Overview

Identification

ID NUMBER
RWA-NISR-DHS-2010-v01

Version

VERSION DESCRIPTION
Version 1.0 (It is the first time to use Metadata Editor)

PRODUCTION DATE
2012-02-01

NOTES
The data entry and internal consistency verification phase of the survey was completed in August 2011.

Overview

ABSTRACT
The government of Rwanda conducted the 2010 Rwanda Demographic and Health Survey (RDHS) to gather up-to-date information for monitoring progress on healthcare programs and policies in Rwanda, including the Economic Development and Poverty Reduction Strategy (EDPRS), the Millennium Development Goals (MDGs), and Vision 2020.

The 2010 RDHS is a follow-up to the 1992, 2000, 2005, and 2007-08 RDHS surveys. Each survey provides data on background characteristics of the respondents, demographic and health indicators, household health expenditures, and domestic violence. The target groups in these surveys were women age 15-49 and men age 15-59 who were randomly selected from households across the country. Information about children age 5 and under also was collected, including the weight and height of the children.

The main objectives of the 2010 RDHS were to:

• Collect data at the national level to facilitate calculation of essential demographic rates, especially rates for fertility and infant and child mortality, and to analyze the direct and indirect factors that determine levels and trends in fertility and child mortality

• Measure the levels of knowledge of contraceptive practices among women

• Collect data on family health, including immunization practices; prevalence and treatment of diarrhea, acute upper respiratory infections, fever and/or convulsions among children under age 5; antenatal visits; and assistance at delivery

• Collect data on the prevention and treatment of malaria, in particular the possession and use of bed nets among children under 5 and among women and pregnant women

• Collect data on nutritional practices of children, including breastfeeding

• Collect data on the knowledge and attitudes of men and women concerning sexually transmitted infections (STIs) and acquired immune deficiency syndrome (AIDS) and evaluate recent behavioral changes with regard to condom use

• Collect data for the estimation of adult mortality and maternal mortality at the national level

• Take anthropometric measurements in half of surveyed households in order to evaluate the nutritional status of children, men, and women

• Conduct confidential testing for malaria parasitemia using Rapid Diagnostic Testing in half of the surveyed households and anonymous blood smear testing at the National Reference Laboratory

• Collect dried blood spots (from finger pricks) for anonymous HIV testing at the National Reference Laboratory in half of
surveyed households

- Measure hemoglobin level (by finger prick) for anemia of surveyed respondents in half of surveyed households.

**KIND OF DATA**
Sample survey data [ssd]

**UNITS OF ANALYSIS**
Household

**Scope**

**NOTES**
The Household Questionnaire was used to list all the usual members and visitors in the selected households as well as to identify women and men eligible for individual interviews. Basic information was collected on the characteristics of each person listed, including age, sex, education, and relationship to the head of household. For children under 18, survival status of the parents was determined.

The Woman’s Questionnaire was used to collect information from all women age 15-49 and was organized by the following sections:

- Respondent background characteristics
- Reproduction, including a complete birth and death history of respondents’ children and information on abortion
- Contraception
- Pregnancy and postnatal care
- Child’s immunization, health, and nutrition
- Marriage and sexual activity
- Fertility preferences
- Husband’s background and woman’s work
- HIV/AIDS and other sexually transmitted infections
- Other health issues
- Adult mortality
- Relationship in the household

The Man’s Questionnaire was administered to all men age 15-59 living in every other household in the RDHS sample. The Man’s Questionnaire collected much of the same information as the Woman’s Questionnaire but was shorter because it did not contain a detailed reproductive history or questions on maternal and child health or nutrition.

**TOPICS**

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<tr>
<th>Topic</th>
<th>Vocabulary</th>
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<td>CESSDA</td>
<td><a href="http://www.nesstar.org/rdf/common">http://www.nesstar.org/rdf/common</a></td>
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<td>Drug abuse, alcohol and smoking [8.3]</td>
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Coverage

**GEOGRAPHIC COVERAGE**
It was a nationwide survey. The survey covered the whole country, all provinces and all districts.

**GEOGRAPHIC UNIT**
Household.

**UNIVERSE**
- Men age 15-59 years
- Women age 15-49
- Children age 0-5 years

Producers and Sponsors

**PRIMARY INVESTIGATOR(S)**

<table>
<thead>
<tr>
<th>Name</th>
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**OTHER PRODUCER(S)**

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<td>Ministry of Health</td>
<td>Technical Assistance</td>
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<td>Laboratoire National de Référence</td>
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<td>MACRO</td>
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**FUNDING**

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<td>United States Agency for International Development</td>
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<tr>
<td>The Centers for Disease Control and Prevention</td>
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<td>United Nations Children’s Fund</td>
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<td>World Vision</td>
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<td>Global Fund (through the malaria division of RBC-IHDPC)</td>
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**OTHER ACKNOWLEDGEMENTS**
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<tr>
<td>Thanks to International Household Survey Network</td>
<td>World Bank</td>
<td>Provide MM Metadata toolkit.</td>
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<td>OPM Oxford Policy management</td>
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<td>Archive Technical Support</td>
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**Metadata Production**

**METADATA PRODUCED BY**

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<td>MINECOFFIN</td>
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**DATE OF METADATA PRODUCTION**

2012-06-20

**DDI DOCUMENT VERSION**

Version 1.0

(This is our first documentation using Metadata Editor)

**DDI DOCUMENT ID**

DDI-RWA-NISR-DHS-2010-v01.
### Sampling

#### Sampling Procedure

The sample for the 2010 RDHS was designed to provide population and health indicator estimates for the country as a whole and for urban and rural areas in particular. Survey estimates are also reported for the provinces (South, West, North, and East) and for the City of Kigali. The results presented in this report show key indicators that correspond to these provinces and the City of Kigali.

A representative sample of 12,792 households was selected for the 2010 RDHS. The sample was selected in two stages. In the first stage, 492 villages (also known as clusters or enumeration areas) were selected with probability proportional to the village size. The village size is the number of households residing in the village. Then, a complete mapping and listing of all households existing in the selected villages was conducted. The resulting lists of households served as the sampling frame for the second stage of sample selection. Households were systematically selected from those lists for participation in the survey.

All women age 15-49 who were either permanent residents of the household or visitors present in the household on the night before the survey were eligible to be interviewed. In addition, in a subsample of half of all households selected for the survey, all men age 15-59 were eligible to be interviewed if they were either permanent residents or visitors present in the household on the night before the survey.

All of the 492 clusters selected for the sample were surveyed for the 2010 RDHS. A total of 12,792 households were selected, of which 12,570 households were identified and occupied at the time of the survey. Among these households, 12,540 completed the Household Questionnaire, yielding a response rate of nearly 100 percent.

#### Deviations from Sample Design

1.2.3 Sample Design

The sample for the RDHS-III survey covered the population residing in ordinary households across the country. A national sample of 10,644 households was selected. The sample was first stratified to provide adequate representation of urban and rural areas as well as all 12 provinces including the “City of Kigali,” the nation’s capital. Decentralization reforms were introduced after this sample was drawn, resulting in new geographically-based divisions that regroup the former districts into five new provinces. However, the sample used posed no obstacle to adequate representation of the new provinces and the data in this report present key indicators corresponding to the five recently created provinces (South, West, North, East, and the City of Kigali).

The survey used a two-stage sample design. The first stage involved selecting primary sampling units (PSUs) based on the list of enumeration areas covered in 2002 General Population and Housing Census (RGPH) prepared by the National Census Bureau. These enumeration areas provided the master frame for the drawing of 462 clusters (351 rural and 111 urban), selected with a representative probability proportional to their size. A strictly proportional sample allocation would have resulted in a very low number of urban households in certain provinces such as Umurara. It was therefore necessary to slightly over-sample urban areas in order to survey a sufficient number of households to produce reliable estimates for urban areas. The second stage involved selecting a sample of households in these enumeration areas. In order to adequately guarantee the accuracy of the indicators, it was necessary to control the total size of the households drawn by setting the number of households to be surveyed at 20 in urban clusters and 24 in rural clusters. Because of the nonproportional distribution of the sample among the different strata and the fact that the number of households was set for each cluster, weighting was used to ensure the validity of the sample at both national and regional levels.

All women age 15-49 years who were either usual residents of the selected household or visitors present in the household on the night before the survey were eligible to be interviewed (approximately 11,500 women). In addition, in a subsample of every second household selected for the survey, a sample of 5,000 men age 15-59 years was selected to be interviewed. In this subsample, all men and women eligible for the individual survey were also eligible for the HIV test. In addition, in this subsample of households, all women eligible for the survey and all children under the age of five were eligible for the anemia test. Finally, in this same subsample of households, all women eligible for the survey and all children under the age of five were eligible for height and weight measurements to determine their nutritional status.

1.2.4 Sample Coverage

All of the 462 clusters selected for the sample were able to be surveyed for the RDHS-III. A total of 10,644 households were selected, of which 10,307 households were identified and occupied at the time.
of the survey. Among these households, 10,272 completed the Household Questionnaire, yielding a response rate of nearly 100 percent (Table 1.1).

In the 10,272 households surveyed, 11,539 women age 15-49 years were identified as being eligible for the individual interview; interviews were completed with 11,321 of these women, yielding a response rate of 98 percent. Male interviews were conducted in every second household. A total of 4,959 men age 15-59 years were identified in the subsample of households. Of these 4,959 men, 4,820 completed the individual interviews, yielding a response rate of 97 percent.

The response rates were slightly higher in rural areas for both men and women.

**Response Rate**

In the 12,540 households surveyed, 13,790 women age 15-49 were identified as being eligible for the individual interview; interviews were completed with 13,671 of these women, yielding a response rate of 99.1 percent. Male interviews were conducted in every second household. A total of 6,414 men age 15-59 were identified in the subsample of households. Of these 6,414 men, 6,329 completed the individual interviews, yielding a response rate of 98.7 percent.

The response rates were slightly higher in rural areas for men, while for women they were almost the same in rural and urban areas.
Questionnaires

Overview

Three questionnaires were used for the 2010 RDHS: the Household Questionnaire, the Woman's Questionnaire, and the Man's Questionnaire. They are based on questionnaires developed by the worldwide Demographic and Health Surveys (DHS) program and on questionnaires used during the 2005 RDHS and 2007-08 RIDHS surveys. To reflect relevant issues in population and health in Rwanda, the questionnaires were adapted during a series of technical meetings with various stakeholders from government ministries and agencies, nongovernmental organizations, and international donors. The questionnaires were translated from English and French into Kinyarwanda.
**Data Collection**

**Data Collection Dates**

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**Data Collection Mode**

Face-to-face [f2f]

**Data Collection Notes**

Thirty-eight women and men were trained from June 14-July 2, 2010, in the administration of the RDHS survey instruments, anthropometric measurement, hemoglobin testing, malaria testing, and blood drawing for HIV testing. Seven days of fieldwork were followed by one day of interviewer debriefing and examination. Pre-test fieldwork was conducted in 230 households in two rural and two urban villages outside of City of Kigali. The majority of pretest participants attended the main training and served as field editors and team leaders for the main survey.

NISR recruited and trained 117 participants, and at the end of the training it retained 105 to work as field personnel. The main training was conducted from August 16-September 14, 2010. The training consisted of instruction regarding interviewing techniques and field procedures, a detailed review of items on the questionnaires followed by tests, instruction and practice in weighing and measuring children, and mock interviews and role plays among participants in the classroom. Each of the fifteen data collection teams included a team leader, a field editor, three female interviewers, one male interviewer, and one biomarker staff member. Fieldwork was conducted from September 26, 2010, to March 10, 2011. Questionnaires and blood samples were regularly delivered to NISR headquarters.

**Questionnaires**

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**Supervision**

Fieldwork supervision was conducted by NISR, NRL, and ICF International through regular visits to teams to review their work and monitor data quality. The UNICEF team also regularly visited the teams in the field. Additional contact between the central office and the teams was maintained through cell phones.
Data Processing

Data Editing

Data entry began on November 1, 2010, almost one month after the survey was launched in the field. Data were entered by a team of 15 data processing personnel recruited and trained for this task. They were assisted during these operations by 4 data verification and codification officers and 2 receptionists. Completed questionnaires were periodically brought in from the field to the National Institute of Statistics headquarters, where assigned agents checked them and coded the open-ended questions. Next, the questionnaires were sent to the data entry facility and the blood samples (DBS and malaria slides) were sent to the NRL to be screened for HIV. Data were entered using CSPro, a program developed jointly by the United States Census Bureau, the ORC Macro MEASURE DHS+ program, and Serpro S.A. Processing the data concurrently with data collection allowed for regular monitoring of teams’ performance and data quality. Field check tables were regularly generated during data processing to check various data quality parameters. As a result, feedback was given on a regular basis, encouraging teams to continue their high quality work and to correct areas in need of improvement. Feedback was individually tailored to each team. Data entry, which included 100 percent double entry to minimize keying error and data editing, was completed on April 21, 2011. Data cleaning and finalization was completed on May 27, 2011.
Data Appraisal

No content available