The Republic of Rwanda





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DISTRICT PROFILE CHART BOOK

EASTERN PROVINCE



DEMOGRAPHIC AND HEALTH SURVEY RDHS 2014-15

DISTRICT PROFILE CHART BOOK

Eastern Province

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East Province map

Introduction

The National Institutes of statistics of Rwanda in collaboration with the worldwide Demographic and Health Surveys Program implemented the 2014-15 Rwanda Demographic and Health Survey (RDHS) to collect data for monitoring progress on health programs and policies in Rwanda.

The key indicators and the main report have been produced and published at national level; the key indicators and the main report have been produced. This document is elaborated in order to disseminate RDHS 2014-15 results at decentralized level.

As for the main report, the chart book gives information on demographic and health indicators such as family planning, maternal mortality, infant and child mortality, nutrition status of mothers and children, antenatal care, delivery care, and childhood diseases. In addition, the survey was designed to measure the prevalence of anemia and malaria among women and children, and to measure the prevalence of HIV infection in Rwanda.

The target groups in this survey were women age 15-49 and men age 15-59 who were randomly selected from households across the country. Information about children under age 5 also was collected, including the weight and height of the children.

Through this document, each province will be able to trace the level attended in health care and other health related indicators through different charts that are produced. This document will also help in the design and implementation of District Development Plan (DDP).

The National Institute of Statistics of Rwanda is pleased to invite District planners and other users to play an active role in using this valuable information to contribute to a better quality of life for the Rwandan population.

Chapter 1: Household characteristics

The Rwanda Demographic Health Survey (RDHS_2014-15) collected household information. This chapter presents some of the indicators that were selected, namely; access to electricity, possession of selected durable goods, availability of hand washing place to evaluate the socioeconomic and living conditions of the household in the Districts of the East Province.

1.1 Electricity coverage

Figure 1 shows that 20 percent of households in East province have access to electricity compared to 23 percent at the national level. The situation has improved since 2010, when only 10 percent of households had electricity. The results show large disparities between Districts in the East Province. Rwamagana has the highest observation of households with electricity (28 percent) and Kayonza has the lowest with only 14 percent as compared to the rest of the Districts in the East Province.



Figure 1: Percentage of households with electricity coverage in East Province

1.2 Household durable good

Figure 2 shows that mobile phone is the most owned household good in East Province (60 percent), the same level as at the national level. Households in Rwamagana (70 percent) are the most likely to possess mobile telephone, followed by households in Bugesera District (67 Percent); while households in Ngoma district are the least to possess the mobile phone (53 percent).

The second most common household asset in East Province is Radio, owned by 55 percent of households in East Province and it is the same at national level. The proportion of households owning a radio is highest in Kayonza District (61percent). In other districts, variations in ownership of radio do not vary too much and it is from 57 percent in Rwamagana to 51 percent in Ngoma and Bugesera.

<u>Source:</u> RDHS2014-15

Six percent of households own a television in East Province compared to 10 percent at national level. Rwamagana has the highest percentage in ownership of Television (9percent) while Kirehe has the lowest ownership (3 percent).

Only 1 percent of households in the East Province have computer compared to 3 percent at the national level. Ownership of computer is very low in all Districts where it is even less than 1 in Gatsibo.



Figure 2: Percentage of households with durable goods



Source: RDHS, 2014-15

1.3 Hand washing place observed

Washing hands with water and soap before eating, while preparing food, and after leaving the toilet is a simple, inexpensive, and good practice that protects against many

diseases. During the survey, the interviewers asked each household if there was a place used for hand washing, and, if so, they asked if they could observe the place to see if water and soap or some other hand cleansing means was available.

Figure 3 shows that 8 percent of households in the East Province and 12 percent at the national level had a place for hand washing that was observed by an interviewer. Thirty four percent of households in Kayonza District had a place for hand washing that was observed. This practice is very low in all other Districts going from 9 percent in Rwamagana to 3 percent in Gatsibo and Kirehe District.

Figure 3: Percentage of households where hand washing place were observed



Source: RDHS, 2014-15

Chapter 2: Respondent characteristics

2.1 Education attainment

Figure 4 and Figure 5 show the distribution of female and male respondents by highest level of education attained in districts of the East Province. The proportion of women who attained primary school is slightly lower to that of men in the Eastern Province (68 percent and 73 percent, respectively). At the secondary education level, the percentages are 10 percent for women and 12 percent for men in the East Province. Those who attended higher education are 1 percent for both women and men. The highest attendance in primary education for women is observed in Rwamagana District (72 percent) and in Kirehe for men (76 percent) while the least one is observed in Nyagatare for women (64 percent) and in Gatsibo for men (13 percent and 15 percent respectively) while Kirehe has the lowest attendance for women (8 percent) and Kayonza for men (10 percent).

Figure 4: Percent distribution of the de facto female household population age 6 and over in the East province by the highest education level attained



<u>Source</u>: RDHS, 2014-15



Figure 5: Percent distribution of the de facto male household population age 6 and over in the East province by the highest education level attained

Source: RDHS, 2014-15

2.2 Net attendance rate

Figure 6 and figure 7 describe the net attendance rate among children in schooling age (7-12 in primary and 13-18 in secondary). Figure 6 shows that the net attendance rate in primary school is almost universal in the East province 93 percent for female and 92 percent for male and it is almost the same at the national level (92 percent for female and 91 for male). Variation among districts of the East Province is from 96 percent in Bugesera and Rwamagana to 87percent in Nyagatare District for female and from 94 percent again in Bugesera and Rwamagana to 88 percent in Kirehe District for male.

Figure 7 describes the net attendance rate among children in secondary school. The net attendance rate in the East province is estimated at 25 percent among male and female compared to 27 percent and 32 percent for male and female respectively at the national level. The net attendance rate at the district level varies from 30 percent in Gatsibo District to 19 percent in Nyagatare District among women and from 32 percent in Rwamagana to 20 percent in Bugesera Districts.



Figure 6: Net Attendance Rate in Primary school

Source: RDHS, 2014-15







2.3 Birth registration of children under age 5

Registering a child's birth with civil authorities establishes the child's legal family ties and his or her right to a name and nationality prior to the age of majority. It confers on the child the right to be recognized by his or her parents and the right to state protection if his or her rights are abused by parents. It gives the child access to social assistance through the parents, including health insurance, and establishes family lineage. Registration is therefore an essential formality. Registration of a child with civil authorities, if performed correctly, also provides a reliable source of socio demographic statistics. For this reason, the survey asked, for all children age 0 to 4 in each household, whether the child had a birth certificate or whether the child's birth had been registered with the civil authorities.

Figure 8 shows that 55 percent of children have been registered with the civil authorities in the East Province compared to 56 percent at the national level. The percentage is highest in Bugesera (71 Percent) followed by Rwamagana (62 percent) and lowest in Nyagatare District (45 Percent).





Source: RDHS, 2014-15

2.4 Children's orphan hood

Because the family is the primary safety net for children, any strategy aimed at protecting children must place a high priority on strengthening the family's capacity to care for children. It is therefore essential to identify orphaned children.

Overall, 9 percent of children under age 18 in East Province have lost one or both parents, the percent is the same at the National level. Nyagatare has the highest percentage of orphaned children who have lost one or both parents (11 percent). This percentage is lowest in Rwamagana District (7 percent), and varies between 8 percent and 10 percent in the rest of other Districts.







2.5 Health insurance among adult women and men

Information on health insurance coverage was collected during the survey. The percentage of household's members with health insurance coverage is shown in figure 10.

Seventy-two percent of the population is covered by any health insurance in East Province compares to 71 percent at National level. This proportion is highest among respondents in Rwamagana district (76 percent), followed by Kayonza district (75 percent), and lowest in Kirehe district (66 percent).



Figure 10: Percentage of household members with Health insurance

<u>Source</u>: RDHS, 2014-15

2.6 Exposure to mass media

Data on the exposure of women and men to mass media are especially important to the development of education programs and the dissemination of all types of information, particularly information about health and family planning. Figure 11 and 12 present data on the exposure of women and men to mass media (print or broadcast). It should be stated at the outset that it is not necessary for a household to own a radio or television or to buy a newspaper to have access to these media, because many people listen to the radio or watch television at the homes of friends and neighbors.

Figure 11 and 12 show that, at the provincial level, Radio is the most common form of media exposure: 57 percent of women and 84 percent of men report listening to the radio at least once a week. At the District level this percentage is highest in Kirehe and Rwamagana Districts among women (64 percent each) while it is lowest in Nyagatare District (41 percent). Among men, the percentage who listens to the radio is highest in Bugesera (98 percent) and lowest in Rwamagana District (71 Percent). Men watch television more frequently than women: 10 percent of women and 35 percent of men watch television at least once a week in East province. Only 5 percent of women reported reading a newspaper at least once a week while men are 17 percent. The proportion of women who report reading a newspaper at least once a week across all districts of the Eastern province is equal or below to 5 percent except for Bugesera with 22 percent of women who reported reading newspaper at least once a week. For men, Kayonza district has a very high percentage of men who read a newspaper at least once a week (62 percent). In other districts, the percentage varies from 26 percent in Bugesera to 2 percent in Rwamagana.



Figure 11: Percentage of women age 14-49 who are exposed to specific media on a weekly basis

<u>Source:</u> RDHS, 2014-15



Figure 12: Percentage of men age 14-49 who are exposed to specific media on a weekly basis

2.6 Current marital status

In the figures 13 and 14 displayed below, the term *married* refers to men and women bound together legally, while *living together* refers to couples cohabiting in informal unions. People are considered *never married* if they have never been married or lived together with a partner. *Ever-married* people include those who are currently married as well as those who are living with a partner: widowed, separated, or divorced.

Figure 13 and 14 show the distribution of women and men by marital status age 15 to 49. Overall 32 percent of women age 15-49 have never been in union compared to 48 percent of men 15-49 in the East Province. The percentage of women 15-49 that have never been in union is highest in Rwamagana (36 percent) and lowest in Kirehe District among women. Among men it varies from 46 percent in Bugesera to 39 percent in Nyagatare. Overall 56 percent of women interviewed in the Eastern province were in union (Married or living in union). This proportion is highest in Kirehe (62 percent) and lowest in Rwamagana (51 percent. Among men, the proportion of those in union is 50 percent in East Province and this varies from 59 percent in Nyagatare to 52 percent in Bugesera. The East province count 5 Percent of women that are widowed, 3 percent divorced and 5 percent separated. Among men, the proportion of those categories of marital status is very low, except that Rwamagana and Kayonza count respectively 5 percent and 3 percent of separated men.

Source: RDHS, 2014-15



Figure 13: Percentage distribution of women age 15-49 by current marital status

Source: RDHS, 2014-15



Figure 14: Percentage distribution of men age 15-49 by current marital status

Source: RDHS, 2014-15

Chapter 3: Fertility determinants and fertility rates

This chapter analyzes the fertility determinants like age at first birth and age at first marriage as well as fertility rates gathered in the 2014-15 RDHS.

3.1 Median age at first marriage

Figure 15 shows the median age at first union among women age 25-49 and men30-59. The median age at first marriage is 21.2 years and 25.2 years among women and men respectively in the East Province compared to 21.9 years versus 25.4 years for women and men at the national level.

The data show that variations by District are not remarkable: Nyagatare have the earliest age at first union (20.2 years), while in other district it is around 21.1 to 21.7 years. Among men, Rwamagana has the latest (27 years) and Kirehe has the earliest (24.3) median age at first marriage.





Source: RDHS, 2014-15

3.2 Birth intervals

Birth intervals, or the length of time between two successive live births, are important not only because they influence the health status of both mother and child but also because they play a role in fertility analysis and in the design of reproductive health programs. Short birth intervals (less than 24 months) are considered harmful to the health and nutritional status of children and increase their risk of premature death.

The interval between births is 40.3 months in the East Province compared to 38.5 at the national level. By District, the birth interval varies from 42.8 months in Ngoma District to 36.9 months In Rwamagana District.



Figure 16: Median number of months since preceding birth (birth interval)

Source: RDHS, 2014-15

3.3 Median age at first birth

Figure 17 below shows median age at first birth according to age of women by District. The median age at first birth for women age 25-49 in East province is 22.1 years as compared to 22.7 at national level. At the Districts level, the highest median age at first birth is 22.3 years in Kayonza District and varies very little in all other districts where Nyagatare has the lowest median age at first birth which is 21.5 years.



Figure 17: Median age at first birth among women age 25-49

3.4 Teenage pregnancy and motherhood

Figure 18 shows the percentage of young women age 15-19 that have begun child bearing in their teenage age. Eleven percent of young women between age 15 and age 19 have already begun childbearing in the East Province while it is 7 percent at the national level. At district level, the percentage of women age 15-19 who have begun childbearing varies from 7 percent in Nyagatare and Kirehe to 16 percent in Gatsibo District.



Figure 18: percentage of women 15-19 who have begun childbearing



3.5 Wanted and Total fertility rate

Figure 19 compares the total wanted fertility rate (TWFR) with the current total fertility rate (TFR) for the five years preceding the survey. Calculation of the TWFR is the same as for the TFR, except that unwanted births are omitted. TWFR for women age 15-49 in the East Province is 3.5 children compared to 3.1 children at the national level.

At Province level, the TFR is 4.6 and it is 4.2 at National level. Among district the TFR is lowest in Kirehe District (4.2 children) and highest in the Nyagatare district (4.9 children). Considering the gap between wanted and TFR, it is seen that there is a gap of 1.1 children in the East province. At district level the highest gap is observed in Ngoma (1.5) and the lowest in Nyagatare (0.7).



Figure 19: Wanted and observed total fertility rates for women age 15-49

Source: RDHS, 2014-15

Chapter 4: Family planning

This section presents information on the prevalence of current contraceptive use among women age 15-49 at the time of the survey. Level of current use of contraceptives is one of the indicators most frequently used to assess the success of family planning program activities and one of the determinants of fertility. This section focuses on levels of family planning in the East Province in comparison with the national level.

4.1 Current use of contraception

Figure 20 shows that 54 percent of married women age 15-49 in the East Province are currently using any family planning method, among them 47 percent use any modern method, and 8 percent are using any traditional method. These figures are relatively the same at the national level. The percentage of women who are currently using contraceptive method is highest in Kirehe District (59 percent) and lowest in Bugesera District (46 percent) with the majority of women using any modern method and the minority using the traditional methods.







4.2 Demand for family planning

Figure 21 below describes the total demand for family planning among all women in the East Province. It is observed that the total demand for family planning in East Province is the same as at it is at the national level (72 percent). At the District level, the total demand for family planning is highest in Rwamagana (76 percent) and lowest in Bugesera (67 percent) among married women age 15-49.





4.3 Exposure to family planning messages

The mass media play an important role in communicating messages about family planning. Data on levels of exposure to radio, television, and printed materials are important for program managers and planners to effectively target population subgroups for information, education, and communication campaigns. To assess the effectiveness of family planning information disseminated through various media, respondents were asked if they had been exposed to family planning messages on the radio, on television, and in print (newspapers and magazines) in the few months preceding the survey.

Figure 22 and Figure 23 show that radio is the most widely accessed source of family planning messages in East province with 54 percent of women and 66 percent of men age 15-49 having heard a family planning message on the radio in the past few months, as compared to 52 percent of women and 64 percent of men at the nation level. Five percent of women and 9 percent of men reported having seen a family planning message on television or read it in a newspaper/magazine in the East Province.

It is also important to note that, 45 percent of women and 33 percent of men in East Province have not been exposed to any family planning messages in any of the three specified media sources. These proportions are almost the same at the national level (47 percent for women and 34 percent for men).

Source: RDHS, 2014-15



Figure 22: Percentage of women age 15-49 who heard or saw a family planning messages by type of channel

Source: RDHS, 2014-15

Figure 23: Percentage of men age 15-49 who heard or saw a family planning messages by type of channel



Source: RDHS, 2014-15

Chapter 5: Childhood mortality

The data used to compute the childhood mortality rates presented in this chapter were derived from the birth history of the Woman's interviewed. Each woman age 15-49 was asked whether she had ever given birth, and, if she had, she was asked to report the number of sons and daughters who live with her, the number who live elsewhere, and the number who have died. In addition, she was asked to provide a detailed birth history of her children in chronological order starting with the first child. Women were asked whether a birth was single or multiple, the sex of the child, the date of birth, survival status, age of the child on the date of the interview if alive, and, if not alive, the age at death of each live birth.

Selected childhood mortality rates are defined as follows:

- Neonatal mortality: the probability of dying within the first month of life
- **Infant mortality:** the probability of dying between birth and the first birthday
- **Under-5 mortality:** the probability of dying between birth and the fifth birthday

All rates are expressed as deaths per 1,000 live births with the exception of child mortality, which is expressed as deaths per 1,000 children surviving to their first birthday.

Figure 24 presents neonatal, infant, and under-5 mortality rates for five-year periods preceding the survey to get sufficient observations because deaths are rare events. In the East Province, Neonatal mortality in the most recent period is 22 deaths per 1,000 live births compared to 20 deaths per 1,000 live births in Rwanda. Fifty one of every 1,000 babies born in East Province do not survive to their first birthday compared to 32 deaths per 1,000 at the National level. The Under-5 mortality in East Province is 86 deaths per 1,000 live births compared to 50 deaths per 1,000 live births at the national level.


Figure 24: Early childhood mortality rates¹

Note: These rates¹ computed as probability of dying within fixed period are expressed as deaths per 1,000 live births

Chapter 6: Maternal health

6.1 Antenatal care

Monitoring of pregnant women through antenatal care visits helps to reduce risks and complications during pregnancy, delivery, and the postpartum periods. The 2014-15 RDHS asked women who had had a live birth in the five years preceding the survey whether they had received antenatal care (ANC). Figure 27 shows the percentage of women who had consulted any skill health provider during the pregnancy for their most recent birth.

Nearly all mothers (99 percent) in the East Province received at least one antenatal care from a skilled provider for their most recent live birth, same percentage as at national level. Universal ANC from skilled personnel is observed in almost all districts of the East Province except in Kirehe where this percentage is 97 percent and Ngoma where it is 98 percent.





<u>Source:</u> RDHS, 2014-15

A skilled provider² includes doctor, nurse, medical assistant, and midwife

6.2 Mothers whose last birth was protected against neonatal tetanus

Neonatal tetanus is a major cause of death among newborns in developing countries. Tetanus toxoid injections given to the mother during pregnancy protect both mother and child against this disease. Figure 26 shows that in the East Province, the percentage of mothers age 15-49 whose last birth was protected against tetanus is 82 percent; this means that 18 percent of pregnant women were not protected against tetanus, and at the national level it is also 18 percent of pregnant women who were not protected

against tetanus. According to the districts, the percentage of mothers whose last birth was protected against neonatal tetanus is highest in Rwamagana and Kirehe Districts (93 percent, each), and lowest in Nyagatare Districts (65 percent).



Figure 26: Percentage of mothers 15-49 whose last birth was protected against neonatal tetanus

Source: RDHS, 2014-15

Note: Neonatal tetanus includes mothers with two injections during the pregnancy of their last birth or two or more injections (the last within 3years of the last live birth), or three or more injections (the last within 5 years of the last birth) or four or more injections (the last within 10 years of the last within 10 years of the last live birth), or five or more injections at any time prior to the last birth.

6.3: Place of delivery

Since every pregnancy may be subject to complications, women are advised to deliver their babies in a health facility so that they access emergency services if needed during labor, delivery, and post-delivery. Figure 27 shows that in the East Province, 89 percent of births in the five years before the survey were delivered at a health facility, compared with 91 percent at the national level. At the District level, Mothers in Bugesera District (96 percent) are more likely to deliver in a health facility than mother in Nyagatare District (83 percent).



Figure 27: Percentage of mothers 15-49 who delivered in a health facility

6.4: Assistance during delivery

To avoid the risk of complications and maternal deaths, women should be assisted during delivery by personnel who have received training in childbirth and who are able, if needed, to diagnose, treat, and refer complications on time. Figure 28 presents the percentage of mothers provided with assistance during the delivery by a health skilled provider. The results show that 9 in 10 births (89 percent) were assisted by a skilled health provider in the East Province, and it is almost the same at national level (91 percent). This percentage is much higher in Bugesera District (96 percent) and lower in Nyagatare District 83 percent.



Figure 28: Percentage delivered by a skilled provider

Source: RDHS, 2014-15

Source: RDHS, 2014-15

6.5: Postnatal checkup

Figure 29 describes the post-natal checkups among women and newborn. In the East Province, forty percent of women had a postnatal checkup in the first two days after delivery while only 23 percent of new born were checked, at National level 43 percent of women were checked and only 19 percent of new born were checked. The proportion of women and child who received a postnatal checkup is high in Rwamagana District (96 percent and 97 percent respectively). For women this percentage is lowest in Bugesera Districts (11 percent) and for children it is in Kayonza district where only 2 percent of children were checked. In General the children are less likely to have been checked than women in all districts.





Source: RDHS, 2014-15

Chapter 7: Child health

To assess the prevalence of children infections, mothers were asked if their children under age 5 had been ill with determined infection during the two weeks preceding the survey. It should be borne in mind that these data are subjective (i.e., based on the mother's perception of illness) and not validated by a medical examination.

7.1 Prevalence of Acute Respiratory infection (ARI)

Acute respiratory infections (ARIs), particularly pneumonia, constitute one of the main causes of child deaths in developing countries. To assess the prevalence of this infection, mothers were asked if their children under age 5 had been ill with a cough during the two weeks preceding the survey and, if so, whether the cough had been accompanied by short, rapid breathing. Figure 30 shows that 5 percent of children under age 5 in the East Province had been ill with a cough accompanied by short, rapid breathing in the two weeks preceding the survey, compared to 6 percent at the national level.

Results according to District of the East Province show the highest prevalence of ARIs in Ngoma (12 percent), followed by Rwamagana where the prevalence of ARIs is half of that of Ngoma (6 percent) and the lowest in Kayonza (1 percent).



Figure 30: Prevalence of ARI among children under-five years

7.2 Prevalence of fever

Fever is the primary symptom of many illnesses such as ARI, malaria and measles among others, which cause numerous deaths in developing countries. For this reason, mothers were asked whether their children had suffered from a fever during the two weeks preceding the survey. Figure 31 shows that, during this time period, 22 percent of children had a fever in the East Province compared to 19 percent at the national level. Under-five children in Ngoma (41 percent) were most likely to have had a fever while children in Kirehe were the least to have it (11 percent).

<u>Source:</u> RDHS, 2014-15



Figure 31: Prevalence of fever among children under five years

7.3 Prevalence of Diarrhea

Figure 32 shows that, according to mothers' reports, 12 percent of children had diarrhea in the two weeks preceding the survey in the East Province, the same level as at national level. The prevalence of diarrhea especially highest among children in Ngoma Districts (25 percent), it drops to 14 percent in Gatsibo to be finally lowest in Kirehe district at 4 percent.



Figure 32: Prevalence of Diarrhea among children under five years

7.4: Anemia among children

Anemia is a condition characterized by a reduction in red blood cell volume and a decrease in the concentration of hemoglobin in the blood. Hemoglobin is necessary for transporting oxygen to tissues and organs in the body. Figure 33 presents anemia prevalence for children age 6-59 months. Children with hemoglobin level less than 11.0

<u>Source:</u> RDHS, 2014-15

g/dl are anemic. Overall, 40 percent of children ages 6-59 months in East province have some level of anemia. This percentage is 37 percent at national level.

By District, fifty three percent of children in Ngoma District are anemic, the highest percentage compared to Rwamagana that has the lowest percentage with 24 percent of anemic Children.



Figure 33: Percentage of children age 6-59 months classified as having anemia³ (hemoglobin <11.0 g/dl)

<u>Source:</u> RDHS, 2014-15

Note: The three levels of anemia³: Mild: hemoglobin concentration of 10.0-10.9 g/dl; Moderate: hemoglobin concentration of 7.0-9.9 g/dl, and severe anemia of hemoglobin concentration below 7.0g/dl)

Chapter 8: Nutrition among children and women

Nutritional status is the result of complex interactions between food consumption and the overall status of health and care practices. Numerous socioeconomic and cultural factors influence decisions on patterns of feeding and nutritional status. Adequate nutrition is critical to child growth, health, and development, especially during the period from conception to age 2. During this period, children who do not receive adequate nutrition can be susceptible to growth faltering, micronutrient deficiencies, and common childhood illnesses such as diarrhea and acute respiratory infections (ARIs). Among women, malnutrition can result in reduced productivity, an increased susceptibility to infections, slow recovery from illness, and a heightened risk of adverse pregnancy outcomes. A woman, who has poor nutritional status, as indicated by a low body mass index (BMI), short stature, anemia, or other micronutrient deficiencies, has a greater risk of obstructed labor, of having a baby with a low birth weight, of producing lower quality breast milk, of mortality due to postpartum hemorrhage, and of morbidity for both herself and her baby.

8.1 Nutritional status of children under 5

Nutritional status of children under age 5 is an important measure of children's health and growth. The anthropometric data on height and weight collected in the 2014-15 RDHS permit the measurement and evaluation of the nutritional status of young children in Rwanda.

In East province, 35 percent of children under age 5 are stunted (too short for their age), compared to 38 percent at the national level (Figure 34). Variation in children's nutritional status by district is quite evident, with stunting being highest in Kayonza (42 percent) and lowest in Rwamagana (33 percent).

Two percent of children under age 5 are wasted (too thin for their height) in East Province, and at the national level. The wasting prevalence is highest among children in Ngoma (4 percent) and lowest in Nyagatare, Kayonza and Bugesera (1 percent, each).

Figure 34 shows also that nine percent of children under age 5 in the East Province are underweight (low weight-for-age), the same percentage as at national level. Variation in children's underweight by district shows that Ngoma has the highest percentage of underweight children (16 percent) while Nyagatare has the lowest one (4 percent).





8.2 Breastfeeding status

The median duration of exclusive breastfeeding in the East province is 5.5 months a little more to the national level. Children in the Nyagatare and Ngoma districts are exclusively breastfed for 6.8 months and 6.4 months respectively, whereas children in Bugesera are breastfed for 4.1 months.



Figure 35: Median duration of exclusively breastfed children under age 5

8.3 Nutritional status among women

Figure 36 presents the women nutritional status and the proportions of women falling into two high-risk categories of nutritional status. Seven percent of women are considered to be thin (BMI below 18.5) at the provincial level as at the national level. This proportion is much higher in Ngoma (11 percent) and lower in Kirehe District (7 Percent). Twenty percent of women are overweight or obese in the East Province as compared to 21 percent at the national level. Variation among District is highest in Rwamagana, Gatsibo and Bugesera (22 Percent, each) and lowest in Kayonza (16

Source: RDHS, 2014-15

percent). The percentage of normal standards among women of the East Province districts varies from 69 percent in Rwamagana to 77 percent in Kirehe.



Figure 36: Percentage distribution of women age 15-49 by nutrition status

8.4 Prevalence of anemia among women

Figure 37 presents anemia prevalence among women age 15-49 based on hemoglobin levels. Raw measured values of hemoglobin were obtained using the HemoCue instrument and adjusted for altitude and smoking status.

The data show that anemia 22 percent of women in the East Province have some level of anemia, as compared with 19 percent of women at national level. The great majority of women with anemia are in Kirehe (31 percent), and the lowest prevalence is in Rwamagana district with 14 percent of anemic women age 15-49.

Source: RDHS, 2014-15



Figure 37: Prevalence of anemia among women age 15-49



Chapter 9: Malaria

Malaria has been a major cause of morbidity and mortality in Rwanda for several years, with periodic epidemics in high-altitude areas. This section presents the 2014-15 RDHS household-level findings on use of mosquito nets, and malaria prevalence particularly among children under age 5.

9.1 Use of Insecticide Treated Net (ITNs)

Figure 38 shows that 65 percent of the household population in the East Province slept under Insecticide Treated Net (ITN) the night before the survey, while 61 percent slept under an ITN at the national level. The proportion of the population that slept under an ITN the night before the survey is lowest in Ngoma district (54 percent) and highest in Kayonza District.





Source: RDHS, 2014-15

9.2 Use of ITNs among children

Children under age 5 are most vulnerable to severe complications of malarial infection due to their reduced immunity.

Figure 39 shows the use of mosquito nets by children under age 5. Seventy-one percent of children under age 5 slept under a mosquito net the night before the survey in the East province as compared to 68 percent at the national level. The percentage of children who slept under any ITN is highest in Gatsibo (81 percent), and lowest in Ngoma District (56 Percent).



Figure 39: Percentage of children under age 5 who slept under an ITN the night before the survey

9.3 Prevalence of Malaria among children

Figure 40 shows the results of the microscopic diagnostic test (blood smear) among children who were tested. In the East province, 4 percent of children ages 6 to 59 months are infected with at least one form of malarial parasites, compared to 2 percent at the national level. The proportion of children with malaria was highest in Ngoma district (8 percent), followed by Kirehe District (6 percent); while it was lowest in Nyagatare District (1 percent).





Source: RDHS, 2014-15

9.4 Prevalence of malaria among women

Women are less likely to be infected with malaria than children as we can see from the figures 39 and 41. In the East province, only 0.9 percent of women have malaria (figure 41). The proportion of women with malaria highest in Nyanza district (2.6 percent), dropped to 1.1 percent in Gatsibo and Bugesera district respectively. Ngoma had almost no case of malaria among women during the survey.





Source: RDHS, 2014-15

Chapter 10: HIV Attitude and Knowledge

HIV infection is a major public health concern in Rwanda, where it is among cause of mortality with negative social and economic consequences that affect people and the country. The following section will discuss the knowledge, attitudes and HIV prevalence.

10.1 Complete knowledge of HIV prevention method

Figure 42 presents the percentage with complete knowledge of HIV and AIDS prevention methods among women and men age 15-49, by districts of the East Province.

Eighty-four percent of women and 90 percent of men are aware that the risk of contracting the AIDS virus can be reduced by limiting sex to one uninfected partner who has no other partners and that using condoms can prevent transmission of the AIDS virus in the East province compared to 83 percent of women and 88 percent of men who have knowledge of the two HIV prevention methods at the national level. Men are more likely to have complete knowledge than women in almost all the districts of the East province except in Nyagatare districts were the situation reverses.



Figure 42: Percentage of respondents with complete knowledge of HIV prevention methods

Source: RDHS, 2014-15

10.2 Comprehensive knowledge about HIV/AIDS transmission

The 2014-15 RDHS included questions on common misconceptions about transmission of AIDS and HIV. Respondents were asked whether they think it is possible for a healthy-looking person to have the AIDS virus and whether a person can contract the AIDS virus from mosquito bites, by supernatural means, or by sharing food with a person who has AIDS.

The results in figure 43 indicate that some Rwandan adults lack accurate knowledge about the ways in which HIV can or cannot be transmitted. Nevertheless, sixty seven percent of women age 15-49 and 69 percent of men of the same age have

comprehensive knowledge about HIV/AIDS transmission; that is:' a healthy-looking person can have the AIDS virus'; 'virus cannot be transmitted by supernatural means or by sharing food with a person who has AIDS or by a mosquito bite'. Variations by the district in the East province go from 49 percent in Ngoma district to 85 percent in Nyagatare district among women and from 59 percent in Ngoma to 79 percent in Bugesera District among men.



Figure 43: Percentage of women and men age 15-49 with comprehensive knowledge on HIV transmission

<u>Source:</u> RDHS, 2014-15

10.3 Accepting attitudes toward those living with HIV/AIDS

Widespread stigma and discrimination toward those living with HIV can adversely affect both people's willingness to be tested for HIV and their adherence to antiretroviral therapy. Thus, reduction of stigma and discrimination against people living with AIDS is an important indicator of the success of programs aimed at preventing and controlling infection.

Four questions were asked to describe acceptance attitude on people living with AIDS. These questions were: their willingness to buy fresh vegetables from an infected shopkeeper, to let others know of an infected family member, and to take care of relatives who have AIDS in their own household. They were also asked whether an HIV-positive female teacher who is not sick should be allowed to continue teaching. Figure 41 show the percentages of women and men who express all those four positive attitudes toward people with HIV, in the district of the East province.

Figure 44 shows that 55 percent of all women and 66 percent of men confirmed to accept all four mentioned above attitude in East Province as compare to 50 of women and 64 percent of men at national level. Accepting all four attitudes among women is highest in Kirehe (73 percent), and lowest in Nyagatare (45 percent). Among men, this

percentage is highest in Nyagatare (74 percent) and lowest in Kayonza (47 percent). Men are more likely to accept all four attitudes toward people living with HIV than women.



Figure 44: Percentage of men and women age 15-49 accepting attitudes towards those living with HIV/AIDS

10.4 Multiple sexual partners

Given that most HIV infections are contracted through heterosexual contact, information on sexual behavior is important in designing and monitoring intervention programs to control the spread of the disease. Given that questions about sexual activity are sensitive, it is important to remember when interpreting the results in this section that respondents 'answers are likely to be biased.

Figure 45 show the percentages of women and men age 15-49 who had sexual intercourse with more than one partner in the 12 months before the survey. Three percent of men and 1 percent of women in East province had two or more sexual partners during the 12 months preceding the survey as it is at national level. Men living in Rwamagana (10 percent) and those in Ngoma and Bugesera (5 percent) are more likely to have had multiple partners over the past 12 months than other respondents in the East province. Women in Gatsibo and Kayonza are the ones who reported having had more than one sexual partner than other women in East province.

Source: RDHS, 2014-15





Source: RDHS, 2014-15

10.5 Payment of sex

Male respondents in the 2014-15 RDHS who had had sex in the 12 months before the survey were asked whether they had ever paid anyone in exchange for sex and whether they had done so in the past 12 months.

The results in figure 46 shows that 7 percent of men age 15-49 in East province have ever paid for sexual intercourse, the same percentage as at national level. Results reveal also that 2 percent had done so in the 12 months before the survey in East province as at national level. Men who are living in Rwamagana district (9 percent) are most likely to have ever paid for sexual intercourse and 3 percent have done so in the last 12 months prior the survey.



Figure 46: Percentage of men 15-49 who paid for sex

Source: RDHS, 2014-15

10.6 Self-reported prevalence of sexually transmitted infections (STIs) and STI symptoms

Figure 47 shows the self-reported prevalence of STIs and STI symptoms among women and men age 15-49 that have ever had sexual intercourse. In the East province, 14 percent of women and 7 percent of men had either an STI or symptoms of an STI in the 12 months preceding the survey, as compared to 15 percent of women and 5 percent of men at the national level. STI and STIs symptoms among women is highly prevalent in Ngoma (27 percent) as compared to other districts. Among men having either an STI or symptoms of an STI in the 12 months preceding the survey is also highest in Ngoma (10 percent) as compared to the rest of the districts of the East Province.



Figure 47: Prevalence of sexually transmitted infections (STIs) and STI symptoms in last 12 months

Source: RDHS, 2014-15

10.7 Practice of Circumcision

Studies have shown that male circumcision, which involves the removal of the foreskin of the penis, is associated with lower susceptibility to transmission of STIs, including HIV. Consequently, WHO recommends male circumcision as an HIV prevention method. In East province, 27 percent of men age 15-49 have been circumcised and in Rwanda 30 percent of men are circumcised (Figure 50). By district, the proportion of men who are circumcised is highest in Rwamagana (31 percent) and lowest in Kayonza (19 percent).



Figure 48: Percentage of men 15-49 who are circumcised

<u>Source:</u> RDHS, 2014-15

10.8 HIV prevalence among adult

Overall, HIV prevalence in East Province is 2.9 percent among women and 1.9 percent among men as compared to 3.6 percent and 2.2 percent among women and men respectively at the national level. HIV prevalence is highest in Kayonza among women (5.0 percent) and in Rwamagana among men (3.7 percent). Prevalence is lowest in Ngoma for women (1.7 percent) and in Bugesera for men (1.1 percent).





10.9 HIV prevalence among cohabiting couples

Figure 50 shows HIV prevalence among couples in the districts of the East province. The percentage of couples in which both partners are HIV positive is 1.6 in the East province as compared to 2.1 percent at the national level. The percentage of couples in which both partners are HIV positive is higher in Gatsibo District (3.4 percent). For discordant couple, 1.1 percent has the men positive and the women negative while 0.9 percent has the woman infected and the men is negative. The percentage of couples in which women partners is HIV positive is high in Nyagatare (1 percent) as compared to the rest of the districts of the East Province and the percentage of couples in which the men is positive is higher in Kirehe District.

Source: RDHS, 2014-15





Source: RDHS, 2014-15

Chapter 11: Women empowerment

Women empowerment is an important factor in development, poverty reduction, and improvements in the standard of living. This chapter presents information on factors that affect the status of women in society: control over cash earnings, earnings relative to those of their husband, and participation in decision-making.

11.1 Control over women's cash earnings and relative magnitude of women's cash earnings

To assess women's autonomy, currently married women who earned cash for their work in the 12 months preceding the survey were asked who usually decides how their earnings are spent. Women who earned cash for their work were also asked the relative magnitude of their earnings compared with those of their husband. This information is an indicator of women's control over their own earnings, as it is expected that employment and earnings are more likely to empower women if women themselves control their own earnings and perceive them as significant relative to those of their husband.

Figure 51 shows the percent distribution of currently married women age 15-49 who received cash earnings for employment in the 12 months preceding the survey, by the person who decides how the cash earnings are used and by the relative magnitude of women's earnings compared with those of their husbands, according to background characteristics.

Twenty percent of women in the East province and at national level mainly decide for themselves how their earnings are used, whereas 65 percent in East province and 68 percent at National level women say that they make joint decisions with their husbands. Fourteen percent of women in the East province compared to 12 percent at the national level reported that decisions regarding how their earnings are spent are made mainly by their husbands. The percentage of women who mainly decide themselves how their earnings are spent is highest in Nyagatare (44 percent) and lowest in Kayonza and Ngoma (8 percent,each). Women in Gatsibo and Ngoma are more likely to report that their husbands mainly decide how to spend their earnings than women in the other districts (28 percent and 24 percent, respectively).





Figure 52 shows the woman's earnings relative to their husbands' earnings during the 12 months preceding the survey. Sixty-three percent of women in the East province report that they earn less than their husband, 7 percent report that they earn more than their husband, and 28 percent earn about the same as their husband. The proportion of women who earn more than their husband at the national level is estimated at 65 percent, where as 10 percent report earning more than they husband, and 23 percent report earning more than they husband, and 23 percent report earning about the same as their husband. Women in the Rwamagana (43 percent) are most likely to report that they earn the same as their husband and those in Gatsibo and Bugesera are most likely to earn more than their husband (13 percent).



Figure 52: percentage distribution of currently married women according to their cash earnings in comparison to their husband's

Source: RDHS, 2014-15

11.2 Control over men's cash earnings (Women and men)

Figure 53 and 54 shows the percent distributions of currently married men age 15-49 who receive cash earnings and currently married women age 15-49 whose husbands receive cash earnings by the person who decides how men's cash earnings are used, according to background characteristics.

In general, women's reports on who makes decisions about how their husband's earnings are spent are comparable to men's reports. Twenty-six percent of women in East province whose husbands have cash earnings report that their husband mainly decides how his cash earnings are used, a figure slightly higher than the 24 percent reported by men themselves. Sixty-nine percent of women report that decisions are made jointly, as compared with 74 percent of men, and 5 percent of women report that they mainly decide how to use their husband's earnings as compared with 2 percent of men who made the same declaration. These figures do not differ from those of national level.

Thirty-two percent of women in Nyagatare and 30 percent of women in Ngoma and Bugesera (Figure 53), whose husbands have cash earnings report that their husband mainly decides how his cash earnings are used compared to 14 percent of women in Rwamagana district. According to the men declaration, Men in Gatsibo and Kayonza (36 percent each) are more likely to be the main decision-makers regarding their own earnings than men in other district while as for women declaration; this percentage is lowest in Rwamagana district (10 percent).





<u>Source:</u> RDHS, 2014-15





Source: RDHS, 2014-15

11.3 Women's participation in decision-making

The ability of women to make decisions that affect their personal circumstances is essential for their empowerment and serves as an important factor in national development. To assess women's decision-making autonomy, the 2014-15 RDHS collected information on married women's participation in three types of decisions: their own health care, major household purchases, and visits to family, relatives, or friends.

Figure 55 shows that in East province eighty-six percent of currently married women age 15-49 say they make decisions about their own health care either by themselves or jointly with their husbands and 75 percent of women say they participate in decisions about major household purchases. Eighty-five percent of married women say they participate in decisions about visits to their own family or relatives.





Figure 56 shows how women's participation in decision-making varies by districts of the East province. Sixty-seven percent of married women in East province report taking part in all three decisions, while 6 percent of women have no say in any of the three decisions. At national level, 65 percent of married women in Rwanda reported taking part in all three decision, while 7 percent of them have no say in any of the three decisions.

By district, married women in Kirehe (89 percent) and Rwamagana District (85 percent) are likely to report that they participate in all three decisions compared to married women in other districts. In addition, married women age 15-49 in Bugesera (11 percent) and Gatsibo (9 percent) have no say in any of the three decisions.

Source: RDHS, 2014-15





11.4 Attitude toward wife beating

The 2014-15 RDHS collected information on the degree of acceptance of wife beating by asking all women and men whether they believe that a husband is justified in beating his wife in five situations: if she burns the food, if she argues with him, if she goes out without telling him, if she neglects the children, and if she refuses to have sexual intercourse with him.

Figure 57 show the percentages of women and men who feel that wife beating is justified for at least one of the specified reasons. Agreement of a high proportion of respondents that wife beating is acceptable is an indication that they generally accept the right of a man to control his wife's behavior even by means of violence.

Figure 57 shows that 32 percent of women in East Province and 41 percent at national level believe that wife beating is justified for at least one of the specified reasons. Men are least likely to agree that a man is justified in beating his wife for at least one reason in East Province and at national level (15 percent in East and 17 percent at National level). Women in Kirehe (13 percent) are less likely to agree that wife beating is justified for at least one reasons than women in other districts. Agreement with at least one reason justifying wife beating among men range from a highest of 19 percent in Rwamagana district to a lowest of 5 percent in Gatsibo District.





Source: RDHS, 2014-15

Annex: New tables that are not included in the RDHS Main Report, Appendix D

_	Has electricity							
District/Province	No	Yes	Missing	Total				
	%	%	%	Number	%			
Nyarugenge	24	75.9	0.0	374	100.0			
Gasabo	38.2	61.8	0.0	742	100.0			
Kicukiro	17.2	82.8	0.0	380	100.0			
Kigali	29.3	70.7	0.0	1496	100.0			
Nyanza	92.8	7.2	0.0	401	100.0			
Gisagara	96.4	3.3	.3	403	100.0			
Nyaruguru	95.7	4.3	0.0	291	100.0			
Huye	78.1	21.9	0.0	407	100.0			
Nyamagabe	91.7	8.3	0.0	378	100.0			
Ruhango	89.1	10.9	0.0	416	100.0			
Muhanga	86.8	13.2	0.0	385	100.0			
Kamonyi	85.2	14.8	0.0	422	100.0			
South	89.2	10.8	.0	3103	100.0			
Karongi	83.1	16.6	.3	391	100.0			
Rutsiro	94.3	5.7	0.0	352	100.0			
Rubavu	69.2	30.8	0.0	457	100.0			
Nyabihu	93.3	6.7	0.0	319	100.0			
Ngororero	84.4	15.6	0.0	419	100.0			
Rusizi	66.1	33.9	0.0	438	100.0			
Nyamasheke	79.9	19.8	.3	413	100.0			
West	80.5	19.5	.1	2789	100.0			
Rulindo	86.7	13.3	0.0	379	100.0			
Gakenke	84.2	15.7	.2	408	100.0			
Musanze	74.1	25.7	.2	457	100.0			
Burera	87.9	12.1	0.0	384	100.0			
Gicumbi	87.2	12.8	0.0	463	100.0			
North	83.8	16.2	.1	2090	100.0			
Rwamagana	71.9	28.1	0.0	409	100.0			
Nyagatare	80.0	20.0	0.0	605	100.0			
Gatsibo	80.4	19.6	0.0	568	100.0			
Kayonza	85.9	14.1	0.0	401	100.0			
Kirehe	84.3	15.7	0.0	385	100.0			
Ngoma	84.6	15.4	0.0	439	100.0			
Bugesera	76.7	23.3	0.0	414	100.0			
EAST	80.5	19.5	0.0	3221	100.0			
Rwanda	77.1	22.8	.0	12699	100.0			

Table 1: Percentage of households with electricity by district

District	Radio	Television	Mobile Telephone	Computer
Nyarugenge	66.6	38.0	88.8	9.2
Gasabo	65.5	32.7	83.5	11.1
Kicukiro	73.2	53.2	89.9	22.4
City of Kigali	67.7	39.3	86.4	13.5
Nyanza	51.7	3.3	46.2	0.9
Gisagara	46.5	1.4	32.4	0.3
Nyaruguru	47.7	1.1	40.6	0.8
Huye	53.4	12.6	51.1	6.2
Nyamagabe	56.6	2.4	44.5	0.9
Ruhango	51.2	3.8	51.9	0.2
Muhanga	64.1	7.6	64.7	2.3
Kamonyi	59.0	8.0	66.7	2.5
South	53.9	5.2	50.2	1.8
Karongi	53.4	4.7	63.6	3.3
Rutsiro	52.2	1.8	48.1	0.5
Rubavu	43.7	13.3	60.3	4.8
Nyabihu	30.0	1.5	44.6	1.1
Ngororero	45.9	3.5	55.6	2.0
Rusizi	49.6	11.7	69.3	2.2
Nyamasheke	44.4	3.9	56.5	1.2
West	45.9	6.2	57.6	2.3
Rulindo	58.5	7.1	55.3	1.9
Gakenke	62.6	2.7	55.9	2.0
Musanze	59.4	8.9	66.1	3.2
Burera	55.0	3.7	53.9	1.5
Gicumbi	49.2	4.1	53.0	2.3
North	56.8	5.4	57.0	2.2
Rwamagana	56.5	8.9	70.2	1.5
Nyagatare	56.4	5.0	59.2	1.4
Gatsibo	53.7	4.1	53.8	0.4
Kayonza	61.1	7.0	63.2	2.1
Kirehe	54.5	3.1	60.3	0.8
Ngoma	51.3	6.5	53.3	2.4
Bugesera	51.0	6.9	66.9	1.4
East	54.9	5.8	60.5	1.4
Total	54.5	9.6	59.8	3.2

Table 2: Percentage of households with durable goods by district

	Covered by health insurance								
District/ Province	No Yes		Don't know	Missing	Total				
	%	%	%	%	Count	%			
Nyarugenge	36.0	63.9	0.0	.2	1574	100.0			
Gasabo	28.7	71.2	0.0	.1	2918	100.0			
Kicukiro	22.9	76.9	.1	.1	1547	100.0			
City of kigali	29.1	70.8	.0	.1	6038	100.0			
Nyanza	43.1	56.8	.1	.1	1569	100.0			
Gisagara	31.0	68.8	.1	.1	1681	100.0			
Nyaruguru	44.1	55.6	.1	.3	1389	100.0			
Huye	20.9	78.9	0.0	.2	1711	100.0			
Nyamagabe	35.5	64.4	0.0	.1	1670	100.0			
Ruhango	32.7	67.1	0.0	.2	1695	100.0			
Muhanga	35.9	63.9	.1	.1	1557	100.0			
Kamonyi	15.0	84.9	.0	.1	1803	100.0			
South	31.7	68.1	.0	.1	13075	100.0			
Karongi	32.5	67.2	.1	.2	1666	100.0			
Rutsiro	30.9	68.9	.1	.1	1510	100.0			
Rubavu	45.5	54.3	.1	.1	2138	100.0			
Nyabihu	22.0	78.0	0.0	0.0	1313	100.0			
Ngororero	18.0	81.9	.1	0.0	1732	100.0			
Rusizi	27.7	71.9	.3	.1	2131	100.0			
Nyamasheke	34.9	64.8	.2	.1	1825	100.0			
West	30.9	68.8	.1	.1	12316	100.0			
Rulindo	31.4	68.5	0.0	.1	1462	100.0			
Gakenke	13.0	86.8	.1	.1	1603	100.0			
Musanze	21.1	78.8	0.0	.1	1968	100.0			
Burera	18.5	81.3	0.0	.1	1701	100.0			
Gicumbi	24.0	75.6	0.0	.4	1990	100.0			
North	21.5	78.3	.0	.2	8724	100.0			
Rwamagana	24.3	75.7	.1	0.0	1765	100.0			
Nyagatare	27.1	72.9	0.0	0.0	2525	100.0			
Gatsibo	27.1	72.8	.1	.1	2516	100.0			
Kayonza	24.7	75.2	0.0	.1	1718	100.0			
Kirehe	34.1	65.8	.1	.1	1575	100.0			
Ngoma	31.2	68.6	0.0	.2	1904	100.0			
Bugesera	27.1	72.7	.2	0.0	1687	100.0			
East	27.8	72.1	.0	.1	13690	100.0			
Rwanda	28.6	71.2	.1	.1	53844	100.0			

 Table 3: Percentage of household's members with health insurance by district

		Highest educational level attained							
District/ Province	No education preschool	Primary	Secondary	Higher	Don't know	Missing	Tot	al	
	%	%	%	%	%	%	Count	%	
Nyarugenge	9.0	62.2	25.3	3.4	0.0	.1	668	100.0	
Gasabo	11.0	58.7	23.7	6.5	0.0	.1	1202	100.0	
Kicukiro	8.6	53.5	25.7	12.2	0.0	0.0	691	100.0	
City of Kigali	9.8	58.2	24.7	7.2	0.0	.1	2562	100.0	
Nyanza	20.0	72.3	6.9	.7	0.0	0.0	705	100.0	
Gisagara	25.9	68.7	5.3	.1	0.0	0.0	779	100.0	
Nyaruguru	24.7	62.8	12.3	.2	0.0	0.0	598	100.0	
Huye	20.0	61.5	14.7	3.5	0.0	.3	766	100.0	
Nyamagabe	23.7	63.8	11.9	.6	0.0	0.0	770	100.0	
Ruhango	15.9	71.8	11.5	.6	0.0	.1	748	100.0	
Muhanga	13.2	69.3	15.9	1.4	0.0	.3	701	100.0	
Kamonyi	10.8	76.1	11.7	1.4	0.0	0.0	802	100.0	
South	19.1	68.5	11.2	1.1	0.0	.1	5867	100.0	
Karongi	17.2	65.0	16.7	1.1	0.0	0.0	732	100.0	
Rutsiro	24.4	66.7	8.6	.2	0.0	0.0	664	100.0	
Rubavu	21.8	62.2	13.4	2.6	0.0	0.0	898	100.0	
Nyabihu	23.9	66.5	9.3	.3	0.0	0.0	585	100.0	
Ngororero	25.3	61.8	11.4	1.5	0.0	0.0	777	100.0	
Rusizi	17.5	66.0	15.7	.8	0.0	0.0	929	100.0	
Nyamasheke	18.5	69.3	11.9	.3	0.0	0.0	800	100.0	
West	21.0	65.2	12.7	1.0	0.0	0.0	5386	100.0	
Rulindo	19.5	66.5	12.5	1.3	0.0	.1	647	100.0	
Gakenke	16.5	68.2	14.7	.5	0.0	0.0	748	100.0	
Musanze	18.4	62.3	18.3	1.0	0.0	0.0	941	100.0	
Burera	21.4	68.8	9.4	.3	0.0	0.0	768	100.0	
Gicumbi	21.0	66.0	12.0	1.0	0.0	0.0	867	100.0	
North	19.4	66.2	13.6	.8	0.0	.0	3971	100.0	
Rwamagana	13.7	72.1	13.0	1.1	0.0	0.0	792	100.0	
Nyagatare	24.7	63.9	10.5	.9	0.0	0.0	1053	100.0	
Gatsibo	24.3	66.9	8.6	.1	0.0	.1	1129	100.0	
Kayonza	20.3	68.0	10.9	.9	0.0	0.0	748	100.0	
Kirehe	21.1	70.7	7.6	.6	0.0	0.0	681	100.0	
Ngoma	17.8	69.6	11.8	.9	0.0	0.0	802	100.0	
Bugesera	20.5	67.1	11.6	.6	0.0	.1	717	100.0	
East	20.7	68.0	10.5	.7	0.0	.0	5923	100.0	
Total	19.0	66.1	13.2	1.6	0.0	.0	23709	100.0	

 Table 4: Percentage of households female population according to the highest level of education attained by district

		Highest educational level attained (male)						
District/ Province	No education, preschool	education, Primary		Higher	Don't know	Missing	Total	
	%	%	%	%	%	%	Count	%
Nyarugenge	5.9	64.8	23.6	5.4	0.0	.3	624	100.0
Gasabo	8.2	61.5	20.0	10.0	0.0	.2	1159	100.0
Kicukiro	6.2	56.6	23.8	13.4	0.0	0.0	631	100.0
City of Kigali	7.1	61.1	22.0	9.7	0.0	.2	2415	100.0
Nyanza	15.2	72.6	11.1	1.1	0.0	0.0	563	100.0
Gisagara	20.4	72.4	6.5	.8	0.0	0.0	577	100.0
Nyaruguru	19.6	68.9	10.2	1.1	0.0	.1	539	100.0
Huye	14.9	64.8	14.8	5.1	0.0	.4	676	100.0
Nyamagabe	16.0	70.4	12.1	1.5	0.0	0.0	653	100.0
Ruhango	11.7	78.2	8.3	1.5	0.0	.3	671	100.0
Muhanga	10.8	76.3	10.8	1.7	0.0	.3	599	100.0
Kamonyi	10.3	76.3	11.8	1.4	0.0	.2	706	100.0
South	14.6	72.6	10.8	1.8	0.0	.2	4986	100.0
Karongi	11.3	72.1	13.4	3.0	0.0	.1	680	100.0
Rutsiro	14.2	75.7	9.7	.4	0.0	0.0	558	100.0
Rubavu	19.3	58.1	18.7	4.0	0.0	0.0	832	100.0
Nyabihu	14.5	72.3	12.4	.8	0.0	0.0	492	100.0
Ngororero	18.7	70.6	9.5	1.1	0.0	.2	647	100.0
Rusizi	11.6	71.0	16.6	.8	0.0	0.0	812	100.0
Nyamasheke	15.7	71.3	10.9	1.8	0.0	.2	630	100.0
West	15.1	69.5	13.5	1.8	0.0	.1	4651	100.0
Rulindo	15.5	74.3	8.2	2.0	0.0	0.0	566	100.0
Gakenke	11.9	74.8	11.8	1.5	0.0	0.0	634	100.0
Musanze	11.1	69.1	16.9	2.9	0.0	0.0	736	100.0
Burera	9.8	79.1	9.6	1.4	0.0	.2	645	100.0
Gicumbi	15.3	70.6	12.8	1.4	0.0	0.0	803	100.0
North	12.7	73.3	12.1	1.8	0.0	.0	3383	100.0
Rwamagana	9.2	73.7	14.9	2.2	0.0	0.0	644	100.0
Nyagatare	16.0	72.6	10.5	.9	0.0	0.0	1001	100.0
Gatsibo	16.0	69.8	13.5	.5	0.0	.1	918	100.0
Kayonza	15.1	73.4	10.1	1.4	0.0	0.0	647	100.0
Kirehe	11.5	75.6	11.5	1.1	0.0	.2	602	100.0
Ngoma	14.2	72.0	11.3	2.5	0.0	0.0	740	100.0
Bugesera	12.7	72.3	13.3	1.7	0.0	0.0	652	100.0
East	13.9	72.6	12.1	1.4	0.0	.0	5205	100.0
Total	13.4	70.7	13.3	2.6	0.0	.1	20640	100.0

 Table 5: Percentage of households male population according to the highest level of education attained by district

