6%	22.7%	52.9%
Hire purchase	394	47	441	0.2%	0.1%	0.2%
Free lodging	6,509	3,644	10,153	3.0%	5.2%	3.5%
Staff housing	3,196	769	3,965	1.5%	1.1%	1.4%
Refuge/Temporary camp settlement	8	9	17	0.0%	0.0%	0.0%
Other	259	279	538	0.1%	0.0%	0.0%
Not stated	564	85	649	0.3%	0.4%	0.2%
Total	216,902	69,762	286,664	100.0%	100.0%	100.0%
South	210,902	09,702	200,004	100.078	100.0 %	100.076
Owner	27.940	470,332	498,181	53.6%	85.2%	82.5%
	27,849	·	·	38.8%	7.4%	10.1%
Tenant	20,151	40,586	60,737			
Hire purchase Free lodging	62	538 35,765	600	0.1% 5.7%	0.1% 6.5%	0.1%
	2,937		38,702			6.4%
Staff housing	780	2,075	2,855	1.5%	0.4%	0.5%
Refuge/Temporary camp settlement	1	7	8	0.0%	0.0%	0.0%
Other	93 73	2,043	2,136	0.2%	0.4%	0.4%
Not stated		508	581	0.1%	0.1%	0.1%
Total	51,946	551,854	603,800	100.0%	100.0%	100.0%
West	00.010	400.000	100 101	50.00/	00.40/	00.40/
Owner	39,213	428,908	468,121	58.3%	90.1%	86.1%
Tenant	24,162	23,650	47,812	35.9%	5.0%	8.8%
Hire purchase	71	469	540	0.1%	0.1%	0.1%
Free lodging	3,073	21,139	24,212	4.6%	4.4%	4.5%
Staff housing	421	1,172	1,593	0.6%	0.3%	0.3%
Refuge/Temporary camp settlement	2	10	12	0.0%	0.0%	0.0%
Other	151	543	694	0.2%	0.1%	0.1%
Not stated	137	373	510	0.2%	0.1%	0.1%
Total	67,230	476,264	543,494	100.0%	100.0%	100.0%
North						
Owner	23,884	336,226	360,110	68.8%	94.2%	91.9%
Tenant	9,482	9,680	19,162	27.3%	2.7%	4.9%
Hire purchase	26	169	195	0.1%	0.1%	0.1%
Free lodging	950	9,306	10,256	2.7%	2.6%	2.6%
Staff housing	291	906	1,197	0.8%	0.3%	0.3%
Refuge/Temporary camp settlement	1	3	4	0.0%	0.0%	0.0%
Other	38	405	443	0.1%	0.1%	0.1%
Not stated	63	238	301	0.2%	0.1%	0.1%
Total	34,735	356,933	391,668	100.0%	100.0%	100.0%
East						
Owner	24,810	470,337	495,147	54.0%	85.0%	82.6%
Tenant	18,536	60,635	79,171	40.3%	11.0%	13.2%
Hire purchase	53	533	586	0.1%	0.1%	0.1%
Free lodging	1,863	16,744	18,607	4.1%	3.0%	3.1%
Staff housing	621	4,029	4,650	1.4%	0.7%	0.8%

Province and Tenure of the household			Count		Percentage	
	Urban	Rural	Rwanda	Urban	Rural	Rwanda
Refuge/Temporary camp settlement	2	17	19	0.0%	0.0%	0.0%
Other	37	687	724	0.1%	0.1%	0.1%
Not stated	44	324	368	0.1%	0.1%	0.1%
Total	45,966	553,306	599,272	100.0%	100.0%	100.0%

Table 72: Distribution (count and %) of the private households by main material of the walls of the household, sex and level of education attained by the household head

	No	Pre-	Primary	Post-	Secondary	University	Not Stated	Total	Count
	Education	School		primary					
Both Sexes									
Wood/Mud	40.4%	0.2%	53.5%	1.5%	3.1%	0.3%	1.0%	100.0%	862,668
Wood/ Cement mud	19.5%	0.2%	56.6%	3.4%	14.5%	4.0%	1.8%	100.0%	98,574
Sundried bricks	28.5%	0.2%	55.8%	2.1%	9.1%	2.8%	1.5%	100.0%	1,341,166
Plastic									
sheeting/Cardboard	36.7%	0.3%	48.6%	1.3%	7.5%	2.3%	3.4%	100.0%	2,401
Cement									
Blocks/Concrete	6.9%	0.2%	28.3%	2.0%	24.2%	35.0%	3.3%	100.0%	18,061
Stone	30.8%	0.3%	49.7%	1.8%	11.9%	3.9%	1.6%	100.0%	6,022
Timber	29.2%	0.4%	59.5%	1.9%	6.0%	1.4%	1.6%	100.0%	18,321
Burnt bricks	8.0%	0.1%	32.6%	2.6%	22.8%	29.2%	4.7%	100.0%	62,640
Other	40.9%	0.3%	50.3%	1.1%	4.2%	1.4%	1.9%	100.0%	7,185
Not stated	30.0%	0.2%	48.8%	1.7%	10.0%	5.7%	3.5%	100.0%	7,860
Total	31.7%	0.2%	54.2%	1.9%	7.6%	2.9%	1.4%	100.0%	2,424,898
Males									
Wood/Mud	31.5%	0.2%	61.4%	1.6%	3.8%	0.4%	1.1%	100.0%	579,859
Wood/ Cement mud	13.3%	0.2%	60.9%	3.3%	15.8%	4.6%	1.9%	100.0%	71,966
Sundried bricks	21.2%	0.2%	61.3%	2.2%	10.2%	3.3%	1.6%	100.0%	982,742
Plastic									
sheeting/Cardboard	30.7%	0.4%	53.1%	1.1%	8.3%	2.5%	4.0%	100.0%	1,868
Cement									
Blocks/Concrete	4.7%	0.2%	28.2%	1.9%	23.9%	37.8%	3.4%	100.0%	14,690
Stone	19.7%	0.3%	57.7%	1.6%	13.6%	5.1%	2.1%	100.0%	4,078
Timber	22.0%	0.4%	65.4%	2.1%	6.7%	1.6%	1.8%	100.0%	13,807
Burnt bricks	5.3%	0.1%	33.3%	2.4%	22.1%	32.0%	4.7%	100.0%	49,261
Other	31.0%	0.3%	58.7%	1.0%	4.9%	1.6%	2.4%	100.0%	5,065
Not stated	21.8%	0.2%	54.2%	1.9%	11.2%	6.7%	4.0%	100.0%	5,609
Total	23.8%	0.2%	60.2%	2.0%	8.7%	3.5%	1.6%	100.0%	1,728,945
Females									
Wood/Mud	58.8%	0.2%	37.2%	1.2%	1.7%	0.1%	0.7%	100.0%	282,809
Wood/ Cement mud	36.2%	0.2%	45.1%	3.6%	11.2%	2.1%	1.5%	100.0%	26,608
Sundried bricks	48.4%	0.2%	40.8%	1.9%	6.1%	1.4%	1.1%	100.0%	358,424
Plastic									
sheeting/Cardboard	57.6%	0.2%	32.8%	2.1%	4.5%	1.7%	1.1%	100.0%	533
Cement	40.70				0= 00/		0.407	400.007	
Blocks/Concrete	16.7%	0.4%	29.0%	2.6%	25.6%	22.7%	3.1%	100.0%	3,371
Stone	54.1%	0.4%	33.0%	2.3%	8.3%	1.3%	0.6%	100.0%	1,944
Timber	51.4%	0.2%	41.4%	1.5%	3.9%	0.6%	1.1%	100.0%	4,514
Burnt bricks	18.0%	0.1%	30.0%	3.3%	25.2%	18.6%	4.8%	100.0%	13,379
Other	64.5%	0.0%	30.2%	1.2%	2.3%	1.0%	0.7%	100.0%	2,120
Not stated	50.3%	0.2%	35.5%	1.2%	7.1%	3.3%	2.4%	100.0%	2,251
Total	51.5%	0.2%	39.2%	1.7%	5.0%	1.4%	1.1%	100.0%	695,953

Table 73: Distribution (%) of the private households by main source of water by level of education of the household head and area of residence

Sex of the household head and								Percentages	
Main Source of Water	No Education	Pre-School	Primary	Post-primary	Secondary	University	Not Stated	Total	Count
Both Sexes									
Improved Sources									
Internal pipe-borne water	6.4%	0.2%	18.1%	1.7%	19.8%	49.1%	4.7%	100.0%	12,086
Pipe-borne water in the									
compound	6.0%	0.2%	33.6%	2.9%	29.9%	24.1%	3.3%	100.0%	172,092
Public tap out of the compound	28.0%	0.2%	55.9%	2.0%	10.1%	2.0%	1.7%	100.0%	670,767
Protected spring/Well	35.9%	0.2%	56.3%	2.0%	4.1%	0.6%	1.0%	100.0%	897,405
Rain water	32.1%	0.9%	54.8%	1.2%	8.6%	1.5%	0.9%	100.0%	17,173
Unimproved Sources									
Unprotected Spring/Well	37.8%	0.2%	55.3%	1.6%	3.7%	0.4%	1.0%	100.0%	315,203
River	37.5%	0.2%	55.7%	1.5%	3.8%	0.3%	1.0%	100.0%	155,208
Lake/Stream/Pond/Surface Water	36.4%	0.3%	56.5%	1.6%	3.8%	0.3%	1.2%	100.0%	154,659
Other	34.9%	0.2%	54.9%	1.5%	6.1%	1.3%	1.1%	100.0%	3,742
Not stated	32.1%	0.2%	51.1%	1.8%	8.5%	3.9%	2.4%	100.0%	26,563
Total	31.7%	0.2%	54.2%	1.9%	7.6%	2.9%	1.4%	100.0%	2,424,898
Male									
Improved Sources									
Internal pipe-borne water	4.4%	0.2%	18.4%	1.5%	18.3%	52.2%	4.9%	100.0%	9,725
Pipe-borne water in the									
compound	4.0%	0.2%	34.5%	2.7%	29.6%	25.8%	3.3%	100.0%	137,869
Public tap out of the compound	20.4%	0.3%	61.5%	2.0%	11.4%	2.4%	1.9%	100.0%	485,004
Protected spring/Well	27.4%	0.2%	63.6%	2.1%	4.8%	0.7%	1.1%	100.0%	619,990
Rain water	22.6%	0.9%	62.3%	1.3%	10.1%	1.9%	1.0%	100.0%	12,736
Unimproved Sources									
Unprotected Spring/Well	29.3%	0.2%	62.8%	1.7%	4.3%	0.5%	1.1%	100.0%	221,587
River	29.1%	0.2%	63.0%	1.7%	4.5%	0.4%	1.1%	100.0%	110,215
Lake/Stream/Pond/Surface Water	29.0%	0.3%	62.9%	1.7%	4.5%	0.4%	1.3%	100.0%	110,276
Other	26.9%	0.3%	61.2%	1.7%	7.1%	1.6%	1.3%	100.0%	2,684
Not stated	23.9%	0.2%	56.7%	1.9%	9.8%	4.9%	2.7%	100.0%	18,859
Total	23.8%	0.2%	60.2%	2.0%	8.7%	3.5%	1.6%	100.0%	1,728,945
Female									
Improved Sources									
Internal pipe-borne water	14.8%	0.3%	16.5%	2.2%	25.7%	36.5%	4.1%	100.0%	2,361
Pipe-borne water in the									
compound	14.1%	0.2%	30.2%	3.8%	31.1%	17.2%	3.4%	100.0%	34,223
Public tap out of the compound	47.9%	0.2%	41.0%	1.9%	6.7%	0.9%	1.2%	100.0%	185,763
Protected spring/Well	54.8%	0.2%	40.0%	1.6%	2.4%	0.2%	0.8%	100.0%	277,415
Rain water	59.4%	0.7%	33.5%	0.9%	4.3%	0.6%	0.7%	100.0%	4,437
Unimproved Sources									

RPHC4 – Theme 08 – Characteristics of households and housing

Sex of the household head and								Percentages	
Main Source of Water	No Education	Pre-School	Primary	Post-primary	Secondary	University	Not Stated	Total	Count
Unprotected Spring/Well	58.1%	0.2%	37.5%	1.3%	2.1%	0.2%	0.8%	100.0%	93,616
River	58.1%	0.2%	37.6%	1.3%	1.9%	0.1%	0.9%	100.0%	44,993
Lake/Stream/Pond/Surface Water	54.9%	0.2%	40.5%	1.3%	2.0%	0.1%	0.9%	100.0%	44,383
Other	55.2%	0.1%	39.0%	0.9%	3.5%	0.6%	0.7%	100.0%	1,058
Not stated	52.3%	0.3%	37.4%	1.5%	5.3%	1.6%	1.5%	100.0%	7,704
Total	51.5%	0.2%	39.2%	1.7%	5.0%	1.4%	1.1%	100.0%	695,953

Table 74: Distribution (%) of the private households by main source of water by level of education of the household head and area of residence

Sex of the household head and Main			<u> </u>	Percent	tages			
Source of Water	No Education	Pre-School	Primary	Post-primary	Secondary	University	Not Stated	Total
Both Sexes								
Improved Sources								
Internal pipe-borne water	0.1%	0.5%	0.2%	0.4%	1.3%	8.5%	1.6%	0.5%
Pipe-borne water in the compound	1.3%	5.6%	4.4%	10.7%	27.7%	59.6%	16.5%	7.1%
Public tap out of the compound	24.4%	29.7%	28.5%	28.6%	36.7%	19.4%	33.7%	27.7%
Protected spring/Well	41.8%	35.7%	38.5%	37.7%	19.7%	7.4%	26.4%	37.0%
Rain water	0.7%	2.7%	0.7%	0.4%	0.8%	0.4%	0.4%	0.7%
Unimproved Sources								
Unprotected Spring/Well	15.5%	11.2%	13.3%	10.5%	6.2%	1.9%	9.4%	13.0%
River	7.6%	5.8%	6.6%	5.2%	3.1%	0.7%	4.6%	6.4%
Lake/Stream/Pond/Surface Water	7.3%	7.4%	6.7%	5.3%	3.1%	0.6%	5.3%	6.4%
Other	0.2%	0.1%	0.2%	0.1%	0.1%	0.1%	0.1%	0.2%
Not stated	1.1%	1.1%	1.0%	1.0%	1.2%	1.5%	1.8%	1.1%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Count	769,881	5,356	1,313,340	46,578	185,360	69,610	34,773	2,424,898
Male								
Improved Sources								
Internal pipe-borne water	0.1%	0.6%	0.2%	0.4%	1.2%	8.4%	1.7%	0.6%
Pipe-borne water in the compound	1.3%	5.6%	4.6%	10.7%	27.1%	59.2%	16.9%	8.0%
Public tap out of the compound	24.0%	30.5%	28.7%	28.2%	36.8%	19.5%	34.6%	28.1%
Protected spring/Well	41.2%	35.0%	37.9%	37.7%	19.8%	7.6%	25.4%	35.9%
Rain water	0.7%	2.8%	0.8%	0.5%	0.9%	0.4%	0.5%	0.7%
Unimproved Sources								
Unprotected Spring/Well	15.8%	11.0%	13.4%	10.8%	6.4%	1.9%	9.1%	12.8%
River	7.8%	5.9%	6.7%	5.3%	3.3%	0.8%	4.5%	6.4%
Lake/Stream/Pond/Surface Water	7.8%	7.5%	6.7%	5.4%	3.3%	0.7%	5.3%	6.4%
Other	0.2%	0.2%	0.2%	0.1%	0.1%	0.1%	0.1%	0.2%
Not stated	1.1%	0.9%	1.0%	1.0%	1.2%	1.5%	1.9%	1.1%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Count	411,473	4,013	1,040,733	34,652	150,652	60,126	27,296	1,728,945
Female								
Improved Sources								
Internal pipe-borne water	0.1%	0.4%	0.1%	0.4%	1.7%	9.1%	1.3%	0.3%
Pipe-borne water in the compound	1.4%	5.4%	3.8%	11.0%	30.6%	61.9%	15.3%	4.9%
Public tap out of the compound	24.8%	27.5%	28.0%	29.9%	36.1%	18.5%	30.7%	26.7%
Protected spring/Well	42.4%	37.9%	40.7%	37.7%	19.1%	6.2%	29.8%	39.9%
Rain water	0.7%	2.5%	0.5%	0.3%	0.5%	0.3%	0.4%	0.6%
Unimproved Sources								
Unprotected Spring/Well	15.2%	11.7%	12.9%	9.9%	5.5%	1.7%	10.3%	13.5%

RPHC4 – Theme 08 – Characteristics of households and housing

Sex of the household head and Main	Percentages										
Source of Water	No Education	Pre-School	Primary	Post-primary	Secondary	University	Not Stated	Total			
River	7.3%	5.7%	6.2%	4.7%	2.5%	0.4%	5.3%	6.5%			
Lake/Stream/Pond/Surface Water	6.8%	7.2%	6.6%	4.9%	2.6%	0.5%	5.2%	6.4%			
Other	0.2%	0.1%	0.2%	0.1%	0.1%	0.1%	0.1%	0.2%			
Not stated	1.1%	1.6%	1.1%	1.0%	1.2%	1.3%	1.6%	1.1%			
Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%			
Count	358,408	1,343	272,607	11,926	34,708	9,484	7,477	695,953			

Table 75: Distribution (count and %) of the private households by main source of water by province and area of residence

Province and Main source of water			Count	unt Percentag			
	Urban	Rural	Rwanda	Urban	Rural	Rwanda	
Rwanda							
Improved sources							
Internal pipe-borne water	9,249	2,837	12,086	2.2%	0.1%	0.5%	
Pipe-borne water in the compound	142,815	29,277	172,092	34.3%	1.5%	7.1%	
Public tap out of the compound	183,379	487,388	670,767	44.0%	24.3%	27.7%	
Protected spring/Well	45,770	851,635	897,405	11.0%	42.4%	37.0%	
Rain water	320	16,853	17,173	0.1%	0.8%	0.7%	
Unimproved sources							
Unprotected Spring/Well	14,835	300,368	315,203	3.6%	15.0%	13.0%	
River	8,064	147,144	155,208	1.9%	7.3%	6.4%	
Lake/Stream/Pond/Surface Water	6,035	148,624	154,659	1.5%	7.4%	6.4%	
Other	567	3,175	3,742	0.1%	0.2%	0.2%	
Not stated	5,745	20,818	26,563	1.4%	1.0%	1.1%	
Total	416,779	2,008,119	2,424,898	100.0%	100.0%	100.0%	
Kigali City							
Improved sources							
Internal pipe-borne water	7,008	71	7,079	3.2%	0.1%	2.5%	
Pipe-borne water in the compound	93,192	2469	95,661	43.0%	3.5%	33.4%	
Public tap out of the compound	91,943	27911	119,854	42.4%	40.0%	41.8%	
Protected spring/Well	11,994	19724	31,718	5.5%	28.3%	11.1%	
Rain water	106	147	253	0.1%	0.2%	0.1%	
Unimproved sources							
Unprotected Spring/Well	6,606	10160	16,766	3.1%	14.6%	5.9%	
River	1,705	5563	7,268	0.8%	8.0%	2.5%	
Lake/Stream/Pond/Surface Water	1,137	3023	4,160	0.5%	4.3%	1.5%	
Other	291	49	340	0.1%	0.1%	0.1%	
Not stated	2,920	645	3,565	1.4%	0.9%	1.2%	
Total	216,902	69762	286,664	100.0%	100.0%	100.0%	
South							
Improved sources							
Internal pipe-borne water	902	534	1,436	1.7%	0.1%	0.2%	
Pipe-borne water in the compound	15,221	5338	20,559	29.3%	1.0%	3.4%	
Public tap out of the compound	12,507	74925	87,432	24.1%	13.6%	14.5%	
Protected spring/Well	17,831	328525	346,356	34.3%	59.5%	57.4%	
Rain water	38	238	276	0.1%	0.0%	0.1%	
Unimproved sources							
Unprotected Spring/Well	2,873	73514	76,387	5.5%	13.3%	12.7%	

Province and Main source of water			Count			Percentage
	Urban	Rural	Rwanda	Urban	Rural	Rwanda
River	900	30895	31,795	1.7%	5.6%	5.3%
Lake/Stream/Pond/Surface Water	1,099	32594	33,693	2.1%	5.9%	5.6%
Other	34	228	262	0.1%	0.0%	0.0%
Not stated	541	5063	5,604	1.0%	0.9%	0.9%
Total	51,946	551854	603,800	100.0%	100.0%	100.0%
West						
Improved sources						
Internal pipe-borne water	666	815	1,481	1.0%	0.2%	0.3%
Pipe-borne water in the compound	16,525	6315	22,840	24.6%	1.3%	4.2%
Public tap out of the compound	36,310	109345	145,655	54.0%	23.0%	26.8%
Protected spring/Well	5,922	210324	216,246	8.8%	44.2%	39.8%
Rain water	49	9932	9,981	0.1%	2.1%	1.8%
Unimproved sources						
Unprotected Spring/Well	2,617	86114	88,731	3.9%	18.1%	16.3%
River	2,941	29722	32,663	4.4%	6.2%	6.0%
Lake/Stream/Pond/Surface Water	1,122	17558	18,680	1.7%	3.7%	3.4%
Other	138	337	475	0.2%	0.1%	0.1%
Not stated	940	5802	6,742	1.4%	1.2%	1.2%
Total	67,230	476264	543,494	100.0%	100.0%	100.0%
North						
Improved sources						
Internal pipe-borne water	417	484	901	1.2%	0.1%	0.2%
Pipe-borne water in the compound	9,105	3915	13,020	26.2%	1.1%	3.3%
Public tap out of the compound	19,056	93856	112,912	54.9%	26.3%	28.8%
Protected spring/Well	4,230	170052	174,282	12.2%	47.6%	44.5%
Rain water	17	4614	4,631	0.1%	1.3%	1.2%
Unimproved sources						
Unprotected Spring/Well	640	47780	48,420	1.8%	13.4%	12.4%
River	479	24938	25,417	1.4%	7.0%	6.5%
Lake/Stream/Pond/Surface Water	52	6846	6,898	0.2%	1.9%	1.8%
Other	16	685	701	0.1%	0.2%	0.2%
Not stated	723	3763	4,486	2.1%	1.1%	1.2%
Total	34,735	356933	391,668	100.0%	100.0%	100.0%
East						
Improved sources						
Internal pipe-borne water	256	933	1,189	0.6%	0.2%	0.2%
Pipe-borne water in the compound	8,772	11240	20,012	19.1%	2.0%	3.3%
Public tap out of the compound	23,563	181351	204,914	51.3%	32.8%	34.2%

Province and Main source of water			Count			Percentage
	Urban	Rural	Rwanda	Urban	Rural	Rwanda
Protected spring/Well	5,793	123010	128,803	12.6%	22.2%	21.5%
Rain water	110	1922	2,032	0.2%	0.4%	0.3%
Unimproved sources						
Unprotected Spring/Well	2,099	82800	84,899	4.6%	15.0%	14.2%
River	2,039	56026	58,065	4.4%	10.1%	9.7%
Lake/Stream/Pond/Surface Water	2,625	88603	91,228	5.7%	16.0%	15.2%
Other	88	1876	1,964	0.2%	0.3%	0.3%
Not stated	621	5545	6,166	1.4%	1.0%	1.0%
Total	45,966	553306	599,272	100.0%	100.0%	100.0%

Table 76: Number and percentage of private households possessing an energy saving stove by sex of the head, province and area of residence

Province and Area of residence		Male		Female	Both sexes		
	Number of households	% possessing an energy saving stove	Number of households	% possessing an energy saving stove	Number of households	% possessing an energy saving stove	
Rwanda							
Urban	61,711	19.4%	20,445	20.8%	82,156	19.7%	
Rural	558,937	39.6%	209,840	35.1%	768,777	38.3%	
Total	620,648	35.9%	230,285	33.1%	850,933	35.1%	
Kigali City							
Urban	18,058	10.5%	4,480	10.1%	22,538	10.4%	
Rural	6,761	13.2%	2,415	13.0%	9,176	13.2%	
Total	24,819	11.1%	6,895	10.9%	31,714	11.1%	
South							
Urban	10,996	29.9%	4,521	29.8%	15,517	29.9%	
Rural	147,324	39.9%	64,304	35.3%	211,628	38.4%	
Total	158,320	39.0%	68,825	34.9%	227,145	37.6%	
West							
Urban	14,923	30.1%	5,456	30.8%	20,379	30.3%	
Rural	158,171	47.6%	60,257	41.8%	218,428	45.9%	
Total	173,094	45.4%	65,713	40.6%	238,807	43.9%	
North							
Urban	6,129	24.1%	1,756	18.9%	7,885	22.7%	
Rural	95,284	37.0%	31,036	31.2%	126,320	35.4%	
Total	101,413	35.9%	32,792	30.2%	134,205	34.3%	
East							
Urban	11,605	33.8%	4,232	36.5%	15,837	34.5%	
Rural	151,397	37.8%	51,828	33.9%	203,225	36.7%	
Total	163,002	37.5%	56,060	34.1%	219,062	36.6%	

Table 77: Distribution (count and %) of the private households by main mode of household sewage disposal by province and area of residence

Province and Main mode of household sewage disposal			Count			Percentage
	Urban	Rural	Rwanda	Urban	Rural	Rwanda
Rwanda						
Sump	93,598	254,955	348,553	22.5%	12.7%	14.4%
In the courtyard	34,076	239,378	273,454	8.2%	11.9%	11.3%
Rivulet/Trench/Channels	13,839	2,197	16,036	3.3%	0.1%	0.7%
In the street	5,736	8,086	13,822	1.4%	0.4%	0.6%
Main sewer	27,697	115,321	143,018	6.7%	5.7%	5.9%
Cesspool	128,190	85,044	213,234	30.8%	4.2%	8.8%
Bush	89,502	929,175	1,018,677	21.5%	46.3%	42.0%
Other	21,427	363,337	384,764	5.1%	18.1%	15.9%
Not stated	2,714	10,626	13,340	0.7%	0.5%	0.6%
Total	416,779	2,008,119	2,424,898	100.0%	100.0%	100.0%
Kigali City						
Sump	46,578	11,285	57,863	21.5%	16.2%	20.2%
In the courtyard	14,417	5,613	20,030	6.7%	8.1%	7.0%
Rivulet/Trench/Channels	12,826	133	12,959	5.9%	0.2%	4.5%
In the street	3,550	623	4,173	1.6%	0.9%	1.5%
Main sewer	14,040	1,923	15,963	6.5%	2.8%	5.6%
Cesspool	87,802	4,231	92,033	40.5%	6.1%	32.1%
Bush	30,658	38,473	69,131	14.1%	55.2%	24.1%
Other	5,632	7,125	12,757	2.6%	10.2%	4.5%
Not stated	1,399	356	1,755	0.6%	0.5%	0.6%
Total	216,902	69,762	286,664	100.0%	100.0%	100.0%
South						
Sump	7,338	40,936	48,274	14.1%	7.4%	8.0%
In the courtyard	9,564	101,758	111,322	18.4%	18.4%	18.4%
Rivulet/Trench/Channels	359	672	1,031	0.7%	0.1%	0.2%
In the street	600	2,418	3,018	1.2%	0.4%	0.5%
Main sewer	6,225	59,866	66,091	12.0%	10.9%	11.0%
Cesspool	10,087	14,249	24,336	19.4%	2.6%	4.0%
Bush	12,773	197,448	210,221	24.6%	35.8%	34.8%
Other	4,717	131,741	136,458	9.1%	23.9%	22.6%
Not stated	283	2,766	3,049	0.5%	0.5%	0.5%
Total	51,946	551,854	603,800	100.0%	100.0%	100.0%
West						
Sump	18,684	78,230	96,914	27.8%	16.4%	17.8%
In the courtyard	4,805	59,108	63,913	7.2%	12.4%	11.8%
Rivulet/Trench/Channels	430	891	1,321	0.6%	0.2%	0.2%

Province and Main mode of household sewage disposal			Count			Percentage
	Urban	Rural	Rwanda	Urban	Rural	Rwanda
In the street	857	1,796	2,653	1.3%	0.4%	0.5%
Main sewer	3,543	27,502	31,045	5.3%	5.8%	5.7%
Cesspool	15,267	24,205	39,472	22.7%	5.1%	7.3%
Bush	19,399	232,588	251,987	28.9%	48.8%	46.4%
Other	3,858	49,415	53,273	5.7%	10.4%	9.8%
Not stated	387	2,529	2,916	0.6%	0.5%	0.5%
Total	67,230	476,264	543,494	100.0%	100.0%	100.0%
North						
Sump	9,020	46,724	55,744	26.0%	13.1%	14.2%
In the courtyard	3,184	52,675	55,859	9.2%	14.8%	14.3%
Rivulet/Trench/Channels	98	287	385	0.3%	0.1%	0.1%
In the street	217	1,150	1,367	0.6%	0.3%	0.4%
Main sewer	1,757	15,117	16,874	5.1%	4.2%	4.3%
Cesspool	8,901	16,645	25,546	25.6%	4.7%	6.5%
Bush	8,988	160,205	169,193	25.9%	44.9%	43.2%
Other	2,272	62,204	64,476	6.5%	17.4%	16.5%
Not stated	298	1,926	2,224	0.9%	0.5%	0.6%
Total	34,735	356,933	391,668	100.0%	100.0%	100.0%
East						
Sump	11,978	77,780	89,758	26.1%	14.1%	15.0%
In the courtyard	2,106	20,224	22,330	4.6%	3.7%	3.7%
Rivulet/Trench/Channels	126	214	340	0.3%	0.0%	0.1%
In the street	512	2,099	2,611	1.1%	0.4%	0.4%
Main sewer	2,132	10,913	13,045	4.6%	2.0%	2.2%
Cesspool	6,133	25,714	31,847	13.3%	4.7%	5.3%
Bush	17,684	300,461	318,145	38.5%	54.3%	53.1%
Other	4,948	112,852	117,800	10.8%	20.4%	19.7%
Not stated	347	3,049	3,396	0.8%	0.6%	0.6%
Total	45,966	553,306	599,272	100.0%	100.0%	100.0%

Table 80: Number and percentage of private households possessing specific assets and their corresponding resident population by area of residence

Household assets and Area of			Household	Population				
residence	Total number of	Number of households	% of households	Total population	Population of the	% of the population		
	households	having the asset	having the asset		households having the	living in households		
					asset	having the asset		
Rwanda								
Radio	2,424,898	1,552,916	64.0%	10,378,021	7,085,617	68.3%		
Television	2,424,898	187,961	7.8%	10,378,021	935,596	9.0%		
Telephone (fixed line)	2,424,898	12,223	0.5%	10,378,021	60,635	0.6%		
Cell phone	2,424,898	1,311,152	54.1%	10,378,021	6,032,195	58.1%		
Refrigerator/Freezer	2,424,898	39,750	1.6%	10,378,021	215,857	2.1%		
Computer	2,424,898	57,990	2.4%	10,378,021	286,663	2.8%		
Bicycle	2,424,898	342,103	14.1%	10,378,021	1,712,072	16.5%		
Vehicles	2,424,898	30,248	1.3%	10,378,021	176,531	1.7%		
Motorcycles	2,424,898	29,429	1.2%	10,378,021	151,253	1.5%		
Urban								
Radio	416,779	301,623	72.4%	1,678,786	1,284,405	76.5%		
Television	416,779	149,783	35.9%	1,678,786	736,255	43.9%		
Telephone (fixed line)	416,779	4,611	1.1%	1,678,786	23,578	1.4%		
Cell phone	416,779	348,966	83.7%	1,678,786	1,449,106	86.3%		
Refrigerator/Freezer	416,779	35,342	8.5%	1,678,786	193,127	11.5%		
Computer	416,779	49,842	12.0%	1,678,786	248,121	14.8%		
Bicycle	416,779	36,347	8.7%	1,678,786	184,158	11.0%		
Vehicles	416,779	24,731	5.9%	1,678,786	146,363	8.7%		
Motorcycles	416,779	12,188	2.9%	1,678,786	57,456	3.4%		
Rural								
Radio	2,008,119	1,251,293	62.3%	8,699,235	5,801,212	66.7%		
Television	2,008,119	38,178	1.9%	8,699,235	199,341	2.3%		
Telephone (fixed line)	2,008,119	7,612	0.4%	8,699,235	37,057	0.4%		
Cell phone	2,008,119	962,186	47.9%	8,699,235	4,583,089	52.7%		
Refrigerator/Freezer	2,008,119	4,408	0.2%	8,699,235	22,730	0.3%		
Computer	2,008,119	8,148	0.4%	8,699,235	38,542	0.4%		
Bicycle	2,008,119	305,756	15.2%	8,699,235	1,527,914	17.6%		
Vehicles	2,008,119	5,517	0.3%	8,699,235	30,168	0.4%		
Motorcycles	2,008,119	17,241	0.9%	8,699,235	93,797	1.1%		

Table 781: Number and percentage of private households possessing specific assets and their corresponding resident population by sex of household head

Household assets and Sex of			Household			Population
household head	Total number of	Number of households	% of households	Total population	Population of the	% of the population
	households	having the asset	having the asset		households having the	living in households
					asset	having the asset
Both sexes						
Radio	2,424,898	1,552,916	64.0%	10,378,021	7,085,617	68.3%
Television	2,424,898	187,961	7.8%	10,378,021	935,596	9.0%
Telephone (fixed line)	2,424,898	12,223	0.5%	10,378,021	60,635	0.6%
Cell phone	2,424,898	1,311,152	54.1%	10,378,021	6,032,195	58.1%
Refrigerator/Freezer	2,424,898	39,750	1.6%	10,378,021	215,857	2.1%
Computer	2,424,898	57,990	2.4%	10,378,021	286,663	2.8%
Vehicles	2,424,898	30,248	1.3%	10,378,021	176,531	1.7%
Motorcycles	2,424,898	29,429	1.2%	10,378,021	151,253	1.5%
Bicycles	2,424,898	342,103	14.1%	10,378,021	1,712,072	16.5%
Male						
Radio	1,728,945	1,223,956	70.8%	7,904,162	5,805,764	73.5%
Television	1,728,945	158,522	9.2%	7,904,162	802,007	10.2%
Telephone (fixed line)	1,728,945	9,962	0.6%	7,904,162	51,045	0.7%
Cell phone	1,728,945	1,026,904	59.4%	7,904,162	4,880,497	61.8%
Refrigerator/Freezer	1,728,945	33,019	1.9%	7,904,162	185,481	2.4%
Computer	1,728,945	49,015	2.8%	7,904,162	246,871	3.1%
Vehicles	1,728,945	27,504	1.6%	7,904,162	162,874	2.1%
Motorcycles	1,728,945	27,530	1.6%	7,904,162	142,561	1.8%
Bicycles	1,728,945	300,887	17.4%	7,904,162	1,525,586	19.3%
Female						
Radio	695,953	328,960	47.3%	2,473,859	1,279,853	51.7%
Television	695,953	29,439	4.2%	2,473,859	133,589	5.4%
Telephone (fixed line)	695,953	2,261	0.3%	2,473,859	9,590	0.4%
Cell phone	695,953	284,248	40.8%	2,473,859	1,151,698	46.6%
Refrigerator/Freezer	695,953	6,731	1.0%	2,473,859	30,376	1.2%
Computer	695,953	8,975	1.3%	2,473,859	39,792	1.6%
Vehicles	695,953	2,744	0.4%	2,473,859	13,657	0.6%
Motorcycles	695,953	1,899	0.3%	2,473,859	8,692	0.4%
Bicycles	695,953	41,216	5.9%	2,473,859	186,486	7.5%

Table 792: Percentage of private households possessing specific assets by province and area of residence

Province and Area of								Hous	ehold assets
residence	Radio	Television	Telephone (fixed line)	Cell phone	Refrigerator /Freezer	Computer	Vehicles	Motorcycles	Bicycles
Rwanda									
Urban	72.4%	35.9%	1.1%	83.7%	8.5%	12.0%	5.9%	2.9%	8.7%
Rural	62.3%	1.9%	0.4%	47.9%	0.2%	0.4%	0.3%	0.9%	15.2%
Total	64.0%	7.8%	0.5%	54.1%	1.6%	2.4%	1.3%	1.2%	14.1%
Kigali City									
Urban	74.4%	48.1%	1.3%	91.5%	13.4%	16.7%	9.1%	2.9%	5.9%
Rural	69.2%	6.8%	0.3%	65.3%	0.8%	0.8%	0.6%	1.8%	15.4%
Total	73.2%	38.1%	1.1%	85.1%	10.3%	12.9%	7.0%	2.6%	8.2%
South									
Urban	72.5%	25.1%	0.7%	75.4%	3.9%	9.3%	3.3%	3.2%	10.0%
Rural	61.1%	1.4%	0.3%	42.3%	0.2%	0.4%	0.2%	0.7%	12.5%
Total	62.0%	3.4%	0.3%	45.2%	0.5%	1.1%	0.5%	0.9%	12.3%
West									
Urban	63.8%	22.4%	1.1%	72.3%	3.2%	5.2%	2.0%	2.1%	5.9%
Rural	55.2%	1.8%	0.5%	43.9%	0.2%	0.4%	0.1%	0.5%	2.8%
Total	56.3%	4.4%	0.6%	47.4%	0.6%	1.0%	0.4%	0.7%	3.2%
North									
Urban	75.8%	24.8%	0.9%	76.8%	2.6%	7.8%	2.5%	2.8%	9.2%
Rural	66.3%	1.5%	0.4%	47.4%	0.2%	0.4%	0.3%	0.7%	9.4%
Total	67.2%	3.5%	0.4%	50.0%	0.4%	1.1%	0.5%	0.9%	9.4%
East									
Urban	72.5%	18.9%	0.7%	78.6%	2.8%	5.5%	2.4%	4.1%	24.3%
Rural	66.2%	2.1%	0.4%	55.1%	0.3%	0.4%	0.4%	1.3%	32.4%
Total	66.7%	3.4%	0.4%	56.9%	0.5%	0.8%	0.6%	1.5%	31.7%

## Annex E Sector-level tables

Table 80: Distribution (%) of private households by type of habitat and sector of residence

	i ype oi nabitat	Type of habitat							
Sector of residence	Umudugudu/ old	Dispersed/	Planned urban	Spontaneous/ squatter	Other	Not stated	Total	Count	
	settlement	isolated housing	housing	housing	Other	Not stated			
Rwanda	49.4	33.7	2.2	14.1	0.6	0.1	100.0	2,424,898	
Nyarugenge									
Gitega	3.3	0.5	0.1	95.7	0.2	0.3	100.0	7,415	
Kanyinya	3.1	51.2	0.1	45.2	0.2	0.2	100.0	5,760	
Kigali	2.9	59.4	0.6	36.9	0.2	0.1	100.0	8,116	
Kimisagara	0.7	1.9	0.5	96.5	0.1	0.2	100.0	11,648	
	5.0	58.5	0.5	33.9	2.1	0.1	100.0	6,220	
Mageregere Muhima	1.3	1.2	3.0	94.3	0.2	0.1	100.0	7,339	
Nyakabanda	0.3	1.2	1.0	97.0	0.2	0.3	100.0	6,375	
Nyamirambo	4.6	10.3	8.3	76.2	0.2	0.3	100.0	9,593	
•	5.9	0.7	9.7	81.8	0.5	1.2	100.0	5,558	
Nyarugenge			<u> </u>						
Rwezamenyo	1.9	0.7	3.0	94.0	0.3	0.1	100.0	4,256	
Gasabo									
Bumbogo	2.3	50.0	12.0	35.2	0.1	0.4	100.0	9,624	
Gatsata	1.6	1.1	4.7	91.9	0.2	0.5	100.0	10,035	
Gikomero	1.4	93.7	1.0	3.6	0.2	0.1	100.0	3,828	
Gisozi	0.8	6.4	3.2	89.0	0.3	0.5	100.0	12,199	
Jabana	6.5	64.6	3.5	23.6	1.7	0.2	100.0	8,207	
Jali	6.3	72.1	0.6	20.6	0.4	0.1	100.0	6,065	
Kacyiru	2.3	1.9	9.2	85.9	0.4	0.4	100.0	9,095	
Kimihurura	0.6	0.9	22.0	75.1	1.0	0.5	100.0	5,599	
Kimironko	6.5	1.9	27.9	62.2	0.8	0.7	100.0	13,191	
Kinyinya	2.4	9.0	6.3	81.4	0.3	0.6	100.0	16,507	
Ndera	2.7	38.6	15.7	42.7	0.1	0.2	100.0	11,208	
Nduba	5.8	69.8	0.7	23.6	0.1	0.1	100.0	6,530	
Remera	2.3	1.2	10.6	84.8	0.7	0.4	100.0	12,006	
Rusororo	7.1	41.8	12.2	38.4	0.4	0.2	100.0	8,889	
Rutunga	5.0	85.7	2.4	6.4	0.5	0.1	100.0	4,163	
Kicukiro									

	Type of habitat							
Sector of residence	Umudugudu/ old settlement	Dispersed/ isolated housing	Planned urban housing	Spontaneous/ squatter housing	Other	Not stated	Total	Count
Gahanga	4.7	47.2	5.3	42.4	0.2	0.2	100.0	7,512
Gatenga	3.6	8.1	5.7	80.7	0.7	1.2	100.0	11,999
Gikondo	2.0	1.0	16.0	79.8	0.6	0.7	100.0	4,227
Kagarama	4.8	10.3	41.0	41.1	2.4	0.4	100.0	3,265
Kanombe	4.3	9.7	7.6	77.5	0.7	0.3	100.0	10,620
Kicukiro	1.0	2.6	9.5	85.6	0.3	1.0	100.0	4,139
Kigarama	4.0	3.8	7.5	83.1	1.2	0.4	100.0	10,549
Masaka	10.7	22.4	13.2	53.3	0.3	0.1	100.0	9,995
Niboye	3.3	2.2	48.3	45.4	0.6	0.3	100.0	6,029
Nyarugunga	1.9	2.9	22.4	72.4	0.3	0.2	100.0	8,903
Nyanza								
Busasamana	12.7	51.7	1.7	32.8	1.0	0.1	100.0	10,687
Busoro	39.2	52.4	0.5	6.8	1.1	0.0	100.0	8,308
Cyabakamyi	45.9	51.6	0.1	2.0	0.2	0.1	100.0	5,579
Kibilizi	72.7	23.9	0.1	2.4	0.9	0.1	100.0	7,657
Kigoma	3.7	84.8	0.4	11.1	0.1	0.0	100.0	8,396
Mukingo	19.1	77.2	0.3	1.9	1.4	0.1	100.0	10,675
Muyira	30.8	63.8	0.3	1.1	3.9	0.1	100.0	8,750
Ntyazo	79.3	15.2	0.1	5.0	0.3	0.1	100.0	6,510
Nyagisozi	33.8	56.5	0.5	9.1	0.1	0.0	100.0	6,148
Rwabicuma	35.6	59.2	0.2	4.9	0.1	0.0	100.0	4,812
Gisagara								
Gikonko	54.5	37.2	0.1	6.5	1.7	0.1	100.0	5,580
Gishubi	65.1	33.0	0.1	1.6	0.2	0.0	100.0	5,942
Kansi	18.0	77.5	0.1	4.1	0.3	0.0	100.0	4,461
Kibirizi	30.4	67.5	0.4	0.9	0.8	0.1	100.0	6,510
Kigembe	65.1	33.8	0.1	0.8	0.2	0.0	100.0	4,801
Mamba	39.9	54.7	0.4	2.1	2.9	0.1	100.0	8,166
Muganza	77.2	21.1	0.2	0.6	0.9	0.0	100.0	6,829
Mugombwa	55.1	29.5	0.2	2.8	12.4	0.0	100.0	5,396
Mukindo	39.4	57.7	0.3	2.4	0.2	0.0	100.0	6,338
Musha	56.6	39.7	0.4	2.2	1.0	0.2	100.0	5,974
Ndora	54.4	39.0	0.3	5.5	0.8	0.0	100.0	5,867
Nyanza	79.6	16.2	0.1	4.0	0.3	0.0	100.0	4,397
Save	24.7	71.6	0.5	2.9	0.3	0.1	100.0	6,998

	Type of habitat							
Sector of residence	Umudugudu/ old settlement	Dispersed/ isolated housing	Planned urban housing	Spontaneous/ squatter housing	Other	Not stated	Total	Count
Nyaruguru								
Busanze	50.6	45.0	0.1	3.1	1.1	0.1	100.0	5,727
Cyahinda	84.3	13.7	0.1	1.2	0.1	0.6	100.0	4,624
Kibeho	67.3	31.1	0.2	0.9	0.5	0.0	100.0	4,789
Kivu	78.6	17.0	0.1	2.3	1.9	0.1	100.0	3,702
Mata	83.1	16.7	0.0	0.1	0.0	0.0	100.0	3,033
Muganza	70.4	29.1	0.1	0.2	0.3	0.0	100.0	4,113
Munini	87.5	11.5	0.1	0.1	0.8	0.0	100.0	3,420
Ngera	70.0	27.9	0.1	0.9	1.0	0.0	100.0	5,180
Ngoma	51.0	41.0	0.1	1.0	6.8	0.0	100.0	5,206
Nyabimata	69.6	28.8	0.1	1.1	0.4	0.0	100.0	3,694
Nyagisozi	77.5	21.7	0.2	0.7	0.0	0.0	100.0	4,014
Ruheru	73.8	25.4	0.1	0.1	0.6	0.0	100.0	7,081
Ruramba	64.9	34.3	0.1	0.8	0.0	0.0	100.0	3,584
Rusenge	82.9	16.3	0.2	0.5	0.0	0.0	100.0	5,446
rtuscrige	02.3	10.5	0.2	0.0	0.1	0.1	100.0	0,440
Huye								
Gishamvu	25.4	59.7	0.4	14.4	0.1	0.1	100.0	3,120
Huye	23.2	62.7	0.4	13.4	0.2	0.2	100.0	5,335
Karama	65.0	32.1	0.1	2.7	0.1	0.0	100.0	3,788
Kigoma	58.4	36.1	0.1	5.2	0.1	0.1	100.0	5,902
Kinazi	75.2	21.2	0.2	2.8	0.6	0.0	100.0	6,382
Maraba	72.5	23.8	0.2	2.9	0.7	0.0	100.0	5,716
Mbazi	41.3	55.2	0.3	3.1	0.0	0.0	100.0	7,682
Mukura	45.2	42.2	0.6	10.6	1.2	0.2	100.0	4,952
Ngoma	14.9	13.2	15.6	53.5	2.7	0.2	100.0	4,814
Ruhashya	56.8	31.1	0.1	11.8	0.2	0.0	100.0	5,498
Rusatira	63.4	32.7	0.2	3.6	0.1	0.1	100.0	6,182
Rwaniro	52.9	44.0	0.1	2.1	0.9	0.0	100.0	5,302
Simbi	62.8	32.0	0.1	3.5	1.5	0.0	100.0	5,366
Tumba	14.4	21.5	1.3	62.4	0.3	0.2	100.0	7,876
Nyamagabe								
Buruhukiro	38.0	56.7	0.4	3.9	1.0	0.1	100.0	5,214
Cyanika	68.9	28.1	0.1	2.8	0.2	0.0	100.0	5,752
Gasaka	14.0	46.0	0.4	39.3	0.2	0.1	100.0	6,050

	Type of habitat	Type of habitat									
Sector of residence	Umudugudu/ old settlement	Dispersed/ isolated housing	Planned urban housing	Spontaneous/ squatter housing	Other	Not stated	Total	Count			
Gatare	46.6	50.4	0.0	2.7	0.3	0.1	100.0	3,529			
Kaduha	39.6	58.7	0.7	0.9	0.1	0.1	100.0	4,849			
Kamegeri	52.9	42.5	0.3	2.8	1.5	0.1	100.0	3,201			
Kibirizi	63.0	33.3	0.1	3.4	0.2	0.0	100.0	4,761			
Kibumbwe	68.2	30.9	0.1	0.8	0.0	0.0	100.0	3,065			
Kitabi	5.1	75.1	0.5	19.1	0.1	0.1	100.0	5,563			
Mbazi	63.0	33.5	0.1	3.3	0.1	0.1	100.0	2,810			
Mugano	58.1	40.0	0.4	1.5	0.0	0.1	100.0	4,327			
Musange	48.9	47.4	0.1	1.2	2.3	0.0	100.0	4,575			
Musebeya	48.8	46.7	0.3	3.6	0.6	0.0	100.0	4,272			
Mushubi	46.2	52.2	0.4	1.0	0.2	0.0	100.0	2,981			
Nkomane	30.3	64.8	0.4	2.2	2.2	0.1	100.0	3,677			
Tare	28.0	63.1	0.4	7.4	1.0	0.1	100.0	5,044			
Uwinkingi	63.1	33.6	0.1	1.0	2.1	0.0	100.0	5,178			
Ruhango											
Bweramana	33.5	53.3	1.0	10.7	1.3	0.2	100.0	6,981			
Byimana	49.3	46.7	0.3	3.3	0.4	0.1	100.0	8,156			
Kabagali	26.7	70.7	0.3	1.3	0.9	0.1	100.0	5,751			
Kinazi	45.3	44.3	0.3	9.8	0.2	0.1	100.0	10,679			
Kinihira	17.5	78.8	0.3	3.3	0.0	0.1	100.0	5,916			
Mbuye	49.8	48.2	0.2	1.6	0.1	0.0	100.0	9,807			
Mwendo	27.8	67.8	0.2	4.1	0.1	0.1	100.0	6,120			
Ntongwe	52.1	44.1	0.3	2.0	1.5	0.1	100.0	7,732			
Ruhango	24.7	54.2	0.9	20.0	0.1	0.1	100.0	15,826			
Muhanga											
Cyeza	57.5	36.0	1.0	5.1	0.4	0.0	100.0	7,156			
Kabacuzi	41.6	58.0	0.3	0.1	0.1	0.0	100.0	6,110			
Kibangu	68.9	30.1	0.1	0.9	0.0	0.1	100.0	4,673			
Kiyumba	37.3	62.2	0.3	0.1	0.1	0.1	100.0	5,488			
Muhanga	45.8	53.1	0.4	0.6	0.0	0.0	100.0	5,986			
Mushishiro	50.9	48.3	0.1	0.5	0.0	0.1	100.0	4,888			
Nyabinoni	47.2	52.3	0.2	0.3	0.0	0.0	100.0	4,047			
Nyamabuye	12.1	32.6	3.1	51.4	0.6	0.2	100.0	10,966			
Nyarusange	38.9	60.1	0.4	0.5	0.1	0.1	100.0	6,054			
Rongi	41.1	56.1	0.3	2.4	0.1	0.0	100.0	6,646			

	Type of habitat	Type of habitat								
Sector of residence	Umudugudu/ old settlement	Dispersed/ isolated housing	Planned urban housing	Spontaneous/ squatter housing	Other	Not stated	Total	Count		
Rugendabari	56.8	41.2	0.2	1.8	0.0	0.0	100.0	4,015		
Shyogwe	40.2	55.6	0.7	3.4	0.1	0.1	100.0	9,178		
Kamonyi										
Gacurabwenge	58.2	35.3	0.3	5.8	0.3	0.0	100.0	6,470		
Karama	46.1	52.0	0.5	1.4	0.1	0.1	100.0	4,367		
Kayenzi	34.9	60.5	0.3	4.2	0.0	0.1	100.0	5,346		
Kayumbu	39.7	42.2	0.1	18.1	0.0	0.0	100.0	3,787		
Mugina	79.2	17.1	0.1	2.7	0.9	0.0	100.0	9,364		
Musambira	48.7	50.2	0.2	0.8	0.1	0.1	100.0	7,914		
Ngamba	26.4	73.3	0.0	0.2	0.0	0.1	100.0	3,242		
Nyamiyaga	44.6	52.5	0.5	1.1	1.3	0.0	100.0	9,293		
Nyarubaka	52.8	43.4	0.3	1.6	1.8	0.0	100.0	6,015		
Rugarika	56.6	36.9	0.3	6.2	0.0	0.0	100.0	8,510		
Rukoma	30.9	62.5	0.4	5.9	0.3	0.1	100.0	7,888		
Runda	27.5	46.8	17.2	7.9	0.5	0.1	100.0	8,272		
Karongi										
Bwishyura	26.8	42.1	0.6	28.2	2.3	0.1	100.0	7,919		
Gashari	25.7	72.8	0.3	0.7	0.3	0.3	100.0	4,693		
Gishyita	61.3	34.2	0.2	2.2	2.1	0.1	100.0	4,783		
Gitesi	31.1	67.5	0.3	0.9	0.1	0.1	100.0	5,633		
Mubuga	59.3	39.6	0.3	0.8	0.1	0.0	100.0	4,369		
Murambi	13.5	83.3	0.5	1.4	1.4	0.1	100.0	5,106		
Murundi	8.5	90.5	0.3	0.5	0.2	0.1	100.0	6,142		
Mutuntu	17.4	81.1	0.5	1.0	0.0	0.1	100.0	5,075		
Rubengera	30.0	50.4	0.4	15.5	3.6	0.1	100.0	7,869		
Rugabano	33.9	65.3	0.4	0.2	0.2	0.0	100.0	7,283		
Ruganda	23.9	74.8	0.4	0.4	0.5	0.0	100.0	4,007		
Rwankuba	39.1	58.8	0.3	1.8	0.1	0.0	100.0	4,870		
Twumba	25.8	71.3	0.4	1.5	0.8	0.1	100.0	5,577		
Rutsiro										
Boneza	51.4	48.2	0.2	0.1	0.0	0.1	100.0	4,801		
Gihango	69.0	27.2	0.2	3.2	0.3	0.1	100.0	5,244		
Kigeyo	70.1	27.9	0.1	0.7	1.1	0.1	100.0	5,153		
Kivumu	71.9	23.2	0.0	4.8	0.1	0.0	100.0	6,950		

	Type of habitat	Type of habitat									
Sector of residence	Umudugudu/ old settlement	Dispersed/ isolated housing	Planned urban housing	Spontaneous/ squatter housing	Other	Not stated	Total	Count			
Manihira	55.7	43.0	0.1	0.7	0.5	0.1	100.0	3,647			
Mukura	48.1	50.8	0.4	0.6	0.0	0.1	100.0	7,579			
Murunda	67.1	30.1	0.3	2.3	0.2	0.0	100.0	4,110			
Musasa	76.3	22.7	0.3	0.5	0.3	0.0	100.0	5,220			
Mushonyi	76.7	22.6	0.1	0.2	0.4	0.0	100.0	5,248			
Mushubati	49.1	48.5	0.2	2.0	0.0	0.1	100.0	5,878			
Nyabirasi	60.6	36.9	0.2	2.0	0.2	0.1	100.0	6,353			
Ruhango	69.5	29.0	0.2	1.3	0.0	0.0	100.0	6,166			
Rusebeya	50.0	48.5	0.1	1.3	0.0	0.1	100.0	4,918			
Rubavu											
Bugeshi	52.1	33.6	0.2	14.1	0.0	0.0	100.0	6,261			
Busasamana	16.4	76.5	0.2	6.8	0.1	0.1	100.0	6,954			
Cyanzarwe	76.2	8.9	0.1	14.7	0.1	0.1	100.0	6,628			
Gisenyi	2.4	4.6	76.4	13.9	2.7	0.2	100.0	11,968			
Kanama	53.5	30.5	1.5	13.5	0.7	0.2	100.0	6,450			
Kanzenze	36.9	51.2	3.0	8.7	0.1	0.0	100.0	4,073			
Mudende	21.6	74.6	0.2	2.9	0.6	0.1	100.0	5,664			
Nyakiriba	46.7	23.0	2.4	27.7	0.1	0.1	100.0	5,832			
Nyamyumba	28.2	17.2	0.2	54.2	0.1	0.1	100.0	8,140			
Nyundo	31.2	42.4	0.5	23.4	2.4	0.1	100.0	6,918			
Rubavu	55.6	4.2	17.8	20.2	2.1	0.1	100.0	9,753			
Rugerero	35.9	16.8	1.3	45.7	0.2	0.1	100.0	10,208			
Nyabihu											
Bigogwe	67.4	4.7	0.3	13.5	14.2	0.1	100.0	6,439			
Jenda	42.8	27.4	0.1	29.6	0.0	0.0	100.0	7,748			
Jomba	50.6	48.7	0.2	0.6	0.0	0.0	100.0	4,763			
Kabatwa	80.1	1.0	0.1	18.9	0.0	0.1	100.0	4,201			
Karago	73.6	19.0	0.2	4.6	2.6	0.1	100.0	5,735			
Kintobo	10.0	88.3	0.3	1.2	0.1	0.1	100.0	3,377			
Mukamira	44.3	27.5	0.1	27.8	0.2	0.2	100.0	6,224			
Muringa	42.3	56.8	0.3	0.6	0.0	0.1	100.0	5,133			
Rambura	28.4	54.3	0.2	16.8	0.4	0.1	100.0	6,236			
Rugera	80.3	17.7	0.1	1.6	0.2	0.1	100.0	5,724			
Rurembo	16.1	76.7	0.3	5.4	1.5	0.0	100.0	5,463			
Shyira	4.2	91.6	0.3	3.8	0.1	0.1	100.0	4,812			

	Type of habitat							
Sector of residence	Umudugudu/ old settlement	Dispersed/ isolated housing	Planned urban housing	Spontaneous/ squatter housing	Other	Not stated	Total	Count
Ngororero								
Bwira	18.9	77.7	0.5	2.9	0.1	0.0	100.0	4,421
Gatumba	24.2	71.1	0.3	4.1	0.0	0.2	100.0	5,747
Hindiro	40.9	57.0	0.3	1.7	0.1	0.1	100.0	5,633
Kabaya	26.0	58.7	0.5	14.6	0.1	0.1	100.0	7,754
Kageyo	24.8	70.8	0.6	3.7	0.0	0.2	100.0	5,432
Kavumu	29.4	68.0	0.4	2.1	0.0	0.1	100.0	6,555
Matyazo	33.9	65.7	0.3	0.1	0.0	0.0	100.0	6,113
Muhanda	28.4	68.0	0.4	3.0	0.1	0.1	100.0	6,505
Muhororo	31.7	66.3	0.4	1.6	0.0	0.0	100.0	4,972
Ndaro	16.3	82.7	0.3	0.7	0.0	0.1	100.0	5,593
Ngororero	35.7	60.2	0.5	3.5	0.0	0.0	100.0	8,471
Nyange	12.4	85.1	0.4	2.0	0.0	0.1	100.0	5,508
Sovu	12.9	84.7	0.2	2.2	0.0	0.1	100.0	6,259
	1.2.3						10010	-,
Rusizi								
Bugarama	27.9	6.9	0.3	64.4	0.1	0.3	100.0	6,683
Butare	44.3	54.6	0.3	0.5	0.0	0.3	100.0	4,082
Bweyeye	36.5	59.2	0.3	3.9	0.0	0.1	100.0	2,857
Gashonga	66.6	33.1	0.1	0.2	0.1	0.1	100.0	4,988
Giheke	55.8	43.8	0.2	0.1	0.0	0.0	100.0	4,126
Gihundwe	24.5	49.7	21.6	4.0	0.0	0.2	100.0	5,598
Gikundamvura	22.2	66.5	0.3	11.0	0.0	0.0	100.0	3,892
Gitambi	60.3	35.6	0.3	3.8	0.0	0.0	100.0	4,790
Kamembe	14.9	27.2	5.7	52.0	0.1	0.1	100.0	5,192
Muganza	12.4	57.5	0.4	29.5	0.1	0.1	100.0	5,835
Mururu	32.1	14.5	1.3	51.9	0.1	0.0	100.0	5,013
Nkanka	20.3	78.9	0.3	0.2	0.2	0.1	100.0	3,867
Nkombo	45.4	52.5	0.5	0.4	1.2	0.0	100.0	3,156
Nkungu	72.9	26.1	0.2	0.8	0.0	0.0	100.0	4,312
Nyakabuye	70.2	22.2	0.4	7.2	0.0	0.1	100.0	6,111
Nyakarenzo	74.4	13.8	0.2	10.2	1.5	0.0	100.0	3,314
Nzahaha	21.0	73.6	0.5	4.7	0.1	0.1	100.0	5,552
Rwimbogo	52.7	41.9	0.3	5.0	0.1	0.1	100.0	3,812
<u> </u>								
Nyamasheke								

	Type of habitat	Type of habitat									
Sector of residence	Umudugudu/ old settlement	Dispersed/ isolated housing	Planned urban housing	Spontaneous/ squatter housing	Other	Not stated	Total	Count			
Bushekeri	35.9	63.3	0.6	0.0	0.0	0.1	100.0	5,588			
Bushenge	78.3	20.2	0.1	1.4	0.1	0.0	100.0	4,607			
Cyato	46.9	51.7	0.3	0.8	0.1	0.1	100.0	5,000			
Gihombo	38.8	59.8	0.5	0.1	0.9	0.0	100.0	5,497			
Kagano	19.6	79.4	0.2	0.5	0.0	0.2	100.0	7,454			
Kanjongo	17.4	78.0	0.5	4.1	0.0	0.1	100.0	7,251			
Karambi	48.3	51.0	0.3	0.2	0.0	0.1	100.0	5,694			
Karengera	57.5	40.9	0.2	1.4	0.0	0.1	100.0	6,256			
Kirimbi	35.3	63.7	0.4	0.0	0.5	0.1	100.0	4,719			
Macuba	41.2	58.1	0.3	0.3	0.0	0.0	100.0	6,174			
Mahembe	42.2	52.3	0.8	0.6	4.0	0.1	100.0	3,725			
Nyabitekeri	25.5	72.0	0.4	2.1	0.1	0.0	100.0	6,081			
Rangiro	60.7	38.7	0.2	0.2	0.0	0.2	100.0	3,260			
Ruharambuga	26.6	71.2	0.4	1.7	0.0	0.1	100.0	5,206			
Shangi	74.3	24.5	0.1	0.3	0.7	0.1	100.0	5,542			
Rulindo											
Base	42.3	54.6	0.2	2.9	0.0	0.0	100.0	4,049			
Burega	16.5	81.9	0.2	0.8	0.6	0.0	100.0	3,045			
Bushoki	45.8	53.5	0.4	0.3	0.0	0.0	100.0	4,702			
Buyoga	30.6	68.2	0.4	0.8	0.0	0.0	100.0	5,070			
Cyinzuzi	7.1	92.2	0.2	0.4	0.1	0.0	100.0	3,261			
Cyungo	56.4	43.0	0.2	0.4	0.0	0.0	100.0	3,017			
Kinihira	42.4	57.2	0.1	0.1	0.0	0.1	100.0	3,473			
Kisaro	45.0	51.4	0.5	2.8	0.2	0.1	100.0	4,452			
Masoro	24.2	73.2	0.2	2.1	0.2	0.1	100.0	5,068			
Mbogo	25.1	72.1	0.3	2.0	0.4	0.0	100.0	3,834			
Murambi	16.4	79.7	0.5	3.2	0.2	0.1	100.0	4,312			
Ngoma	9.4	88.0	0.3	2.2	0.1	0.0	100.0	2,605			
Ntarabana	17.6	78.0	0.6	3.3	0.4	0.1	100.0	4,383			
Rukozo	65.9	33.8	0.2	0.1	0.0	0.0	100.0	3,421			
Rusiga	30.9	68.7	0.3	0.0	0.1	0.0	100.0	2,596			
Shyorongi	33.4	65.2	0.4	0.3	0.6	0.2	100.0	5,774			
Tumba	47.4	52.0	0.2	0.4	0.0	0.0	100.0	4,391			
Gakenke											
Busengo	92.8	6.4	0.0	0.3	0.4	0.0	100.0	4,751			

	Type of habitat							
Sector of residence	Umudugudu/ old settlement	Dispersed/ isolated housing	Planned urban housing	Spontaneous/ squatter housing	Other	Not stated	Total	Count
Coko	59.3	39.5	0.2	0.8	0.1	0.1	100.0	3,822
Cyabingo	88.3	10.8	0.1	0.6	0.2	0.1	100.0	4,066
Gakenke	72.8	15.1	1.9	3.3	6.8	0.0	100.0	5,350
Gashenyi	61.5	37.4	0.1	0.9	0.0	0.1	100.0	4,777
Janja	86.9	12.5	0.1	0.4	0.1	0.1	100.0	3,628
Kamubuga	89.8	8.7	0.1	1.4	0.0	0.0	100.0	4,833
Karambo	88.2	10.9	0.0	0.1	0.8	0.1	100.0	2,995
Kivuruga	86.6	10.2	0.1	3.1	0.0	0.0	100.0	4,026
Mataba	87.3	11.4	0.1	0.6	0.6	0.1	100.0	3,470
Minazi	87.7	12.0	0.1	0.0	0.1	0.1	100.0	3,141
Mugunga	91.2	8.2	0.0	0.4	0.1	0.1	100.0	4,706
Muhondo	52.0	42.5	0.3	5.0	0.2	0.1	100.0	4,778
Muyongwe	52.0	47.7	0.2	0.1	0.0	0.1	100.0	3,546
Muzo	80.6	18.7	0.1	0.0	0.4	0.2	100.0	5,065
Nemba	83.6	15.8	0.0	0.5	0.0	0.1	100.0	3,691
Ruli	62.0	35.3	1.5	0.9	0.2	0.2	100.0	4,678
Rusasa	74.2	25.2	0.1	0.1	0.1	0.3	100.0	4,271
Rushashi	67.4	31.4	0.2	0.8	0.0	0.2	100.0	4,166
Musanze								
Busogo	72.2	15.4	0.2	12.0	0.2	0.1	100.0	4,771
Cyuve	42.0	13.0	1.0	43.9	0.1	0.0	100.0	8,962
Gacaca	84.4	13.0	0.1	2.2	0.2	0.1	100.0	5,379
Gashaki	76.8	20.4	0.1	2.6	0.0	0.0	100.0	3,031
Gataraga	60.1	26.6	0.3	12.8	0.1	0.1	100.0	4,949
Kimonyi	28.4	68.5	0.9	2.1	0.0	0.1	100.0	3,644
Kinigi	99.6	0.1	0.0	0.1	0.2	0.0	100.0	6,311
Muhoza	16.7	12.4	22.6	47.7	0.5	0.2	100.0	12,091
Muko	91.9	7.2	0.0	0.9	0.1	0.0	100.0	4,561
Musanze	71.1	5.2	2.4	20.6	0.5	0.2	100.0	7,371
Nkotsi	94.9	3.9	0.0	1.2	0.0	0.1	100.0	3,292
Nyange	80.6	19.1	0.0	0.2	0.0	0.0	100.0	6,354
Remera	83.7	16.1	0.1	0.1	0.1	0.1	100.0	4,294
Rwaza	92.6	4.4	0.1	2.8	0.0	0.1	100.0	4,952
Shingiro	87.0	11.7	0.1	1.2	0.0	0.0	100.0	4,794
Burera								

	Type of habitat	Type of habitat									
Sector of residence	Umudugudu/ old settlement	Dispersed/ isolated housing	Planned urban housing	Spontaneous/ squatter housing	Other	Not stated	Total	Count			
Bungwe	97.1	2.8	0.0	0.0	0.0	0.0	100.0	3,360			
Butaro	79.5	18.3	0.0	1.9	0.1	0.1	100.0	6,917			
Cyanika	73.1	26.5	0.2	0.1	0.1	0.1	100.0	8,007			
Cyeru	71.3	23.9	0.5	3.9	0.5	0.1	100.0	2,832			
Gahunga	91.5	0.5	0.1	7.8	0.0	0.0	100.0	5,635			
Gatebe	78.1	18.3	0.1	3.6	0.0	0.0	100.0	3,692			
Gitovu	81.1	18.2	0.2	0.4	0.1	0.0	100.0	2,255			
Kagogo	87.1	8.9	0.1	3.9	0.0	0.1	100.0	4,249			
Kinoni	79.4	13.3	0.0	7.0	0.2	0.1	100.0	3,790			
Kinyababa	42.2	53.2	0.3	3.9	0.5	0.1	100.0	4,269			
Kivuye	87.7	11.4	0.1	0.7	0.0	0.1	100.0	3,367			
Nemba	74.5	23.8	0.2	0.3	1.2	0.1	100.0	4,200			
Rugarama	68.8	23.8	0.2	7.2	0.0	0.0	100.0	5,095			
Rugengabari	6.0	75.4	0.4	18.0	0.2	0.1	100.0	4,224			
Ruhunde	54.0	45.1	0.1	0.5	0.3	0.0	100.0	3,829			
Rusarabuye	12.2	86.1	0.2	1.5	0.0	0.0	100.0	3,886			
Rwerere	72.8	23.9	0.1	2.1	1.1	0.1	100.0	4,017			
Gicumbi											
Bukure	44.2	42.7	0.4	12.7	0.1	0.0	100.0	3,676			
Bwisige	5.6	92.5	0.3	1.5	0.0	0.0	100.0	3,366			
Byumba	19.7	55.1	9.7	13.8	1.6	0.1	100.0	8,576			
Cyumba	70.5	27.6	0.1	1.1	0.6	0.2	100.0	3,480			
Giti	60.1	34.4	0.3	5.0	0.0	0.2	100.0	3,228			
Kageyo	26.4	69.8	0.8	2.5	0.4	0.1	100.0	3,921			
Kaniga	28.5	68.9	0.1	2.4	0.0	0.1	100.0	3,404			
Manyagiro	42.6	56.1	0.3	1.0	0.1	0.1	100.0	4,400			
Miyove	32.8	66.2	0.5	0.3	0.1	0.0	100.0	3,714			
Mukarange	47.3	50.5	0.2	1.9	0.1	0.0	100.0	3,601			
Muko	54.4	38.9	0.1	6.6	0.1	0.0	100.0	4,070			
Mutete	35.4	61.4	0.3	2.5	0.3	0.0	100.0	5,347			
Nyamiyaga	62.1	37.0	0.1	0.9	0.0	0.0	100.0	4,067			
Nyankenke	25.0	72.7	0.4	1.6	0.2	0.1	100.0	4,567			
Rubaya	77.5	22.1	0.2	0.1	0.0	0.1	100.0	2,416			
Rukomo	26.0	68.0	0.3	5.6	0.0	0.1	100.0	5,458			
Rushaki	66.9	32.5	0.4	0.2	0.0	0.0	100.0	2,757			
Rutare	52.8	36.6	0.2	10.4	0.0	0.1	100.0	5,347			

	Type of habitat	Type of habitat								
Sector of residence	Umudugudu/ old settlement	Dispersed/ isolated housing	Planned urban housing	Spontaneous/ squatter housing	Other	Not stated	Total	Count		
Ruvune	34.5	64.0	0.2	1.1	0.1	0.1	100.0	4,262		
Rwamiko	62.6	34.6	0.2	2.6	0.0	0.0	100.0	2,878		
Shangasha	36.3	62.1	0.3	1.0	0.3	0.1	100.0	3,540		
Rwamagana										
Fumbwe	62.0	28.7	0.4	8.7	0.2	0.0	100.0	4,956		
Gahengeri	50.3	41.6	0.1	7.8	0.1	0.0	100.0	5,575		
Gishali	91.3	8.1	0.2	0.3	0.1	0.0	100.0	5,597		
Karenge	84.6	13.7	0.2	1.4	0.1	0.0	100.0	5,268		
Kigabiro	40.2	17.7	2.3	39.0	0.7	0.1	100.0	8,252		
Muhazi	49.9	17.2	1.3	30.4	1.1	0.1	100.0	5,923		
Munyaga	97.7	1.9	0.0	0.4	0.0	0.0	100.0	4,033		
Munyiginya	88.5	9.8	0.1	1.2	0.5	0.1	100.0	3,940		
Musha	39.1	38.7	0.2	21.7	0.2	0.1	100.0	5,037		
Muyumbu	41.5	41.8	0.6	15.9	0.1	0.2	100.0	6,058		
Mwulire	84.3	13.9	0.1	1.3	0.3	0.1	100.0	5,260		
Nyakaliro	50.3	40.7	0.5	5.5	3.0	0.0	100.0	4,841		
Nzige	59.0	39.4	0.2	0.9	0.4	0.1	100.0	3,610		
Rubona	77.4	19.0	0.2	1.0	2.3	0.0	100.0	5,825		
Nyagatare										
Gatunda	95.9	4.1	0.0	0.1	0.0	0.0	100.0	6,676		
Karama	85.0	12.7	0.1	2.2	0.0	0.0	100.0	6,226		
Karangazi	64.2	23.9	2.3	8.8	0.6	0.2	100.0	12,328		
Katabagemu	95.0	4.9	0.1	0.0	0.0	0.0	100.0	7,582		
Kiyombe	77.4	22.4	0.1	0.0	0.1	0.0	100.0	3,932		
Matimba	62.3	16.2	0.3	20.4	0.8	0.0	100.0	5,399		
Mimuri	71.2	19.7	0.1	9.0	0.0	0.0	100.0	6,745		
Mukama	62.4	19.3	0.1	17.8	0.4	0.0	100.0	5,072		
Musheri	73.9	22.1	0.2	3.8	0.1	0.0	100.0	6,653		
Nyagatare	69.3	11.3	11.3	7.7	0.3	0.1	100.0	12,350		
Rukomo	63.9	23.8	0.1	12.1	0.1	0.1	100.0	8,170		
Rwempasha	39.4	38.1	0.6	19.2	2.7	0.1	100.0	4,308		
Rwimiyaga	60.0	26.2	0.6	12.2	1.1	0.0	100.0	12,723		
Tabagwe	91.6	7.7	0.1	0.1	0.6	0.1	100.0	7,201		
Gatsibo										

	Type of habitat	Type of habitat									
Sector of residence	Umudugudu/ old settlement	Dispersed/ isolated housing	Planned urban housing	Spontaneous/ squatter housing	Other	Not stated	Total	Count			
Gasange	30.4	62.5	0.2	6.3	0.6	0.1	100.0	3,841			
Gatsibo	40.7	51.7	0.4	6.1	1.0	0.2	100.0	5,924			
Gitoki	45.8	45.2	0.3	8.3	0.4	0.1	100.0	7,750			
Kabarore	35.8	30.9	1.1	31.9	0.2	0.1	100.0	11,076			
Kageyo	60.7	34.3	0.2	4.8	0.1	0.0	100.0	5,053			
Kiramuruzi	57.2	14.2	0.2	28.1	0.4	0.0	100.0	7,404			
Kiziguro	83.0	13.6	0.0	3.4	0.0	0.0	100.0	6,765			
Muhura	44.7	51.6	0.7	2.8	0.3	0.0	100.0	6,761			
Murambi	84.5	12.1	0.2	2.9	0.3	0.0	100.0	6,683			
Ngarama	51.2	18.5	0.2	16.6	13.0	0.5	100.0	7,199			
Nyagihanga	25.4	65.1	0.6	4.4	4.5	0.1	100.0	5,624			
Remera	48.8	48.6	0.9	1.3	0.3	0.1	100.0	6,091			
Rugarama	83.5	9.2	0.3	6.4	0.6	0.1	100.0	8,427			
Rwimbogo	88.3	8.4	0.1	3.2	0.1	0.1	100.0	7,722			
Kayonza											
Gahini	73.5	19.9	0.8	5.5	0.2	0.1	100.0	7,271			
Kabare	92.8	1.5	0.2	5.0	0.5	0.0	100.0	7,837			
Kabarondo	89.8	3.9	0.4	5.8	0.0	0.1	100.0	7,497			
Mukarange	70.0	17.8	1.5	10.1	0.6	0.1	100.0	10,678			
Murama	99.8	0.1	0.0	0.1	0.0	0.0	100.0	4,684			
Murundi	69.3	18.4	0.2	11.7	0.4	0.1	100.0	8,146			
Mwiri	86.7	8.1	0.8	4.3	0.1	0.0	100.0	5,120			
Ndego	98.3	0.7	0.5	0.0	0.3	0.1	100.0	4,235			
Nyamirama	94.2	4.6	0.0	0.7	0.5	0.0	100.0	7,177			
Rukara	64.0	21.7	0.3	13.6	0.4	0.0	100.0	6,966			
Ruramira	96.1	2.7	0.1	0.8	0.2	0.1	100.0	4,203			
Rwinkwavu	97.8	1.1	0.0	0.8	0.3	0.1	100.0	6,703			
Kirehe											
Gahara	99.3	0.5	0.0	0.0	0.0	0.1	100.0	9,106			
Gatore	98.5	0.4	0.3	0.8	0.1	0.0	100.0	6,156			
Kigarama	99.3	0.5	0.0	0.1	0.0	0.0	100.0	7,104			
Kigina	98.0	0.5	1.0	0.4	0.1	0.1	100.0	6,279			
Kirehe	98.6	0.4	0.1	0.9	0.0	0.0	100.0	5,385			
Mahama	98.0	0.1	0.0	1.7	0.1	0.1	100.0	5,451			
Mpanga	98.5	0.6	0.0	0.8	0.1	0.0	100.0	7,183			

	Type of habitat	Type of habitat									
Sector of residence	Umudugudu/ old settlement	Dispersed/ isolated housing	Planned urban housing	Spontaneous/ squatter housing	Other	Not stated	Total	Count			
Musaza	99.6	0.4	0.0	0.0	0.0	0.0	100.0	5,907			
Mushikiri	98.7	1.1	0.0	0.1	0.0	0.0	100.0	6,343			
Nasho	98.5	0.7	0.3	0.5	0.1	0.1	100.0	6,016			
Nyamugari	97.9	1.2	0.1	0.8	0.0	0.1	100.0	8,568			
Nyarubuye	99.4	0.3	0.3	0.0	0.0	0.0	100.0	4,381			
Ngoma											
Gashanda	97.2	2.4	0.0	0.4	0.0	0.0	100.0	4,017			
Jarama	95.7	3.2	0.0	0.9	0.1	0.0	100.0	5,613			
Karembo	95.9	3.8	0.1	0.1	0.0	0.0	100.0	3,596			
Kazo	95.5	2.8	0.1	1.5	0.0	0.1	100.0	6,407			
Kibungo	87.9	7.5	2.3	2.1	0.2	0.1	100.0	6,368			
Mugesera	90.9	7.7	0.3	1.0	0.1	0.0	100.0	6,137			
Murama	96.1	2.9	0.2	0.8	0.1	0.0	100.0	5,296			
Mutenderi	96.1	2.7	0.1	1.1	0.0	0.0	100.0	4,874			
Remera	72.2	4.3	0.1	23.3	0.0	0.1	100.0	6,538			
Rukira	98.8	0.9	0.3	0.0	0.0	0.0	100.0	5,815			
Rukumberi	82.0	2.2	0.1	15.7	0.1	0.0	100.0	6,914			
Rurenge	95.8	3.0	0.0	1.1	0.1	0.0	100.0	6,802			
Sake	97.2	1.4	0.1	1.3	0.0	0.0	100.0	5,624			
Zaza	97.3	2.4	0.0	0.1	0.2	0.0	100.0	5,646			
Bugesera											
Gashora	96.1	2.2	0.0	1.6	0.1	0.0	100.0	5,131			
Juru	70.6	22.3	0.3	5.8	1.0	0.0	100.0	5,481			
Kamabuye	96.4	1.2	0.7	1.0	0.7	0.0	100.0	4,622			
Mareba	87.3	7.1	0.0	4.7	0.9	0.0	100.0	5,344			
Mayange	90.7	3.8	0.0	5.2	0.2	0.1	100.0	6,617			
Musenyi	62.1	31.4	0.2	4.1	2.2	0.0	100.0	7,123			
Mwogo	85.0	8.5	0.1	6.2	0.2	0.0	100.0	4,471			
Ngeruka	89.8	4.4	0.1	5.6	0.2	0.0	100.0	6,961			
Ntarama	69.2	27.7	0.8	2.2	0.1	0.0	100.0	4,827			
Nyamata	69.9	17.6	1.5	10.8	0.2	0.1	100.0	8,778			
Nyarugenge	90.4	5.0	0.5	3.3	0.9	0.0	100.0	4,893			
Rilima	72.2	22.5	0.1	4.0	1.2	0.0	100.0	5,935			
Ruhuha	86.2	3.3	0.3	9.8	0.4	0.0	100.0	5,407			
Rweru	95.8	1.7	0.1	1.6	0.6	0.2	100.0	6,399			

	Type of habitat	71:								
Sector of residence	Umudugudu/ old	Dispersed/	Planned urban	Spontaneous/ squatter	Other	Not stated	Total	Count		
	settlement	isolated housing	housing	housing	Other	NOI Stated				
Shyara	64.4	22.3	0.2	12.0	0.9	0.1	100.0	3,380		

Table 814: Distribution (%) of private households by main source of water and sector of residence

									Main so	urce of water		
				Improved	water source				Unimproved	water source		
Sector of residence	Internal pipe-borne water	Pipe-borne water in the compound	Public tap out of the compound	Protected spring/ well	Rain water	Unprotected spring/ well	River	Lake/ stream/ pond/ surface water	Other	Not stated	Total	Count
Rwanda	0.5	7.1	27.7	37.0	0.7	13.0	6.4	6.4	0.2	1.1	100.0	2,424,898
Nyarugenge												
Gitega	0.8	46.3	47.4	1.3	0.0	2.2	0.3	0.0	0.0	1.7	100.0	7,415
Kanyinya	0.1	5.0	41.2	11.8	0.2	18.6	18.8	3.4	0.2	0.8	100.0	5,760
Kigali	0.1	7.2	58.5	12.1	0.1	7.9	1.8	11.2	0.0	1.2	100.0	8,116
Kimisagara	0.6	45.8	48.7	2.4	0.1	1.0	0.0	0.0	0.0	1.3	100.0	11,648
Mageregere	0.1	1.9	53.7	27.4	1.4	3.6	8.8	2.5	0.1	0.6	100.0	6,220
Muhima	6.7	46.7	44.7	0.5	0.0	0.5	0.1	0.0	0.0	0.7	100.0	7,339
Nyakabanda	1.8	51.2	43.9	0.9	0.1	0.2	0.0	0.0	0.1	1.9	100.0	6,375
Nyamirambo	2.2	51.6	35.3	4.6	0.1	3.2	1.6	0.1	0.2	1.1	100.0	9,593
Nyarugenge	9.8	56.5	28.2	2.6	0.1	0.1	0.1	0.3	0.0	2.3	100.0	5,558
Rwezamenyo	3.1	72.7	22.9	0.1	0.0	0.0	0.0	0.0	0.0	1.1	100.0	4,256
Gasabo												
Bumbogo	0.1	4.4	30.6	33.2	0.2	21.6	5.7	3.6	0.0	0.7	100.0	9,624
Gatsata	0.6	26.1	46.6	11.8	0.1	11.5	1.9	0.0	0.0	1.5	100.0	10,035
Gikomero	0.1	0.3	33.7	42.5	0.1	16.8	3.4	2.6	0.1	0.6	100.0	3,828
Gisozi	2.3	40.5	49.9	3.3	0.0	1.9	0.8	0.0	0.0	1.3	100.0	12,199
Jabana	0.7	12.8	57.7	14.9	0.0	12.2	0.3	0.3	0.0	1.1	100.0	8,207
Jali	0.2	12.4	12.1	22.4	0.1	21.6	29.7	0.5	0.1	0.9	100.0	6,065
Kacyiru	6.8	50.1	33.9	5.8	0.0	1.8	0.2	0.0	0.0	1.4	100.0	9,095
Kimihurura	8.8	34.7	42.1	10.6	0.1	2.1	0.8	0.0	0.0	1.0	100.0	5,599
Kimironko	5.5	52.1	35.5	2.5	0.1	1.0	1.0	0.3	0.2	1.8	100.0	13,191
Kinyinya	3.1	23.9	47.9	16.0	0.0	6.1	0.7	1.0	0.0	1.3	100.0	16,507
Ndera	0.5	15.6	49.2	16.6	0.1	11.0	4.5	1.8	0.0	0.7	100.0	11,208
Nduba	0.1	1.8	21.2	49.9	0.0	19.5	4.0	2.1	0.0	1.4	100.0	6,530
Remera	4.6	38.9	45.5	6.4	0.0	2.1	1.0	0.0	0.0	1.6	100.0	12,006
Rusororo	1.1	19.8	40.2	17.6	0.1	9.3	4.4	5.6	0.6	1.5	100.0	8,889
Rutunga	0.1	0.3	29.0	55.7	0.1	10.0	1.8	2.1	0.0	1.0	100.0	4,163
Kicukiro												

									Main so	urce of water		
				Improved	water source				Unimproved	water source		
Sector of residence	Internal pipe-borne water	Pipe-borne water in the compound	Public tap out of the compound	Protected spring/ well	Rain water	Unprotected spring/ well	River	Lake/ stream/ pond/ surface water	Other	Not stated	Total	Count
Gahanga	0.1	5.5	61.1	14.3	0.1	9.8	1.2	6.8	0.3	0.9	100.0	7,512
Gatenga	1.2	36.3	41.8	9.9	0.1	6.5	1.4	0.0	0.7	2.0	100.0	11,999
Gikondo	5.3	48.2	38.4	0.2	0.1	5.5	0.0	0.8	0.1	1.4	100.0	4,227
Kagarama	6.2	45.8	32.2	12.5	0.1	0.7	0.3	0.7	0.7	0.8	100.0	3,265
Kanombe	1.9	47.9	39.0	4.4	0.0	2.0	1.4	2.4	0.1	1.0	100.0	10,620
Kicukiro	4.3	51.2	34.3	5.8	0.1	3.5	0.1	0.0	0.0	0.8	100.0	4,139
Kigarama	2.2	45.3	44.2	5.7	0.1	0.9	0.4	0.0	0.1	1.1	100.0	10,549
Masaka	0.7	29.8	59.5	0.5	0.1	0.3	3.6	4.1	0.2	1.2	100.0	9,995
Niboye	6.4	64.5	20.1	5.9	0.1	1.3	0.0	0.1	0.1	1.4	100.0	6,029
Nyarugunga	3.5	61.2	32.7	0.8	0.1	0.1	0.2	0.1	0.0	1.2	100.0	8,903
Nyanza												
Busasamana	0.5	20.2	8.1	57.0	0.1	8.7	2.4	2.4	0.1	0.6	100.0	10,687
Busoro	0.0	0.7	34.1	43.1	0.1	4.0	11.9	5.4	0.0	0.7	100.0	8,308
Cyabakamyi	0.0	0.4	5.3	60.1	0.0	21.2	1.7	10.5	0.0	0.8	100.0	5,579
Kibilizi	0.0	0.4	19.4	53.7	0.0	6.5	10.0	9.2	0.1	0.7	100.0	7,657
Kigoma	0.1	1.0	2.9	69.5	0.0	10.5	7.4	7.9	0.0	0.7	100.0	8,396
Mukingo	0.1	0.5	3.9	75.3	0.0	9.9	2.3	7.2	0.0	0.7	100.0	10,675
Muyira	0.0	0.4	2.4	64.6	0.0	6.5	11.4	13.9	0.0	0.7	100.0	8,750
Ntyazo	0.1	0.5	32.3	49.5	0.0	1.6	8.6	7.0	0.0	0.4	100.0	6,510
Nyagisozi	0.0	0.4	13.2	45.5	0.0	20.4	8.8	10.7	0.0	1.0	100.0	6,148
Rwabicuma	0.0	0.4	4.3	71.4	0.0	9.7	5.5	7.8	0.0	0.9	100.0	4,812
Gisagara												
Gikonko	0.1	1.4	19.6	49.4	0.0	6.9	7.9	13.8	0.0	0.8	100.0	5,580
Gishubi	0.1	0.3	18.8	68.9	0.0	9.7	0.4	0.7	0.0	1.2	100.0	5,942
Kansi	0.0	0.9	22.1	59.3	0.2	6.8	7.6	2.8	0.0	0.2	100.0	4,461
Kibirizi	0.3	1.8	41.2	52.8	0.0	2.4	0.5	0.0	0.0	0.9	100.0	6,510
Kigembe	0.0	0.6	0.2	91.7	0.0	3.2	1.0	2.7	0.0	0.7	100.0	4,801
Mamba	0.1	1.1	23.2	52.5	0.0	9.1	3.7	9.6	0.0	0.8	100.0	8,166
Muganza	0.0	0.4	10.4	69.0	0.1	14.8	1.7	2.6	0.0	1.0	100.0	6,829
Mugombwa	0.0	0.2	11.7	68.2	0.1	12.2	5.5	0.4	0.4	1.4	100.0	5,396
Mukindo	0.1	0.3	12.5	72.2	0.1	11.9	0.7	0.8	0.0	1.4	100.0	6,338
Musha	0.1	0.8	14.4	77.9	0.0	4.2	1.3	0.8	0.0	0.6	100.0	5,974

									Main so	urce of water		
				Improved	water source				Unimproved	water source		
Sector of residence	Internal pipe-borne water	Pipe-borne water in the compound	Public tap out of the compound	Protected spring/ well	Rain water	Unprotected spring/ well	River	Lake/ stream/ pond/ surface water	Other	Not stated	Total	Count
Ndora	0.0	0.9	10.5	75.2	0.1	8.6	2.7	1.1	0.0	0.8	100.0	5,867
Nyanza	0.0	0.2	0.5	74.3	0.0	22.0	0.8	0.9	0.0	1.3	100.0	4,397
Save	0.4	4.5	43.0	50.7	0.0	0.5	0.1	0.1	0.0	0.7	100.0	6,998
Nyaruguru												
Busanze	0.1	1.4	40.7	36.5	0.1	12.6	6.4	1.2	0.0	1.1	100.0	5,727
Cyahinda	0.1	0.3	1.4	73.0	0.0	18.6	3.6	1.0	0.0	2.0	100.0	4,624
Kibeho	0.2	2.4	26.7	48.0	0.1	16.8	3.6	1.0	0.0	1.3	100.0	4,789
Kivu	0.0	0.2	15.0	56.7	0.1	23.8	1.9	0.6	0.0	1.6	100.0	3,702
Mata	0.1	0.8	33.8	34.4	0.0	13.4	12.9	3.8	0.0	0.9	100.0	3,033
Muganza	0.0	0.3	14.5	49.9	0.1	31.0	2.3	1.5	0.0	0.6	100.0	4,113
Munini	0.0	0.1	32.4	41.7	0.0	22.1	2.7	0.2	0.0	0.7	100.0	3,420
Ngera	0.1	0.2	7.2	76.7	0.1	11.5	3.2	0.4	0.0	0.7	100.0	5,180
Ngoma	0.0	0.1	3.5	72.4	0.1	22.7	0.7	0.2	0.0	0.4	100.0	5,206
Nyabimata	0.1	0.5	7.3	43.8	0.1	33.7	10.4	3.6	0.0	0.6	100.0	3,694
Nyagisozi	0.1	0.3	5.6	81.6	0.0	7.8	3.9	0.2	0.0	0.6	100.0	4,014
Ruheru	0.0	0.3	6.9	48.8	0.1	27.0	12.3	3.4	0.0	1.3	100.0	7,081
Ruramba	0.0	0.4	10.4	46.0	0.0	23.1	9.2	10.0	0.0	0.9	100.0	3,584
Rusenge	0.0	0.3	17.5	39.4	0.0	30.8	10.4	0.9	0.0	0.6	100.0	5,446
Huye												
Gishamvu	0.0	0.3	41.3	35.4	0.1	13.0	8.5	1.0	0.1	0.4	100.0	3,120
Huye	0.2	5.0	14.5	58.9	0.0	10.0	5.7	5.1	0.0	0.7	100.0	5,335
Karama	0.1	0.6	30.9	52.0	0.0	6.1	7.6	1.2	0.1	1.5	100.0	3,788
Kigoma	0.1	1.8	13.4	57.9	0.0	21.7	3.4	1.0	0.0	0.9	100.0	5,902
Kinazi	0.1	0.3	3.1	69.5	0.0	15.3	3.3	7.9	0.0	0.5	100.0	6,382
Maraba	0.1	0.9	20.7	56.5	0.1	9.7	10.6	0.3	0.0	1.1	100.0	5,716
Mbazi	0.3	3.9	18.2	66.4	0.1	9.1	0.8	0.1	0.0	1.2	100.0	7,682
Mukura	0.2	4.8	20.1	51.6	0.0	19.0	1.3	2.1	0.0	1.0	100.0	4,952
Ngoma	9.9	41.7	21.2	20.1	0.0	4.2	2.1	0.0	0.0	0.8	100.0	4,814
Ruhashya	0.1	0.6	16.2	70.8	0.0	7.9	0.3	2.9	0.0	1.2	100.0	5,498
Rusatira	0.6	1.4	13.6	62.8	0.0	11.5	4.4	4.6	0.0	1.2	100.0	6,182
Rwaniro	0.0	0.4	12.5	75.7	0.0	6.3	3.0	1.1	0.1	0.9	100.0	5,302
Simbi	0.1	0.5	10.2	81.3	0.0	6.3	0.8	0.2	0.0	0.7	100.0	5,366

									Main so	urce of water		
				Improved	water source				Unimproved	water source		
Sector of residence	Internal pipe-borne water	Pipe-borne water in the compound	Public tap out of the compound	Protected spring/ well	Rain water	Unprotected spring/ well	River	Lake/ stream/ pond/ surface water	Other	Not stated	Total	Count
Tumba	1.3	31.8	37.5	23.3	0.1	3.2	1.2	0.4	0.0	1.2	100.0	7,876
Nyamagabe												
Buruhukiro	0.0	0.4	10.4	51.2	0.1	22.3	5.5	9.0	0.0	1.1	100.0	5,214
Cyanika	0.1	2.5	7.1	72.9	0.1	12.6	2.0	2.1	0.0	0.6	100.0	5,752
Gasaka	0.6	24.6	14.6	41.6	0.1	10.9	4.4	2.1	0.1	1.0	100.0	6,050
Gatare	0.0	0.3	10.8	59.6	0.0	20.0	4.3	3.9	0.0	1.2	100.0	3,529
Kaduha	0.4	2.6	20.6	35.4	0.0	20.3	11.4	8.4	0.2	0.8	100.0	4,849
Kamegeri	0.0	1.5	10.4	60.3	0.1	15.2	6.1	5.7	0.0	0.8	100.0	3,201
Kibirizi	0.1	1.9	15.2	61.4	0.0	15.7	1.5	3.0	0.0	1.1	100.0	4,761
Kibumbwe	0.2	0.5	38.6	39.8	0.0	13.0	4.7	2.6	0.0	0.6	100.0	3,065
Kitabi	0.9	1.7	3.1	66.8	0.1	19.2	4.0	3.4	0.1	0.8	100.0	5,563
Mbazi	0.1	0.9	6.8	64.3	0.0	15.7	1.5	9.8	0.0	0.9	100.0	2,810
Mugano	0.1	0.4	11.2	46.8	0.0	17.7	18.5	3.8	0.1	1.4	100.0	4,327
Musange	0.1	0.2	9.5	70.6	0.0	8.4	6.4	3.8	0.0	1.1	100.0	4,575
Musebeya	0.0	0.6	12.2	44.7	0.1	18.4	9.9	13.1	0.5	0.5	100.0	4,272
Mushubi	0.2	1.4	25.3	33.2	0.0	20.2	1.0	18.1	0.1	0.5	100.0	2,981
Nkomane	0.0	0.6	10.9	33.7	0.1	19.8	5.1	27.7	1.5	0.6	100.0	3,677
Tare	0.1	5.2	7.5	63.1	0.0	9.3	5.8	8.3	0.2	0.6	100.0	5,044
Uwinkingi	0.2	0.8	11.5	59.3	0.0	18.8	4.4	3.9	0.0	1.1	100.0	5,178
Ruhango												
Bweramana	0.4	0.7	4.0	66.4	0.1	10.5	1.9	14.3	0.0	1.7	100.0	6,981
	0.4	3.4	7.1	70.7	0.0		4.9	8.0	0.0	1.7	100.0	8,156
Byimana Kabagali	0.1	0.1	4.4	69.1	0.0	4.8 17.5	2.1	5.9	0.0	0.8	100.0	5,751
Kabagaii	0.0	1.6	30.8	29.8	0.0	16.7	8.5	11.5	0.0	0.8	100.0	10,679
Kinazi	0.2	0.5	7.7	29.8 65.8	0.0	9.6	5.3	10.1	0.0	0.9	100.0	5,916
Mbuye	0.1	0.5	5.1	38.7	0.0	11.9	17.5	25.1	0.0	1.1	100.0	9,807
Mwendo	0.0	0.4	16.0	60.3	0.0	13.3	4.2	4.7	0.0	1.0	100.0	6,120
	0.1	0.5	4.1	38.5	0.0	25.5	15.5	14.9	0.0	1.3	100.0	7,732
Ntongwe	0.0	6.4	7.0	63.2	0.0	9.4	3.5	9.3	0.0	1.0	100.0	15,826
Ruhango	0.2	0.4	7.0	63.2	0.0	9.4	3.5	9.3	0.0	1.0	100.0	15,826
Muhanga												
Cyeza	0.3	2.2	7.2	72.8	0.0	12.1	1.5	2.7	0.0	1.2	100.0	7,156

									Main so	urce of water		
				Improved	water source				Unimproved	water source		
Sector of residence	Internal pipe-borne water	Pipe-borne water in the compound	Public tap out of the compound	Protected spring/ well	Rain water	Unprotected spring/ well	River	Lake/ stream/ pond/ surface water	Other	Not stated	Total	Count
Kabacuzi	0.1	0.8	8.0	69.9	0.1	17.2	1.8	0.9	0.0	1.4	100.0	6,110
Kibangu	0.1	3.8	31.7	57.5	0.0	3.0	2.4	0.0	0.0	1.4	100.0	4,673
Kiyumba	0.1	2.0	10.2	72.4	0.0	10.2	3.4	0.7	0.0	1.1	100.0	5,488
Muhanga	0.1	1.1	9.1	61.7	0.0	22.4	2.6	2.4	0.0	0.5	100.0	5,986
Mushishiro	0.1	0.7	9.0	52.7	0.0	32.1	3.0	1.5	0.0	0.9	100.0	4,888
Nyabinoni	0.1	0.8	40.4	27.0	0.2	13.4	16.9	0.2	0.0	1.0	100.0	4,047
Nyamabuye	1.1	36.3	6.8	50.6	0.0	3.5	0.5	0.2	0.2	0.9	100.0	10,966
Nyarusange	0.1	0.6	7.2	70.0	0.0	10.7	7.5	3.3	0.0	0.7	100.0	6,054
Rongi	0.0	0.5	19.5	48.7	0.1	12.0	17.4	0.6	0.0	1.2	100.0	6,646
Rugendabari	0.4	2.2	26.5	41.8	0.1	26.9	1.1	0.7	0.0	0.5	100.0	4,015
Shyogwe	0.2	11.9	2.1	73.4	0.0	8.8	1.3	1.8	0.0	0.5	100.0	9,178
Kamonyi												
,	0.1	1.8	17.2	61.3	0.0	10.0	2.5	6.2	0.0	1.0	100.0	6,470
Gacurabwenge Karama	0.1	0.4	0.8	77.7	0.0	12.3	1.7	6.1	0.0	0.8	100.0	4,367
Kayenzi	0.1	0.4	3.0	77.8	0.1	12.3	2.9	2.9	0.0	1.1	100.0	5,346
Kayumbu	0.0	0.4	8.8	62.1	0.0	15.1	4.9	7.2	0.0	1.4	100.0	3,787
Mugina	0.1	1.2	27.4	47.8	0.0	6.9	3.3	12.4	0.0	0.9	100.0	9,364
Musambira	0.1	1.2	12.9	48.9	0.0	17.0	3.0	15.3	0.0	1.4	100.0	7,914
Ngamba	0.2	0.3	30.0	42.1	0.2	8.5	16.9	0.0	0.0	2.1	100.0	3,242
Nyamiyaga	0.0	0.5	6.3	61.0	0.0	14.5	7.3	9.5	0.0	0.8	100.0	9,293
Nyarubaka	0.0	0.2	7.8	54.5	0.1	7.5	8.0	20.9	0.1	0.8	100.0	6,015
Rugarika	0.0	0.9	4.9	60.8	0.1	7.8	12.5	12.1	0.0	0.9	100.0	8,510
Rukoma	0.2	2.1	39.3	41.1	0.2	13.4	2.1	0.5	0.0	1.1	100.0	7,888
Runda	0.2	5.8	20.6	41.0	0.1	16.0	9.0	6.2	0.0	1.2	100.0	8,272
Karongi												
Bwishyura	1.0	21.4	31.6	17.4	0.1	6.6	9.0	11.4	0.7	0.9	100.0	7,919
Gashari	0.2	3.9	13.2	54.4	0.2	9.6	15.6	1.3	0.1	1.5	100.0	4,693
Gishyita	0.3	2.0	12.7	44.1	0.1	12.9	2.1	24.7	0.0	1.0	100.0	4,783
Gitesi	0.0	0.7	29.3	38.7	0.1	9.0	16.6	4.4	0.1	1.2	100.0	5,633
Mubuga	0.2	0.9	14.2	65.0	0.1	5.2	4.3	9.1	0.1	1.1	100.0	4,369
Murambi	0.3	1.4	11.9	77.9	0.0	4.6	2.7	0.5	0.0	0.7	100.0	5,106
Murundi	0.1	1.2	13.8	58.4	0.0	12.8	12.4	0.2	0.0	1.2	100.0	6,142

									Main so	urce of water		
				Improved	water source				Unimproved	water source		
Sector of residence	Internal pipe-borne water	Pipe-borne water in the compound	Public tap out of the compound	Protected spring/ well	Rain water	Unprotected spring/ well	River	Lake/ stream/ pond/ surface water	Other	Not stated	Total	Count
Mutuntu	0.1	0.2	5.1	52.6	0.1	26.9	8.4	5.7	0.0	1.1	100.0	5,075
Rubengera	0.3	7.1	35.6	31.4	0.0	4.1	16.1	4.5	0.5	0.5	100.0	7,869
Rugabano	0.1	0.6	14.7	64.2	0.1	11.9	6.3	1.2	0.0	1.0	100.0	7,283
Ruganda	0.2	0.8	6.1	60.5	0.0	16.0	11.9	4.0	0.0	0.6	100.0	4,007
Rwankuba	0.2	0.2	8.9	58.0	0.0	19.8	8.3	3.3	0.0	1.2	100.0	4,870
Twumba	0.7	0.8	10.4	46.1	0.0	28.5	9.1	3.2	0.0	1.1	100.0	5,577
Rutsiro												
Boneza	0.0	0.5	5.1	60.9	0.0	17.0	3.0	12.1	0.0	1.4	100.0	4,801
Gihango	0.2	4.2	18.5	44.6	0.0	19.2	5.6	5.5	0.3	2.0	100.0	5,244
Kigeyo	0.5	0.7	8.9	66.2	0.1	9.3	9.3	3.6	0.0	1.4	100.0	5,153
Kivumu	0.3	1.0	17.3	64.5	0.0	7.0	1.1	7.0	0.0	1.9	100.0	6,950
Manihira	0.1	0.6	10.9	57.0	0.1	22.4	2.9	3.6	1.1	1.3	100.0	3,647
Mukura	0.1	0.7	9.3	52.0	0.0	14.5	17.6	3.6	0.8	1.5	100.0	7,579
Murunda	0.2	1.8	13.6	46.5	0.1	27.9	6.7	0.9	0.6	1.7	100.0	4,110
Musasa	0.1	0.3	4.2	74.2	0.1	16.3	1.8	2.5	0.0	0.5	100.0	5,220
Mushonyi	0.4	0.7	18.6	64.9	0.0	8.3	2.6	3.5	0.0	1.0	100.0	5,248
Mushubati	0.2	2.0	13.4	61.3	0.1	7.9	6.8	6.5	0.0	1.8	100.0	5,878
Nyabirasi	0.1	0.3	15.1	55.4	0.1	22.0	5.6	0.4	0.0	1.2	100.0	6,353
Ruhango	0.1	1.2	2.4	49.9	0.3	33.1	11.2	1.1	0.0	0.8	100.0	6,166
Rusebeya	0.0	0.3	7.3	53.9	0.0	30.3	4.3	2.0	0.0	1.9	100.0	4,918
Rubavu												
Bugeshi	0.0	0.2	36.7	2.7	56.1	0.2	2.7	0.1	0.1	1.5	100.0	6,261
Busasamana	0.0	0.8	97.3	0.2	0.2	0.1	0.0	0.0	0.0	1.4	100.0	6,954
Cyanzarwe	0.1	0.4	88.8	2.5	0.0	0.5	6.5	0.0	0.0	1.2	100.0	6,628
Gisenyi	2.3	67.7	24.9	2.7	0.2	0.3	0.0	0.1	0.1	1.8	100.0	11,968
Kanama	0.3	3.1	37.6	46.4	0.0	6.3	5.2	0.3	0.0	0.9	100.0	6,450
Kanzenze	0.3	1.2	89.4	0.1	0.1	0.3	7.6	0.0	0.0	1.2	100.0	4,073
Mudende	0.0	0.5	79.7	2.3	8.2	0.0	7.8	0.0	0.0	1.5	100.0	5,664
Nyakiriba	0.2	5.3	67.7	2.5	0.1	4.0	18.6	0.0	0.0	1.8	100.0	5,832
Nyamyumba	0.3	4.2	25.3	50.4	0.0	7.7	3.8	6.8	0.1	1.3	100.0	8,140
Nyundo	0.4	1.5	21.5	61.5	0.0	12.1	1.8	0.4	0.0	0.7	100.0	6,918
Rubavu	0.1	7.3	88.7	1.7	0.1	0.0	0.0	0.0	0.0	2.0	100.0	9,753

									Main so	urce of water		
				Improved	water source				Unimproved	water source		
Sector of residence	Internal pipe-borne water	Pipe-borne water in the compound	Public tap out of the compound	Protected spring/ well	Rain water	Unprotected spring/ well	River	Lake/ stream/ pond/ surface water	Other	Not stated	Total	Count
Rugerero	0.3	7.1	74.4	4.9	0.1	5.2	6.8	0.0	0.0	1.2	100.0	10,208
Nyabihu												
Bigogwe	0.0	0.7	69.2	10.9	8.0	7.8	2.1	0.0	0.0	1.3	100.0	6,439
Jenda	0.1	8.0	24.6	27.9	14.9	27.3	3.5	0.1	0.0	0.8	100.0	7,748
Jomba	0.1	0.7	20.3	64.4	0.0	10.7	2.4	8.0	0.0	0.6	100.0	4,763
Kabatwa	0.0	0.4	4.3	0.1	93.4	0.1	0.6	0.0	0.0	1.1	100.0	4,201
Karago	0.4	0.4	12.8	66.0	0.0	14.4	2.2	2.9	0.0	1.0	100.0	5,735
Kintobo	0.0	0.5	2.6	49.1	0.1	43.1	3.3	0.5	0.0	0.9	100.0	3,377
Mukamira	0.1	1.6	48.3	24.0	1.8	17.6	0.3	4.2	0.2	2.1	100.0	6,224
Muringa	0.0	0.5	0.5	73.8	0.0	16.2	1.2	6.7	0.0	1.0	100.0	5,133
Rambura	0.2	1.2	12.5	70.0	0.0	10.4	1.1	3.3	0.1	1.2	100.0	6,236
Rugera	0.1	1.9	25.4	46.7	0.0	8.4	11.9	3.2	0.1	2.3	100.0	5,724
Rurembo	0.0	0.1	17.9	63.4	0.0	12.6	2.5	2.5	0.0	0.9	100.0	5,463
Shyira	0.2	1.0	31.6	40.3	0.0	6.7	14.3	5.2	0.0	0.9	100.0	4,812
Ngororero												
Bwira	0.1	0.4	4.8	77.1	0.1	14.4	1.5	0.4	0.0	1.2	100.0	4,421
Gatumba	0.3	3.3	10.6	70.2	0.0	12.7	1.1	0.6	0.0	1.3	100.0	5,747
Hindiro	0.3	1.8	15.0	59.3	0.0	17.6	1.9	3.1	0.0	1.1	100.0	5,633
Kabaya	0.2	2.2	15.9	50.5	0.0	22.4	0.1	7.0	0.0	1.7	100.0	7,754
Kageyo	0.1	0.3	3.8	53.6	0.1	23.5	3.4	13.5	0.2	1.5	100.0	5,432
Kavumu	0.1	0.3	2.6	51.9	0.1	30.3	6.4	6.5	0.0	1.7	100.0	6,555
Matyazo	0.1	0.3	8.1	53.1	0.1	16.8	9.3	10.5	0.0	1.7	100.0	6,113
Muhanda	0.2	0.3	13.4	40.6	0.1	39.9	1.3	2.4	0.1	1.9	100.0	6,505
Muhororo	0.1	1.0	7.7	80.5	0.0	9.5	0.3	0.0	0.0	1.0	100.0	4,972
Ndaro	0.0	0.5	9.9	54.9	0.0	30.3	1.5	1.8	0.0	0.9	100.0	5,593
Ngororero	0.1	0.8	14.7	67.9	0.2	10.9	2.2	2.2	0.0	1.1	100.0	8,471
Nyange	0.1	1.4	11.3	69.7	0.0	10.8	5.4	0.2	0.0	1.1	100.0	5,508
Sovu	0.1	0.3	4.8	46.4	0.1	36.1	3.2	7.2	0.0	1.9	100.0	6,259
Rusizi												
Bugarama	0.2	6.3	67.3	0.1	0.0	1.8	23.2	0.0	0.0	1.1	100.0	6,683
Butare	0.1	0.1	2.1	23.7	0.0	69.0	2.0	2.0	0.0	1.1	100.0	4,082

									Main so	urce of water		
				Improved	water source				Unimproved	water source		
Sector of residence	Internal pipe-borne water	Pipe-borne water in the compound	Public tap out of the compound	Protected spring/ well	Rain water	Unprotected spring/ well	River	Lake/ stream/ pond/ surface water	Other	Not stated	Total	Count
Bweyeye	0.1	0.6	26.4	22.0	0.2	40.9	7.1	1.9	0.0	0.8	100.0	2,857
Gashonga	0.4	1.2	51.5	20.4	0.0	17.5	6.3	1.7	0.0	0.9	100.0	4,988
Giheke	0.6	0.9	4.1	43.0	0.2	39.8	9.4	0.9	0.1	1.1	100.0	4,126
Gihundwe	0.5	18.0	16.0	31.8	0.1	14.8	12.2	4.9	0.1	1.5	100.0	5,598
Gikundamvura	0.1	0.7	61.2	3.9	0.1	18.5	14.2	0.0	0.1	1.3	100.0	3,892
Gitambi	0.2	2.9	39.7	17.3	0.1	31.4	6.9	0.7	0.0	0.9	100.0	4,790
Kamembe	2.3	44.1	24.6	14.1	0.1	9.4	4.0	0.4	0.1	1.1	100.0	5,192
Muganza	0.3	6.5	47.5	4.6	0.1	1.4	36.2	1.7	0.3	1.4	100.0	5,835
Mururu	0.4	5.0	29.8	32.9	0.0	23.4	5.9	1.2	0.3	1.2	100.0	5,013
Nkanka	0.1	1.1	23.4	55.9	0.0	8.9	2.0	7.6	0.1	1.0	100.0	3,867
Nkombo	0.1	0.2	3.0	82.7	0.0	1.6	0.0	11.7	0.0	0.7	100.0	3,156
Nkungu	0.1	0.6	17.2	53.0	0.1	25.5	1.0	1.6	0.0	1.1	100.0	4,312
Nyakabuye	0.1	3.1	24.9	31.6	0.1	31.1	6.1	1.7	0.0	1.3	100.0	6,111
Nyakarenzo	0.2	0.5	9.6	46.1	0.1	26.8	5.2	10.5	0.0	1.0	100.0	3,314
Nzahaha	0.1	0.8	72.2	12.8	0.0	10.1	2.7	0.1	0.0	1.4	100.0	5,552
Rwimbogo	0.3	3.5	63.7	14.1	0.0	13.8	3.4	0.0	0.0	1.2	100.0	3,812
Nyamasheke												
Bushekeri	0.8	2.7	23.6	27.5	0.0	36.2	5.3	2.8	0.0	1.1	100.0	5,588
Bushenge	0.4	2.6	46.3	31.3	0.1	9.6	7.0	0.3	1.7	0.7	100.0	4,607
Cyato	0.0	0.2	8.4	34.3	0.1	39.5	13.6	2.9	0.0	0.9	100.0	5,000
Gihombo	0.0	0.4	20.8	44.2	0.1	21.7	4.1	8.0	0.0	0.6	100.0	5,497
Kagano	0.3	5.7	32.8	15.6	0.1	22.8	7.5	14.0	0.1	1.1	100.0	7,454
Kanjongo	0.7	9.1	23.7	22.0	0.1	28.7	7.9	6.3	0.1	1.3	100.0	7,251
Karambi	0.2	0.8	29.6	20.5	0.0	45.5	1.8	0.3	0.0	1.3	100.0	5,694
Karengera	0.1	1.2	7.9	54.9	0.0	28.9	4.1	1.1	0.0	1.8	100.0	6,256
Kirimbi	0.6	0.8	9.1	52.7	0.0	22.6	8.2	4.9	0.1	1.1	100.0	4,719
Macuba	0.1	1.2	11.2	41.8	0.0	34.9	4.0	6.0	0.0	0.8	100.0	6,174
Mahembe	0.3	0.6	17.9	47.5	0.1	26.3	6.4	0.0	0.0	0.9	100.0	3,725
Nyabitekeri	0.1	1.4	48.1	34.2	0.0	2.5	2.4	10.5	0.0	0.8	100.0	6,081
Rangiro	0.0	1.0	14.9	46.4	0.0	23.6	9.6	3.1	0.2	1.1	100.0	3,260
Ruharambuga	0.4	3.2	16.2	35.9	0.1	37.2	2.7	2.9	0.0	1.4	100.0	5,206
Shangi	0.4	2.6	46.7	34.0	0.0	6.2	3.3	5.1	0.0	1.8	100.0	5,542

									Main so	urce of water		
				Improved	water source				Unimproved	water source		
Sector of residence	Internal pipe-borne water	Pipe-borne water in the compound	Public tap out of the compound	Protected spring/ well	Rain water	Unprotected spring/ well	River	Lake/ stream/ pond/ surface water	Other	Not stated	Total	Count
Rulindo												
Base	0.1	2.4	21.0	43.3	0.0	25.2	4.4	0.0	2.6	0.9	100.0	4,049
Burega	0.0	0.4	17.1	67.9	0.1	3.7	10.3	0.1	0.0	0.2	100.0	3,045
Bushoki	0.4	4.5	21.1	49.4	0.2	22.1	0.9	0.7	0.0	0.9	100.0	4,702
Buyoga	0.0	0.2	4.4	69.8	0.1	12.9	11.4	0.5	0.0	0.6	100.0	5,070
Cyinzuzi	0.0	0.9	17.5	43.4	0.1	18.7	18.1	0.4	0.2	0.7	100.0	3,261
Cyungo	0.0	0.9	10.3	82.1	0.1	5.4	0.1	0.0	0.0	1.1	100.0	3,017
Kinihira	0.5	2.7	22.5	62.6	0.0	8.5	2.1	0.3	0.0	0.8	100.0	3,473
Kisaro	0.1	0.5	14.8	65.8	0.4	13.8	3.3	0.0	0.0	1.4	100.0	4,452
Masoro	0.1	1.9	35.6	38.2	0.1	22.4	0.6	0.0	0.0	1.1	100.0	5,068
Mbogo	0.1	1.4	20.6	53.0	0.2	16.6	4.8	3.0	0.2	0.3	100.0	3,834
Murambi	0.0	2.3	31.3	56.1	0.1	5.3	3.3	0.8	0.0	0.8	100.0	4,312
Ngoma	0.1	0.9	5.8	51.1	0.2	22.3	15.2	3.3	0.4	0.7	100.0	2,605
Ntarabana	0.1	1.7	58.8	28.1	0.0	4.0	5.4	0.7	0.0	1.3	100.0	4,383
Rukozo	0.0	0.2	0.3	85.0	0.0	8.7	4.0	0.0	0.1	1.8	100.0	3,421
Rusiga	0.0	1.0	19.1	49.5	0.9	12.4	16.6	0.0	0.0	0.4	100.0	2,596
Shyorongi	0.2	3.7	38.6	20.6	0.1	8.1	24.7	3.0	0.0	0.9	100.0	5,774
Tumba	0.1	1.2	8.2	74.6	0.0	14.1	0.9	0.1	0.0	0.7	100.0	4,391
Gakenke												
Busengo	0.1	0.3	10.2	73.6	0.1	13.9	0.8	0.0	0.0	1.0	100.0	4,751
Coko	0.0	0.5	24.5	27.4	1.8	44.4	0.3	0.1	0.0	1.1	100.0	3,822
Cyabingo	0.2	0.7	2.6	85.5	0.0	9.2	0.4	0.0	0.0	1.4	100.0	4,066
Gakenke	0.1	3.3	20.4	59.4	0.0	13.6	2.0	0.1	0.2	1.0	100.0	5,350
Gashenyi	0.1	0.4	12.9	68.3	0.0	16.4	0.7	0.1	0.0	1.1	100.0	4,777
Janja	0.5	0.9	18.1	66.3	0.0	11.3	2.3	0.1	0.0	0.6	100.0	3,628
Kamubuga	0.0	0.1	17.4	56.8	0.1	19.9	4.7	0.1	0.0	1.0	100.0	4,833
Karambo	0.0	0.7	12.1	69.1	0.1	7.6	8.4	0.0	0.5	1.5	100.0	2,995
Kivuruga	0.2	1.2	27.8	43.1	0.1	18.1	7.9	0.0	0.6	1.2	100.0	4,026
Mataba	0.1	0.3	3.5	33.4	0.0	58.2	2.8	0.2	0.1	1.5	100.0	3,470
Minazi	0.0	0.6	9.4	32.2	0.9	52.2	3.2	0.4	0.0	1.2	100.0	3,141
Mugunga	0.1	0.4	28.4	47.3	0.0	17.8	4.1	1.1	0.0	0.8	100.0	4,706
Muhondo	0.2	4.0	37.8	43.1	0.1	11.8	1.7	0.4	0.0	0.9	100.0	4,778
Muyongwe	0.3	2.8	32.5	31.1	0.0	18.3	12.6	0.6	0.0	1.7	100.0	3,546

									Main so	urce of water		
				Improved	water source				Unimproved	water source		
Sector of residence	Internal pipe-borne water	Pipe-borne water in the compound	Public tap out of the compound	Protected spring/ well	Rain water	Unprotected spring/ well	River	Lake/ stream/ pond/ surface water	Other	Not stated	Total	Count
Muzo	0.5	0.3	14.0	32.7	0.1	34.1	16.7	0.2	0.0	1.6	100.0	5,065
Nemba	0.4	3.8	51.8	27.1	0.0	12.3	3.0	0.1	0.1	1.6	100.0	3,691
Ruli	0.5	5.3	29.5	41.3	0.1	21.0	1.2	0.2	0.0	0.9	100.0	4,678
Rusasa	0.1	0.4	3.8	67.6	0.1	17.9	6.9	1.7	0.1	1.3	100.0	4,271
Rushashi	0.2	3.4	16.5	60.9	0.1	14.6	2.1	1.2	0.2	0.9	100.0	4,166
Musanze												
Busogo	0.3	2.7	57.6	29.5	0.0	5.4	2.7	0.5	0.0	1.2	100.0	4,771
Cyuve	0.5	12.1	82.7	1.8	0.0	1.3	0.2	0.0	0.0	1.4	100.0	8,962
Gacaca	0.2	1.1	11.3	60.0	0.1	16.3	6.5	2.5	0.4	1.6	100.0	5,379
Gashaki	0.1	0.8	22.1	64.8	0.0	3.0	0.2	8.0	0.0	1.1	100.0	3,031
Gataraga	0.4	1.8	42.6	14.0	2.5	11.7	24.1	1.1	0.0	1.9	100.0	4,949
Kimonyi	0.1	3.4	62.0	5.4	0.5	0.4	27.1	0.0	0.0	1.1	100.0	3,644
Kinigi	0.2	3.1	59.9	2.2	6.3	4.3	10.1	12.9	0.1	0.9	100.0	6,311
Muhoza	1.7	36.0	37.1	12.7	0.0	4.2	5.1	0.6	0.1	2.6	100.0	12,091
Muko	0.1	2.1	78.1	8.8	0.0	1.8	7.7	0.0	0.0	1.3	100.0	4,561
Musanze	0.3	7.4	85.5	0.1	0.4	0.1	4.7	0.0	0.0	1.6	100.0	7,371
Nkotsi	0.2	2.1	58.8	16.7	0.1	12.1	6.2	3.1	0.0	0.7	100.0	3,292
Nyange	0.1	2.2	89.3	2.0	0.8	0.1	4.1	0.0	0.1	1.3	100.0	6,354
Remera	0.1	0.7	20.5	72.5	0.0	3.1	0.1	1.4	0.3	1.4	100.0	4,294
Rwaza	0.0	0.3	9.6	79.0	0.1	5.9	3.8	0.0	0.0	1.3	100.0	4,952
Shingiro	0.1	0.2	39.5	1.4	7.0	19.9	22.7	1.6	6.6	1.2	100.0	4,794
Burera												
Bungwe	0.0	0.6	4.7	48.6	0.7	23.4	21.2	0.0	0.0	0.8	100.0	3,360
Butaro	0.7	0.9	26.6	49.1	0.0	17.7	1.6	2.0	0.0	1.4	100.0	6,917
Cyanika	0.1	1.1	69.7	0.2	27.1	0.2	0.5	0.0	0.0	1.1	100.0	8,007
Cyeru	0.3	0.9	17.7	76.7	0.2	2.4	0.7	0.3	0.1	0.9	100.0	2,832
Gahunga	0.2	1.9	89.2	3.9	0.2	0.9	2.8	0.0	0.0	0.9	100.0	5,635
Gatebe	0.1	0.2	3.0	71.5	0.0	13.1	5.9	5.7	0.1	0.5	100.0	3,692
Gitovu	0.1	0.3	11.7	58.5	0.1	13.4	5.1	9.6	0.0	1.1	100.0	2,255
Kagogo	0.1	1.5	56.3	16.3	0.1	4.0	6.6	14.3	0.0	1.0	100.0	4,249
Kinoni	0.6	2.0	31.7	16.9	0.2	24.4	15.9	6.7	0.0	1.7	100.0	3,790
Kinyababa	0.1	0.6	12.2	50.0	0.1	20.0	6.2	10.2	0.0	0.8	100.0	4,269

									Main so	urce of water		
				Improved	water source				Unimproved	water source		
Sector of residence	Internal pipe-borne water	Pipe-borne water in the compound	Public tap out of the compound	Protected spring/ well	Rain water	Unprotected spring/ well	River	Lake/ stream/ pond/ surface water	Other	Not stated	Total	Count
Kivuye	0.0	0.2	8.1	60.9	0.4	22.3	4.0	3.5	0.0	0.6	100.0	3,367
Nemba	0.1	2.2	19.2	63.2	0.1	7.7	5.8	0.1	0.1	1.5	100.0	4,200
Rugarama	0.1	0.9	75.6	0.0	5.0	0.0	4.8	13.2	0.0	0.4	100.0	5,095
Rugengabari	0.1	0.4	5.5	77.9	0.1	12.8	2.0	0.2	0.1	1.0	100.0	4,224
Ruhunde	0.1	0.2	11.8	77.0	0.0	5.1	0.1	4.9	0.0	0.8	100.0	3,829
Rusarabuye	0.4	2.5	20.1	66.0	0.1	5.9	1.1	3.0	0.1	0.9	100.0	3,886
Rwerere	0.1	0.6	15.4	53.2	0.1	17.2	1.2	11.3	0.0	1.1	100.0	4,017
Gicumbi												
Bukure	0.3	0.2	17.7	44.0	0.3	11.7	17.9	7.0	0.0	1.0	100.0	3,676
Bwisige	0.0	0.6	16.3	37.4	1.0	15.5	27.8	0.3	0.1	1.1	100.0	3,366
Byumba	0.8	25.0	21.2	33.4	0.3	15.5	1.8	0.4	0.0	1.5	100.0	8,576
Cyumba	0.0	1.2	11.4	76.6	0.6	8.5	8.0	0.0	0.1	0.9	100.0	3,480
Giti	0.0	0.1	15.3	39.2	0.2	17.1	19.8	4.2	1.5	2.8	100.0	3,228
Kageyo	0.2	8.2	8.1	58.7	0.1	8.9	14.4	0.0	0.1	1.4	100.0	3,921
Kaniga	0.6	0.7	15.1	65.2	0.3	13.5	0.7	3.2	0.0	0.7	100.0	3,404
Manyagiro	0.1	0.3	1.1	68.9	1.3	22.2	4.7	0.0	0.4	1.0	100.0	4,400
Miyove	0.1	0.4	7.5	71.3	1.3	11.1	4.9	1.6	0.1	1.8	100.0	3,714
Mukarange	0.1	0.9	9.6	63.1	1.8	21.9	1.1	0.2	0.0	1.3	100.0	3,601
Muko	0.0	0.6	32.3	53.0	0.2	4.4	8.6	0.2	0.0	0.7	100.0	4,070
Mutete	0.0	0.3	11.1	58.0	1.3	19.6	5.2	3.1	0.0	1.5	100.0	5,347
Nyamiyaga	0.0	0.3	43.3	42.0	0.1	6.3	6.6	0.3	0.3	0.7	100.0	4,067
Nyankenke	0.4	0.6	1.8	82.2	0.2	2.0	11.2	0.5	0.0	1.2	100.0	4,567
Rubaya	0.0	0.1	4.0	83.4	2.6	4.3	4.4	0.0	0.0	1.1	100.0	2,416
Rukomo	0.2	0.7	26.3	57.2	0.2	2.7	11.3	0.7	0.0	0.8	100.0	5,458
Rushaki	0.3	2.4	22.3	50.8	0.1	18.1	3.1	2.1	0.0	0.9	100.0	2,757
Rutare	0.1	0.3	0.8	70.8	1.2	15.6	9.9	0.3	0.0	1.1	100.0	5,347
Ruvune	0.1	0.5	19.1	48.5	0.3	9.0	20.5	1.1	0.0	1.0	100.0	4,262
Rwamiko	0.0	0.1	30.9	50.5	0.4	9.8	5.4	2.5	0.0	0.4	100.0	2,878
Shangasha	0.1	0.9	0.9	65.3	11.2	14.6	5.2	0.9	0.0	0.9	100.0	3,540
Rwamagana												
Fumbwe	0.1	0.8	21.9	35.4	0.2	12.7	3.3	25.1	0.1	0.5	100.0	4,956
Gahengeri	0.1	0.8	9.1	29.8	0.2	30.6	11.2	15.5	2.0	0.8	100.0	5,575

									Main so	urce of water		
				Improved	water source				Unimproved	water source		
Sector of residence	Internal pipe-borne water	Pipe-borne water in the compound	Public tap out of the compound	Protected spring/ well	Rain water	Unprotected spring/ well	River	Lake/ stream/ pond/ surface water	Other	Not stated	Total	Count
Gishali	0.1	5.5	25.6	37.2	0.1	4.9	1.4	24.8	0.0	0.6	100.0	5,597
Karenge	0.2	19.5	51.6	1.4	0.0	3.3	1.1	21.4	0.6	1.1	100.0	5,268
Kigabiro	0.5	25.7	53.1	14.7	0.0	3.7	1.1	0.1	0.0	1.1	100.0	8,252
Muhazi	0.2	14.5	37.5	23.2	0.1	5.8	1.9	15.8	0.1	1.1	100.0	5,923
Munyaga	0.1	0.7	60.3	22.7	0.0	6.8	7.9	1.0	0.0	0.5	100.0	4,033
Munyiginya	0.1	1.2	19.2	35.1	0.1	11.6	3.6	28.2	0.1	0.9	100.0	3,940
Musha	0.1	1.8	20.0	31.2	0.1	14.8	2.7	29.1	0.0	0.4	100.0	5,037
Muyumbu	0.9	7.8	46.9	11.2	0.1	8.8	14.0	9.1	0.0	1.1	100.0	6,058
Mwulire	0.1	2.3	59.7	20.4	0.1	10.2	4.8	1.1	0.0	1.3	100.0	5,260
Nyakaliro	0.2	9.4	64.8	2.5	0.0	9.1	8.4	4.9	0.0	0.8	100.0	4,841
Nzige	0.4	7.3	75.1	5.7	0.0	3.1	3.4	4.6	0.1	0.5	100.0	3,610
Rubona	0.1	1.4	15.5	30.7	0.1	24.8	4.3	22.4	0.2	0.6	100.0	5,825
Nyagatare												
Gatunda	0.3	6.1	52.7	11.6	0.1	6.6	14.4	7.4	0.6	0.3	100.0	6,676
Karama	0.1	1.3	31.9	3.4	0.2	7.7	48.0	6.8	0.1	0.6	100.0	6,226
Karangazi	0.1	1.2	28.2	24.7	1.1	7.9	2.8	32.0	0.3	1.7	100.0	12,328
Katabagemu	0.5	1.4	36.3	7.7	0.2	38.9	5.7	8.2	0.1	1.1	100.0	7,582
Kiyombe	0.3	1.0	42.5	21.5	0.1	11.4	22.8	0.0	0.0	0.4	100.0	3,932
Matimba	0.1	1.4	63.9	4.0	1.0	2.8	20.8	5.0	0.2	0.9	100.0	5,399
Mimuri	0.4	3.6	43.5	8.0	0.1	8.9	32.1	1.7	0.5	1.2	100.0	6,745
Mukama	0.4	2.0	18.5	8.0	0.1	19.1	49.9	1.4	0.0	0.6	100.0	5,072
Musheri	0.0	0.7	5.9	32.9	5.4	11.9	18.2	23.7	0.3	1.0	100.0	6,653
Nyagatare	0.5	12.4	52.0	6.0	0.1	4.3	17.0	6.4	0.1	1.3	100.0	12,350
Rukomo	0.4	5.3	56.4	0.2	0.0	2.0	26.5	8.9	0.0	0.5	100.0	8,170
Rwempasha	0.2	0.5	14.9	35.8	0.3	4.0	37.8	5.4	0.1	1.2	100.0	4,308
Rwimiyaga	0.1	0.5	30.0	14.5	3.0	5.8	9.9	34.3	0.4	1.6	100.0	12,723
Tabagwe	0.0	0.4	5.0	25.7	1.2	30.3	32.6	3.4	0.0	1.4	100.0	7,201
Gatsibo												
Gasange	0.0	0.3	18.5	7.6	0.0	6.8	24.9	38.5	2.5	0.9	100.0	3,841
Gatsibo	0.2	4.6	28.7	36.9	0.1	11.8	12.2	3.6	0.4	1.5	100.0	5,924
Gitoki	0.1	0.6	9.6	60.7	0.2	9.5	9.3	6.0	2.9	1.2	100.0	7,750
Kabarore	0.4	1.6	25.1	28.6	0.2	17.9	1.6	22.7	0.4	1.4	100.0	11,076

									Main so	urce of water		
				Improved	water source				Unimproved	water source		
Sector of residence	Internal pipe-borne water	Pipe-borne water in the compound	Public tap out of the compound	Protected spring/ well	Rain water	Unprotected spring/ well	River	Lake/ stream/ pond/ surface water	Other	Not stated	Total	Count
Kageyo	0.4	1.6	29.0	37.7	0.1	18.3	10.6	1.3	0.0	1.1	100.0	5,053
Kiramuruzi	0.2	2.5	23.3	10.0	0.1	14.1	12.7	35.5	0.2	1.5	100.0	7,404
Kiziguro	0.1	1.1	20.2	34.2	0.7	32.5	3.8	6.3	0.0	1.1	100.0	6,765
Muhura	0.2	1.1	55.1	19.5	0.0	9.3	9.0	4.3	0.6	1.0	100.0	6,761
Murambi	0.1	0.4	13.0	28.0	0.2	10.4	15.6	28.8	1.9	1.4	100.0	6,683
Ngarama	0.3	3.1	15.2	12.3	0.1	48.3	8.9	9.4	0.8	1.6	100.0	7,199
Nyagihanga	0.0	0.5	18.3	34.9	0.3	15.5	29.3	0.6	0.1	0.6	100.0	5,624
Remera	0.1	0.4	33.8	32.8	0.2	13.2	16.1	2.6	0.0	0.9	100.0	6,091
Rugarama	0.1	0.5	18.1	43.9	0.1	18.0	11.7	6.8	0.0	0.8	100.0	8,427
Rwimbogo	0.1	0.3	9.1	29.4	1.4	32.1	1.1	24.3	0.9	1.5	100.0	7,722
Kayonza												
Gahini	0.3	4.2	38.8	9.2	2.2	22.6	7.6	13.2	0.4	1.6	100.0	7,271
Kabare	0.3	2.0	48.9	15.4	0.0	14.9	11.4	4.0	1.7	1.3	100.0	7,837
Kabarondo	0.2	7.2	40.3	23.5	0.1	16.5	7.8	3.1	0.0	1.5	100.0	7,497
Mukarange	0.1	9.1	55.9	7.6	0.0	11.9	8.3	5.8	0.1	1.1	100.0	10,678
Murama	0.1	0.8	1.3	55.0	3.0	23.3	11.5	4.3	0.0	0.9	100.0	4,684
Murundi	0.1	0.3	16.6	28.9	0.3	19.6	5.8	27.6	0.1	0.7	100.0	8,146
Mwiri	0.4	1.6	42.4	28.3	0.5	9.6	10.2	5.4	0.1	1.6	100.0	5,120
Ndego	0.0	1.0	77.7	0.2	0.1	0.1	0.0	18.6	0.2	2.2	100.0	4,235
Nyamirama	0.2	1.8	20.6	33.8	0.4	27.0	11.2	3.9	0.1	1.1	100.0	7,177
Rukara	0.1	1.9	30.7	1.5	0.1	17.7	9.6	37.0	0.1	1.3	100.0	6,966
Ruramira	0.0	0.2	1.2	46.0	0.1	12.3	23.1	15.7	0.0	1.4	100.0	4,203
Rwinkwavu	0.7	3.1	57.8	7.7	0.4	6.0	16.6	7.0	0.0	0.7	100.0	6,703
Kirehe												
Gahara	0.0	0.4	7.7	46.3	0.2	30.5	7.4	6.4	0.0	1.2	100.0	9,106
Gatore	0.5	1.3	9.8	24.9	0.7	34.8	20.0	6.2	0.5	1.4	100.0	6,156
Kigarama	0.7	1.0	65.8	11.4	0.0	16.2	1.7	2.1	0.0	1.0	100.0	7,104
Kigina	0.2	0.7	23.3	29.4	0.2	28.5	7.9	8.6	0.0	1.2	100.0	6,279
Kirehe	0.1	0.7	6.6	53.4	0.1	22.0	13.6	0.9	1.4	1.2	100.0	5,385
Mahama	0.2	1.9	87.4	0.2	0.1	0.6	2.9	5.7	0.1	1.1	100.0	5,451
Mpanga	0.1	1.2	39.3	12.8	0.1	29.8	5.4	10.6	0.0	0.7	100.0	7,183
Musaza	0.3	1.6	29.9	17.6	0.1	37.4	7.1	3.5	1.2	1.4	100.0	5,907

									Main so	urce of water		
				Improved	water source				Unimproved	water source		
Sector of residence	Internal pipe-borne water	Pipe-borne water in the compound	Public tap out of the compound	Protected spring/ well	Rain water	Unprotected spring/ well	River	Lake/ stream/ pond/ surface water	Other	Not stated	Total	Count
Mushikiri	0.4	1.5	6.7	26.4	0.2	33.3	27.2	3.2	0.1	1.1	100.0	6,343
Nasho	0.5	5.2	62.6	13.8	0.1	10.8	1.1	5.1	0.0	0.9	100.0	6,016
Nyamugari	0.2	2.7	69.5	1.2	0.2	1.5	8.6	15.2	0.0	1.0	100.0	8,568
Nyarubuye	0.0	0.2	10.7	27.1	0.1	34.9	12.5	11.7	1.9	1.0	100.0	4,381
Ngoma												
Gashanda	0.1	0.1	9.2	76.6	0.2	10.8	1.6	1.1	0.0	0.5	100.0	4,017
Jarama	0.1	0.4	22.7	10.4	0.0	8.9	0.9	56.2	0.1	0.3	100.0	5,613
Karembo	0.2	3.8	25.3	56.6	0.0	9.7	3.8	0.2	0.0	0.4	100.0	3,596
Kazo	0.1	1.9	32.2	46.5	0.0	15.6	0.6	2.6	0.0	0.6	100.0	6,407
Kibungo	0.7	19.8	43.0	6.9	0.1	21.6	5.6	0.7	0.1	1.6	100.0	6,368
Mugesera	0.0	0.7	3.2	25.3	0.0	14.6	1.0	53.8	0.0	1.2	100.0	6,137
Murama	0.1	0.9	21.1	54.1	0.1	16.0	7.0	0.0	0.0	0.8	100.0	5,296
Mutenderi	0.0	0.2	0.4	35.1	0.1	42.5	6.6	13.9	0.4	0.9	100.0	4,874
Remera	0.1	5.6	55.6	14.2	0.1	14.4	8.2	1.0	0.1	0.9	100.0	6,538
Rukira	0.0	2.3	44.0	23.9	0.1	16.3	12.2	0.4	0.0	0.8	100.0	5,815
Rukumberi	0.0	0.2	2.2	0.1	0.0	0.1	0.6	95.8	0.1	0.8	100.0	6,914
Rurenge	0.0	0.4	14.8	47.5	0.0	21.8	8.9	5.6	0.0	0.9	100.0	6,802
Sake	0.1	1.1	26.4	27.0	0.1	15.5	10.7	18.1	0.0	1.0	100.0	5,624
Zaza	0.1	2.6	19.2	28.5	0.1	11.9	10.2	26.6	0.0	0.8	100.0	5,646
Bugesera												
Gashora	0.2	3.6	47.1	1.2	0.1	0.9	0.4	44.2	1.6	0.7	100.0	5,131
Juru	0.1	1.6	21.6	1.5	0.1	0.1	17.2	56.1	0.3	1.3	100.0	5,481
Kamabuye	0.1	0.8	75.9	1.8	0.0	1.4	0.7	18.7	0.1	0.6	100.0	4,622
Mareba	0.1	2.0	74.5	12.1	0.0	3.8	2.1	4.6	0.0	0.8	100.0	5,344
Mayange	0.1	3.4	86.8	2.3	0.1	0.3	0.1	6.1	0.0	0.9	100.0	6,617
Musenyi	0.1	1.3	23.9	53.0	0.0	11.5	2.6	5.5	0.9	1.2	100.0	7,123
Mwogo	0.0	0.3	0.2	0.2	0.2	2.0	0.9	94.3	1.2	1.0	100.0	4,471
Ngeruka	0.2	2.8	71.6	10.7	0.0	5.8	0.5	7.6	0.0	0.8	100.0	6,961
Ntarama	0.0	2.4	17.2	6.8	0.1	17.6	10.3	45.0	0.0	0.6	100.0	4,827
Nyamata	0.7	15.5	41.5	19.8	0.1	10.9	0.8	9.5	0.0	1.2	100.0	8,778
Nyarugenge	0.2	1.8	63.6	24.1	0.0	4.2	1.6	3.5	0.0	1.0	100.0	4,893
Rilima	0.1	4.6	79.2	0.1	0.0	0.1	0.0	15.2	0.0	0.6	100.0	5,935

									Main so	urce of water		
				Improved	water source				Unimproved	water source		
Sector of residence	Internal pipe-borne water	Pipe-borne water in the compound	Public tap out of the compound	Protected spring/ well	Rain water	Unprotected spring/ well	River	Lake/ stream/ pond/ surface water	Other	Not stated	Total	Count
Ruhuha	0.3	7.7	69.3	18.6	0.1	3.1	0.0	0.3	0.0	0.6	100.0	5,407
Rweru	0.0	0.4	10.5	4.0	0.0	0.3	0.2	82.8	1.3	0.6	100.0	6,399
Shyara	0.1	0.2	16.5	57.7	0.1	10.5	6.4	7.3	0.1	1.1	100.0	3,380

Source: Fourth Rwanda Population and Housing Census

Table 825: Distribution (%) of private households by main source of energy for lighting and sector of residence

						Main sou	irce of energy	y for lighting		
Sector of residence	Electricity*	Kerosene lamp	Paraffin	Biogas	Candle	Firewood	Other	Not stated	Total	Count
Rwanda	17.4	39.6	1.3	0.0	9.7	7.9	23.6	0.5	100.0	2,424,898
Nyarugenge										
Gitega	90.4	2.7	0.1	0.0	6.0	0.0	0.3	0.6	100.0	7,415
Kanyinya	33.0	27.2	0.1	0.0	29.1	0.6	9.2	0.8	100.0	5,760
Kigali	52.1	28.5	0.2	0.0	16.9	0.3	1.6	0.4	100.0	8,116
Kimisagara	87.3	4.2	0.1	0.0	7.6	0.0	0.2	0.6	100.0	11,648
Mageregere	10.3	67.2	2.4	0.0	11.2	0.2	8.4	0.3	100.0	6,220
Muhima	87.8	3.2	0.1	0.0	8.1	0.0	0.4	0.5	100.0	7,339
Nyakabanda	87.8	4.8	0.1	0.0	6.4	0.0	0.2	0.7	100.0	6,375
Nyamirambo	80.5	11.2	0.1	0.0	7.2	0.0	0.6	0.3	100.0	9,593
Nyarugenge	87.6	4.1	0.1	0.0	6.5	0.1	0.4	1.4	100.0	5,558
Rwezamenyo	94.7	1.8	0.0	0.0	2.8	0.0	0.3	0.5	100.0	4,256
Gasabo										
Bumbogo	31.6	34.6	1.8	0.1	21.0	0.7	9.6	0.7	100.0	9,624
Gatsata	87.2	3.1	0.0	0.0	8.7	0.0	0.5	0.5	100.0	10,035
Gikomero	2.4	31.2	3.9	0.0	20.8	1.1	40.1	0.4	100.0	3,828
Gisozi	81.2	5.4	0.0	0.0	12.4	0.1	0.4	0.5	100.0	12,199
Jabana	33.5	33.1	0.2	0.3	28.1	0.4	3.9	0.4	100.0	8,207
Jali	20.5	34.3	0.9	0.0	28.5	0.7	14.6	0.5	100.0	6,065
Kacyiru	86.8	3.9	0.0	0.0	8.3	0.1	0.4	0.6	100.0	9,095
Kimihurura	86.8	4.1	0.0	0.0	7.8	0.0	0.5	0.7	100.0	5,599
Kimironko	91.0	1.8	0.1	0.0	6.2	0.0	0.4	0.5	100.0	13,191
Kinyinya	72.6	11.4	0.3	0.0	14.2	0.1	0.9	0.4	100.0	16,507
Ndera	45.1	30.8	0.7	0.0	16.8	0.3	6.0	0.4	100.0	11,208
Nduba	12.8	29.5	1.2	0.0	34.3	1.2	20.5	0.5	100.0	6,530
Remera	89.2	2.6	0.0	0.0	7.4	0.0	0.3	0.4	100.0	12,006
Rusororo	36.2	39.4	0.5	0.1	14.9	0.4	7.8	0.8	100.0	8,889
Rutunga	1.3	34.1	8.9	0.1	18.1	1.9	35.3	0.3	100.0	4,163
Kicukiro										
Gahanga	50.9	29.9	0.5	0.0	15.7	0.2	2.5	0.4	100.0	7,512
Gatenga	83.8	7.8	0.1	0.0	7.4	0.1	0.4	0.5	100.0	11,999
Gikondo	89.5	3.8	0.0	0.0	5.9	0.0	0.3	0.4	100.0	4,227
Kagarama	78.8	8.7	0.1	0.0	10.7	0.1	1.2	0.4	100.0	3,265

						Main so	ource of energy	y for lighting		
Sector of residence	Electricity*	Kerosene lamp	Paraffin	Biogas	Candle	Firewood	Other	Not stated	Total	Count
Kanombe	76.2	10.5	0.1	0.0	11.9	0.1	0.9	0.4	100.0	10,620
Kicukiro	92.0	2.2	0.1	0.0	5.2	0.0	0.2	0.4	100.0	4,139
Kigarama	85.0	7.1	0.0	0.0	7.1	0.0	0.4	0.4	100.0	10,549
Masaka	40.2	43.2	0.2	0.1	9.4	0.1	6.6	0.4	100.0	9,995
Niboye	93.7	1.9	0.0	0.0	3.6	0.0	0.3	0.5	100.0	6,029
Nyarugunga	88.1	3.8	0.1	0.0	7.1	0.1	0.5	0.4	100.0	8,903
Nyanza										
Busasamana	31.3	55.0	0.1	0.0	4.9	1.5	7.0	0.2	100.0	10,687
Busoro	4.7	65.1	0.0	0.0	3.4	4.2	22.1	0.6	100.0	8,308
Cyabakamyi	0.3	55.5	0.1	0.0	2.7	8.4	32.5	0.5	100.0	5,579
Kibilizi	0.3	58.1	0.1	0.0	2.7	3.6	34.9	0.3	100.0	7,657
Kigoma	3.8	71.4	0.1	0.1	1.7	2.6	20.2	0.2	100.0	8,396
Mukingo	5.4	69.4	0.0	0.0	2.3	2.6	19.7	0.6	100.0	10,675
Muyira	1.7	61.9	0.0	0.0	2.4	3.5	30.2	0.3	100.0	8,750
Ntyazo	5.6	40.6	0.6	0.1	7.6	6.5	38.6	0.4	100.0	6,510
Nyagisozi	0.5	42.5	0.0	0.0	3.8	8.6	44.0	0.5	100.0	6,148
Rwabicuma	0.5	49.5	0.1	0.0	4.1	6.0	39.3	0.4	100.0	4,812
Gisagara		+								
Gikonko	3.8	13.6	3.3	0.0	4.4	4.4	70.0	0.5	100.0	5,580
Gishubi	0.1	10.5	1.5	0.2	4.4	17.7	65.3	0.3	100.0	5,942
Kansi	0.3	46.7	0.1	0.1	4.3	13.1	35.4	0.1	100.0	4,461
Kibirizi	2.6	64.6	0.0	0.0	6.0	6.4	20.1	0.3	100.0	6,510
Kigembe	0.3	39.9	0.2	0.0	3.6	12.8	43.2	0.2	100.0	4,801
Mamba	3.9	9.7	3.8	0.0	7.3	7.5	67.4	0.4	100.0	8,166
Muganza	0.2	40.2	0.8	0.0	2.9	19.0	36.5	0.5	100.0	6,829
Mugombwa	0.2	47.8	0.1	0.0	4.1	9.9	37.7	0.2	100.0	5,396
Mukindo	0.1	24.5	0.1	0.0	2.3	16.8	55.8	0.5	100.0	6,338
Musha	3.2	17.9	2.5	0.0	3.3	4.6	68.2	0.3	100.0	5,974
Ndora	4.2	48.5	3.0	0.0	3.8	9.5	30.8	0.3	100.0	5,867
Nyanza	3.1	23.7	1.3	0.0	6.1	25.6	40.0	0.2	100.0	4,397
Save	7.2	48.4	1.0	0.0	6.9	3.2	32.9	0.5	100.0	6,998
Nyaruguru										
Busanze	1.3	8.4	0.1	0.0	16.5	36.6	36.6	0.5	100.0	5,727
Cyahinda	2.5	23.6	0.5	0.0	7.8	31.7	33.4	0.5	100.0	4,624

						Main s	ource of energy	y for lighting		
Sector of residence	Electricity*	Kerosene lamp	Paraffin	Biogas	Candle	Firewood	Other	Not stated	Total	Count
Kibeho	8.7	26.2	0.1	0.0	7.8	33.2	23.6	0.5	100.0	4,789
Kivu	0.4	8.2	0.1	0.0	14.1	41.7	35.2	0.2	100.0	3,702
Mata	8.0	39.6	0.0	0.0	9.0	19.8	23.5	0.1	100.0	3,033
Muganza	1.4	12.8	0.1	0.0	10.1	35.9	39.6	0.2	100.0	4,113
Munini	2.9	28.0	0.1	0.0	9.1	30.2	29.5	0.2	100.0	3,420
Ngera	0.2	36.7	2.1	0.0	12.6	21.1	27.1	0.3	100.0	5,180
Ngoma	4.9	7.3	3.9	0.0	15.5	23.6	44.6	0.1	100.0	5,206
Nyabimata	1.5	7.4	0.1	0.0	12.2	53.3	25.2	0.3	100.0	3,694
Nyagisozi	2.4	19.6	1.0	0.0	10.3	23.9	42.3	0.5	100.0	4,014
Ruheru	1.7	7.0	0.0	0.0	10.9	58.9	21.0	0.6	100.0	7,081
Ruramba	3.2	19.6	0.0	0.0	16.7	31.6	28.5	0.5	100.0	3,584
Rusenge	1.9	21.5	0.2	0.0	9.3	35.2	31.6	0.3	100.0	5,446
Huye										
Gishamvu	2.8	42.6	1.4	0.1	10.9	14.0	28.0	0.2	100.0	3,120
Huye	13.9	64.1	0.1	0.0	5.7	6.5	9.3	0.4	100.0	5,335
Karama	0.1	44.1	0.0	0.1	2.6	18.9	33.8	0.3	100.0	3,788
Kigoma	2.6	51.1	0.1	0.0	2.1	10.5	33.5	0.2	100.0	5,902
Kinazi	5.3	47.8	0.2	0.0	4.0	5.2	37.3	0.3	100.0	6,382
Maraba	3.4	66.9	0.0	0.0	1.4	8.0	20.2	0.2	100.0	5,716
Mbazi	12.4	66.8	0.6	0.0	6.8	3.2	9.9	0.3	100.0	7,682
Mukura	8.8	47.7	1.2	0.0	13.0	10.7	18.2	0.3	100.0	4,952
Ngoma	62.9	23.1	0.0	0.0	10.4	1.1	2.0	0.5	100.0	4,814
Ruhashya	5.0	36.2	3.1	0.0	7.6	5.0	42.8	0.4	100.0	5,498
Rusatira	8.6	31.3	8.9	0.0	9.6	6.5	34.4	0.6	100.0	6,182
Rwaniro	0.4	26.0	0.0	0.0	2.9	7.0	63.5	0.3	100.0	5,302
Simbi	1.1	59.9	0.0	0.0	1.4	6.8	30.4	0.3	100.0	5,366
Tumba	46.5	32.0	0.1	0.0	14.7	2.3	4.0	0.4	100.0	7,876
Nyamagabe										
Buruhukiro	1.4	4.1	0.1	0.1	12.8	34.9	46.4	0.2	100.0	5,214
Cyanika	1.7	53.0	0.0	0.1	6.3	10.6	28.0	0.3	100.0	5,752
Gasaka	38.9	39.1	0.1	0.0	10.4	3.7	7.4	0.4	100.0	6,050
Gatare	0.3	4.8	0.3	0.0	19.9	28.8	45.7	0.2	100.0	3,529
Kaduha	6.0	20.7	0.1	0.1	8.2	25.5	39.1	0.5	100.0	4,849
Kamegeri	24.5	32.2	0.0	0.0	4.6	15.3	23.1	0.3	100.0	3,201
Kibirizi	8.3	45.4	0.0	0.0	9.1	15.8	21.2	0.4	100.0	4,761

						Main	source of energ	y for lighting		
Sector of residence	Electricity*	Kerosene lamp	Paraffin	Biogas	Candle	Firewood	Other	Not stated	Total	Count
Kibumbwe	6.1	18.6	0.2	0.0	9.5	25.4	40.0	0.3	100.0	3,065
Kitabi	3.9	12.7	0.1	0.0	25.4	34.8	22.7	0.4	100.0	5,563
Mbazi	0.4	49.6	0.0	0.0	6.6	11.2	31.6	0.5	100.0	2,810
Mugano	0.4	22.4	0.1	0.0	8.5	31.1	37.0	0.5	100.0	4,327
Musange	0.3	35.0	0.0	0.0	4.1	16.5	43.5	0.7	100.0	4,575
Musebeya	4.2	8.0	0.0	0.2	20.0	21.1	46.2	0.4	100.0	4,272
Mushubi	3.1	9.5	0.0	0.0	18.7	18.2	50.4	0.1	100.0	2,981
Nkomane	1.1	2.6	0.0	0.0	8.6	33.5	54.0	0.2	100.0	3,677
Tare	9.3	24.2	0.0	0.0	15.3	23.3	27.4	0.5	100.0	5,044
Uwinkingi	0.7	10.8	0.0	0.8	19.2	33.2	34.8	0.5	100.0	5,178
Ruhango										
Bweramana	12.2	74.0	0.0	0.0	1.7	3.2	8.5	0.4	100.0	6,981
Byimana	15.8	60.9	2.5	0.1	3.3	3.1	13.8	0.5	100.0	8,156
Kabagali	2.5	62.0	0.0	0.0	2.5	11.8	20.6	0.5	100.0	5,751
Kinazi	8.1	59.6	0.4	0.0	4.1	5.0	22.3	0.4	100.0	10,679
Kinihira	2.2	57.8	0.0	0.0	1.6	8.2	29.7	0.4	100.0	5,916
Mbuye	0.4	69.7	0.8	0.0	2.9	3.2	22.3	0.6	100.0	9,807
Mwendo	0.6	63.9	0.0	0.1	2.4	7.6	25.1	0.4	100.0	6,120
Ntongwe	1.4	71.5	0.0	0.0	1.7	4.4	20.3	0.7	100.0	7,732
Ruhango	20.1	68.7	0.2	0.0	2.4	1.9	6.3	0.4	100.0	15,826
Muhanga										
Cyeza	7.8	76.1	0.3	0.0	1.7	1.9	12.0	0.3	100.0	7,156
Kabacuzi	0.9	87.4	0.0	0.0	1.1	1.6	8.7	0.3	100.0	6,110
Kibangu	5.7	73.6	0.1	0.0	2.1	5.8	12.5	0.3	100.0	4,673
Kiyumba	3.1	85.6	0.1	0.0	1.2	2.0	7.8	0.2	100.0	5,488
Muhanga	5.5	68.0	0.1	0.0	3.4	1.8	20.9	0.4	100.0	5,986
Mushishiro	5.0	57.1	0.2	0.0	2.4	5.5	29.4	0.4	100.0	4,888
Nyabinoni	1.1	50.9	0.0	0.0	3.0	10.9	34.1	0.1	100.0	4,047
Nyamabuye	57.9	31.1	0.1	0.0	5.9	0.7	4.0	0.4	100.0	10,966
Nyarusange	2.2	48.2	0.0	0.0	2.5	7.4	39.3	0.3	100.0	6,054
Rongi	0.3	77.6	0.0	0.0	2.3	4.9	14.3	0.5	100.0	6,646
Rugendabari	2.8	45.7	11.1	0.0	7.8	4.6	27.7	0.4	100.0	4,015
Shyogwe	29.3	56.8	0.4	0.0	4.3	1.3	7.6	0.3	100.0	9,178
Kamonyi										

						Main s	ource of energy	y for lighting		
Sector of residence	Electricity*	Kerosene lamp	Paraffin	Biogas	Candle	Firewood	Other	Not stated	Total	Count
Gacurabwenge	15.9	63.8	6.8	0.1	4.3	0.8	8.0	0.4	100.0	6,470
Karama	4.4	89.0	0.0	0.0	0.8	0.6	4.8	0.4	100.0	4,367
Kayenzi	5.5	87.5	0.0	0.0	1.4	0.5	4.8	0.4	100.0	5,346
Kayumbu	1.7	82.9	0.0	0.0	1.6	0.7	12.4	0.7	100.0	3,787
Mugina	5.6	38.6	17.6	0.0	5.8	2.4	29.7	0.3	100.0	9,364
Musambira	8.9	53.4	8.7	0.0	5.0	2.6	20.9	0.4	100.0	7,914
Ngamba	0.8	90.6	0.0	0.1	1.9	0.2	5.6	0.8	100.0	3,242
Nyamiyaga	3.0	52.4	10.6	0.0	3.6	2.2	27.9	0.4	100.0	9,293
Nyarubaka	2.8	57.1	6.5	0.0	2.3	1.7	29.1	0.4	100.0	6,015
Rugarika	7.1	71.5	5.4	0.0	4.2	0.9	10.6	0.3	100.0	8,510
Rukoma	3.4	90.5	0.0	0.0	1.8	0.4	3.5	0.5	100.0	7,888
Runda	24.7	58.6	0.2	0.0	10.5	0.2	5.3	0.4	100.0	8,272
Karongi						+				
Bwishyura	27.6	29.7	0.0	0.0	15.4	2.6	24.2	0.4	100.0	7,919
Gashari	4.8	38.1	0.0	0.0	5.1	22.9	28.5	0.6	100.0	4,693
Gishyita	6.5	32.1	0.0	0.0	9.6	9.1	40.2	2.5	100.0	4,783
Gitesi	2.0	18.4	0.1	0.0	6.5	13.1	59.8	0.2	100.0	5,633
Mubuga	5.7	39.8	0.0	0.0	10.3	7.7	36.1	0.4	100.0	4,369
Murambi	6.6	44.8	0.0	0.0	3.5	12.8	31.9	0.4	100.0	5,106
Murundi	0.5	27.7	0.1	0.0	5.3	21.2	44.7	0.5	100.0	6,142
Mutuntu	0.9	5.3	0.1	0.0	10.9	25.8	56.5	0.5	100.0	5,075
Rubengera	17.0	39.3	0.1	0.0	8.2	6.3	28.9	0.3	100.0	7,869
Rugabano	0.6	24.7	0.1	0.1	10.5	14.3	49.2	0.6	100.0	7,283
Ruganda	1.2	30.9	0.1	0.1	5.7	30.7	31.0	0.5	100.0	4,007
Rwankuba	1.1	8.4	0.0	0.0	12.1	22.5	55.5	0.4	100.0	4,870
Twumba	3.7	14.1	0.1	0.0	18.7	34.8	28.4	0.3	100.0	5,577
Rutsiro										
Boneza	1.0	54.3	0.0	0.0	8.1	5.6	30.5	0.5	100.0	4,801
Gihango	7.4	16.6	0.0	0.0	9.5	18.3	46.8	1.4	100.0	5,244
Kigeyo	5.4	42.1	0.1	0.0	11.4	19.1	21.4	0.5	100.0	5,153
Kivumu	5.5	42.3	1.1	0.0	13.0	24.0	13.7	0.5	100.0	6,950
Manihira	0.6	6.8	0.0	0.0	18.6	25.1	48.6	0.3	100.0	3,647
Mukura	0.5	13.8	0.2	0.5	10.6	29.6	44.5	0.5	100.0	7,579
Murunda	5.9	20.5	0.1	0.0	6.4	17.5	49.0	0.7	100.0	4,110
Musasa	3.3	23.6	0.0	0.0	15.0	16.0	42.1	0.1	100.0	5,220

						Main sou	rce of energy	y for lighting		
Sector of residence	Electricity*	Kerosene lamp	Paraffin	Biogas	Candle	Firewood	Other	Not stated	Total	Count
Mushonyi	6.9	45.7	0.0	0.2	10.7	17.5	18.6	0.4	100.0	5,248
Mushubati	3.9	21.2	0.0	0.0	3.3	23.1	48.1	0.5	100.0	5,878
Nyabirasi	0.1	9.2	0.4	0.0	18.0	44.9	27.0	0.3	100.0	6,353
Ruhango	6.7	21.3	0.1	0.0	12.8	28.1	30.8	0.3	100.0	6,166
Rusebeya	0.4	3.2	0.0	0.0	12.8	36.7	46.6	0.3	100.0	4,918
Rubavu										
Bugeshi	1.7	23.5	0.1	0.0	32.7	14.5	27.3	0.3	100.0	6,261
Busasamana	12.1	11.8	0.1	0.0	37.0	22.1	16.5	0.5	100.0	6,954
Cyanzarwe	5.4	32.6	0.2	0.0	25.7	20.5	15.3	0.3	100.0	6,628
Gisenyi	85.0	7.6	0.1	0.0	6.0	0.3	0.5	0.6	100.0	11,968
Kanama	14.6	26.5	0.5	0.0	20.9	14.1	23.0	0.5	100.0	6,450
Kanzenze	18.6	37.6	0.1	0.0	23.1	10.4	9.8	0.4	100.0	4,073
Mudende	4.7	24.0	0.1	0.0	26.2	19.2	25.6	0.4	100.0	5,664
Nyakiriba	28.8	28.8	0.2	0.0	18.0	12.8	10.9	0.4	100.0	5,832
Nyamyumba	22.3	18.5	6.0	0.0	36.0	8.7	8.0	0.5	100.0	8,140
Nyundo	8.9	24.1	1.9	0.0	21.5	24.2	18.8	0.7	100.0	6,918
Rubavu	28.3	49.4	0.7	0.0	10.8	6.1	3.9	0.7	100.0	9,753
Rugerero	35.7	31.9	1.2	0.1	22.8	4.0	4.0	0.3	100.0	10,208
Nyabihu										
Bigogwe	14.2	48.9	0.1	0.0	18.3	6.3	11.7	0.6	100.0	6,439
Jenda	18.5	45.9	0.8	0.1	16.3	8.6	9.7	0.3	100.0	7,748
Jomba	3.5	27.3	0.0	0.0	6.2	39.6	23.2	0.2	100.0	4,763
Kabatwa	17.8	48.7	0.2	0.0	16.4	3.6	13.0	0.3	100.0	4,201
Karago	3.6	34.7	0.2	0.0	14.3	30.6	16.3	0.4	100.0	5,735
Kintobo	3.1	40.7	0.4	0.0	6.4	33.1	16.0	0.4	100.0	3,377
Mukamira	21.8	40.7	1.8	0.0	11.5	13.2	10.3	0.7	100.0	6,224
Muringa	2.2	18.2	0.0	0.0	5.4	49.7	24.0	0.5	100.0	5,133
Rambura	7.6	23.3	0.1	0.1	12.9	38.5	17.2	0.5	100.0	6,236
Rugera	10.3	58.3	0.0	0.0	2.7	12.7	15.5	0.5	100.0	5,724
Rurembo	0.2	26.3	0.1	0.0	7.9	33.3	31.8	0.4	100.0	5,463
Shyira	1.0	54.5	0.1	0.0	5.7	14.0	24.3	0.4	100.0	4,812
Ngororero										
Bwira	0.2	30.9	0.2	0.0	3.1	24.5	40.6	0.3	100.0	4,421
Gatumba	11.7	54.3	3.9	0.0	4.5	7.9	17.5	0.2	100.0	5,747

						Main s	ource of energy	y for lighting		
Sector of residence	Electricity*	Kerosene lamp	Paraffin	Biogas	Candle	Firewood	Other	Not stated	Total	Count
Hindiro	7.2	52.9	0.0	0.0	4.6	21.8	13.0	0.4	100.0	5,633
Kabaya	16.0	23.7	0.0	0.0	8.8	39.4	11.6	0.5	100.0	7,754
Kageyo	0.6	39.8	0.3	0.1	3.9	30.2	24.6	0.5	100.0	5,432
Kavumu	0.7	22.4	0.1	0.0	5.0	52.4	19.0	0.5	100.0	6,555
Matyazo	2.3	60.2	0.0	0.1	2.9	14.6	19.3	0.6	100.0	6,113
Muhanda	1.3	10.2	0.2	0.0	9.0	53.9	24.3	1.1	100.0	6,505
Muhororo	2.8	56.2	1.4	0.0	5.9	10.0	23.1	0.6	100.0	4,972
Ndaro	0.4	22.4	0.1	0.0	5.5	26.6	44.4	0.7	100.0	5,593
Ngororero	9.6	65.3	0.1	0.0	2.6	7.1	14.7	0.5	100.0	8,471
Nyange	0.9	27.5	0.1	0.0	9.8	21.2	40.2	0.4	100.0	5,508
Sovu	0.6	11.4	0.1	0.0	5.7	34.6	47.2	0.5	100.0	6,259
Rusizi										
Bugarama	25.8	36.8	1.3	0.0	11.4	2.3	21.8	0.6	100.0	6,683
Butare	0.6	14.7	0.2	0.0	6.1	33.8	44.2	0.5	100.0	4,082
Bweyeye	2.1	19.7	0.1	0.0	24.3	29.8	23.0	1.0	100.0	2,857
Gashonga	8.4	50.7	4.0	0.0	6.4	5.4	24.7	0.3	100.0	4,988
Giheke	9.1	77.1	0.0	0.0	2.3	2.6	8.3	0.5	100.0	4,126
Gihundwe	41.4	50.1	0.0	0.0	3.5	1.3	3.3	0.3	100.0	5,598
Gikundamvura	4.7	23.8	1.0	0.0	7.8	8.2	54.5	0.2	100.0	3,892
Gitambi	19.0	28.1	1.3	0.0	7.6	6.0	37.5	0.5	100.0	4,790
Kamembe	71.3	21.7	0.1	0.0	4.7	0.5	1.4	0.4	100.0	5,192
Muganza	44.6	29.3	1.7	0.0	11.7	2.0	10.3	0.5	100.0	5,835
Mururu	30.7	53.1	0.1	0.0	7.3	2.7	5.8	0.3	100.0	5,013
Nkanka	7.3	77.0	0.0	0.0	1.2	1.6	12.6	0.3	100.0	3,867
Nkombo	15.7	73.7	0.1	0.0	0.1	2.5	7.6	0.3	100.0	3,156
Nkungu	0.4	60.8	0.1	0.1	3.0	4.4	30.8	0.5	100.0	4,312
Nyakabuye	14.1	44.5	0.1	0.0	4.4	4.6	32.1	0.3	100.0	6,111
Nyakarenzo	4.9	62.8	2.1	0.0	6.8	4.0	19.3	0.2	100.0	3,314
Nzahaha	9.3	50.9	1.3	0.0	7.0	3.3	27.7	0.5	100.0	5,552
Rwimbogo	23.4	46.0	2.7	0.0	9.6	2.6	15.5	0.3	100.0	3,812
Nyamasheke										
Bushekeri	22.7	40.4	0.0	0.1	8.0	9.1	19.4	0.3	100.0	5,588
Bushenge	7.7	66.8	0.0	0.0	3.9	3.3	17.9	0.5	100.0	4,607
Cyato	0.4	29.9	0.0	0.0	9.1	36.7	23.6	0.3	100.0	5,000
Gihombo	5.2	40.7	0.0	0.0	11.2	11.7	30.9	0.3	100.0	5,497

						Main so	urce of energy	y for lighting		
Sector of residence	Electricity*	Kerosene lamp	Paraffin	Biogas	Candle	Firewood	Other	Not stated	Total	Count
Kagano	11.1	52.9	0.0	0.0	5.4	9.7	20.4	0.5	100.0	7,454
Kanjongo	19.5	58.9	0.0	0.0	5.6	10.7	5.1	0.3	100.0	7,251
Karambi	1.4	48.1	0.0	0.0	12.2	12.4	25.3	0.6	100.0	5,694
Karengera	8.6	64.4	0.1	0.0	1.9	8.9	15.6	0.7	100.0	6,256
Kirimbi	1.7	47.2	0.0	0.1	13.1	12.1	25.1	0.7	100.0	4,719
Macuba	1.9	53.3	0.0	0.1	5.1	8.6	30.6	0.4	100.0	6,174
Mahembe	9.9	39.1	0.1	0.0	12.7	14.4	23.0	0.8	100.0	3,725
Nyabitekeri	1.6	65.9	0.0	0.0	2.8	4.2	25.2	0.3	100.0	6,081
Rangiro	2.4	27.2	0.0	0.0	10.3	26.3	33.8	0.1	100.0	3,260
Ruharambuga	13.3	63.7	0.1	0.0	6.5	6.4	8.9	1.3	100.0	5,206
Shangi	6.4	64.6	0.0	0.0	6.0	5.7	16.9	0.3	100.0	5,542
Rulindo										
Base	11.4	24.1	3.0	0.0	15.3	8.0	37.8	0.4	100.0	4,049
Burega	0.5	11.0	14.7	0.1	18.5	7.1	47.9	0.2	100.0	3,045
Bushoki	15.5	30.8	5.0	0.0	14.3	5.7	28.3	0.3	100.0	4,702
Buyoga	2.8	4.1	7.2	0.0	11.9	10.0	63.5	0.5	100.0	5,070
Cyinzuzi	2.7	20.7	14.4	0.1	15.5	4.0	42.4	0.3	100.0	3,261
Cyungo	5.2	21.6	0.9	0.1	13.0	7.1	52.1	0.1	100.0	3,017
Kinihira	9.5	8.4	3.3	0.0	16.9	10.3	51.0	0.5	100.0	3,473
Kisaro	3.3	15.1	1.6	0.1	17.4	12.1	49.8	0.7	100.0	4,452
Masoro	11.3	23.5	1.6	0.0	43.6	0.9	18.7	0.4	100.0	5,068
Mbogo	6.1	15.2	7.0	0.0	11.6	6.1	53.1	0.8	100.0	3,834
Murambi	5.2	24.2	1.5	0.1	29.5	2.1	35.9	1.6	100.0	4,312
Ngoma	4.0	21.9	6.8	0.0	20.6	4.3	42.0	0.3	100.0	2,605
Ntarabana	1.1	14.2	4.2	0.2	42.1	2.6	35.2	0.3	100.0	4,383
Rukozo	5.2	15.3	1.3	0.0	15.6	8.1	53.8	0.6	100.0	3,421
Rusiga	3.0	15.7	7.8	0.1	19.5	1.5	52.3	0.1	100.0	2,596
Shyorongi	6.1	37.6	1.7	0.0	22.0	0.8	31.5	0.4	100.0	5,774
Tumba	5.5	12.7	8.0	0.0	17.0	8.5	48.1	0.3	100.0	4,391
Gakenke										
Busengo	0.7	13.9	6.0	0.2	3.6	10.7	64.4	0.6	100.0	4,751
Coko	0.9	59.9	0.0	0.0	4.0	3.2	31.6	0.3	100.0	3,822
Cyabingo	0.5	33.8	5.9	0.0	12.1	4.8	42.2	0.6	100.0	4,066
Gakenke	9.2	23.3	4.2	0.0	7.4	6.3	49.3	0.3	100.0	5,350
Gashenyi	1.3	25.6	2.4	0.0	14.6	5.1	50.7	0.4	100.0	4,777

						Main so	urce of energy	y for lighting		
Sector of residence	Electricity*	Kerosene lamp	Paraffin	Biogas	Candle	Firewood	Other	Not stated	Total	Count
Janja	1.3	42.5	0.1	0.0	6.5	14.1	35.3	0.1	100.0	3,628
Kamubuga	1.9	11.1	3.7	0.0	8.0	30.3	44.6	0.5	100.0	4,833
Karambo	0.5	13.9	6.5	0.0	6.7	8.9	63.3	0.3	100.0	2,995
Kivuruga	4.1	17.1	11.9	0.1	14.2	11.8	40.3	0.6	100.0	4,026
Mataba	1.8	24.6	0.4	0.1	7.8	12.8	52.3	0.3	100.0	3,470
Minazi	0.8	43.6	0.7	0.0	5.9	6.9	39.4	2.7	100.0	3,141
Mugunga	1.0	69.9	0.0	0.1	2.0	5.4	21.1	0.5	100.0	4,706
Muhondo	2.9	61.0	2.8	0.0	3.4	1.6	27.7	0.6	100.0	4,778
Muyongwe	4.3	42.0	2.7	0.0	6.1	6.0	38.6	0.4	100.0	3,546
Muzo	0.6	39.8	0.1	0.0	5.3	8.4	44.9	0.9	100.0	5,065
Nemba	7.9	12.7	10.4	0.0	10.9	13.6	44.2	0.4	100.0	3,691
Ruli	16.7	46.6	0.2	0.0	13.0	1.4	21.6	0.6	100.0	4,678
Rusasa	0.2	59.9	0.0	0.0	1.7	6.6	31.1	0.4	100.0	4,271
Rushashi	6.6	48.5	0.3	0.1	4.8	3.9	34.9	0.9	100.0	4,166
Musanze										
Busogo	29.0	39.0	1.5	0.0	6.4	13.7	9.9	0.7	100.0	4,771
Cyuve	27.6	27.8	0.3	0.0	21.5	7.0	15.3	0.5	100.0	8,962
Gacaca	4.0	21.8	8.6	0.1	20.3	7.3	36.7	1.1	100.0	5,379
Gashaki	17.9	21.7	6.7	0.1	10.1	8.5	34.8	0.2	100.0	3,031
Gataraga	11.4	32.0	0.8	0.0	19.4	24.1	11.9	0.5	100.0	4,949
Kimonyi	22.0	24.0	3.3	0.1	22.2	9.0	19.3	0.1	100.0	3,644
Kinigi	9.7	12.4	1.8	0.4	32.0	10.4	32.9	0.4	100.0	6,311
Muhoza	63.3	22.1	1.0	0.1	10.1	0.8	1.9	0.6	100.0	12,091
Muko	28.5	54.4	0.2	0.0	4.7	2.8	9.1	0.3	100.0	4,561
Musanze	17.7	11.5	2.8	0.0	36.8	15.4	14.8	1.0	100.0	7,371
Nkotsi	13.3	58.3	0.1	0.0	1.9	7.9	18.1	0.3	100.0	3,292
Nyange	8.3	16.8	0.6	0.1	37.0	10.9	25.9	0.6	100.0	6,354
Remera	8.6	31.0	8.3	0.1	10.8	5.7	35.3	0.3	100.0	4,294
Rwaza	4.1	52.1	3.4	0.0	5.7	2.8	31.6	0.3	100.0	4,952
Shingiro	3.3	12.3	3.0	0.1	14.6	31.1	35.2	0.6	100.0	4,794
Burera										
Bungwe	0.3	18.2	0.2	0.1	16.8	14.7	47.6	2.1	100.0	3,360
Butaro	8.4	33.6	0.1	0.1	7.0	11.9	38.5	0.5	100.0	6,917
Cyanika	8.1	61.9	0.1	0.1	4.3	2.5	22.7	0.4	100.0	8,007
Cyeru	10.5	28.1	0.0	0.0	7.6	19.6	32.9	1.2	100.0	2,832

						Main	source of energ	y for lighting		
Sector of residence	Electricity*	Kerosene lamp	Paraffin	Biogas	Candle	Firewood	Other	Not stated	Total	Count
Gahunga	10.5	25.8	0.3	0.0	15.7	9.1	37.9	0.6	100.0	5,635
Gatebe	0.2	14.3	0.0	0.1	12.2	11.4	61.6	0.2	100.0	3,692
Gitovu	5.6	30.5	0.3	0.1	5.5	21.4	36.1	0.6	100.0	2,255
Kagogo	8.6	49.1	0.1	0.1	4.9	2.6	34.3	0.3	100.0	4,249
Kinoni	17.2	34.1	0.1	0.0	8.9	6.6	32.5	0.6	100.0	3,790
Kinyababa	0.5	52.4	0.0	0.1	3.6	9.3	33.7	0.5	100.0	4,269
Kivuye	0.9	15.5	0.0	0.0	12.9	18.6	51.8	0.3	100.0	3,367
Nemba	5.0	36.1	0.8	0.1	10.9	11.5	34.4	1.2	100.0	4,200
Rugarama	8.4	47.1	0.4	0.0	11.5	3.5	29.0	0.1	100.0	5,095
Rugengabari	5.0	25.8	1.2	0.1	6.6	18.3	42.7	0.4	100.0	4,224
Ruhunde	1.9	15.9	1.7	0.1	16.6	12.2	51.3	0.5	100.0	3,829
Rusarabuye	8.5	24.6	0.1	0.1	6.2	16.9	43.4	0.3	100.0	3,886
Rwerere	2.4	31.4	0.1	0.0	8.4	25.2	32.2	0.3	100.0	4,017
Gicumbi										
Bukure	1.5	50.2	7.7	0.1	14.6	0.9	24.5	0.6	100.0	3,676
Bwisige	1.0	26.3	0.1	0.1	9.8	7.6	55.0	0.3	100.0	3,366
Byumba	30.4	34.3	0.1	0.1	16.2	3.7	14.6	0.8	100.0	8,576
Cyumba	8.4	45.3	0.0	0.2	17.9	5.8	22.0	0.5	100.0	3,480
Giti	0.5	18.5	10.3	0.1	14.2	1.6	53.8	0.9	100.0	3,228
Kageyo	10.6	24.7	2.4	0.0	23.7	5.4	32.6	0.5	100.0	3,921
Kaniga	7.5	59.7	0.1	0.0	14.7	6.6	11.1	0.4	100.0	3,404
Manyagiro	1.1	24.6	0.1	0.1	18.3	11.1	44.2	0.5	100.0	4,400
Miyove	7.2	17.6	0.9	0.0	10.9	7.6	55.4	0.4	100.0	3,714
Mukarange	5.0	49.4	0.0	0.2	12.3	7.4	25.4	0.4	100.0	3,601
Muko	0.5	22.3	3.6	0.0	11.8	1.8	59.7	0.3	100.0	4,070
Mutete	2.9	12.9	7.1	0.1	21.1	6.2	49.6	0.2	100.0	5,347
Nyamiyaga	0.8	8.5	1.4	0.1	22.9	3.5	62.5	0.3	100.0	4,067
Nyankenke	1.5	38.5	0.0	0.1	15.0	9.5	34.8	0.6	100.0	4,567
Rubaya	4.0	43.8	0.0	0.1	9.6	11.7	30.3	0.5	100.0	2,416
Rukomo	3.5	19.1	0.8	0.0	30.8	5.4	40.1	0.3	100.0	5,458
Rushaki	4.4	54.4	0.0	0.0	11.4	3.5	25.7	0.6	100.0	2,757
Rutare	0.9	34.3	1.8	0.1	16.4	1.2	45.1	0.4	100.0	5,347
Ruvune	0.8	7.3	0.6	0.1	17.7	3.9	69.5	0.3	100.0	4,262
Rwamiko	3.8	31.6	2.0	0.1	16.1	0.7	45.4	0.4	100.0	2,878
Shangasha	6.8	45.2	0.0	0.1	9.6	11.1	26.8	0.5	100.0	3,540

						Main so	urce of energ	y for lighting		
Sector of residence	Electricity*	Kerosene lamp	Paraffin	Biogas	Candle	Firewood	Other	Not stated	Total	Count
Rwamagana										
Fumbwe	11.7	28.7	1.5	0.0	20.7	0.6	36.7	0.2	100.0	4,956
Gahengeri	6.5	49.3	1.0	0.1	14.0	0.6	28.2	0.3	100.0	5,575
Gishali	8.5	63.5	1.1	0.1	8.8	0.2	17.4	0.3	100.0	5,597
Karenge	22.1	60.3	0.1	0.0	4.3	0.2	12.3	0.7	100.0	5,268
Kigabiro	39.4	45.0	0.1	0.0	9.0	0.2	6.0	0.3	100.0	8,252
Muhazi	25.9	59.6	1.0	0.1	5.7	0.2	7.2	0.4	100.0	5,923
Munyaga	3.5	71.5	0.2	0.0	3.0	0.6	20.9	0.4	100.0	4,033
Munyiginya	4.1	50.0	0.8	0.1	17.4	0.7	26.4	0.6	100.0	3,940
Musha	10.0	41.5	1.9	0.1	15.6	0.6	29.9	0.4	100.0	5,037
Muyumbu	10.3	55.1	0.4	0.1	9.4	0.4	23.8	0.6	100.0	6,058
Mwulire	16.1	53.2	2.8	0.0	11.2	0.7	15.5	0.6	100.0	5,260
Nyakaliro	7.2	64.2	0.4	0.0	10.0	0.5	17.5	0.2	100.0	4,841
Nzige	12.1	49.8	0.4	0.0	5.4	0.3	31.6	0.4	100.0	3,610
Rubona	7.1	72.0	1.3	0.0	2.9	0.4	16.0	0.3	100.0	5,825
Nyagatare										
Gatunda	25.6	27.1	5.7	0.0	11.2	0.7	29.4	0.2	100.0	6,676
Karama	21.4	40.6	1.2	0.0	10.3	0.6	25.5	0.3	100.0	6,226
Karangazi	14.6	43.5	0.9	0.1	11.0	1.0	28.2	0.6	100.0	12,328
Katabagemu	26.2	12.4	5.6	0.0	21.5	1.0	32.8	0.4	100.0	7,582
Kiyombe	9.7	59.3	0.0	0.0	10.5	2.1	17.9	0.4	100.0	3,932
Matimba	24.6	44.1	1.0	0.2	13.3	0.3	16.0	0.6	100.0	5,399
Mimuri	19.2	23.9	3.7	0.1	13.2	1.0	38.6	0.4	100.0	6,745
Mukama	4.5	42.5	10.6	0.1	9.7	1.7	30.6	0.4	100.0	5,072
Musheri	29.0	47.1	0.3	0.0	5.6	1.0	16.4	0.6	100.0	6,653
Nyagatare	35.6	34.2	4.6	0.1	12.1	0.5	12.5	0.5	100.0	12,350
Rukomo	20.4	33.5	3.1	0.1	15.0	0.6	27.1	0.2	100.0	8,170
Rwempasha	3.2	53.1	6.2	0.1	9.0	0.4	27.5	0.5	100.0	4,308
Rwimiyaga	8.8	43.4	0.8	0.1	12.9	1.5	32.0	0.6	100.0	12,723
Tabagwe	1.8	59.3	1.0	0.0	8.8	1.5	26.7	0.9	100.0	7,201
Gatsibo										
Gasange	0.8	10.6	3.3	0.0	12.4	1.0	71.3	0.7	100.0	3,841
Gatsibo	9.6	25.5	1.7	0.0	23.2	1.4	38.1	0.5	100.0	5,924
Gitoki	11.0	31.4	3.4	0.0	13.8	1.7	38.3	0.5	100.0	7,750

						Main	source of energ	y for lighting		
Sector of residence	Electricity*	Kerosene lamp	Paraffin	Biogas	Candle	Firewood	Other	Not stated	Total	Count
Kabarore	15.2	40.6	2.0	0.1	10.1	0.6	31.0	0.4	100.0	11,076
Kageyo	5.6	18.6	4.9	0.0	26.7	2.6	41.3	0.4	100.0	5,053
Kiramuruzi	30.7	48.3	0.1	0.1	6.5	0.4	13.4	0.6	100.0	7,404
Kiziguro	35.3	47.4	1.8	0.0	4.3	0.3	10.5	0.5	100.0	6,765
Muhura	2.1	39.9	3.9	0.0	19.0	1.5	33.2	0.5	100.0	6,761
Murambi	9.3	50.9	2.3	0.0	8.8	0.7	27.6	0.5	100.0	6,683
Ngarama	6.4	12.6	5.3	0.0	19.0	1.4	54.9	0.4	100.0	7,199
Nyagihanga	2.2	26.9	1.8	0.0	17.2	3.4	48.2	0.3	100.0	5,624
Remera	4.8	37.9	5.0	0.0	18.8	0.6	32.6	0.3	100.0	6,091
Rugarama	19.1	45.4	0.2	0.0	5.4	0.4	29.1	0.4	100.0	8,427
Rwimbogo	4.5	53.1	1.3	0.0	8.6	0.6	31.5	0.5	100.0	7,722
Kayonza										
Gahini	19.5	60.7	1.2	0.0	4.3	0.9	12.6	0.8	100.0	7,271
Kabare	3.2	80.8	1.7	0.0	1.2	0.5	12.3	0.4	100.0	7,837
Kabarondo	24.0	68.6	0.1	0.1	2.4	0.2	4.3	0.5	100.0	7,497
Mukarange	31.5	58.5	1.0	0.0	5.2	0.1	3.3	0.3	100.0	10,678
Murama	6.4	84.9	0.0	0.0	2.2	0.9	5.2	0.4	100.0	4,684
Murundi	9.9	52.0	2.1	0.0	5.8	1.2	28.5	0.6	100.0	8,146
Mwiri	13.0	66.6	0.6	0.0	3.2	0.5	15.3	0.7	100.0	5,120
Ndego	0.9	54.6	0.2	0.0	4.7	1.0	38.2	0.5	100.0	4,235
Nyamirama	23.2	70.9	0.0	0.1	1.8	0.5	3.1	0.4	100.0	7,177
Rukara	11.3	74.7	0.3	0.0	2.6	0.5	9.9	0.7	100.0	6,966
Ruramira	9.3	80.5	0.1	0.0	2.0	0.5	7.5	0.3	100.0	4,203
Rwinkwavu	27.7	52.1	1.5	0.0	4.9	0.6	12.8	0.4	100.0	6,703
Kirehe										
Gahara	16.4	66.8	0.2	0.1	2.5	4.3	9.4	0.4	100.0	9,106
Gatore	16.8	75.6	1.2	0.1	1.6	0.7	3.6	0.5	100.0	6,156
Kigarama	5.7	69.9	5.9	0.2	3.9	0.9	13.2	0.4	100.0	7,104
Kigina	14.1	71.6	4.3	0.0	2.4	0.5	6.4	0.7	100.0	6,279
Kirehe	12.8	78.6	0.3	0.1	1.9	0.7	5.2	0.5	100.0	5,385
Mahama	33.9	37.5	1.7	0.2	6.6	1.6	18.1	0.4	100.0	5,451
Mpanga	2.3	69.3	0.2	0.0	3.2	1.0	23.7	0.3	100.0	7,183
Musaza	1.1	81.8	0.2	0.1	2.9	1.4	12.0	0.5	100.0	5,907
Mushikiri	2.6	91.7	0.0	0.3	0.6	0.5	4.0	0.3	100.0	6,343
Nasho	4.3	77.4	0.3	0.1	4.9	0.5	12.1	0.4	100.0	6,016

						Main	source of energ	y for lighting		
Sector of residence	Electricity*	Kerosene lamp	Paraffin	Biogas	Candle	Firewood	Other	Not stated	Total	Count
Nyamugari	26.4	41.6	4.1	0.1	6.5	0.9	19.9	0.7	100.0	8,568
Nyarubuye	1.3	85.2	1.1	0.0	1.6	0.5	10.0	0.4	100.0	4,381
Ngoma										
Gashanda	1.5	90.3	0.1	0.0	1.4	0.6	5.9	0.2	100.0	4,017
Jarama	14.9	50.2	0.6	0.0	5.5	4.4	23.9	0.5	100.0	5,613
Karembo	6.6	79.8	0.3	0.0	2.4	0.4	10.3	0.2	100.0	3,596
Kazo	3.9	90.0	0.0	0.0	1.2	0.9	3.8	0.3	100.0	6,407
Kibungo	35.7	58.3	0.0	0.1	3.6	0.2	1.3	0.8	100.0	6,368
Mugesera	4.5	78.2	0.2	0.0	1.4	0.9	14.4	0.4	100.0	6,137
Murama	6.1	90.1	0.0	0.3	0.7	0.2	2.3	0.3	100.0	5,296
Mutenderi	0.5	87.5	0.0	0.1	1.1	0.8	9.8	0.3	100.0	4,874
Remera	13.7	79.2	0.0	0.1	1.7	0.4	4.5	0.4	100.0	6,538
Rukira	16.9	79.5	0.0	0.2	0.6	0.3	2.1	0.4	100.0	5,815
Rukumberi	12.4	60.5	4.4	0.0	2.7	1.4	18.5	0.3	100.0	6,914
Rurenge	1.0	88.4	0.8	0.0	1.3	0.4	7.9	0.3	100.0	6,802
Sake	7.8	79.5	2.5	0.0	2.6	1.9	5.6	0.1	100.0	5,624
Zaza	5.2	80.8	0.2	0.0	1.4	0.9	10.9	0.6	100.0	5,646
Bugesera										
Gashora	12.0	14.5	3.6	0.1	25.4	2.3	41.8	0.4	100.0	5,131
Juru	0.4	49.3	5.3	0.1	6.0	0.7	37.8	0.6	100.0	5,481
Kamabuye	0.4	33.0	1.0	0.0	12.6	4.4	48.4	0.2	100.0	4,622
Mareba	2.5	24.0	0.3	0.1	12.2	4.3	56.2	0.3	100.0	5,344
Mayange	20.8	37.4	2.3	0.1	11.7	0.7	26.6	0.4	100.0	6,617
Musenyi	1.5	41.7	4.6	0.0	6.7	2.7	42.3	0.4	100.0	7,123
Mwogo	0.3	75.5	3.7	0.0	8.0	0.7	11.5	0.4	100.0	4,471
Ngeruka	0.3	23.1	0.1	0.0	10.5	5.1	60.5	0.4	100.0	6,961
Ntarama	17.2	56.8	2.8	0.0	11.7	0.8	10.0	0.6	100.0	4,827
Nyamata	33.2	40.2	1.1	0.0	15.6	1.0	8.4	0.5	100.0	8,778
Nyarugenge	0.8	41.5	0.1	0.1	12.8	5.0	39.4	0.3	100.0	4,893
Rilima	17.4	41.9	4.3	0.0	8.5	0.6	27.1	0.3	100.0	5,935
Ruhuha	16.2	34.6	0.2	0.1	9.8	2.1	36.7	0.3	100.0	5,407
Rweru	2.8	10.9	1.3	0.0	14.9	4.5	65.2	0.3	100.0	6,399
Shyara	0.4	27.7	0.0	0.1	9.4	6.8	55.4	0.3	100.0	3,380

Source: Fourth Rwanda Population and Housing Census. Notes: (1) \* Electricity = Electricity by EWSA + Hydro-electric source + Solar power + Generator.

Table 83: Percentage (%) of private households possessing specific assets by sector of residence

	% of private households possessing the asset										
Sector of residence			Commu	nication assets		Tra	ansport assets	Count			
Sector of residence	Radio	Television	Telephone (fixed line)	Cell phone	Bicycle	Vehicle	Motor cycle	Count			
Rwanda	64.0	7.8	0.5	54.1	14.1	1.3	1.2	2,424,898			
Nyarugenge											
	74.0	54.2	0.9	93.2	2.1	2.7	2.1	7,415			
Gitega	70.0	12.3	0.9	72.0	12.2	0.7	2.3				
Kanyinya Kigali	67.6	18.9	0.2	75.0	3.7	0.7	1.8	5,760 8,116			
	75.6	51.1	1.3	91.9	2.0	3.6	2.9	11,648			
Kimisagara			0.3	62.9							
Mageregere Muhima	67.8	3.5			14.7	0.3	1.6	6,220			
	74.4	55.6	1.9	94.5	3.4	8.7	3.0	7,339			
Nyakabanda	78.0	56.6	1.6	93.8	3.4	8.7	2.7	6,375			
Nyamirambo	75.0	51.0	1.5	91.6	5.1	9.4	2.7	9,593			
Nyarugenge	72.0	58.1	2.3	93.3	4.1	10.0	2.5	5,558			
Rwezamenyo	79.3	70.4	2.0	95.9	3.4	11.1	2.4	4,256			
Gasabo											
Bumbogo	69.9	11.7	0.3	71.8	13.6	1.0	3.1	9,624			
Gatsata	75.0	46.6	1.4	91.5	2.3	4.2	2.7	10,035			
Gikomero	69.3	0.4	0.2	50.3	20.6	0.5	1.5	3,828			
Gisozi	70.1	40.3	0.8	89.9	3.3	6.9	2.6	12,199			
Jabana	71.6	19.0	0.5	72.8	7.5	4.0	2.3	8,207			
Jali	71.8	12.9	0.6	66.7	8.1	2.1	2.2	6,065			
Kacyiru	76.4	58.6	2.2	94.3	5.0	14.2	2.6	9,095			
Kimihurura	73.8	49.0	2.3	92.5	6.4	11.3	3.0	5,599			
Kimironko	76.8	55.3	1.3	94.1	6.3	19.4	3.6	13,191			
Kinyinya	69.2	31.7	1.0	85.2	6.9	4.9	2.9	16,507			
Ndera	68.4	16.8	0.6	76.8	14.5	1.9	2.3	11,208			
Nduba	71.7	5.6	0.3	62.8	14.7	0.6	1.4	6,530			
Remera	73.8	47.9	1.3	92.4	4.1	10.9	2.6	12,006			
Rusororo	71.1	18.0	0.6	75.8	16.0	2.8	2.3	8,889			
Rutunga	72.6	0.7	0.1	55.0	21.8	0.4	1.3	4,163			
Kicukiro											
Gahanga	67.6	12.7	0.3	74.4	13.1	0.9	2.3	7,512			
Garianga	74.4	46.8	0.3	91.3	4.7	5.5	3.1	11,999			
Gikondo	74.4	57.0	2.2	95.3	4.7	12.6	2.0	4,227			

	% of private households possessing the asset										
			Commu	unication assets	•	·	Transport assets	2			
Sector of residence	Radio	Television	Telephone (fixed line)	Cell phone	Bicycle	Vehicle	Motor cycle	Count			
Kagarama	77.2	48.3	1.5	92.7	10.1	17.6	3.7	3,265			
Kanombe	75.7	47.5	1.2	91.0	10.2	12.4	3.5	10,620			
Kicukiro	77.3	60.0	1.4	95.7	5.1	12.2	3.1	4,139			
Kigarama	74.2	51.0	1.5	92.5	4.1	7.1	2.8	10,549			
Masaka	72.7	19.2	0.4	79.2	30.4	2.8	2.7	9,995			
Niboye	79.8	65.6	1.6	96.9	8.2	22.3	2.7	6,029			
Nyarugunga	78.1	58.9	1.6	94.3	6.7	14.9	3.3	8,903			
Nyanza											
Busasamana	70.6	14.5	0.8	66.5	10.4	1.7	1.9	10,687			
Busoro	60.8	1.1	1.1	41.4	22.0	0.3	0.7	8,308			
Cyabakamyi	60.9	0.4	0.1	38.4	6.8	0.1	0.3	5,579			
Kibilizi	62.5	0.3	0.2	39.9	23.8	0.5	0.9	7,657			
Kigoma	60.8	1.2	0.1	45.0	21.6	0.3	0.7	8,396			
Mukingo	63.8	1.7	0.1	50.4	17.1	0.3	0.7	10,675			
Muyira	59.8	0.8	0.2	42.5	19.8	0.2	0.7	8,750			
Ntyazo	59.5	1.0	0.1	38.4	21.8	0.3	0.8	6,510			
Nyagisozi	65.5	0.3	0.1	34.3	14.3	0.2	0.7	6,148			
Rwabicuma	63.1	0.4	0.2	47.2	14.1	0.3	0.6	4,812			
Gisagara											
Gikonko	62.2	1.6	0.1	42.1	22.5	0.2	1.2	5,580			
Gishubi	55.1	0.3	0.5	23.4	15.3	0.1	0.4	5,942			
Kansi	55.7	0.4	0.1	35.3	14.8	0.2	0.4	4,461			
Kibirizi	56.7	1.6	0.3	39.7	16.3	0.2	1.0	6,510			
Kigembe	59.4	0.6	0.2	31.9	20.1	0.3	0.3	4,801			
Mamba	57.5	0.9	0.1	35.1	28.2	0.4	0.7	8,166			
Muganza	51.9	0.2	0.6	24.3	13.7	0.2	0.8	6,829			
Mugombwa	59.2	0.1	0.2	31.1	13.5	0.2	0.6	5,396			
Mukindo	54.6	0.3	0.2	26.7	11.5	0.2	0.6	6,338			
Musha	61.4	0.7	0.7	36.4	21.9	0.3	0.8	5,974			
Ndora	56.0	1.8	0.6	33.6	13.8	0.2	0.8	5,867			
Nyanza	52.0	0.5	0.6	28.3	12.8	0.3	0.4	4,397			
Save	62.9	3.4	0.2	46.4	20.7	0.3	0.9	6,998			
Nyaruguru					+		+				

					% of private	households posses	ssing the asset	Count
0			Commu	inication assets		Tr	ansport assets	
Sector of residence	Radio	Television	Telephone (fixed line)	Cell phone	Bicycle	Vehicle	Motor cycle	Count
Busanze	53.1	1.0	0.2	29.6	2.2	0.1	0.5	5,727
Cyahinda	53.5	0.8	0.2	34.2	5.3	0.2	0.3	4,624
Kibeho	61.6	2.2	0.2	40.5	6.4	0.3	0.8	4,789
Kivu	64.2	0.3	0.0	37.6	4.0	0.1	0.9	3,702
Mata	61.9	1.5	0.2	41.8	9.1	0.4	1.3	3,033
Muganza	61.0	0.4	0.1	37.4	3.1	0.1	0.7	4,113
Munini	60.5	1.1	0.3	36.8	2.8	0.1	0.4	3,420
Ngera	59.6	0.4	0.2	38.5	12.5	0.2	0.7	5,180
Ngoma	54.9	0.9	0.2	34.6	7.8	0.1	0.3	5,206
Nyabimata	56.1	0.4	0.1	34.1	2.3	0.0	0.5	3,694
Nyagisozi	61.8	0.7	0.1	40.5	10.8	0.2	0.8	4,014
Ruheru	55.8	0.4	0.2	31.6	2.9	0.1	0.3	7,081
Ruramba	59.7	1.1	0.1	35.5	7.8	0.1	0.8	3,584
Rusenge	57.5	0.2	0.1	31.0	12.3	0.3	0.4	5,446
Huye								
Gishamvu	57.1	1.2	0.1	44.7	10.5	0.1	0.4	3,120
Huye	60.0	5.9	0.1	51.1	13.1	0.6	1.2	5,335
Karama	59.1	0.3	0.1	36.2	16.3	0.2	0.1	3,788
Kigoma	59.9	1.2	0.2	33.2	12.9	0.1	0.5	5,902
Kinazi	59.3	2.1	0.2	45.6	15.8	0.3	0.9	6,382
Maraba	63.9	1.5	0.2	38.0	14.6	0.2	0.7	5,716
Mbazi	62.5	5.8	0.3	51.2	17.3	0.6	1.5	7,682
Mukura	56.1	4.1	0.1	45.7	12.4	0.3	1.1	4,952
Ngoma	73.0	35.0	1.0	81.6	13.1	7.8	3.4	4,814
Ruhashya	62.1	2.3	0.1	44.0	19.5	0.4	0.8	5,498
Rusatira	63.6	3.8	0.3	45.8	17.9	0.6	0.9	6,182
Rwaniro	61.4	0.3	0.1	33.5	15.8	0.1	0.4	5,302
Simbi	59.6	0.5	0.1	35.3	19.6	0.2	0.3	5,366
Tumba	68.0	24.8	0.6	71.8	9.5	3.0	2.7	7,876
Nyamagabe								
Buruhukiro	62.4	0.4	0.3	27.8	7.5	0.2	0.9	5,214
Cyanika	64.9	0.9	0.1	38.3	13.2	0.1	0.9	5,752
Gasaka	69.4	15.6	0.9	61.7	7.3	1.9	2.5	6,050
Gatare	55.0	0.6	0.3	29.5	3.4	0.1	0.6	3,529

					% of pri	vate households po	ssessing the asset	
Contag of world and a			Commu	inication assets			Transport assets	Count
Sector of residence	Radio	Television	Telephone (fixed line)	Cell phone	Bicycle	Vehicle	Motor cycle	Count
Kaduha	55.6	1.3	0.4	29.8	2.5	0.1	0.6	4,849
Kamegeri	58.2	0.8	0.3	32.1	5.9	0.1	0.3	3,201
Kibirizi	60.8	1.6	0.3	36.0	8.8	0.3	0.9	4,761
Kibumbwe	55.3	0.6	0.4	28.8	2.5	0.1	0.3	3,065
Kitabi	60.4	1.4	0.2	38.5	10.9	0.2	0.5	5,563
Mbazi	65.3	0.3	0.0	33.4	10.0	0.1	1.1	2,810
Mugano	51.9	0.2	0.4	23.0	1.6	0.0	0.2	4,327
Musange	53.5	0.4	0.1	31.5	3.9	0.0	0.3	4,575
Musebeya	55.0	1.2	0.2	28.6	7.1	0.1	0.6	4,272
Mushubi	53.0	1.0	0.2	27.3	4.3	0.2	0.9	2,981
Nkomane	49.5	0.2	0.5	24.1	2.8	0.1	0.4	3,677
Tare	57.7	4.0	0.2	39.3	7.2	0.7	1.4	5,044
Uwinkingi	63.4	0.5	0.3	33.6	10.1	0.2	0.8	5,178
Ruhango								
Bweramana	61.3	4.5	0.3	50.9	11.1	0.6	1.0	6,981
Byimana	64.8	5.4	0.2	54.7	14.3	0.4	1.0	8,156
Kabagali	52.2	0.9	0.3	37.4	7.9	0.1	0.3	5,751
Kinazi	59.3	2.3	0.4	47.3	15.0	0.4	0.9	10,679
Kinihira	62.2	1.1	0.5	42.9	6.7	0.2	0.7	5,916
Mbuye	58.9	0.5	0.1	46.2	19.9	0.4	1.1	9,807
Mwendo	64.0	0.3	0.3	42.7	9.7	0.2	0.7	6,120
Ntongwe	57.7	0.6	0.2	43.4	17.4	0.4	0.6	7,732
Ruhango	58.7	7.3	0.2	53.8	13.3	0.7	1.0	15,826
Muhanga								_
Cyeza	68.8	3.0	0.3	56.9	16.2	0.5	1.1	7,156
Kabacuzi	73.7	0.7	1.4	58.3	7.2	0.1	0.7	6,110
Kibangu	66.2	1.7	0.5	47.5	2.0	0.2	0.6	4,673
Kiyumba	70.4	1.3	0.2	55.3	2.8	0.1	0.9	5,488
Muhanga	67.6	2.1	0.3	52.9	12.5	0.3	0.8	5,986
Mushishiro	67.3	2.3	0.2	53.4	5.1	0.2	0.8	4,888
Nyabinoni	59.1	0.2	1.2	35.9	7.2	0.2	0.4	4,047
Nyamabuye	76.0	28.9	0.5	81.6	6.9	3.1	3.3	10,966
Nyarusange	63.1	1.0	0.1	44.1	7.6	0.1	0.6	6,054
Rongi	66.9	0.2	0.1	43.7	4.8	0.1	0.3	6,646

	% of private households possessing the asset									
l <b>a</b>			Commu	nication assets	-	Tra	nsport assets	0		
Sector of residence	Radio	Television	Telephone (fixed line)	Cell phone	Bicycle	Vehicle	Motor cycle	Count		
Rugendabari	71.1	1.2	0.4	53.8	5.2	0.1	0.8	4,015		
Shyogwe	70.6	13.2	0.5	66.3	14.3	1.4	2.4	9,178		
Kamonyi										
Gacurabwenge	65.8	5.5	0.2	63.2	6.4	0.5	0.9	6,470		
Karama	67.7	1.6	0.2	57.3	11.1	0.1	0.7	4,367		
Kayenzi	71.3	2.3	0.3	61.2	6.7	0.2	1.5	5,346		
Kayumbu	70.7	1.1	0.2	57.8	15.5	0.2	1.9	3,787		
Mugina	61.3	2.3	0.1	49.3	16.8	0.4	1.0	9,364		
Musambira	63.9	3.3	0.2	55.4	8.9	0.3	0.6	7,914		
Ngamba	72.8	0.8	0.1	53.1	16.0	0.3	0.9	3,242		
Nyamiyaga	61.8	1.1	0.1	51.7	13.2	0.2	0.9	9,293		
Nyarubaka	66.7	1.2	1.1	49.4	18.6	0.2	1.2	6,015		
Rugarika	67.3	3.4	0.5	61.2	10.7	0.4	1.1	8,510		
Rukoma	71.6	2.7	0.2	58.2	15.5	0.6	1.3	7,888		
Runda	70.0	12.8	0.3	70.0	8.0	2.3	1.3	8,272		
Karongi										
Bwishyura	62.5	11.1	0.5	61.6	2.2	0.9	1.1	7,919		
Gashari	57.0	1.3	0.2	35.0	1.6	0.1	0.7	4,693		
Gishyita	58.7	2.3	0.4	47.8	0.9	0.2	0.5	4,783		
Gitesi	56.7	0.3	0.5	32.7	0.9	0.0	0.2	5,633		
Mubuga	59.7	1.8	0.3	41.5	2.5	0.1	0.8	4,369		
Murambi	61.7	2.1	0.2	43.9	3.8	0.1	0.5	5,106		
Murundi	56.2	0.5	0.2	30.3	0.8	0.1	0.3	6,142		
Mutuntu	51.2	0.3	0.7	26.4	0.8	0.1	0.4	5,075		
Rubengera	63.9	6.7	0.1	54.0	2.9	0.5	1.2	7,869		
Rugabano	58.0	0.4	1.2	29.9	1.5	0.0	0.2	7,283		
Ruganda	49.9	0.3	0.5	28.6	0.7	0.1	0.2	4,007		
Rwankuba	54.8	0.5	0.2	31.3	0.4	0.1	0.3	4,870		
Twumba	57.1	1.4	0.2	39.0	1.8	0.1	0.8	5,577		
Rutsiro										
Boneza	66.2	0.7	0.2	49.9	6.2	0.1	0.8	4,801		
Gihango	58.7	3.0	1.3	40.9	0.9	0.4	0.8	5,244		
Kigeyo	62.4	1.6	0.4	51.0	3.1	0.2	0.7	5,153		

					% of priv	ate households pos	ssessing the asset	
0			Commu	inication assets			Transport assets	Count
Sector of residence	Radio	Television	Telephone (fixed line)	Cell phone	Bicycle	Vehicle	Motor cycle	Count
Kivumu	51.4	1.7	1.0	39.8	3.2	0.1	0.7	6,950
Manihira	59.2	0.5	0.3	38.4	0.6	0.1	0.7	3,647
Mukura	56.1	0.3	0.1	33.3	0.7	0.0	0.3	7,579
Murunda	57.5	2.4	0.2	41.0	1.0	0.0	0.6	4,110
Musasa	61.9	1.2	0.3	42.3	4.7	0.1	0.6	5,220
Mushonyi	61.9	1.8	0.2	49.4	5.5	0.2	0.6	5,248
Mushubati	55.2	1.2	0.2	39.2	2.1	0.2	0.4	5,878
Nyabirasi	44.6	0.2	0.3	35.2	1.5	0.0	0.3	6,353
Ruhango	51.4	2.7	1.0	39.3	3.4	0.2	0.8	6,166
Rusebeya	53.4	0.6	0.2	35.4	0.4	0.0	0.8	4,918
Rubavu								
Bugeshi	51.5	0.6	0.7	47.3	6.2	0.2	0.6	6,261
Busasamana	44.4	1.8	0.3	35.0	12.9	0.2	0.7	6,954
Cyanzarwe	43.7	0.9	0.9	30.6	8.6	0.2	0.7	6,628
Gisenyi	73.6	50.1	1.3	91.7	6.6	5.8	3.4	11,968
Kanama	53.2	4.3	0.4	50.5	3.0	0.3	0.7	6,450
Kanzenze	50.0	4.0	0.2	60.0	4.4	0.3	1.1	4,073
Mudende	47.8	1.1	0.3	44.6	4.6	0.1	0.4	5,664
Nyakiriba	60.0	8.5	0.1	59.8	4.4	0.6	1.3	5,832
Nyamyumba	55.9	7.7	0.4	52.8	3.0	0.5	1.3	8,140
Nyundo	53.7	3.5	0.3	45.1	3.5	0.4	0.5	6,918
Rubavu	53.1	8.2	2.6	55.2	7.8	0.4	1.6	9,753
Rugerero	55.2	10.5	0.2	58.2	4.0	0.5	1.5	10,208
Nyabihu								
Bigogwe	54.3	2.7	0.8	64.2	2.4	0.1	0.3	6,439
Jenda	58.8	4.1	1.1	56.7	3.1	0.1	0.4	7,748
Jomba	54.0	0.7	0.7	41.8	3.2	0.1	0.2	4,763
Kabatwa	64.8	4.5	0.3	64.2	5.9	0.2	0.7	4,201
Karago	50.6	1.2	0.5	43.4	3.5	0.1	0.1	5,735
Kintobo	57.3	0.5	1.7	44.9	2.3	0.1	0.2	3,377
Mukamira	62.1	6.4	0.6	58.4	5.5	0.3	0.4	6,224
Muringa	47.1	0.3	0.3	36.5	1.5	0.0	0.2	5,133
Rambura	57.1	1.9	1.5	49.4	3.4	0.1	0.2	6,236
Rugera	61.0	1.2	2.0	45.9	4.8	0.1	0.2	5,724

					% of privat	e households posse	ssing the asset	
0			Commu	nication assets		Tr	ansport assets	0
Sector of residence	Radio	Television	Telephone (fixed line)	Cell phone	Bicycle	Vehicle	Motor cycle	Count
Rurembo	49.6	0.2	0.8	31.0	2.8	0.1	0.2	5,463
Shyira	56.9	0.4	0.2	43.7	5.9	0.2	0.3	4,812
Ngororero								
Bwira	57.4	0.3	0.1	38.4	1.0	0.1	0.4	4,421
Gatumba	67.6	4.3	0.4	56.5	2.2	0.1	0.7	5,747
Hindiro	55.1	1.6	0.1	48.1	2.0	0.1	0.5	5,633
Kabaya	56.1	3.9	0.3	48.4	3.0	0.3	0.7	7,754
Kageyo	53.6	0.4	0.0	36.8	1.6	0.0	0.1	5,432
Kavumu	47.7	0.3	0.1	33.1	1.0	0.1	0.4	6,555
Matyazo	55.2	0.6	0.2	42.8	2.5	0.1	0.3	6,113
Muhanda	45.7	0.5	0.6	34.1	2.3	0.1	0.2	6,505
Muhororo	67.2	0.7	0.2	49.7	3.2	0.1	0.2	4,972
Ndaro	53.1	0.4	0.6	30.3	0.8	0.0	0.3	5,593
Ngororero	60.1	2.6	0.5	48.8	5.2	0.3	0.6	8,471
Nyange	54.8	0.5	0.3	35.0	2.4	0.2	0.3	5,508
Sovu	47.6	0.4	0.3	27.5	0.8	0.1	0.4	6,259
Rusizi								
Bugarama	44.7	8.9	0.5	50.8	14.5	0.5	0.5	6,683
Butare	44.6	0.2	0.4	28.3	0.2	0.0	0.2	4,082
Bweyeye	52.3	0.3	0.2	33.4	1.1	0.1	0.4	2,857
Gashonga	61.4	2.6	0.0	52.5	9.9	0.2	0.8	4,988
Giheke	62.8	3.6	0.2	61.0	1.7	0.3	0.6	4,126
Gihundwe	70.2	19.2	0.5	72.9	3.2	1.6	2.4	5,598
Gikundamvura	46.3	0.8	0.2	40.5	2.0	0.0	0.2	3,892
Gitambi	52.3	5.3	0.1	48.5	2.4	0.1	0.5	4,790
Kamembe	71.3	38.3	1.5	84.4	2.8	3.8	2.3	5,192
Muganza	47.9	12.0	0.8	56.5	7.8	0.5	1.3	5,835
Mururu	65.1	13.9	0.8	64.3	3.5	0.7	0.9	5,013
Nkanka	57.4	1.9	0.3	53.5	2.1	0.2	0.5	3,867
Nkombo	38.4	3.1	0.3	46.0	0.3	0.0	0.1	3,156
Nkungu	64.6	0.4	0.3	45.2	0.8	0.1	0.5	4,312
Nyakabuye	53.5	4.1	0.5	49.0	3.6	0.1	0.7	6,111
Nyakarenzo	64.5	2.2	0.2	54.4	4.2	0.2	0.5	3,314
Nzahaha	60.4	1.6	0.1	46.9	11.0	0.1	0.3	5,552

					% of private	e households posse	essing the asset	
0			Commu	inication assets		T	ransport assets	Count
Sector of residence	Radio	Television	Telephone (fixed line)	Cell phone	Bicycle	Vehicle	Motor cycle	Count
Rwimbogo	56.4	5.9	0.4	56.6	4.3	0.2	0.5	3,812
Nyamasheke								
Bushekeri	59.6	5.0	0.2	60.2	1.5	0.2	0.7	5,588
Bushenge	58.8	2.7	0.3	57.5	0.7	0.1	0.7	4,607
Cyato	49.8	0.1	3.0	37.1	0.6	0.0	0.6	5,000
Gihombo	53.1	0.9	0.5	46.0	0.8	0.0	0.4	5,497
Kagano	55.4	4.0	2.4	51.4	2.1	0.3	0.6	7,454
Kanjongo	56.9	7.7	1.5	52.4	1.4	0.4	1.5	7,251
Karambi	57.3	0.4	0.5	44.5	1.8	0.1	0.9	5,694
Karengera	58.1	2.7	0.2	50.6	1.3	0.1	0.4	6,256
Kirimbi	56.0	0.6	0.1	47.4	1.5	0.2	0.6	4,719
Macuba	60.9	0.9	0.5	52.3	0.9	0.1	0.8	6,174
Mahembe	60.2	2.2	0.3	51.4	1.9	0.2	1.1	3,725
Nyabitekeri	55.9	0.5	0.1	53.0	0.6	0.1	0.8	6,081
Rangiro	54.3	0.6	0.1	43.5	0.8	0.0	0.6	3,260
Ruharambuga	63.3	3.4	0.2	58.9	1.8	0.3	1.0	5,206
Shangi	52.7	2.0	0.1	50.9	0.5	0.1	0.6	5,542
Rulindo								
Base	67.1	2.3	0.1	52.6	11.3	0.5	1.0	4,049
Burega	72.2	0.3	0.4	48.9	10.4	0.3	1.1	3,045
Bushoki	72.9	4.6	0.4	62.4	7.9	0.5	0.8	4,702
Buyoga	70.1	1.0	0.2	45.8	10.7	0.2	0.9	5,070
Cyinzuzi	73.6	1.2	0.3	47.9	6.7	0.2	0.5	3,261
Cyungo	63.7	1.4	0.4	44.4	9.3	0.3	0.7	3,017
Kinihira	68.4	2.7	0.2	54.0	13.4	0.4	0.8	3,473
Kisaro	66.4	1.0	0.3	41.4	11.7	0.4	0.9	4,452
Masoro	73.0	4.5	0.3	59.1	8.1	0.4	1.2	5,068
Mbogo	72.5	2.0	0.4	52.6	9.4	0.3	0.7	3,834
Murambi	76.5	2.7	0.1	61.0	10.3	0.5	1.6	4,312
Ngoma	69.3	0.8	0.3	46.1	6.7	0.2	0.6	2,605
Ntarabana	71.1	1.6	0.0	51.1	10.5	0.3	0.8	4,383
Rukozo	65.3	1.6	0.4	43.6	10.6	0.2	0.9	3,421
Rusiga	73.8	1.4	0.2	52.3	6.4	0.1	0.4	2,596
Shyorongi	72.1	3.5	0.2	59.5	12.0	0.7	1.4	5,774

					% of priva	ate households pos	sessing the asset	
0			Commu	nication assets			Transport assets	Count
Sector of residence	Radio	Television	Telephone (fixed line)	Cell phone	Bicycle	Vehicle	Motor cycle	Count
Tumba	69.2	1.9	0.2	53.5	10.8	0.4	0.7	4,391
Gakenke								
Busengo	67.5	0.2	1.6	41.1	5.3	0.1	0.3	4,751
Coko	76.2	0.5	0.3	61.2	14.3	0.2	1.1	3,822
Cyabingo	71.6	0.3	0.4	53.6	10.3	0.2	0.4	4,066
Gakenke	66.3	2.9	0.9	52.8	9.8	0.4	0.8	5,350
Gashenyi	66.7	0.5	0.2	44.8	11.6	0.3	0.6	4,777
Janja	63.1	0.5	0.1	40.6	3.0	0.1	0.2	3,628
Kamubuga	63.4	0.5	0.3	37.1	2.8	0.1	0.2	4,833
Karambo	61.4	0.3	2.0	34.7	4.7	0.1	0.2	2,995
Kivuruga	67.5	0.6	1.9	48.7	4.0	0.2	0.2	4,026
Mataba	61.3	0.4	0.6	37.1	9.7	0.2	0.6	3,470
Minazi	67.6	0.3	0.0	46.9	6.4	0.1	0.5	3,141
Mugunga	61.8	0.3	0.3	44.5	7.0	0.2	0.4	4,706
Muhondo	75.9	1.2	0.1	58.1	9.1	0.2	0.7	4,778
Muyongwe	69.1	0.7	0.9	49.0	5.4	0.1	0.4	3,546
Muzo	62.3	0.2	0.3	38.9	5.2	0.2	0.2	5,065
Nemba	63.4	1.9	0.7	48.2	2.6	0.4	0.2	3,691
Ruli	79.7	8.0	0.3	71.3	14.2	0.7	3.6	4,678
Rusasa	65.7	0.4	0.1	46.2	6.8	0.1	0.1	4,271
Rushashi	73.2	2.4	0.3	55.1	12.6	0.2	1.1	4,166
•								
Musanze	04.0	0.0	0.4	04.7		0.0	0.0	4 774
Busogo	64.8	9.6	0.1	61.7	5.5	0.3	0.6	4,771
Cyuve	66.9	13.0	0.6	61.1	9.7 8.1	1.0 0.2	1.4 0.5	8,962
Gacaca Gashaki	68.5	1.4		49.8 47.7				5,379
	70.5	1.6	0.1		4.8	0.1	0.2	3,031
Gataraga	58.2	2.9	0.2	50.3	4.4	0.1	0.3	4,949
Kimonyi	58.6	3.5	0.3	49.1	5.4	0.2	0.9	3,644
Kinigi	69.8	3.1	0.1	60.1	8.3	0.4	0.9	6,311
Muhoza	78.6	34.5	1.0	82.9	7.1	3.6	2.9	12,091
Muko	66.4	5.2	0.4	56.8	11.9	0.2	1.5	4,561
Musanze	62.4	6.3	0.6	56.9	7.4	0.4	0.8	7,371
Nkotsi	63.3	2.1	0.2	46.5	9.2	0.2	0.9	3,292
Nyange	64.3	2.1	0.2	53.4	13.9	0.3	0.5	6,354

Sector of residence					% of privat	te households pos	sessing the asset	
	Communication assets Transport assets						Transport assets	0
	Radio	Television	Telephone (fixed line)	Cell phone	Bicycle	Vehicle	Motor cycle	Count
Remera	74.2	2.5	0.4	61.1	7.1	0.2	0.4	4,294
Rwaza	69.6	1.1	0.6	52.4	11.4	0.2	0.4	4,952
Shingiro	53.1	1.0	0.2	40.5	4.5	0.1	0.1	4,794
Burera								
Bungwe	65.7	0.5	0.5	41.2	11.3	0.3	1.0	3,360
Butaro	66.2	2.3	1.0	48.9	5.7	0.6	1.0	6,917
Cyanika	56.5	1.9	0.3	49.9	7.0	0.3	0.5	8,007
Cyeru	64.3	2.4	0.2	44.4	5.5	0.2	0.6	2,832
Gahunga	55.9	2.5	0.2	42.4	10.6	0.3	0.5	5,635
Gatebe	67.0	0.3	0.3	39.3	9.2	0.4	0.5	3,692
Gitovu	72.4	1.3	0.4	44.2	6.8	0.0	0.6	2,255
Kagogo	58.7	2.5	1.9	49.9	11.7	0.3	0.5	4,249
Kinoni	68.7	4.3	0.3	59.2	9.2	0.4	0.5	3,790
Kinyababa	65.2	0.2	0.0	50.7	7.4	0.1	0.5	4,269
Kivuye	70.8	0.6	1.5	40.1	11.6	0.1	0.5	3,367
Nemba	64.1	1.4	0.1	44.0	8.7	0.1	0.8	4,200
Rugarama	58.4	2.8	0.6	51.8	7.9	0.2	0.2	5,095
Rugengabari	63.1	1.1	0.8	41.5	3.0	0.2	0.7	4,224
Ruhunde	62.3	1.0	1.4	40.3	8.2	0.1	0.9	3,829
Rusarabuye	66.3	2.5	0.3	50.1	7.4	0.2	1.2	3,886
Rwerere	64.4	0.7	0.2	43.6	5.4	0.1	0.3	4,017
Gicumbi								
Bukure	71.3	0.7	0.3	49.2	22.6	0.5	1.1	3,676
Bwisige	66.9	0.6	0.2	36.1	11.2	0.2	1.2	3,366
Byumba	70.4	17.3	0.7	61.9	9.2	2.1	2.7	8,576
Cyumba	67.8	4.9	0.6	53.5	13.6	0.7	1.0	3,480
Giti	66.4	0.4	0.2	37.8	16.6	0.2	1.1	3,228
Kageyo	65.4	6.6	0.3	48.1	8.6	0.9	1.5	3,921
Kaniga	70.9	2.9	0.2	49.4	14.3	0.5	1.3	3,404
Manyagiro	63.6	0.7	0.3	34.2	12.4	0.1	0.7	4,400
Miyove	62.5	1.6	0.2	38.4	9.1	0.3	1.1	3,714
Mukarange	73.5	1.3	0.1	47.9	14.1	0.5	0.9	3,601
Muko	67.5	0.5	0.2	40.9	15.6	0.3	1.0	4,070
Mutete	66.6	0.8	0.3	44.5	8.8	0.4	0.9	5,347

					% of priva	te households pos	sessing the asset	
Sector of residence	Communication assets Transport assets							
	Radio	Television	Telephone (fixed line)	Cell phone	Bicycle	Vehicle	Motor cycle	Count
Nyamiyaga	67.9	0.4	0.1	38.1	14.1	0.1	1.3	4,067
Nyankenke	60.6	0.6	0.3	38.5	14.0	0.2	0.6	4,567
Rubaya	61.3	0.7	2.2	38.8	13.5	0.4	0.7	2,416
Rukomo	67.8	1.8	0.2	42.7	10.9	0.3	0.9	5,458
Rushaki	72.2	1.9	0.2	46.7	16.0	0.5	1.7	2,757
Rutare	66.7	1.1	0.1	46.2	13.2	0.6	1.1	5,347
Ruvune	69.2	0.4	0.3	39.3	16.2	0.1	1.3	4,262
Rwamiko	70.4	0.8	0.2	46.7	16.1	0.4	1.1	2,878
Shangasha	68.1	1.8	1.0	40.7	10.0	0.1	1.0	3,540
Rwamagana								
Fumbwe	69.3	4.5	0.5	56.7	13.6	0.5	1.3	4,956
Gahengeri	69.3	2.4	0.2	63.9	22.7	0.5	1.2	5,575
Gishali	66.5	3.9	0.2	58.6	26.9	0.8	1.2	5,597
Karenge	77.6	7.2	0.2	70.8	44.4	0.9	2.4	5,268
Kigabiro	72.7	18.5	0.7	75.3	16.9	2.0	2.5	8,252
Muhazi	71.8	10.5	0.3	73.2	27.3	1.3	1.8	5,923
Munyaga	62.7	0.4	0.3	48.9	24.1	0.3	1.1	4,033
Munyiginya	64.3	1.7	0.5	54.3	25.8	0.5	1.2	3,940
Musha	68.3	5.4	1.6	54.7	26.7	0.5	1.3	5,037
Muyumbu	73.4	5.1	0.7	69.8	30.3	1.1	2.0	6,058
Mwulire	69.5	6.4	0.4	66.0	24.9	0.5	1.6	5,260
Nyakaliro	73.9	2.7	0.2	64.6	43.3	0.3	2.5	4,841
Nzige	74.9	4.2	0.3	66.7	40.5	0.1	2.1	3,610
Rubona	64.8	2.2	0.1	56.7	34.4	0.3	1.8	5,825
Nyagatare								
Gatunda	69.7	2.7	0.5	55.7	33.0	0.3	1.7	6,676
Karama	70.9	1.7	0.6	52.5	31.4	0.6	1.6	6,226
Karangazi	66.8	3.1	0.2	65.3	40.4	0.8	2.4	12,328
Katabagemu	68.7	1.7	0.3	53.7	48.6	0.6	2.2	7,582
Kiyombe	74.5	0.5	0.0	46.8	21.5	0.2	1.0	3,932
Matimba	68.6	6.4	0.4	68.7	38.5	1.2	2.8	5,399
Mimuri	64.1	3.9	0.3	51.1	32.1	0.5	2.7	6,745
Mukama	66.5	0.3	0.1	45.1	26.7	0.4	1.4	5,072
Musheri	69.0	1.9	2.0	63.2	48.0	0.5	2.3	6,653

Sector of residence		% of private households possessing the asset						
			Commu	inication assets			Transport assets	Carrat
	Radio	Television	Telephone (fixed line)	Cell phone	Bicycle	Vehicle	Motor cycle	Count
Nyagatare	70.6	9.5	1.3	72.6	36.3	1.6	4.5	12,350
Rukomo	68.2	5.2	0.2	63.1	41.0	0.6	2.4	8,170
Rwempasha	72.4	0.6	0.2	70.4	44.5	0.4	4.3	4,308
Rwimiyaga	66.9	2.6	0.3	65.4	47.3	0.5	3.0	12,723
Tabagwe	73.2	0.3	0.1	58.4	45.1	0.3	1.5	7,201
Gatsibo								
Gasange	66.0	0.7	0.2	41.3	20.5	0.4	1.3	3,841
Gatsibo	66.8	2.9	0.3	51.6	26.0	0.5	2.2	5,924
Gitoki	60.1	1.6	0.2	48.6	29.0	0.3	1.2	7,750
Kabarore	66.6	3.7	0.4	59.7	35.4	0.9	1.9	11,076
Kageyo	61.4	1.1	0.5	35.4	20.5	0.2	1.2	5,053
Kiramuruzi	63.6	6.6	0.3	58.6	23.2	0.6	1.3	7,404
Kiziguro	62.9	3.8	0.2	58.4	21.5	0.5	1.0	6,765
Muhura	66.6	1.7	0.2	46.1	17.2	0.5	1.7	6,761
Murambi	62.1	0.7	0.2	43.4	19.5	0.2	0.7	6,683
Ngarama	61.8	2.2	0.3	44.8	23.6	0.3	1.9	7,199
Nyagihanga	61.9	0.4	0.3	36.2	15.0	0.2	1.1	5,624
Remera	64.9	1.3	0.1	44.5	20.5	0.3	1.2	6,091
Rugarama	64.3	2.0	1.5	56.2	25.8	0.2	1.1	8,427
Rwimbogo	69.1	0.6	0.2	62.5	40.2	0.3	1.5	7,722
Kayonza								
Gahini	67.1	4.4	0.3	60.4	29.3	0.6	1.7	7,271
Kabare	72.7	0.8	1.0	62.0	35.2	0.5	0.9	7,837
Kabarondo	66.3	9.6	0.2	63.4	19.4	0.9	1.4	7,497
Mukarange	70.3	11.1	0.2	71.9	21.2	1.8	2.0	10,678
Murama	70.8	1.4	0.2	58.8	26.8	0.4	0.9	4,684
Murundi	65.1	1.3	1.1	54.1	31.0	0.4	2.0	8,146
Mwiri	64.9	1.5	0.2	55.8	35.8	0.3	1.3	5,120
Ndego	69.3	0.8	0.1	63.6	52.8	0.5	0.6	4,235
Nyamirama	63.1	4.9	0.2	58.8	27.0	0.5	1.1	7,177
Rukara	62.9	3.9	0.3	55.1	28.5	0.3	1.5	6,966
Ruramira	59.9	0.6	0.1	48.7	25.1	0.1	0.6	4,203
Rwinkwavu	67.9	3.4	0.3	62.1	39.6	0.8	1.7	6,703

					% of pri	vate households po	ssessing the asset	
Sector of residence	Communication assets Transport assets							0
	Radio	Television	Telephone (fixed line)	Cell phone	Bicycle	Vehicle	Motor cycle	Count
Kirehe								
Gahara	60.8	1.0	0.5	49.6	20.8	0.3	0.7	9,106
Gatore	66.7	2.6	0.2	60.1	25.8	0.5	1.0	6,156
Kigarama	60.2	0.6	0.3	52.8	25.5	0.1	0.9	7,104
Kigina	65.8	4.8	0.5	61.5	27.2	0.5	1.3	6,279
Kirehe	69.0	3.7	0.2	65.3	29.2	0.6	1.0	5,385
Mahama	61.5	0.8	0.1	57.8	49.1	0.2	1.1	5,451
Mpanga	64.2	0.8	0.2	58.8	37.5	0.4	1.2	7,183
Musaza	66.7	0.4	0.5	57.1	25.4	0.3	1.4	5,907
Mushikiri	70.8	0.6	0.2	58.2	24.9	0.2	0.8	6,343
Nasho	71.3	1.6	1.1	62.1	37.2	0.6	1.5	6,016
Nyamugari	63.6	2.7	0.9	57.2	35.0	0.4	1.0	8,568
Nyarubuye	68.4	0.6	0.2	57.9	22.0	0.2	0.9	4,381
Ngoma								
Gashanda	65.8	0.5	0.1	46.5	32.2	0.2	0.5	4,017
Jarama	57.9	1.1	0.1	35.7	34.6	0.3	0.5	5,613
Karembo	67.8	3.0	0.3	50.7	28.8	0.4	1.3	3,596
Kazo	67.1	2.1	0.1	52.4	27.8	0.4	0.6	6,407
Kibungo	75.4	17.4	0.8	73.5	15.2	2.4	2.5	6,368
Mugesera	63.7	0.8	1.1	42.2	43.0	0.2	1.1	6,137
Murama	71.0	0.9	1.7	59.5	23.2	0.2	0.9	5,296
Mutenderi	65.1	0.4	0.1	49.7	25.7	0.2	0.7	4,874
Remera	68.6	7.5	0.5	63.1	21.8	0.7	1.2	6,538
Rukira	73.1	1.9	0.2	63.8	19.9	0.2	0.9	5,815
Rukumberi	60.5	1.7	0.4	43.3	44.9	0.3	0.6	6,914
Rurenge	71.4	0.7	0.1	52.4	24.5	0.2	0.8	6,802
Sake	59.9	2.8	0.2	44.4	30.1	0.5	1.0	5,624
Zaza	63.0	2.3	0.2	46.1	32.3	0.1	0.6	5,646
Bugesera								
Gashora	62.2	3.2	0.4	53.2	43.1	0.3	0.7	5,131
Juru	71.7	0.7	0.2	57.2	54.2	0.3	1.4	5,481
Kamabuye	63.6	0.7	1.0	41.0	41.2	0.4	0.4	4,622
Mareba	58.3	1.4	0.1	44.6	33.4	0.5	1.2	5,344
Mayange	69.4	5.5	0.2	68.0	54.7	0.6	1.5	6,617

	% of private households possessing the asset							
Sector of residence			Comr	nunication assets	Transport assets			0
Sector of residence	Radio	Television	Telephone (fixed line)	Cell phone	Bicycle	Vehicle	Motor cycle	Count
Musenyi	62.8	0.6	0.1	49.0	36.6	0.3	0.6	7,123
Mwogo	69.3	0.5	0.1	51.9	42.9	0.3	0.7	4,471
Ngeruka	61.3	0.4	0.2	40.2	37.6	0.3	0.7	6,961
Ntarama	66.7	3.0	1.6	60.6	28.3	0.7	0.9	4,827
Nyamata	68.3	13.4	0.7	72.4	31.9	1.8	2.1	8,778
Nyarugenge	56.7	0.4	0.4	39.4	23.8	0.3	0.6	4,893
Rilima	72.4	4.9	0.1	67.6	56.4	0.7	1.8	5,935
Ruhuha	66.5	6.7	0.5	55.0	29.0	0.9	1.9	5,407
Rweru	63.2	0.5	0.1	46.4	40.4	0.3	1.2	6,399
Shyara	59.2	0.5	0.1	38.3	24.6	0.3	0.9	3,380

Source: Fourth Rwanda Population and Housing Census

# PERSONS AND INSTITUTIONS THAT CONTRIBUTED TO THE FOURTH RWANDA POPULATION AND HOUSING CENSUS, 2012

## **National Census Commission**

**Chairperson:** 

Claver GATETE Minister of Finance and Economic Planning

John RWANGOMBWA Former Minister of Finance and Economic Planning

**Vice Chairperson:** 

James MUSONI Minister of Local Government

Secretary:

Yusuf MURANGWA Director General of NISR

Dr. Diane KARUSISI Former Acting Director General of NISR

#### **Members of the National Census Commission**

Venantia TUGIREYEZU Minister in the Office of the President

Stella Ford MUGABO Minister of Cabinet Affairs

James KABAREBE Minister of Defense

Sheikh Mussa HARERIMANA Minister of Internal Security

Louise MUSHIKIWABO Minister of Foreign Affairs and Cooperation

Dr. Vincent BIRUTA Minister of Education

Dr. Mathias HAREBAMUNGU Minister of State in charge of Primary and Secondary Education

Dr. Agnes BINAGWAHO Minister of Health

Odda GASINZIGWA Minister in Prime Minister's Office in charge of Gender and Family

Promotion

Minister of Youth and ICT Minister of Infrastructure

Former Minister of Infrastructure
Minister of Public Service and Labour

Minister of Natural Resources

Former Acting Director General of ORINFOR

**Director General of RBA** 

CEO of the Private Sector Federation

Former CEO of the Private Sector Federation

Stanislas KAMANZI Willy RUKUNDO Arthur ASIIMWE Hannington NAMARA

Albert NSENGIYUMVA Anastase MUREKEZI

Jean Philbert NSENGIMANA

Prof. Silas LWAKABAMBA

Robert BAYIGAMBA

## **National Technical Committee**

**Chairperson:** 

Leonard MINEGA RUGWABIZA Former Director of National Development Planning and Research in MINECOFIN

Vice Chairperson: Egide RUGAMBA

Secretary:

Prosper NKAKA MUTIJIMA

Dr. Agnes NTIBANYURWA
Esther MUTAMBA
Anna MUGABO
Dr. Erasme RWANAMIZA
Innocent MUSABYIMANA
Jeanne d'Arc UMULISA
Parfait UWARIRAYE
Redempter BATETE MUKUNZI
Antonio MUTORO

Director General of Planning in MINALOC

Census Coordinator of the RPHC4

## **Members of the National Technical Committee**

Assistant Representative of UNFPA in charge of Population and Development

Director General of Rwanda Housing Authority Director General of Labour and Employment

Director General of Education Director of Planning in MINIRENA

Director of Planning and M&E in MIGEPROF

Director of Planning in MINISANTE

Director of Youth Employment and Program Coordination

Former Executive Director of IPAR-Rwanda

## **Branches of the National Census Commission**

## Members of the Branches of the NCC at Province Level (Governors of Provinces)

## **Kigali City:**

Fidele NDAYISABA, Mayor

## **Sothern Province:**

Alphonse MUNYENTWARI, Governor

## **Western Province:**

Celestin KABAHIZI, Former Governor Caritas MUKANDASIRA, Governor

## **Northern Province:**

Aime BOSENIBAMWE, Governor

## **Eastern Province:**

Odette UWAMARIYA, Governor

## Members of the Branches of the NCC at District Level (Mayors of Districts)

Solange MUKASONGA Willy NDIZEYE Paul Jules NDAMAGE Abdallah MURENZI Leandres KAREKAZI Francois HABITEGEKO Eugene MUZUKA KAYIRANGA Philbert MUGISHA Francois Xavier MBABAZI Yvonne MTAKWASUKU Jacques RUTSINGA Bernard KAYUMBA Gaspard BYUKUSENGE Sheikh Hassan BAHAME	Nyarugenge District Gasabo District Kicukiro District Nyanza District Gisagara District Nyaruguru District Huye District Nyamagabe District Ruhango District Muhanga District Kamonyi District Karongi District Rutsiro District Rubavu District	Gedeon RUBONEKA Oscar NZEYIMANA Jean Baptiste HABYARIMANA Justus KANGWAGYE Deogratias NZAMWITA Winifrida MPEBYEMUNGU Samuel SEMBAGARE Alexandre MVUYEKURE Nehemie UWIMANA Fred SABITI ATUHE Ambrose RUBONEZA John MUGABO Protais MURAYIRE Aphrodice NAMBAJE	Ngororero District Rusizi District Nyamasheke District Rulindo District Gakenke District Musanze District Burera District Gicumbi District Rwamagana District Ryagatare District Gatsibo District Kayonza District Kirehe District Ngoma District
Abdoulatif TWAHIRWA	Nyabihu District	Louis RWAGAJU	Bugesera District

## **National Directors**

Yusuf MURANGWA, Director General of NISR Dr. Diane KARUSISI, Former Acting Director General of NISR

Census Technical Director Willy MPABUKA GASAFARI

Census National Coordinator Prosper NKAKA MUTIJIMA

**Census Field Operations** 

#### **Census National Coordinators**

Prosper NKAKA MUTIJIMA Major-General Jacques MUSEMAKWELI Eric KAYIRANGA Alex MUGISHA National Institute of Statistics of Rwanda Rwanda Defence Force Rwanda National Police

**Rwanda Correctional Services** 

## **Census Province Coordinators**

Juvenal MUNYARUGERERO Baudouin RUTERANA Willy MPABUKA GASAFARI Francois SEKAMONDO Astrid SEGAHWEGE Kigali City Southern Province Western Province Northern Province Eastern Province

#### **Census District Coordinators**

Jean Nepo. RWABUKUMBA Franck Mine Jean Paul RUSHAKU François ABALIKUMWE **Evelyne KANYONGA** Etienne KWIZERA Juvenal NTAMBARA Albert KARERA Annonciata MUKABAGIRE Francois KABAYIZA Andre KAJABIKA Jean Baptiste SERUGENDO Jean Marc MUKUNDABANTU Jean MUGABO Immaculee MUKANGENDO Olivier MBANGUTSE Wellars MUDASHIMA

Nyarugenge District Gasabo District Kicukiro District Nyanza District Gisagara District Nyaruguru District **Huye District** Nyamagabe District Ruhango District Muhanga District Kamonyi District Karongi District Rutsiro District Rubavu District Nyabihu District **Ngororero District** Rusizi District

Patrick NSHIMIYIMANA
Jean BIZIMANA
Issa MUSABEMUNGU
Clement BIZIMUNGU
Beatrice UWAYEZU
Esther MAHUKU
Vital HABINSHUTI
Ephrem RUKUNDO
Dominique M. KANOBANA
Nicolas MWIZERWA
David MASENGEHO
Venuste NKURUNZIZA
Basile NJAMAHORO
Dominique MICOMYIZA
Eugene UWIRAGIYE

Florence UWIMBABAZI

Rusizi District Nyamasheke District Rulindo District Gakenke District Musanze District **Burera District** Gicumbi District Rwamagana District **Nyagatare District** Nyagatare District Gatsibo District Kayonza District Kirehe District Ngoma District **Ngoma District Bugesera District** 

#### **Zone and Sector Controllers and Enumerators**

## **Zone Controllers:**

127 (mostly Districts Education Officers and Headmasters of some Secondary Schools)

## **Sector Controllers:**

451 (mostly Sector Education Officers)

## **Enumerators:**

24,005 (mostly Primary School Teachers)

## **Cartography and Data Processing**

**Programmer:** 

Augustin TWAGIRUMUKIZA, Director of ICT

**Assistant Programmers:** 

Didier UYIZEYE

Donath NKUNDIMANA

Massoud HARERIMANA

Coders:

Number = 308

**Data Entry Clerks:** 

Number = 308

**Cartography:** 

Florent BIGIRIMANA

Olivier MBANGUTSE

Clement BIZIMUNGU

Albert KARERA

James RWAGASANA

**Archiving:** 

Eric RUSA

Pierre Claver KABANDANA

## **Administration and Finance**

Odette MBABAZI Didier GAKUBA

Liberal SEBULIKOKO

Jean Pierre UWINEZA

Andre GASHUGI

Silas MUNYEMANA

Jerome UWIBAMBE

Alicia INGABIRE

Jocelyne UWAMAHORO

Esperance UWIMANA

Nina RURANGIRWA

Maureen TWAHIRWA

Yolande KABEGA

Antoinette HABINSHUTI

Theodore RUGANZU

Jean Paul NDISANZE

Hassan YAHYA

Eric BUGINGO

Alphonse SHUMBUSHO

Gerald YEMUKAMA

Nadine BABYEYI

Elias DUSENGE

Sita KAZIMBAYA

Deputy Director General in charge of Corporate Services in NISR

Former Director of Finance in NISR

Former Coordinator of Basket Fund

Former Acting Director of Finance in NISR

Director of Administration in NISR

Director of Finance in NISR

Accountant in NISR

Accountant in NISR

HR Manager of Permanent Staff in NISR

Former HR Manager of Temporary Staff in NISR

HR Manager of Temporary Staff in NISR

Former Public Relations Officer

Former Public Relations Officer

Planning Officer

Former Planning Officer

Planning Officer

Coordinator of Basket Fund

**Procurement Officer** 

**Procurement Officer** 

**Procurement Officer** 

Administrative Assistant

Messenger

Messenger

## **Census Data Analysis**

## **National Data Analysts**

Jean RUGARAMA Population Size and Spatial Distribution

Dieudonne MUHOZA Marital Status and Nuptiality

Beatrice UWAYEZU Fertility
Willy MPABUKA GASAFARI Mortality

Dr. Bosco BINENWA Socio-Cultural Characteristics of the Population

Pierre Claver RUTAYISIRE Migration and Spatial Mobility

Prof. Emmanuel TWARABAMENYE Characteristics of Housing and Households

James BYIRINGIRO Labour Force

Charles RURANGA Measurement and Mapping of Non-Monetary Poverty

Annonciata MUKABAGIRE Education
Dominique M.KANOBANA Gender

Apolline MUKANYONGA Socio-Economic Status of Persons with Disability

Jules RUBYUTSA Socio-Economic Status of Children Venant HABARUGIRA Socio-Economic Status of Youth Michel NDAKIZE Socio-Economic Status of Elderly

Prosper NKAKA MUTIJIMA Population Projections

## **International Technical Support**

## National Institute of Statistics of Rwanda (NISR): Oxford Policy Management (OPM):

Dr. Mohamed ABULATA

Mary STRODE

Ludovico CARRARO

Felix SCHMIEDING

Juste NITIEMA

**United Nations Population Fund (UNFPA):** 

Dr, Bolaji TAIWO, Chief Technical Adviser Dr. Mady BIAYE, Regional Technical Adviser

Jean Marc HIE, International Data Processing Expert Dr. Macoumba THIAM, International Census Analyst

Prof. Sabu PADMADAS

Gilberto RIBEIRO

Philippe N. GAFISHI

Cora MEZGER Jean Michel

Prof. James BROWN Wine LANGERAAR Stephi SPRINGHAM Sophia KAMARUDEEN

Paul JASPER

DURR

## Dr. Ben MWASI, International GIS Expert

## Johnson FIFI

#### **NISR MANAGEMENT TEAM**

Yusuf MURANGWA, Director General

Odette MBABAZI, Deputy Director General/CS

Andre GASHUGI, Director of Administration

Jean Pierre UWINEZA, Director of Finance

Willy GASAFARI, Director of Census

Juvenal MUNYARUGERERO, Census Field Expert

Prosper MUTIJIMA, Census Coordinator

Augustin TWAGIRUMUKIZA, Director of ICT

Sebastien MANZI, Director of Economic Statistics

Dominique HABIMANA, Director of Statistical Methods, Research and Publications

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