



## RWANDA FURTHER ANALYSIS

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### **Levels and Trends of Contraceptive Prevalence and Estimate of Unmet Need for Family Planning in Rwanda**

**Further Analysis of the Rwanda Demographic and Health Surveys, 2000–2007/08**

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# Republic of Rwanda



## Levels and Trends of Contraceptive Prevalence and Estimate of Unmet Need for Family Planning in Rwanda

### Further Analysis of the Rwanda Demographic and Health Surveys 2000 – 2007/08

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This report presents findings from a further analysis study undertaken as part of the follow-up to the 2007-08 Rwanda Interim Demographic and Health Survey (RIDHS). ICF Macro provided technical assistance for the project. Funding was provided by the United States Agency for International Development (USAID) under the terms of Contract No. HRN-C-00-97-00019-00. The opinions expressed herein are those of the authors and do not necessarily reflect the views of the USAID.

This report is part of the MEASURE DHS program, which is designed to collect, analyze, and disseminate data on fertility, family planning, maternal and child health, nutrition, and HIV/AIDS.

Additional information about the survey can be obtained from the National Institute of Statistics of Rwanda (NISR), P.O. Box 6139, Kigali, Rwanda; Internet: [www.statistics.gov.rw](http://www.statistics.gov.rw). Information about the DHS program can be obtained from MEASURE DHS, ORC Macro, 11785 Beltsville Drive, Suite 300, Calverton, MD, USA (Telephone: 301-572-0200; Fax: 301-572-0999; E-mail: [reports@orcmacro.com](mailto:reports@orcmacro.com); Internet: <http://www.measuredhs.com>).

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## ABSTRACT

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Rwanda is the most densely populated country in Africa and one of the fastest growing countries in the region. The family planning program is among the government's planned goals and strategies for reducing poverty, developing the country and improving the health of the Rwandan population. This study presents levels, trends, and differentials in the use of contraception and estimates the level of unmet need for family planning among women of reproductive age. The use of contraception has increased substantially from 2000 to 2007-08 among women currently in union in Rwanda. From 2005 to 2007-08, contraceptive prevalence increased almost threefold from 13 percent to 36 percent. This increase is predominantly a result of an increase in the use of modern contraceptive methods. Women who are of prime reproductive age, have higher parity, are better educated, and live in urban and more highly developed areas (Kigali), are more likely than other women to use a contraceptive method. In 2007-08, the level of unmet need for family planning among women currently in union has dropped, most likely due to an increase in the use of contraception, particularly for the purpose of limiting births. In addition, the components of unmet need have changed as more women currently need family planning for limiting births than for spacing than in 2000 and 2005. The increase in unmet need for limiting is consistent with an increase in the proportion of women who do not want any more children and with a wider gap between total fertility wanted and actual total fertility. The family planning program in Rwanda has improved significantly in the last few years as a result of hard work, commitment, coordination and partnership between the government and national and international partners. In Rwanda, family planning has been recognized as necessary for poverty reduction and development of the country. Rwanda is on the way to achieving its goal of reducing the population growth rate and improving the health of the population.



# 1 BACKGROUND

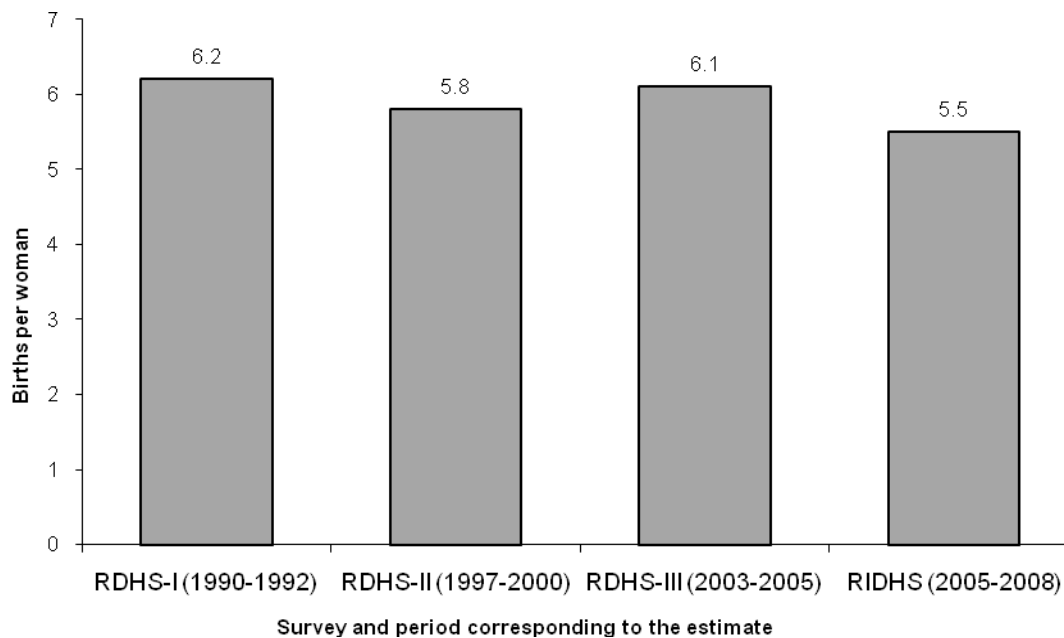
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## 1.1 Introduction

Rwanda is located in Central Africa, east of the Democratic Republic of the Congo and occupies an area of 26,338 square km. As of mid 2007, the estimated population is approximately 10 million and has a population growth rate of 2.8 (UNFPA, 2009). Rwanda's population density is the highest in sub-Saharan Africa.

Rwanda initiated its first population program that included family planning in 1982. After the 1994 United Nations International Conference on Population and Development (ICPD) in Cairo, a model was provided for developing countries to revise and extend their demographic policies and better integrate the provision of family planning into reproductive health services. Rwanda also revised its reproductive health policy to encourage integration and provision of family planning services in all health facilities nationwide (National Institute of Statistics (NIS) [Rwanda], Ministry of Health (MOH) [Rwanda], and Macro International Inc., 2008).

**Figure 1. Total fertility rates, Rwanda 1992 - 2007/08**



The total fertility rate (TFR) in Rwanda was persistently high from 1992 to 2005 with an average of 6.2 children per woman in 1992. It had not changed appreciably more than a decade later, with 6.1 children per woman in 2005. Data from the 2007-08 Rwanda Interim Demographic and Health Survey (RIDHS) show a substantial drop in TFR to 5.5 children per woman (Figure 1). The changes in TFR are paralleled by changes in contraceptive prevalence (CPR) (Office National de la Population (ONAPO) and Macro International Inc., 1994; ONAPO and ORC Macro, 2001; NISR and ORC Macro, 2006; MOH, NISR and ICF Macro, 2009).

Currently the family planning and reproductive health program is under the management of the Maternal and Child Health (MCH) Taskforce within the Ministry of Health. In 2005 the government of Rwanda's Health Sector Policy (MOH, 2005) adopted a new national reproductive health policy. The government initiated this policy to increase access to a full range of family planning services including modern contraceptive methods. Family planning services are currently integrated into MCH clinics in health centers, as well as some hospitals and private healthcare facilities.

There were many missed opportunities to promote family planning in addition to the vital importance of counseling and quality of services. For example, in 2000 less than 1 in 4 women (22 percent) visited a health facility and were told about family planning by a healthcare provider. This figure increased to 31 percent in 2005 but was still substantially low.

## **1.2 Objective of the study**

The objective of this study is to analyze levels and trends of contraceptive prevalence among women of reproductive age in Rwanda. Changes in differentials in the use of modern contraception over the past eight years, from 2000 to 2007-08, are presented by selected demographic and socioeconomic factors. The study also estimates the level of unmet need for family planning to space and/or limit childbirth for women who are currently in union in Rwanda. The study analyzes data from two standard DHS surveys (2000 and 2005 DHSs) and the 2007-08 Interim DHS in Rwanda.

## **2 DATA AND METHODS**

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The study uses data from two standard DHS (2000 and 2005) and the 2007-08 Interim DHS in Rwanda. The DHS collects information from a nationally representative sample of women age 15-49 (reproductive age). The surveys use a two-stage sampling method, cluster sampling and then household sampling within each cluster. Information on population, health, nutrition, and biomarkers (in selected countries) are collected using household, women's and men's questionnaires, which are adapted to country specific needs but comparable across countries and over time. This consistency facilitates comparative and trend analysis. For the Rwanda DHS, information on survey methodology is available in the RDHS and RIDHS reports (Office National de la Population (ONAPO) and Macro International Inc., 1994; ONAPO and ORC Macro, 2001; NISR and ORC Macro, 2006; MOH, NISR and ICF Macro, 2009). Samples in the RDHS are implicitly stratified at each of the lower geographical or administrative levels by sorting the sampling frame according to geographical/administrative divisions and by using a probability proportional to size at the first stage of selection. The resulting oversampling of small areas and urban areas is corrected by applying sampling weights to the data, which ensures the validity of the sample at the provincial and national level.

### **2.1 Contraceptive prevalence**

Contraceptive prevalence is a measure of current use of contraceptive methods by women of childbearing age. In the surveys, all eligible women are asked if they ever used or currently use (at the time of the survey) any modern or traditional contraceptives methods. In Rwanda the modern methods include the pill, injectables, intra-uterine device (IUD), implant, male condom, female condom, standard days method (SDM), lactational amenorrhea method (LAM), female sterilization, and male sterilization. Traditional methods include periodic abstinence or rhythm, withdrawal, and other folk methods. This study analyzes both modern and traditional contraceptive methods; its emphasis is on the use of modern contraception.

### **2.2 Unmet need**

The concept and definition of unmet need for family planning have been developed and have evolved over the past four decades, since the 1960s. The concept of unmet need for family planning is the identification of women who may want to use a method of contraception to space or limit their births, but are not currently using. Initially, in the 1960s, its purpose was to demonstrate and measure the desire of women to limit their births and their current use of contraception (Mauldin, 1965). Later, Westoff and Ochoa (1991) developed an algorithm for measuring unmet need using Demographic and Health Surveys data. The algorithm included the need to space births and the need to avoid unwanted or mistimed pregnancy. Unmet need in the Demographic and Health Surveys is defined through a combination of several variables collected in the individual women's questionnaire. Since then certain details have been updated to refine the definition of unmet need; nonetheless the basic components have remained essentially the same.

In most of the countries where DHS data are available, unmet need is more pronounced in rural areas, except in the least developed countries in sub-Saharan Africa where the level of unmet need among women currently in union is higher in urban than in rural areas. By comparison, larger proportions of urban women currently use contraception compared to rural women in practically all countries. Unmet need is also associated with the level of wealth, whereas the use of contraception is positively associated with better socioeconomic status.

For currently married women, unmet need refers to the percentage of those who are not currently using a method of family planning and want to stop (limiting) or postpone (spacing) childbearing.



Women with unmet need for spacing are women who are not currently using a method of contraception, not currently pregnant or amenorrheic, are able to bear a child (fecund) and want to delay the next birth for two or more years. In addition, women with an unmet need for spacing also include those who are not currently using a method, are pregnant or amenorrheic, or where the current pregnancy/last birth was mistimed and they want to delay the next birth. Women with unmet need for limiting are women who are not currently using a method of contraception, not currently pregnant or amenorrheic, are able to bear a child (fecund), and want to stop childbearing. This definition also includes those women who are not using a method of contraception, but are pregnant or amenorrheic, have an unwanted pregnancy and want no more children.

As mentioned previously, unmet need in the Demographic and Health Surveys is defined through a combination of several variables collected in the individual women's questionnaire. These variables provide information on fertility preferences, current pregnancy (whether wanted/mistimed), amenorrhea, birth in the last five years, number of unions, number of years since married, ever used contraception, currently using contraception, reason for not using contraception, and recent sexual activity. In the 2007-08 Interim DHS, some variables were not collected due to the shorter version of the questionnaire, and it is not possible to construct a standard unmet need variable. The analysis provides an estimate of unmet need based on information available in the 2007-08 survey. Information on sexual experience was not available, and therefore, a woman who is currently or formerly in union, or has one or more children, is assumed to have sexual experience. Also, information on amenorrhea and menopause were not asked, and it was substituted by the alternative variable for not using a contraceptive method because of postpartum amenorrhea or menopause/hysterectomy. Information on fecund and infertile status was not complete (time since marriage and number of unions). Recent sexual activity (in the past 4 weeks prior to the survey) was not available. In spite of this limitation, core variables for unmet need such as use of contraception, desire for more children, wanted current pregnancy or most recent birth are available and allow for a reasonable estimate of the level of unmet need for family planning in Rwanda in 2007-08.

## **2.3 Analysis**

This study uses descriptive and bivariate methods to present data for all women and women currently in union age 15-49.

Section 3.1 presents a distribution of the study population by selected characteristics, both for all women and women currently in union, in order to examine changes in certain demographic and socioeconomic characteristics of the women and for comparability of samples. Section 3.2 shows levels and trends of current contraceptive use both for all women and women currently in union; and section 3.3 shows differentials in levels and trends of current use of contraception by selected characteristics for women currently in union. Section 3.4 discusses the preferred methods in the future among women currently in union who did not use any contraception but planned to use a method, and section 3.5 discusses the reasons for not using contraception among non users who do not intend to use.

Section 3.6 estimates unmet need for family planning among women currently in union using an indirect method. Among currently pregnant women, unmet need was estimated directly from the 2007-08 survey. However, the family planning status of currently pregnant women, which was not determined in the 2007-08 survey, was estimated from its distribution in the previous survey. The proportion of amenorrheic women was estimated from the proportion in 2005, but the family planning status of the anticipated birth was based on the distribution in the 2007-08 survey. This was applied to the subset of women who said that postpartum amenorrhea is the reason for not using a method. For women neither pregnant nor amenorrheic, this method divided the women into fecund and non-fecund based on the distribution of these two categories in 2005; it then applied the distribution of reproductive intentions to estimate unmet need.

## 2.4 Challenges

DHS surveys were conducted in Rwanda in 1992, 2000, 2005, and 2007-08. These surveys used similar sampling methods and survey instruments to collect data, allowing comparison of indicators over time. However, the geographic boundaries of provinces and districts have changed between the surveys, notably between 1992 and 2000. At the time when this report is being written, the country is divided into five provinces (the city of Kigali with its three districts is considered a province), and is further divided into 30 districts, 415 sectors, then into cells and finally villages (Imidugudu). For comparability purposes, findings from this study are presented using the new geographic boundaries for four provinces and the city of Kigali (available in the 2005 and 2007-08 surveys), and it has required regrouping of data from the 2000 survey. However, it was not possible to re-categorize data from the 1992 survey into five new provinces due to a significant difference in the sampling frame.

Prior to the 2005 survey, the LAM method was classified as a traditional method. In this analysis it is re-classified as a modern method that is comparable to the classification used in the 2005 and 2007-08 surveys. Furthermore, the SDM method was not asked in the 2000 RDHS, because the method had not been promoted during that period. However, this absence would not affect trends since use of the SDM method in 2005 and 2007-08 was less than half a percent. In the 2007-08 RIDHS, questions on exposure to family planning messages through the mass media and on spousal communication about family planning were not asked. In the analysis non-response rates could have affected the estimates if the rates differed significantly for certain groups of respondents and for certain specific questions compared to other groups of respondents or questions. However, non-response rates are small and are unlikely to cause any significant biases.



### 3 FINDINGS

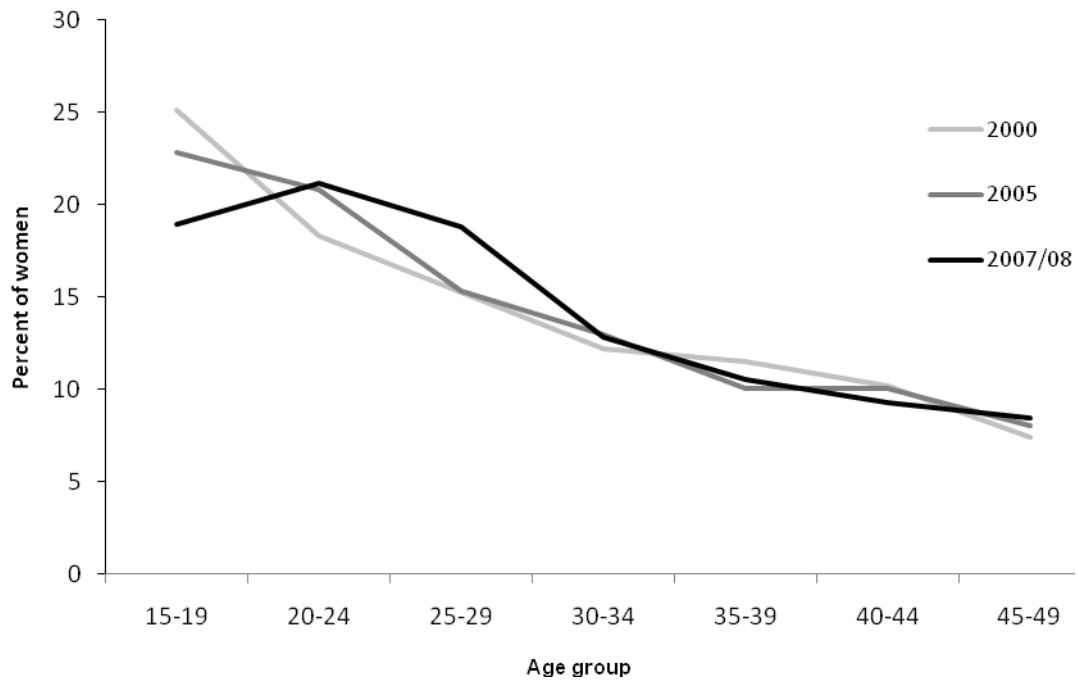
#### 3.1 Characteristics of the study population

Table 1 shows the distribution of the study population by selected background characteristics in 2000, 2005, and 2007-08. The proportion of women who were in union (married or living together) from 2000 to 2005 did not change (49 percent each) but increased slightly in 2007-08 (53 percent). The proportion of women who were formerly in union (widowed/divorced/ separated) decreased consistently from 2000 to 2007-08. Even though there were fewer women age 15-19 in later surveys than the earlier one, the distributions of women by age group (5 years) are the same (Table 1 and Figure 2). More women received education in 2005 and 2007-08 than in 2000, mostly at the primary level. In 2005, nearly six in ten women (57 percent) read a newspaper, listened to the radio, or watched television at least once per week (exposure to mass media) compared to only 41 percent in 2000. There is evidence of some population migration from urban to rural in Rwanda, particularly emigration from the city of Kigali and immigration into the East province.

**Table 1. Sample distribution of women age 15-49 by selected background characteristics, Rwanda 2000 - 2007/08**

Characteristic	2000	2005	2007/08
Marital status			
Never in union	34.1	37.7	35.2
Currently in union	48.5	48.7	53.2
Widowed/divorced/separated	17.5	13.7	11.7
Age			
15-19	25.1	22.8	19.0
20-24	18.3	20.8	21.2
25-29	15.3	15.4	18.8
30-34	12.2	13.0	12.8
35-39	11.5	10.0	10.5
40-44	10.2	10.0	9.3
45-49	7.4	8.0	8.5
Education			
No education	29.4	23.4	22.2
Primary	59.9	67.1	66.2
Secondary+	10.6	9.6	11.6
Exposure one or more sources of media (newspaper, radio, or television) at least once per week			
No	58.8	43.5	n/a
Yes	41.2	56.5	n/a
Household wealth			
Lowest	12.6	21.4	15.2
Second	22.6	20.5	27.0
Middle	18.9	18.5	18.7
Fourth	23.4	18.8	17.9
Highest	22.4	20.7	21.3
Residence			
Urban	17.2	17.0	15.0
Rural	82.8	83.0	85.0
Province			
Kigali	19.1	10.0	9.4
North	19.4	18.2	17.3
South	25.7	26.1	26.6
East	11.8	20.7	23.0
West	24.0	25.0	23.8
Number of women	10,421	11,321	7,313

Figure 2. Distribution of women age 15-49 by age group, Rwanda 2000 - 2007/08



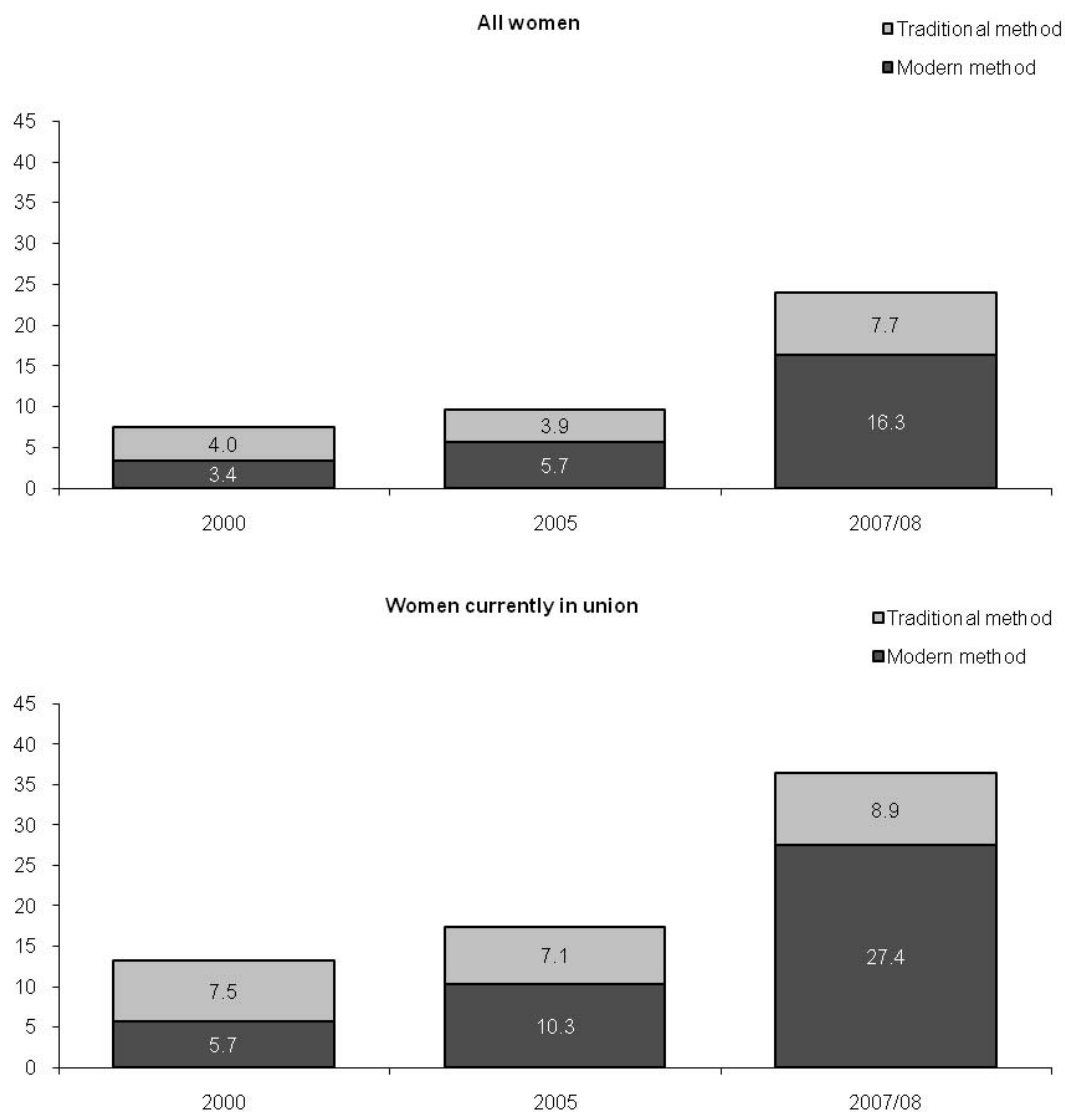
### 3.2 Levels and trends of current use of contraception

*All women:* In 2000 only 7 percent of women age 15-49 currently used a family planning method at the time of the survey. Traditional methods (4 percent) were more popular than modern methods (3 percent). The most commonly used methods were periodic abstinence (3 percent), withdrawal (1 percent), and injectables (1 percent). The level of current contraceptive use in 2005 had increased to 10 percent. Modern methods (6 percent) became more popular than traditional methods (4 percent). Injectables and periodic abstinence were equally commonly used methods at that time (more than 2 percent each). The pill and withdrawal, the second most commonly used methods, were each used by more than 1 percent of women. In 2007-08 the current level of contraceptive use by all women in Rwanda increased more than twofold, to 24 percent. Current use of modern methods was double that of traditional methods (16 percent versus 8 percent). Injectables were the most popular method for all women (9 percent) (Table 2, and Figure 3).

**Table 2. Current use of contraception among women age 15-49 by marital status and by type of method, Rwanda 2000 - 2007/08**

Contraceptive methods	2000	2005	2007/08
<b>All women</b>			
Any methods	7.4	9.6	23.9
Any modern method	3.4	5.7	16.3
Pills	0.5	1.3	3.6
Injectables	1.0	2.4	9.0
Condom (male)	0.5	0.8	1.4
Female sterilization	0.5	0.3	0.5
Lactational amenorrhea	0.7	0.4	0.6
Standard days method	n/a	0.2	0.2
Other modern methods	0.2	0.2	1.1
Any traditional methods	4.0	3.9	7.7
Periodic abstinence	2.6	2.4	6.0
Withdrawal	1.4	1.5	1.7
Number of women	10,421	11,321	7,313
<b>Women currently in union</b>			
Any methods	13.3	17.4	36.4
Any modern method	5.7	10.3	27.4
Pills	1.0	2.5	6.4
Injectables	1.9	4.7	15.2
Condom (male)	0.4	0.9	1.9
Female sterilization	0.8	0.5	0.7
Lactational amenorrhea	1.4	0.8	1.0
Standard days method	n/a	0.5	0.3
Other modern methods	0.3	0.4	1.9
Any traditional methods	7.5	7.1	8.9
Periodic abstinence	4.7	4.2	6.0
Withdrawal	2.9	3.0	3.0
Number of women	5,052	5,510	3,888

**Figure 3. Current use of contraception among women age 15-49 by marital status and by type of method, Rwanda 2000 - 2007/08**



**Women currently in union:** Current levels of contraceptive use by women currently in union have always been higher than that for all women. From 2000 to 2007-08, the level of current contraceptive use increased from 13 percent in 2000, to 17 percent in 2005, and 36 percent in 2007-08. Whereas the level of current use of traditional methods changed little (8 percent to 7 percent and 9 percent, respectively), an increase in modern methods (from 6 percent to 10 percent and 27 percent, respectively) contributed to this exceptionally fast increase. The two most important modern methods being used by women currently in union in 2007-08 were injectables (15 percent) and the pill (6 percent) (Table 2, and Figures 3 and 4).

### 3.3 Differential in levels and trends of current use of contraception

Figure 4. Current use of contraception among women currently in union by type of method, Rwanda 2000 - 2007/08

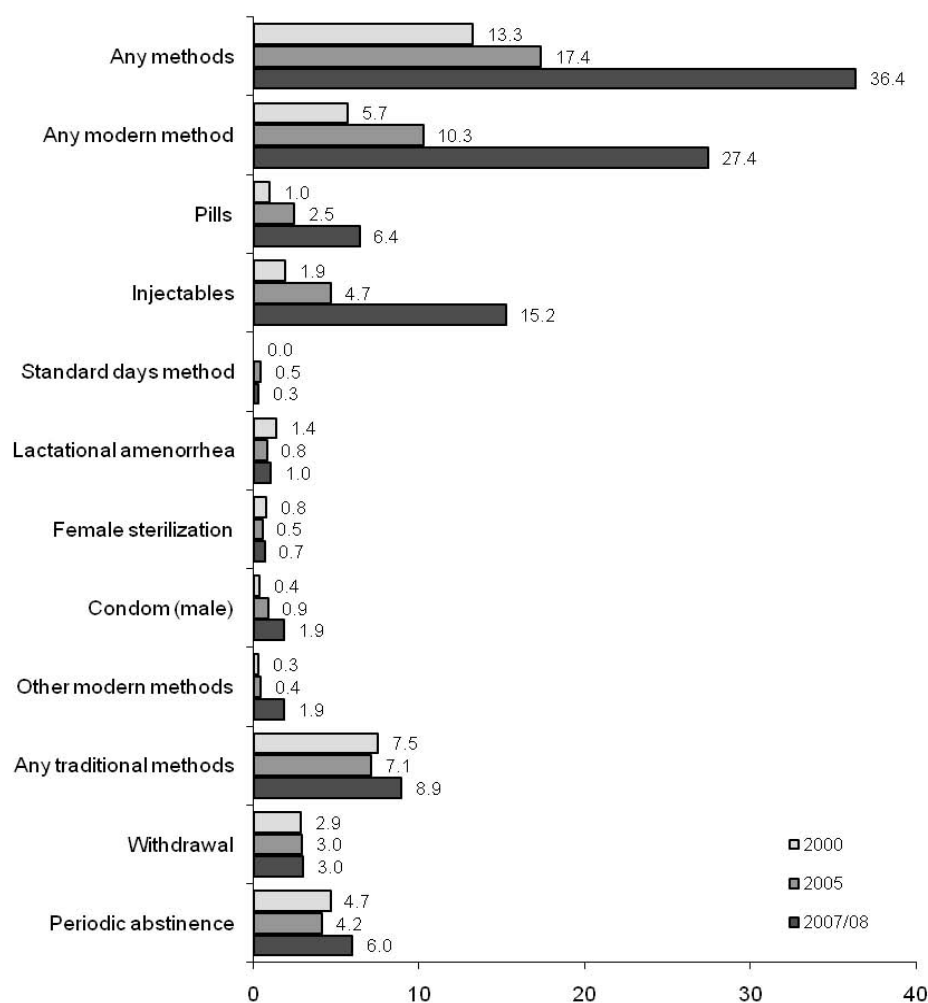


Figure 4 presents levels and trends of current use of contraception among women currently in union by type of method. Use of any contraceptive among women currently in union increased from 13 percent in 2000 to 17 percent in 2005, and doubled to 36 percent in 2007-08. This increase is explained predominantly by an increase in current use of modern methods (from 6 percent to 10 percent and 27 percent, respectively). Current use of traditional contraceptive methods only marginally increased during the same period. Current use of the two most popular modern methods, the pill and injectables, increased by a larger margin than other modern methods (Figure 4). There was little or no change in current use of each traditional method over the past 8 years.



**Table 3. Current use of modern contraception among women age 15-49 currently in union by selected characteristics, Rwanda 2000 - 2007/08**

Characteristic	2000	2005	2007/08
Marital status			
Currently in union	5.7	10.3	27.4
Age			
15-19	1.5	3.2	23.7
20-24	5.0	7.6	21.6
25-29	6.9	10.9	30.6
30-34	5.1	12.7	34.1
35-39	7.0	13.1	30.4
40-44	5.9	10.0	25.2
45-49	3.9	5.8	14.3
Number of living children			
No children	0.3	1.1	0.7
1 child	3.8	5.5	22.0
2 children	6.7	10.1	29.6
3 children	7.6	13.3	32.8
4+ children	6.4	12.2	30.9
Education			
No education	3.2	5.9	19.0
Primary	4.8	9.7	28.8
Secondary+	18.9	29.1	42.7
Exposure one or more sources of media (newspaper, radio, or television) at least once per week			
No	2.9	6.0	na
Yes	9.3	13.6	na
Household wealth			
Lowest	2.4	6.0	21.7
Second	2.3	7.5	23.2
Middle	3.5	8.5	26.8
Fourth	5.2	8.5	27.4
Highest	14.7	22.4	38.6
Residence			
Urban	16.1	21.2	35.7
Rural	3.9	8.6	26.2
Province			
Kigali	10.4	23.2	34.5
South	3.5	8.4	22.9
West	4.2	10.3	26.3
North	6.7	9.9	33.3
East	5.3	8.5	26.3
Number of women	5,052	5,510	3,888

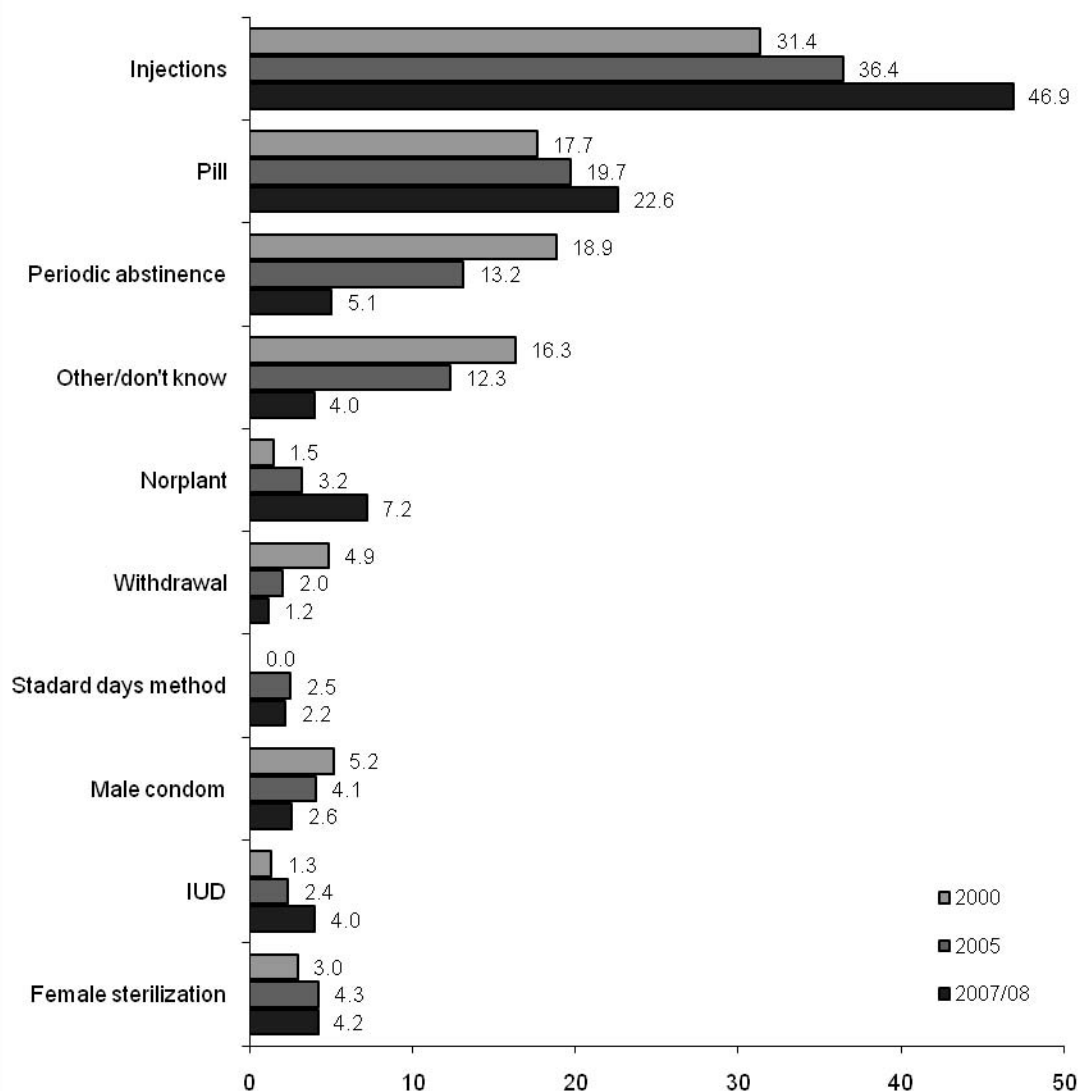
Table 3 shows the distribution of trends in modern contraceptive use for currently married women, by selected demographic and socioeconomic characteristics and by year of the survey. Modern contraceptive prevalence among married women was affected considerably by background characteristics, beginning with age group. Generally, women between 25 and 44 years old were more likely to use a modern contraceptive than women younger than 25 or older than 44, except in 2000 when modern contraceptive prevalence was low among women age 30-34. Results by number of living children show that in all three surveys, contraceptive prevalence increased with the number of living children, especially among women who had two or more children. Contraceptive prevalence also increased with level of education. In 2000, 2005, and 2007-8, current use of modern contraception among women with secondary or higher education compared to that for women without education was 19 percent versus 3 percent, 29 percent versus 6 percent, and 43 percent versus 19 percent, respectively. Exposure to one or more media sources increased current use of modern contraception among women in union (data were not

available in the 2007-8 survey). Modern contraceptive prevalence increased steadily with the rise in socioeconomic status of the household, represented by the household wealth quintile: from 2 percent in the lowest (poorest) quintile, to 15 percent in the highest (richest) quintile in 2000, from 6 percent to 22 percent in 2005, and from 22 percent to 39 percent in 2007-08. Finally, use of modern contraception varies considerably by geographical differences. Use of modern methods is consistently higher in urban areas than rural areas in all three surveys. In 2000 and 2005, women living in the City of Kigali were more likely to use a modern contraceptive method than women living in other provinces. However, gaps in modern contraceptive prevalence between Kigali and other provinces have narrowed considerably.

### **3.4 Preferred methods of contraception for future use**

The survey asked women currently in union who did not use any contraception, but planned to use a method, about their preferred future methods. Results show that the injectable method is the most preferred future method among those women, and its preference increases over time: from 31 percent in 2000, to 36 percent in 2005, and 47 percent in 2007-08. The second most preferred future method is the pill. The increase in preference for the pill is smaller than that for injectables. On the other hand, the proportion of women whose future preferred methods are periodic abstinence and withdrawal decreased substantially from 2000 to 2007-08: from 19 percent to 5 percent for periodic abstinence and from 5 percent to only 1 percent for withdrawal. Norplant is also becoming a popular preferred method among non users who intend to use in the future (Figure 5).

**Figure 5. Preferred methods of contraception for future use among currently married women who are not using a contraceptive method but who intend to use in the future, Rwanda 2000 - 2007/08**



### 3.5 Reasons for not using contraception among non users who do not intend to use

In order to increase the adoption of contraception in Rwanda, it is important to know the reasons why women nonusers do not intend to use contraception in the future. A majority of women (69 percent) gave reasons relating to fertility. Menopause/hysterectomy (28 percent) and subfecund/infecund (25 percent) are the two main reasons relating to fertility. Twelve percent of women said they were opposed to the use of contraception: 2 percent by the husband/partner, 6 percent by the woman herself, and 4 percent by religious prohibitions (4 percent). About one in eight women (13 percent) did not intend to use a contraceptive method for health concerns (3 percent) and fear of side effects from contraceptive methods (9 percent). Lack of knowledge about contraceptive methods and lack of knowledge of where to obtain family planning services were the least likely reasons for not intending to use in the future (1 percent).

Results by broad age groups indicate that reasons relating to fertility were cited more frequently by older women (age 30-49) than younger women (age 15-29). On the other hand, younger women were more often opposed to contraception than older women (11 percent, compared with 5 percent), and younger women more often cited lack of knowledge as their reason for not using contraception (4 percent, compared with 1 percent).

**Table 4. Percent distribution of currently married women age 15-49 who are not using contraception and who do not intend to use a method in the future by main reason for not intending to use a method, Rwanda 2007 - 08**

Reason	Age		Total
	15-29	30-49	
<b>Fertility-related reasons</b>			
Infrequent sex/no sex	2.8	16.5	14.4
Menopausal/had hysterectomy	0.7	32.9	27.9
Subfecund/infecund	35.7	23.2	25.1
Wants as many children as possible	1.2	2.2	2.0
<b>Opposition to use</b>			
Respondent opposed	11.2	4.7	5.7
Husband/partner opposed	3.4	1.2	1.5
Others opposed	0.3	0.0	0.1
Religious prohibition	8.5	3.4	4.2
<b>Lack of knowledge</b>			
Knows no method	4.2	0.4	1.0
Knows no source	0.0	0.3	0.2
<b>Method-related reasons</b>			
Health concerns	2.6	3.3	3.2
Fear of side effects	21.8	6.0	8.5
Inconvenient to use	0.0	0.4	0.4
Interferes with body's normal process	0.8	0.8	0.8
Other	4.7	3.9	4.0
Don't know	1.1	0.5	0.6
Missing	1.1	0.5	0.6
Total	100.0	100.0	100.0
Number of women	100	547	647

### 3.6 Estimated unmet need for family planning

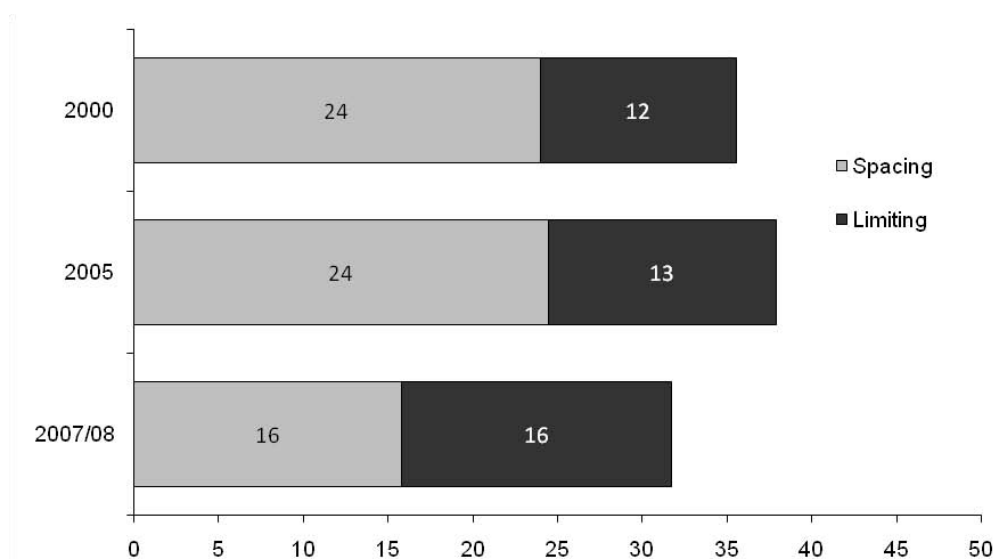
Table 5 and Figure 6 show trends of unmet need for women currently in union. The 2007-08 survey marks a change in the level and nature of unmet need for family planning.

The level of unmet need among women currently in union has changed in the past 8 years, and increased from 36 percent in 2000 to 38 percent in 2005 and dropped to 32 percent in 2007-08 (Figure 6 and Table 5).

Until recently, women in Rwanda had a greater unmet need for spacing than for limiting births. In 2000 and 2005, unmet need for spacing among women currently in union was about twice as much as unmet need for limiting: 24 percent for spacing and 12 percent for limiting in 2000 and 25 percent for spacing and 13 percent for limiting in 2005 (Table 5). The components of unmet need have changed in 2007-08. Concurrent with decrease in the level of total unmet need, there has been a substantial decrease in the level of unmet need for spacing and an increase in unmet need for limiting.

The level of unmet need should have increased because women wanted to have fewer children (desired fertility of 3.7 children per woman) than the number of children they actually had (actual total fertility of 5.5 children per woman), and the gap between desired fertility and actual fertility also increased, from 1.5 in 2005 to 1.8 in 2007-08. However, the effect of the desired fertility was likely offset by a substantial increase in current use of contraception. The relationship between wanting fewer children and current use of contraception was also reflected by a larger proportion of women using contraception for limiting births than those using it for spacing births in 2007-08.

**Figure 6. Unmet need in family planning among women currently in union, Rwanda 2000 - 2007/08**



From 2000 to 2005, the levels of current use for spacing among women currently in union did not change; it was about 7 percent each for women currently in union. In 2007-08 the level of current use for spacing was 14 percent. By comparison, the level of current use for limiting has steadily increased since 2000 (6 percent in 2000 and 10 percent in 2005). It has sharply increased to 22 percent in 2007-08 (Table 5).

**Table 5. Unmet need for family planning and current use of contraception among women currently in union, Rwanda 2000 - 2007/08**

Year	Unmet need <sup>1</sup>			Current use of any method		
	Total	Spacing	Limiting	Total	Spacing	Limiting
2000	35.6	24.0	11.6	13.2	7.3	5.9
2005	37.9	24.5	13.4	17.4	7.5	9.9
2007/08	31.7	15.8	15.9	36.4	14.1	22.3

<sup>1</sup>In 2007-08 IDHS the unmet need variable is not constructed directly from the conventional variables like previous surveys because some of those variables are not available (see section 2), and the analysis provides only the estimate.

#### **4. DISCUSSION AND RECOMMENDATIONS**

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The levels, trends, and differentials of contraceptive use among women in Rwanda from 2000 to 2007-8 have experienced a substantial, positive change. From 2005 to 2007-08, contraceptive prevalence has increased nearly threefold. As in other countries, women at their prime reproductive age, higher parity women, better educated women, urban women and women living in more highly developed areas (Kigali) are more likely than other women to use a contraceptive method.

In 2007-08, the level of unmet need for family planning among women currently in union has dropped. The decrease in total level of unmet need is likely a result of an increase in use of contraception, particularly for the purpose of limiting births.

In 2000 and 2005, the level of unmet need for spacing among women in union was higher than the level of unmet need for limiting. Recently the level of unmet need for limiting has become equal to the need for spacing. Indeed, by 2007-08 the level of unmet need for limiting and the level of unmet need for spacing are the same. The increase in unmet need for limiting is concordant with an increase in the proportion of women currently in union that do not want any more children, from 42 percent in 2005 to 48 percent in 2007-08. It is also consistent with a wider gap between total fertility wanted and actual total fertility rate, 1.8 children in 2007-08 compared to only 1.5 children in 2005.

Improvement in the family planning program and increase in contraceptive use have been a combination of hard work, commitment, coordination and partnership between the government of Rwanda and development partners. In fact, family planning has been recognized as essential for Rwanda, the most densely populated country in Africa. Recognizing that family planning is necessary for poverty reduction and development of the country, the Rwandan government has set ambitious goals and strategies to speed up its implementation. The progress of the past few years has been striking. Rwanda seems to be on a path toward achieving its goal of a decrease in the population growth rate.



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## APPENDIX

**Table A1. Current use of contraception among women age 15-49 currently in union by urban rural residence and by type of method, Rwanda 2000 - 2007/08**

Contraceptive methods	Total			Urban			Rural		
	2000	2005	2007/08	2000	2005	2007/08	2000	2005	2007/08
Any methods	13.3	17.4	36.4	26.9	31.6	44.8	10.9	15.2	35.1
Any modern method	5.7	10.3	27.4	16.3	21.2	35.7	3.9	8.6	26.2
Pills	1.0	2.5	6.4	4.2	4.2	8.8	0.4	2.2	6.1
Injectables	1.9	4.7	15.2	5.5	7.3	16.7	1.3	4.3	15.0
Condom (male)	0.4	0.9	1.9	1.5	4.0	3.9	0.2	0.4	1.6
Female sterilization	0.8	0.5	0.7	1.7	1.1	1.7	0.6	0.5	0.5
Lactational amenorrhea	1.4	0.8	1.0	2.1	1.5	1.0	1.3	0.7	1.0
Standard days method	n/a	0.5	0.3	n/a	1.4	0.5	n/a	0.3	0.3
Other modern methods	0.3	0.4	1.9	1.4	1.9	3.2	0.1	0.2	1.7
Any traditional methods	7.5	7.1	8.9	10.6	10.4	9.1	7.0	6.6	8.9
Periodic abstinence	4.7	4.2	6.0	7.5	6.9	6.6	4.2	3.7	5.9
Withdrawal	2.9	3.0	3.0	3.2	3.5	2.5	2.8	2.9	3.1
Number of women	5,052	5,510	3,888	741	744	495	4,311	4,766	3,393

**Table A2. Current use of contraception among women age 15-49 currently in union by province and by type of method, Rwanda 2000 - 2007/08**

Contraceptive methods	North			South			East			West			Kigali city		
	2000	2005	2007/08	2000	2005	2007/08	2000	2005	2007/08	2000	2005	2007/08	2000	2005	2007/08
Any methods	10.5	16.0	44.0	12.5	14.6	33.5	14.1	18.9	34.2	11.1	14.5	33.9	20.7	35.5	41.9
Any modern method	3.6	9.8	33.3	4.2	8.1	22.9	6.9	8.5	26.3	5.3	10.3	26.4	10.4	23.2	34.6
Pills	0.4	2.8	8.9	0.4	1.7	4.8	0.7	2.7	5.5	1.4	2.2	6.2	2.1	4.2	8.8
Injectables	1.5	5.5	19.7	1.1	3.9	12.5	2.5	4.1	15.5	1.7	4.7	14.0	3.6	6.6	16.6
Condom (male)	0.2	0.7	1.5	0.3	0.7	1.5	0.8	0.4	1.9	0.2	0.4	1.9	0.6	5.2	3.9
Female sterilization	0.4	0.2	0.3	0.9	0.4	0.4	0.4	0.2	0.5	0.9	1.0	1.0	1.1	1.3	1.9
Lactational amenorrhea	1.1	0.1	0.4	1.4	0.6	1.3	1.9	0.7	1.4	0.7	1.3	1.0	2.4	2.3	0.9
Standard days method	n/a	0.3	0.0	n/a	0.7	0.5	n/a	0.1	0.2	n/a	0.5	0.6	n/a	1.4	0.4
Other modern methods	0.1	0.3	2.6	0.1	0.0	1.9	0.5	0.4	1.2	0.4	0.2	1.8	0.6	2.2	2.1
Any traditional methods	6.8	6.1	10.6	8.3	6.5	10.6	7.3	10.4	7.9	5.8	4.2	7.5	10.3	12.3	7.3
Periodic abstinence	4.3	3.5	7.5	4.4	3.4	6.9	4.6	6.5	5.1	4.0	2.3	4.9	6.5	7.9	5.1
Withdrawal	2.5	2.6	3.1	3.9	3.1	3.6	2.6	4.0	2.8	1.8	1.9	2.6	3.8	4.4	2.2
Number of women	1,116	1,058	727	1,184	1,411	985	582	1,208	923	1,322	1,427	943	847	407	309

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**Table A3. Current use of contraception among women age 15-49 currently in union by age group and by type of method, Rwanda 2000 - 2007/08**

Contraceptive methods	15-29			30-39			40-49		
	2000	2005	2007/08	2000	2005	2007/08	2000	2005	2007/08
Any methods	12.0	14.9	32.0	13.8	20.4	44.0	15.0	17.3	33.3
Any modern method	5.7	9.3	27.0	6.1	12.9	32.5	5.2	8.2	20.5
Pills	1.2	2.6	6.7	1.0	2.9	7.0	0.5	1.7	4.9
Injectables	2.1	4.3	15.1	2.2	5.7	18.1	1.1	3.8	11.0
Condom (male)	0.5	1.0	1.6	0.4	1.0	2.9	0.1	0.6	0.9
Female sterilization	0.0	0.1	0.3	0.7	0.6	0.6	2.4	1.1	1.6
Lactational amenorrhea	1.6	0.7	0.9	1.5	1.4	1.4	0.7	0.2	0.7
Standard days method	n/a	0.4	0.3	n/a	0.4	0.4	n/a	0.7	0.3
Other modern methods	0.3	0.3	2.1	0.3	0.8	2.1	0.4	0.2	1.0
Any traditional methods	6.3	5.7	5.1	7.7	7.5	11.5	9.8	9.0	12.9
Periodic abstinence	3.9	2.8	3.6	4.9	4.6	7.4	5.9	5.9	8.5
Withdrawal	2.4	2.9	1.5	2.8	3.0	4.1	3.9	3.1	4.3
Number of women	2,256	2,299	1,718	1,712	1,919	1,323	1,084	1,292	846

**Table A4. Current use of contraception among women age 15-49 currently in union by level of education and by type of method, Rwanda 2000 - 2007/08**

Contraceptive methods	No education			Primary			Secondary or higher		
	2000	2005	2007/08	2000	2005	2007/08	2000	2005	2007/08
Any methods	9.1	10.8	27.3	12.1	17.3	37.4	34.3	40.4	55.8
Any modern method	3.3	5.9	19.1	4.9	9.8	28.7	18.9	29.1	42.7
Pills	0.3	1.4	3.8	0.6	2.2	7.1	5.4	7.9	9.5
Injectables	0.9	3.1	11.9	1.9	4.9	16.2	5.4	8.5	18.2
Condom (male)	0.1	0.3	1.0	0.3	0.8	1.9	1.9	4.0	4.5
Female sterilization	0.7	0.4	0.5	0.5	0.4	0.7	2.3	1.7	1.2
Lactational amenorrhoea	1.2	0.4	1.2	1.4	1.0	0.9	2.2	0.9	1.4
Standard days method	n/a	0.2	0.0	n/a	0.3	0.3	n/a	2.6	2.0
Other modern methods	0.1	0.1	0.7	0.2	0.2	1.8	1.7	3.5	6.0
Any traditional methods	5.8	5.0	8.3	7.2	7.6	8.6	15.5	11.2	13.1
Periodic abstinence	3.5	3.0	6.1	4.1	4.1	5.5	11.7	8.1	9.3
Withdrawal	2.3	1.9	2.2	3.1	3.4	3.2	3.8	3.2	3.9
Number of women	1,784	1,640	1,011	2,756	3,392	2,539	512	479	338

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**Table A5. Current use of contraception among women age 15-49 currently in union by household wealth quintile and by type of method, Rwanda 2000 - 2007/08**

Contraceptive methods	Lowest			Lower			Middle			Higher			Highest		
	2000	2005	2007/08	2000	2005	2007/08	2000	2005	2007/08	2000	2005	2007/08	2000	2005	2007/08
Any methods	7.4	11.0	27.6	8.1	15.2	30.3	11.1	15.7	36.1	13.3	14.8	38.8	25.5	31.8	49.5
Any modern method	2.4	6.0	21.7	2.3	7.5	23.3	3.5	8.5	26.8	5.3	8.5	27.4	14.8	22.4	38.6
Pills	0.3	1.1	6.1	0.6	1.7	5.2	0.3	2.2	6.2	0.5	1.8	6.1	3.3	5.9	8.9
Injectables	0.2	3.3	12.0	0.8	3.8	14.1	1.2	4.2	16.1	1.6	4.9	15.6	5.5	7.4	18.0
Condom (male)	n/a	0.2	1.1	n/a	0.4	1.3	0.4	0.2	1.8	0.2	0.5	1.4	1.3	3.4	4.0
Female sterilization	0.1	0.4	0.4	0.3	0.5	0.4	0.4	0.2	0.3	1.1	0.4	0.4	1.7	1.2	2.0
Lactational amenorrhoea	1.8	0.8	1.2	0.6	0.7	1.0	1.1	1.1	1.0	1.7	0.4	1.0	1.9	1.2	1.1
Standard days method	n/a	0.1	0.0	n/a	0.2	0.1	n/a	0.4	0.4	n/a	0.3	0.4	n/a	1.4	0.9
Other modern methods	n/a	0.1	1.0	0.1	0.1	1.2	0.1	0.2	1.0	0.2	0.2	2.5	1.1	1.8	3.8
Any traditional methods	5.0	5.0	5.9	5.7	7.8	7.0	7.6	7.3	9.3	8.0	6.4	11.4	10.7	9.4	10.9
Periodic abstinence	3.4	3.3	3.7	3.9	4.4	4.3	4.9	4.4	7.2	4.0	2.7	7.4	7.0	6.2	7.2
Withdrawal	1.6	1.7	2.3	1.8	3.3	2.7	2.7	2.8	2.1	4.0	3.7	4.0	3.7	3.2	3.7
Number of women	650	1,136	528	1,145	1,123	1,072	997	1,112	776	1,288	1,144	795	970	995	716

