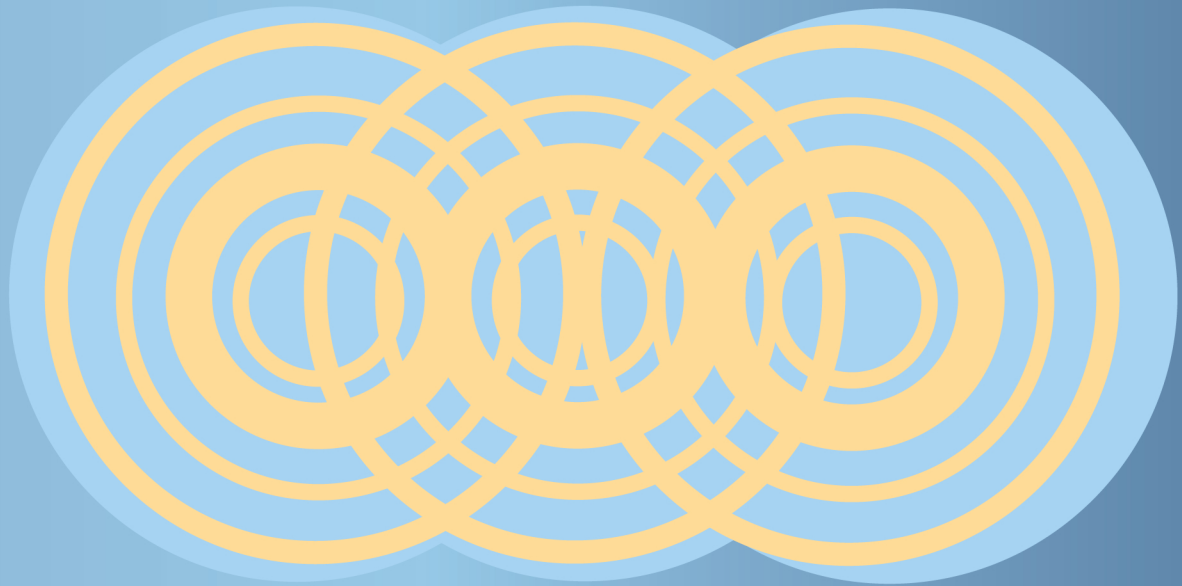


E c o n o m i c &

S o c i a l A f f a i r s

# World Fertility Report 2009



United Nations



**Department of Economic and Social Affairs**  
Population Division

# **World Fertility Report: 2009**



United Nations  
New York, 2011

# DESA

The Department of Economic and Social Affairs of the United Nations Secretariat is a vital interface between global policies in the economic, social and environmental spheres and national action. The Department works in three main interlinked areas: (i) it compiles, generates and analyses a wide range of economic, social and environmental data and information on which States Members of the United Nations draw to review common problems and take stock of policy options; (ii) it facilitates the negotiations of Member States in many intergovernmental bodies on joint courses of action to address ongoing or emerging global challenges; and (iii) it advises interested Governments on the ways and means of translating policy frameworks developed in United Nations conferences and summits into programmes at the country level and, through technical assistance, helps build national capacities.

## Note

The designations employed in this report and the material presented in it do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

The designations “more developed” and “less developed” regions and “developed”, “developing”, and “least developed” countries or areas are intended for statistical convenience and do not necessarily express a judgement about the stage reached by a particular country or area in the development process.

The term “country” as used in the text of this report also refers, as appropriate, to territories or areas.

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## PREFACE

The Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat is responsible for providing the international community with up-to-date and scientifically objective information on population and development. The Population Division provides guidance to the United Nations General Assembly, the Economic and Social Council and the Commission on Population and Development on population and development issues and undertakes regular studies on population levels and trends, including trends of fertility, nuptiality and family planning, changes in population policies and the interrelationships between population and development.

As part of its work on fertility, the Population Division monitors levels and trends in age and parity patterns of fertility, and its proximate determinants, such as marriage and contraceptive use, collects and analyses information on the relationship between fertility and development, and provides substantive support to intergovernmental processes at the United Nations on fertility, family planning and development.

This report is the third in the series of *World Fertility Reports* and it provides the factual basis for the analysis of reproductive behaviour worldwide. It discusses levels and trends of fertility, the timing of childbearing, marriage, contraceptive use and national policies with respect to fertility and childbearing for 196 countries or areas. The data presented are obtained from civil registration statistics, population censuses and nationally representative sample surveys. Information on national policies is obtained mainly from the responses of Governments to periodic United Nations inquiries and official sources of information on government policies and programmes. This report comes with online data and metadata on a comprehensive set of indicators on fertility, nuptiality, contraceptive use and national policies related to childbearing for 196 countries or areas.

The Population Division gratefully acknowledges the assistance and cooperation of the Statistics Division of the Department of Economic and Social Affairs of the United Nations Secretariat.

This report and its online data and metadata are available on the Population Division's website at [www.unpopulation.org](http://www.unpopulation.org). For further information about this report, please contact the office of the Director, Population Division, Department of Economic and Social Affairs, United Nations, New York, 10017, by telephone (+1 212) 963-3179 or fax (+1 212) 963-2147.



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## EXPLANATORY NOTES

The following symbols have been used in the tables throughout this report:

Two dots (..) indicate that data are not available or are not reported separately.

A hyphen (-) indicates that the item is not applicable.

A minus sign (-) before a figure indicates a decrease.

A full stop (.) is used to indicate decimals.

Use of a hyphen (-) between years, for example, 1995-2000, signifies the full period involved.

Numbers and percentages in tables do not necessarily add to totals because of rounding.

References to countries, territories and areas:

The designations employed and the material in this publication do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations concerning the legal status of any country, territory or area or its authorities, or concerning the delimitation of its frontiers or boundaries.

The designation “more developed” and “less developed” regions are intended for statistical convenience and do not necessarily express a judgement about the stage reached by a particular country or area in the development process. The term “country” as used in this publication also refers, as appropriate, to territories or areas.

More developed regions comprise all regions of Europe plus Northern America, Australia/New Zealand and Japan. The term “developed countries” is used to designate countries in the more developed regions.

Less developed regions comprise all regions of Africa, Asia (excluding Japan) and Latin America and the Caribbean, as well as Melanesia, Micronesia and Polynesia. In this publication, countries and areas of the less developed regions are divided into two groups: least developed countries and developing countries.

The group of least developed countries comprised, as of December 2010, 49 countries: Afghanistan, Angola, Bangladesh, Benin, Bhutan, Burkina Faso, Burundi, Cambodia, Central African Republic, Chad, Comoros, Democratic Republic of the Congo, Djibouti, Equatorial Guinea, Eritrea, Ethiopia, Gambia, Guinea, Guinea-Bissau, Haiti, Kiribati, Lao People’s Democratic Republic, Lesotho, Liberia, Madagascar, Malawi, Maldives, Mali, Mauritania, Mozambique, Myanmar, Nepal, Niger, Rwanda, Samoa, Sao Tome and Principe, Senegal, Sierra Leone, Solomon Islands, Somalia, Sudan, Timor-Leste, Togo, Tuvalu, Uganda, United Republic of Tanzania, Vanuatu, Yemen and Zambia.

The term “developing countries” is used to designate countries in the less developed regions excluding the least developed countries.

Names and compositions of geographical areas follow those of “Standard country or area codes for statistical use” (ST/ESA/STAT/SER.M/49/Rev.3), available at <http://unstats.un.org/unsd/methods/m49/m49.htm>.

The following abbreviations have been used:

CARICOM	Caribbean Community Secretariat
CCPS	Caribbean Contraceptive Prevalence Survey
CPS	Contraceptive Prevalence Survey
DHS	Demographic and Health Survey
ESS	European Social Survey
Eurostat	Statistical Office of the European Communities
FFS	Fertility and Family Survey
GCHS	Gulf Child Health Survey
GFHS	Gulf Family Health Survey
LSMS	Living Standards Measurement Study
MICS	Multiple Indicator Cluster Survey
MIS/DHS	Malaria Indicator Survey (MIS)
PAPCHILD	Pan-Arab Project for Child Development Survey
PAPFAM	Pan-Arab Project for Family Health Survey
RHS	Reproductive Health Survey
SAR	Special Administrative Region
SPC	Secretariat of the Pacific Community
TFYR	The former Yugoslav Republic
UN-ECA	United Nations Economic Commission for Africa
UN-ECLAC	United Nations Economic Commission for Latin America and the Caribbean
UN-ESCWA	United Nations Economic and Social Commission for Western Asia
UNPD	United Nations Population Division
UNSD	United Nations Statistics Division
WFS	World Fertility Survey



## EXECUTIVE SUMMARY

Since the 1970s the world has experienced profound changes in fertility, union formation and contraceptive demand. Fertility has declined throughout the world, early childbearing and marriage are less common and the percentage of women and men using contraception, especially modern methods, has risen. Nevertheless, the level and pace of change in fertility and the proximate determinants of marriage and contraceptive use have varied markedly among countries such that major differences in fertility levels persist across countries and regions of the world. The paths that childbearing, union formation and contraceptive use have taken in countries have crucial implications for the sustainability of development efforts and for the health and well-being of individuals.

The *World Fertility Report 2009*, prepared by the Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat, presents a compilation of key indicators of fertility, nuptiality, contraceptive use and relevant population policies for 196 countries over the past 40 years. Data are presented for three time periods: the first time period is as close to 1970 as possible, the second time period is as close to 1995 as possible (shortly after the adoption of the Programme of Action of the International Conference on Population and Development in 1994), and the last time period reflects the latest available data. The conclusions presented here reinforce and extend those presented in the *World Fertility Report 2007* (United Nations, 2010a) by considering a broader time period. The key findings of this report are the following:

- 1. Fertility declined worldwide to unprecedented levels between the 1970s and the first decade of the twenty-first century.** Total fertility fell in all but three of the 185 countries or areas for which data are available for all three periods. In the most recent period covered, 75 countries or areas had a total fertility below 2.1 children per woman, the level required to ensure the replacement of generations in low mortality populations.
- 2. Fertility declines were substantial in the less developed regions, but fertility levels are still spread over a broad range.** The median level of total fertility among developing countries fell by more than half, from 5.7 children per woman in the 1970s to 2.5 children per woman in the most recent period. More than a third of all developing countries experienced fertility declines of at least 1.0 child per woman per decade during that period. Yet total fertility is below replacement level (2.1 children per woman) in 32 of 102 developing countries or areas with data available for all three periods and remains above 4.0 children per woman in 10 countries or areas.
- 3. Fertility levels among the least developed countries remain high and have undergone only moderate decline since 1970s.** Among the 39 least developed countries with data for the three time periods, the median total fertility declined from 6.5 children per woman in the 1970s to 5.4 children per woman in the first decade of the twenty-first century. In 2000-2007, more than two-thirds of the least developed countries still had total fertility higher than 5.0 children per woman.
- 4. Among developed countries, fertility levels were already relatively low in the 1970s but continued to fall over time.** By the first decade of the twenty-first century, none of the developed countries had total fertility above 2.1 children per woman and only three (Iceland, New Zealand and the United States of America) had levels above 2.0 children per woman. Total fertility was below 1.4 children per woman in about half of developed countries. However, total fertility increased between the 1990s and the latest period in half of the developed countries, though the magnitude of increase was generally very small.

- 5. Adolescent birth rates declined among developed and developing countries but are still high in the least developed countries.** Among developed countries the median adolescent birth rate dropped from 34 births per 1,000 women aged 15-19 in the 1970s to 14 births per 1,000 women aged 15-19 in the first decade of the twenty-first century. Among developing countries, the median adolescent birth rate dropped in the same period from 79 births per 1,000 women aged 15-19 to 50 births per 1,000 women aged 15-19. Given already high levels of adolescent fertility in the 1970s in the least developed countries, the declines over time were marginal (the median adolescent birth rate changed from 151 births per 1,000 women aged 15-19 in the 1970s to 123 births per 1,000 women aged 15-19 in 2000-2007).
- 6. Fertility rates among women aged 20-24 declined markedly.** In all of 159 countries with the data, fertility rates in the age group 20-24 declined with the exception of three least developed countries. The median fertility rate changed from 242 births per 1,000 women aged 20-24 in 1970-1979 to 109 births per 1,000 women aged 20-24 in 2000-2007.
- 7. Increasing numbers of Governments have become dissatisfied with the fertility levels of their populations.** In 1976, 53 per cent of Governments at the world level viewed their fertility levels as being satisfactory, and by 2009 only 38 per cent held this view. Changes in Governments' views have moved in opposite directions over this period. Among developed countries, an increasing proportion of Governments viewed their fertility levels as being too low: 21 per cent of Governments did so in 1976 compared to 61 per cent in 2009. Among the least developed countries, an increasing proportion of Governments viewed their fertility levels as being too high: in 1976, just 31 per cent of Governments did so compared to 86 per cent of Governments in 2009.
- 8. Age at marriage has been rising around the world.** The female singulate mean age at marriage (SMAM) increased over time in 75 of the 77 countries with the requisite data. Among developed countries, the female SMAM increased sharply, with the median of the distribution rising from 22.3 years in 1970-1979 to 29.4 years in 2000-2008. Among developing countries, the median female SMAM in 2000-2008 was 23.5 years but the mean age at marriage ranged widely from 20.2 years to 33.1 years. Female SMAMs remained substantially lower in the least developed countries, where the median female SMAM was 20.7 years in 2000-2008. For men, changes in the mean age at marriage over time were similar to those for women except that men almost universally marry at older ages than women do.
- 9. In countries where women marry at young ages, the differences in the mean age at marriage between men and women are generally large.** In 2000-2008, among developed countries the difference between the male and female SMAMs was generally small with the median difference at 2.4 years. Among developing countries, the median difference between the male and female SMAMs was 3.3 years and the gap was even larger among the least developed countries, where women tend to marry at much earlier ages on average, with a median difference of 4.3 years.
- 10. Marriage is becoming less relevant for childbearing.** In 62 countries with data on extramarital births for all three periods, the median percentage of all births that occurred out of formal (legal) marriage rose substantially, from 7.1 per cent in the 1970s to 33.8 per cent in the first decade of the twenty-first century.
- 11. Contraceptive use has risen since the 1970s in nine out of ten countries with data over time, and modern method use accounts for most of the increase.** The use of contraception among women aged 15 to 49 who are married or in a union increased in 90 per cent of the 68 countries or areas with data. Among developing countries, contraceptive use increased sharply, where the

median of the distribution rose from 44.6 per cent in 1970-1979 to 64.1 per cent in 2000-2009. The increasing use of modern methods accounted for most of the rise in contraceptive prevalence in the developing countries. Increases were more modest among developed countries, where levels of contraceptive use were already high in the 1970s. Among the least developed countries, the median of the distribution rose from 8.7 per cent in the 1970s to 25.7 per cent in the most recent period.

**12. Despite increases in contraceptive use over time, levels of unmet need for family planning in 2000-2009 were moderate to high in developing and least developed countries.** Among the 37 developing countries with data for 2000-2009, half had levels of unmet need for family planning between 7.5 per cent and 20.2 per cent. Unmet need for family planning was substantially higher among the 24 least developed countries, where half had levels of unmet need between 21.1 per cent and 32.2 per cent. Unmet need for family planning tends to be highest in countries where contraceptive prevalence is low and lowest in countries where contraceptive prevalence is already high (above 60 per cent).

**13. Government policies supporting family planning programmes mirror increases in demand for contraception.** An rising percentage of Governments since the 1970s have policies that provide direct support for family planning programmes. In 1976, 74 per cent of Governments worldwide supported family planning programmes and the distribution of contraceptives either directly (63 per cent) through government facilities or indirectly (11 per cent) by supporting the activities of non-governmental agencies. By 2009, 91 per cent of Governments supported family planning programmes and the distribution of contraceptives (75 per cent through direct means and 16 per cent through indirect means).





## INTRODUCTION

During the last several decades, the world has experienced profound changes in fertility. Between 1970-1979 and 2000-2007, the median level of total fertility in the world fell by more than half, from 5.6 to 2.4 children per woman. Central to these changes were shifts in the timing of childbearing, in the incidence and prevalence of nuptiality and in the use of contraception. The profound changes in fertility were associated with important changes in social and economic development and have crucial implications for the sustainability of development efforts.

The Population Division of the Department of Economic and Social Affairs has the mandate of increasing understanding and awareness among United Nations Member States and civil society of issues in the field of population and development. Accordingly, it has produced a number of reports on these topics, including the *World Fertility Report 2003* and *World Fertility Report 2007* (United Nations, 2004a and 2010a). *World Fertility Report 2009* complements and supplements previous publications by providing a set of consistent and updated data for three time periods since 1970 on various aspects of reproduction, nuptiality, contraceptive use and policies relating to childbearing for most countries of the world.

The data presented in this report have been compiled from civil registration systems, population censuses and nationally representative sample surveys. Information on national policies is obtained mainly from the responses of Governments to periodic United Nations inquiries. The basic criterion for inclusion of data is their validity. No attempt has been made to adjust the estimates used for coverage, undercount, underreporting of events, misreporting of age, sampling error or other types of data problems.<sup>1</sup>

A set of profiles for each of the 196 countries or areas with at least 100,000 inhabitants in 2009 is included in the online data of *World Fertility Report 2009*. The country profiles present data in relation to 21 indicators of fertility, nuptiality, contraceptive use and national policies related to childbearing. Because total fertility is the most widely used indicator of fertility, data on total fertility and three selected profiles of age-specific fertility for each country are presented in graphical form. The data available are presented in conjunction with estimates of total fertility from *World Population Prospects: The 2008 Revision* (United Nations, 2009a), thus allowing a comparison between the two sets.

In each country profile, the data relative to each of the 21 indicators are presented for three time periods: the first being as close to 1970 as possible, the second being as close to 1995 as possible and the last being the latest available data. Because the availability of data varies considerably among countries, the reference dates for the data for the earlier period vary from 1965 to 1989, the middle period from 1990 to 1999 and the latest period from 2000 to 2009.

For purposes of the analysis, the 196 countries or areas of the world with at least 100,000 inhabitants in 2009 have been divided into three groups: developed, developing and the least developed countries. The 44 developed countries include all countries in Europe plus Australia, Canada, Japan, New Zealand and the United States of America. The group of least developed countries, as of December 2010, include the 49 countries listed in table 1.<sup>2</sup> For the purposes of this report, developing countries include all other countries in the world, that is, all countries in the less developed regions that are not among the least developed. Therefore, the groups of developed, developing and least developed countries cover all countries in the world and are disjoint.

In the analysis of selected indicators, the 196 countries or areas covered by this report are not always included in their totality because, for each indicator, certain countries lack the required data. A second reason for excluding countries from the analysis is that, in order to assess trends, data for all three periods

are necessary. The countries with data on total fertility for three points in time numbered 185 and covered 98 per cent of the world's population in each period. Consequently, the conclusions about total fertility derived from the subset of countries with data for the three periods are reasonably robust. Although an effort was made to consider the same set of countries for every indicator, the availability of data on indicators other than total fertility is usually more limited. Thus, in discussing levels and trends of other indicators, fewer than 185 countries may be considered. Information on the number of countries with data on each indicator is presented in Table B.1 in the online data and metadata.

The data available for each period are typically spread over the period, especially among developing countries and the least developed countries. Thus, fertility data for Mexico refer to the years 1970, 1995 and 2006, while fertility data for Ecuador refer to 1970, 1997 and 2002. Therefore, the summary measures used for a period, such as the median value for an indicator, do not refer to any particular date within that period. In analyzing change over time, however, the period of observation is controlled for by calculating the average annual pace of change for each country separately.

In analysing how the levels and trends of an indicator vary among countries, the shape of the distribution of a set of countries or areas according to the indicator of interest has been summarized using a five-number summary. The five-number summary includes the median, the upper and lower quartiles and the upper and lower extremes of the distribution. The upper and lower extremes are the maximum and minimum values observed for a particular indicator; the lower quartile, the median and the upper quartile are the values of the indicator that divide the distribution into four parts, each with the same number of observations. Consequently, half of the observed values of an indicator fall between the upper and lower quartiles (i.e. the interquartile range) and the median marks the centre of the distribution. Five-number summaries are displayed graphically by using boxplots, where the interquartile range is depicted as a box whose upper and lower limits are the upper and lower quartiles, and the lines that extend above and below the box have as extremes the maximum and minimum values of the distribution. These diagrammatic depictions of the distributions of indicators by country or area are useful in assessing overall trends. The values of the median, lower and upper quartiles, and the minimum and maximum corresponding to the distributions displayed graphically and described in the report are presented in tables I.1 to IV.5 in the annex of the report.

The following sections discuss in some detail major trends in different indicators and their interrelationships. The online data and metadata that accompany this report contain, in addition to the individual country profiles described earlier, tables where data for each selected indicator, including information on source type, source of data and notes, are listed for all countries or areas that are included in the present report. The definitions of the different indicators considered in this report are also in the online data and metadata as well as tables of total fertility estimates from the *World Fertility Report 2009* compared to the estimates of total fertility from the *World Population Prospects: Revision 2008* (United Nations, 2009a).

TABLE 1. LIST OF LEAST DEVELOPED COUNTRIES BY MAJOR AREA

<i>Africa</i>		
Angola	Ethiopia	Niger
Benin	Gambia	Rwanda
Burkina Faso	Guinea	Sao Tome and Principe
Burundi	Guinea-Bissau	Senegal
Central African Republic	Lesotho	Sierra Leone
Chad	Liberia	Somalia
Comoros	Madagascar	Sudan
Dem. Republic of the Congo	Malawi	Togo
Djibouti	Mali	Uganda
Equatorial Guinea	Mauritania	United Republic of Tanzania
Eritrea	Mozambique	Zambia
<i>Asia</i>		
Afghanistan	Lao People's Dem. Republic	
Bangladesh	Maldives	Timor-Leste
Bhutan	Myanmar	Yemen
Cambodia	Nepal	
<i>Latin America and the Caribbean</i>		
Haiti		
<i>Oceania</i>		
Kiribati*	Solomon Islands	Vanuatu
Samoa	Tuvalu*	

\* Countries with a population of less than 100,000 in 2009.

## NOTES

<sup>1</sup> Most of the data included in the present report and CD-ROM are also available in *World Fertility Data 2008* (United Nations, 2009b), *World Marriage Data 2008* (United Nations, 2009c), *World Contraceptive Use 2010* (United Nations, 2011a) and *World Population Policies 2009* (United Nations, 2010b). These datasets are accessible on the website of the Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat, at <http://www.unpopulation.org>. The year of the most recent data point varies by indicator and the relevant data source.

<sup>2</sup> Among the 49 least developed countries, Kiribati and Tuvalu are not presented in country profiles and are not included in the analysis because they had less than 100,000 inhabitants in 2009.



## I. FERTILITY

The data presented in this report document how national populations have undergone the fertility transition. Several stages of the fertility transition may be distinguished (United Nations, 2007), beginning with a pre-transitional stage in which fertility is high (generally above 5.0 children per woman) and relatively stable. The next stage is that where fertility begins to fall but the decline is slow, followed by a period of sustained reductions, which has generally led to very low levels of total fertility, usually below 2.1 children per woman that is considered to be replacement fertility. Comparisons between the fertility levels observed during 1970-1979, 1990-1999 and 2000-2007 illustrate the various stages of the transition experienced by different countries and are analysed by focusing on the distribution of fertility levels by development groups using boxplots. The values of the median, lower and upper quartiles, and the minimum and maximum corresponding to the distributions displayed graphically are presented in tables I.1 to I.3 in the annex of the report.

### A. FERTILITY LEVELS AND TRENDS

The boxplots shown in figure I.1 provide the basis for a summary view of the 185 countries<sup>1</sup> with data on total fertility for the three time periods 1970-1979, 1990-1999 and 2000-2007. In 1970-1979, total fertility levels were at 5.6 children per woman in half of the countries of the world. Among the 44 developed countries with data for all three time periods, the highest level of total fertility was in 1970-1979 in Albania, with 5.2 children per woman; the next highest was in Ireland, with 3.9 children per woman. The lowest fertility levels among developed countries were found in Croatia and Finland (1.8 children per woman). Fifty per cent of the developed countries had total fertility levels concentrated in the narrow range of 2.1 to 2.6 children per woman, and median total fertility among developed countries was 2.3 children per woman.

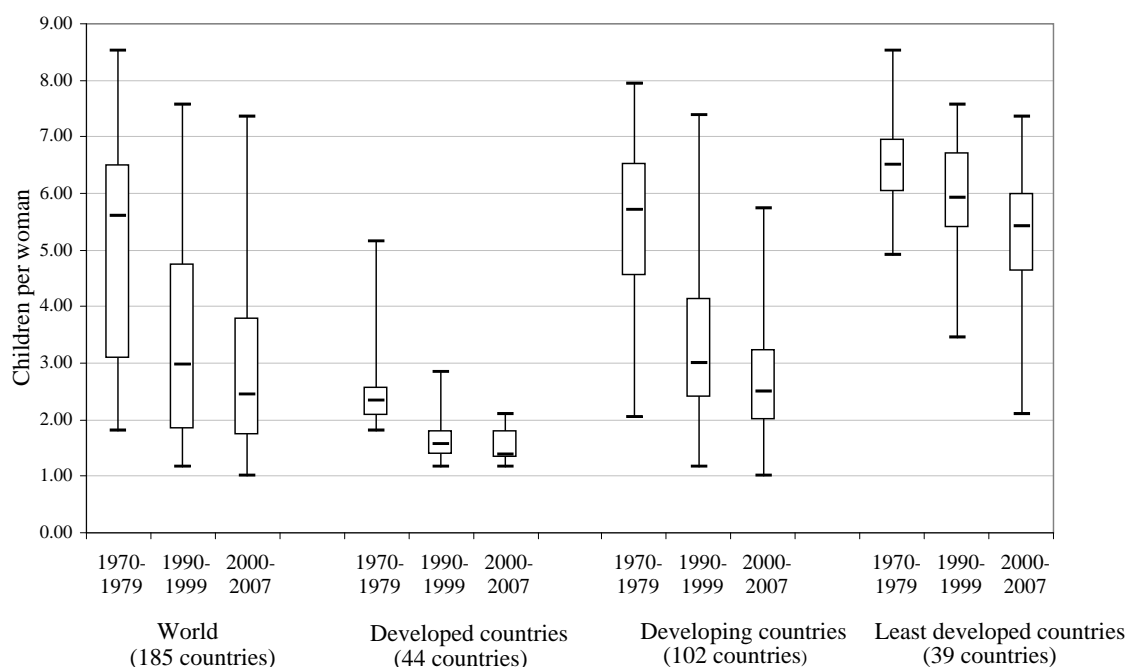
Total fertility levels among the 102 developing countries with data for all three time periods were considerably higher than among the developed countries in the earliest time period (1970-1979). Levels ranged from 2.0 children per woman in Macao SAR of China, followed by 2.5 children per woman for Aruba and 2.7 children per woman for Cyprus, Georgia, and Uruguay, to 7.9 children per woman in Mayotte, 7.7 children per woman in Syrian Arab Republic and 7.6 children per woman in Jordan and Kenya. The median fertility level among developing countries or areas was 5.7 children per woman, and half of the developing countries had fertility levels ranging between 4.6 and 6.5 children per woman, producing an inter-quartile range of close to 2.0 children per woman.

There were 39 least developed countries with fertility data for the three time periods. Total fertility among these countries was quite high in the earliest period, whereby the central half of the countries had fertility levels ranging between 6.0 and 7.0 children per woman, producing an inter-quartile range of 1.0 child. The highest fertility level was 8.5 children per woman in Yemen, while the lowest total fertility was 4.9 children per woman in Equatorial Guinea.

The world has since witnessed significant fertility declines over the past three decades. Total fertility fell in all but three of the 185 countries or areas for which data are available for all three periods. The distributions of total fertility shifted downward resulting in a decline of the median total fertility from 5.6 children per woman in 1970-1979 to 2.4 children per woman in 2000-2007. The decline in total fertility was fastest among developing countries, whereby the median total fertility among countries with the required data dropped from 5.7 children per woman in the earliest period to 2.5 by 2000-2007. The developed countries were already far advanced in the transition to low fertility in 1970-1979, but still more than three quarters of them exhibited total fertility levels at or over 2.1 children per woman. In 2000-2007, all developed countries had total fertility at or below 2.1 children per woman. Overall

declines for least developed countries were marginal given the high levels of fertility that characterise most of those countries and the median total fertility declined from 6.5 to 5.4 children per woman between 1970-1979 and 2000-2007.

**Figure I.1. Distribution of total fertility, the world and the development groups**



The time period from 1970-1979 to 1990-1999 was characterized by significant fertility reductions and the median decrease in total fertility among the 44 developed countries with data was 0.3 children per decade (tabulations not shown). Between 1990-1999 and 2000-2007, the median change in total fertility was 0.0 children per decade. In half of the developed countries total fertility increased between 1990-1999 and 2000-2007, although the magnitude of increase was generally very small. Yet total fertility declined by at least half of a child per decade in five of the developed countries (Albania, Bosnia and Herzegovina, the Former Yugoslav Republic of Macedonia, the Republic of Moldova and Serbia). Overall, the fastest decline in total fertility from 1970-1979 to 2000-2007 among the developed countries was in Albania, where total fertility fell by 1.1 children per woman per decade. Finland, Sweden and Denmark had almost no change on average in fertility from 1970-1979 to 2000-2007. By 2000-2007, total fertility was at or below replacement (2.1 children per woman) in all 44 developed countries and half of the developed countries had total fertility levels below the median of 1.4 children per woman. The lowest level of fertility among developed countries was in Belarus, Bosnia and Herzegovina, Poland and the Republic of Moldova (1.2 children per woman in 2006). The highest levels were found in Iceland, New Zealand and the United States of America (2.1 children per woman in 2006).

The developing countries experienced significant declines in total fertility. The median decrease in total fertility among the 102 developing countries was 0.9 children per decade from 1970-1979 to 1990-1999, followed by a decline at a slower pace of 0.5 children per decade between 1990-1999 and 2000-2007. Developing countries with the most rapid declines of total fertility levels between 1970-1979 and 2000-2007 were Oman (2.3 children per decade), followed by Islamic Republic of Iran, Mongolia and the

United Arab Emirates (1.7 children per decade). At the other end of the distribution were Argentina, Aruba, Israel and Uruguay, with very slow decreases (0.2 children per decade). The median total fertility among the 102 developing countries in 2000-2007 was 2.5 children per woman and was only slightly above the median value among developed countries in 1970-1979 (2.3 children per woman). A quarter of developing countries had total fertility lower than 2.0 children per woman. The pace of change in developing countries has been rapid, and as a consequence they have managed to achieve in about 30 years fertility levels similar to those attained by developed countries over a much longer course of time.

In the 39 least developed countries with fertility data for the three time periods, the distribution of fertility levels has undergone only moderate decline since 1970-1979, remaining much higher than for the other two groups. Between 1970-1979 and 1990-1999, the median decline in total fertility among the 39 least developed countries was 0.2 children per decade, but thereafter the pace of decline increased substantially. Between 1990-1999 and 2000-2007, the median decline was 0.7 children per decade, or three and a half times the median decline between the earlier periods. The lowest fertility level among the 39 least developed countries in 2000-2007 was in the Maldives (2.1 children per woman) while the highest fertility level was in Guinea-Bissau (7.4 children per woman), Niger (7.1 children per woman) and Timor-Leste (7.0 children per woman). In 2000-2007, 28 countries among the 39 least developed countries had still total fertility higher than 5.0 children per woman.

#### B. MEAN AGE AT CHILDBEARING

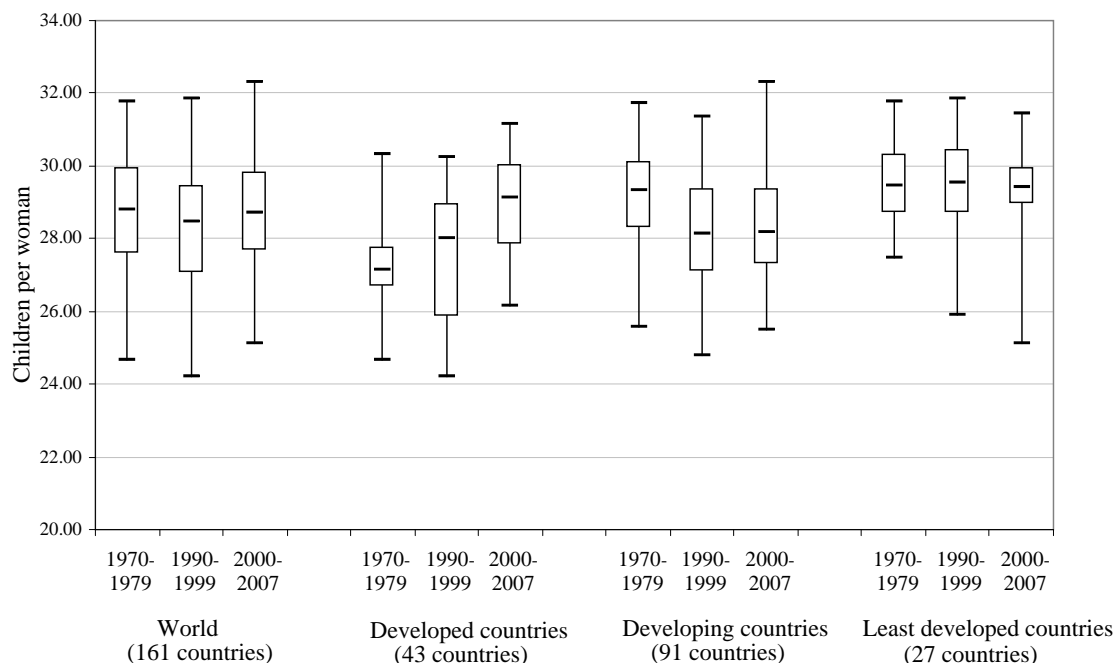
The decline in total fertility experienced by most countries over the past several decades has been accompanied by shifts in the timing of childbearing. During the early stages of the fertility transition, there are fewer higher order births and the mean age at childbearing tends to fall (assuming there is not an offsetting increase in the age at first birth). In countries where total fertility is low, changes in the mean age at childbearing are mainly influenced by the changes in the age at first birth. The differences in trends among countries over the past three decades are a product of these factors.

Data allowing the calculation of mean age at childbearing for the three time points 1970-1979, 1990-1999 and 2000-2007 were available for 161 countries<sup>2</sup> (figure I.2). The distribution of mean age at childbearing shows at the world level a remarkable stability from 1970-1979 to 2000-2007. The stability of the distribution of all countries according to the mean age at childbearing masks the changes that have taken place within individual countries. Among the 161 countries considered, 37 recorded a significant decline and 27 recorded a significant increase in the mean age at childbearing of at least 0.5 years per decade between 1970-1979 and 2000-2007. Moreover, in many countries the mean age at childbearing first decreased and later increased. The important changes taking place in the mean age at childbearing are clearer when one focuses on the distribution of countries within development groups.

Among the 43 developed countries with data for three time periods, Ireland had the highest mean age at childbearing in 1970-1979 at 30.3 years and Bulgaria had the lowest mean age at childbearing at 24.7 years (which was also the world's lowest mean age at childbearing in that period). The mean age at childbearing was lower compared to other development groups and central half of developed countries had the mean age at childbearing between 26.7 and 27.8 years. Between 1970-1979 and 1990-1999, contrasting developments were taking place in the timing of childbearing in developed countries. More than one third of developed countries registered a decline in the mean age at childbearing. On the other side, as a result of a postponement of the start of childbearing, in more than one third of developed countries the mean age at childbirth increased by at least 0.5 years per decade. Denmark had the fastest rate of increase at 1.0 years per decade, while the Republic of Moldova had the fastest rate of decline, at 1.3 years per decade.

From 1990-1999 to 2000-2007, the postponement of childbearing has been more pronounced and all developed countries registered an increase in the mean age at childbearing. In seven countries (Belgium, the Czech Republic, Estonia, Hungary, Latvia, Slovakia and Slovenia) the mean age at childbearing had increased by 2.0 or more years per decade and the Czech Republic had the fastest rate of increase at 2.9 years per decade. By 2000-2007, Ireland still had the highest mean age at childbearing at 31.1 years while Bulgaria and Ukraine had the lowest value, both with a mean age of childbearing at 26.2 years.

**Figure I.2. Distribution of the mean age at childbearing, the world and the development groups**



In 1970-1979, many developing countries were still in the early stages of the fertility transition. Between 1970-1979 and 1990-1999, even as shifts towards lower fertility levels occurred, more than two thirds of 91 developing countries with available data recorded a decline in the mean age at childbearing and the median declined from 29.4 to 28.1 years. This can be explained by the effects of the transition to lower fertility: when women have fewer children, their births get compressed over a shorter period within their reproductive lives and the mean age at childbearing tends to decrease. While the distribution of the mean age at childbearing has changed little between 1990-1999 and 2000-2007, other changes have taken place among developing countries. More than a third of developing countries experienced significant postponement of childbearing of more than 0.5 years per decade. The fastest pace of increase was 2.0 years per decade in the Republic of Korea. Still in a third of countries a decline in the mean age at childbearing continued. In 2000-2007, the highest mean age at childbearing of 32.3 years was found in Algeria and the lowest at 25.5 years in Armenia.

Among the 27 least developed countries with data for all three periods, the median of the distribution has remained stable at around 29.5 years between 1970-1979 and 2000-2007. Nonetheless, the trends in individual countries have been very diverse. The fastest decline in the mean age at childbearing between 1970-1979 and 2000-2007 was experienced in Nepal (1.3 years per decade) and Bangladesh (0.7 years per decade); concurrent to fast declines of total fertility over the same period. In all three periods, Bangladesh had the lowest mean age at childbearing among the least developed countries, declining from



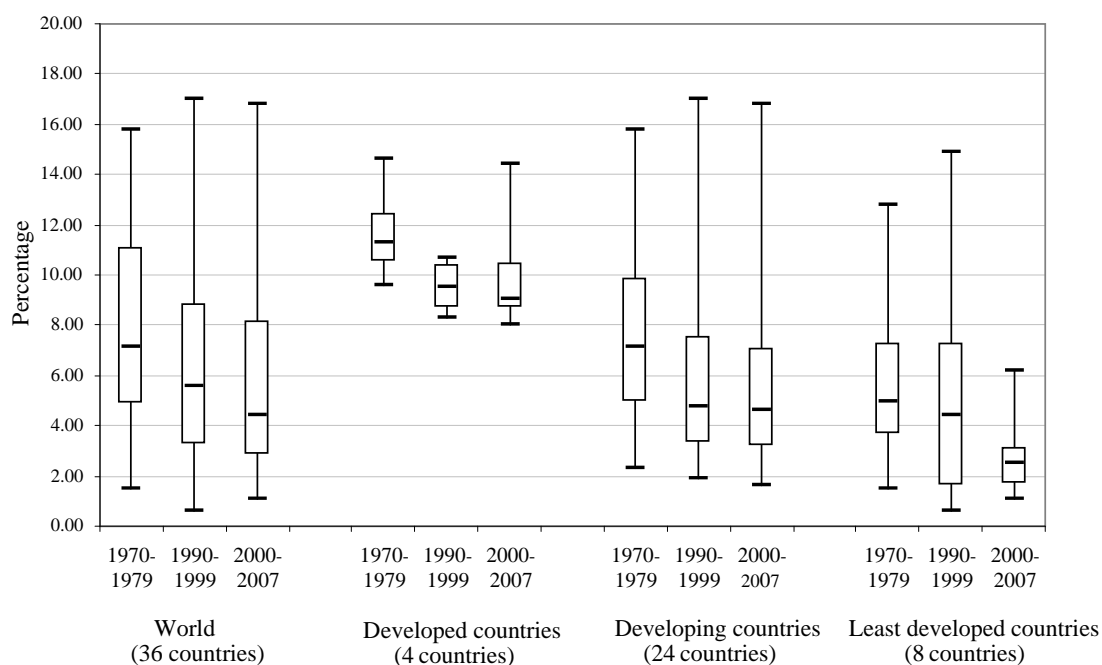
27.5 years in 1970-1979 to 25.1 years in 2000-2007 (which was also the world's lowest mean age at childbearing in 2000-2007). The highest mean age at childbearing was consistently over 31.0 years - in 1970-1979 in Haiti and Somalia (31.8 years) and in 2000-2007 in Burundi (31.4 years).

### C. CHILDLESSNESS

For the purposes of this report, childlessness is measured as the percentage of women aged 45-49 who have never borne a live child. The levels of childlessness in the range of 1 per cent to 3 per cent are considered to reflect the effects of primary infertility, estimated as the proportion of married couples without a live born child after several years of marriage.<sup>3</sup> Levels of overall childlessness above this range can be due to postponement of childbearing to ages where fecundity is low or to conscious decisions not to have children. In countries, where nearly all children are born within marriage, childlessness also depends on the proportion of women who had never married and on the age at marriage. In parts of Africa, reductions in childlessness have been mostly brought about by the successful treatment of sexually transmitted infections, which were a major cause of infertility in the 1970s and earlier decades. In contrast, childlessness is assumed to be rising in other parts of the world, mainly due to postponement of childbearing to ages with lower fecundity and a deliberate intention not to have children.

Very few countries have the required data from censuses or surveys for the three time points 1970-1979, 1990-1999 and 2000-2007: 36 in all, four of which were developed countries.<sup>4</sup> The distribution of all countries shifted downward between 1970-1979 and 2000-2007 (figure I.3). Among the 36 countries considered, the percentage childless declined in all but seven countries. Among the seven countries where the percentage childless increased, the fastest rises occurred in Saudi Arabia (a rise of 3.1 percentage points per decade), Bahrain (a rise of 2.6 percentage points per decade) and Australia (a rise of 1.6 percentage points per decade). Among the countries with decline of the percentage childless, the fastest declines in the percentage childless were recorded by Nepal and Dominican Republic (a reduction of 2.8 percentage points per decade).

**Figure I.3. Distribution of the percentage childless among women aged 45-49, the world and the development groups**



Among the four developed countries with the required data on proportion childless from census or surveys – Australia, Hungary, Latvia and the New Zealand – data do not show rising percentages of childlessness among women aged 45-49, with exception of Australia. The median percentage childless among the four developed countries considered declined from 11.3 per cent to 9.1 per cent.

In the 24 developing countries, the median of the distribution fell from 7.2 per cent in 1970-1979 to 4.6 per cent in 2000-2008. The range of variation of the percentage childless was and has remained large. In 1970-1979, the percentage childless ranged from 2.3 per cent childless in Ghana to 15.8 per cent in the Netherlands Antilles; in 2000-2008, it ranged from 1.6 per cent in Ghana to 16.8 per cent in Bahrain.

Among the eight least developed countries with the required data, the percentage childless ranged from below 2.0 per cent in Rwanda to 12.8 per cent in Nepal in the first period. The levels of childlessness dropped in the least developed countries. By 2000-2008, all these countries had percentages childless under 3.5 per cent, with the exception of the Solomon Islands, where childlessness was 6.2 per cent. Bangladesh and Rwanda exhibited very low levels of childlessness in all three periods, reaching in 2000-2008 1.4 per cent and 2.2 per cent, respectively.

#### D. POPULATION POLICIES

The shift in the views and actions of Governments regarding fertility over time (United Nations, 2010b) reflects the many changes in fertility levels and trends that have occurred since the 1970s. In 1976, 53 per cent of Governments at the world level viewed their fertility levels as being satisfactory, by 2009 only 38 per cent held this view. In developed countries, while 79 per cent of Governments viewed their fertility as satisfactory in 1976, by 2009 it was only 39 per cent of Governments. In the same time, an increasing proportion of Governments of developed countries viewed the fertility as being too low – 21 per cent of Governments did so in 1976 compared to 61 per cent in 2009. Among the developing countries (including the least developed countries), the percentage of Governments that viewed their fertility levels as being too high was 47 per cent in 1976 and 50 per cent in 2009. However, the views of the Governments of the least developed countries dramatically changed; 62 per cent of Governments held the view that fertility was satisfactory in 1976 and this figure dropped to 14 per cent in 2009. In 1976, just 31 per cent of Governments in the least developed countries viewed their fertility as being too high, but by 2009, 86 per cent of them did so.

There has been an increasing number of Governments introducing policies aiming to influence the level of fertility (United Nations, 2010b). Since 1976, there has been an increase in the number of Governments that have adopted policies to lower their fertility from 27 per cent in 1976 to 38 per cent in 2009. This trend has been strong especially among the least developed countries - by 2009, 76 per cent of Governments in least developed countries have implemented measures to lower fertility compared to 14 per cent in 1976. During the same period, more Governments in the world have also introduced policies to raise fertility levels, increasing from 9 per cent of Governments in 1976 to 22 per cent of Governments in 2009. Among developed countries, concerns regarding fertility being too low have grown over time as has the proportion of Governments that have implemented measures to increase fertility, rising from 21 per cent in 1976 to 55 per cent in 2009.

NOTES

<sup>1</sup> For the period 1970-1979, 18 countries have data for 1965-1969 and 13 countries have data for 1980-1989.

<sup>2</sup> For the period 1970-1979, 15 countries have data for 1966-1969 and nine countries have data for 1980-1989.

<sup>3</sup> The comparative study of the World Fertility Surveys conducted in the 1970s and early 1980s found that levels of childlessness among women aged 40-44 and married at least five years, a measure of primary infertility, were ranging from below 2 per cent to 9 per cent. Among 29 developing countries included in the study, in 14 countries the childlessness levels were between 2 and 4 per cent (Vaessen, 1984). Similarly, in comparative study of 28 countries in sub-Saharan Africa, percentages childless after seven years of marriage among women aged 20-44 have been as low as 1 per cent and as high as 6 per cent, with 19 of the 28 countries having the percentage childless 3 per cent or lower (Larsen, 2000).

<sup>4</sup> For the period 1970-1979, 2 countries have data for 1966-1969 and 7 countries have data for 1980-1989.



## II. NUPTIALITY AND FERTILITY

The timing of first marriage is a key determinant of the age at first birth and hence of the effective length of the reproductive period and of total fertility when nearly all births occur within marriage. In addition, the proportion of women never married is a key determinant of childlessness. In countries where the number of births occurring outside marriage has been significant or has been increasing, the union formation patterns (including formal marriages, consensual unions and other types of unions) are a more appropriate indication of the effective length of the reproductive period.

In this report the singulate mean age at marriage (SMAM) is used to assess the timing of marriage and the percentage of ever married women at ages 45-49 to assess the prevalence of marriage. The percentage of births occurring outside of (formal) marriage is indicative of the extent to which marriage is closely associated with childbearing.

Levels and trends in nuptiality may be affected by the way marriage is defined and measured in different data sources and, in particular, by whether the data refer only to formal (legal) marriages or include consensual unions as well. In analyses of fertility and its determinants, consensual unions are usually considered as a form of marriage. To the extent possible, that practice is followed in this report.<sup>1</sup> Sample surveys and censuses conducted in countries where consensual unions are common generally record consensual unions as a separate category under the item referring to marital status. Thus, the censuses and surveys of most countries in Africa, the Caribbean and Latin America record information on consensual unions.<sup>2</sup> That is not the case, however, in developed countries, despite the fact that the practice of cohabiting before marriage or, to a lesser extent, instead of marriage has become more common. Censuses and other sources of data do not provide an appropriate category to report those unions under the overall reporting of marital status.<sup>3</sup> In such cases, data that refer only to legal marriage seriously understate the actual proportions of men and women who are in a union and may lead to erroneous conclusions when compared with data from countries that include consensual unions. The majority of data sources on extramarital childbearing report births outside of formal (legal) marriage. The values of the median, lower and upper quartiles, and the minimum and maximum corresponding to the distributions displayed graphically are presented in tables II.1 to II.4 in the annex of the report.

### A. THE SINGULATE MEAN AGE AT MARRIAGE

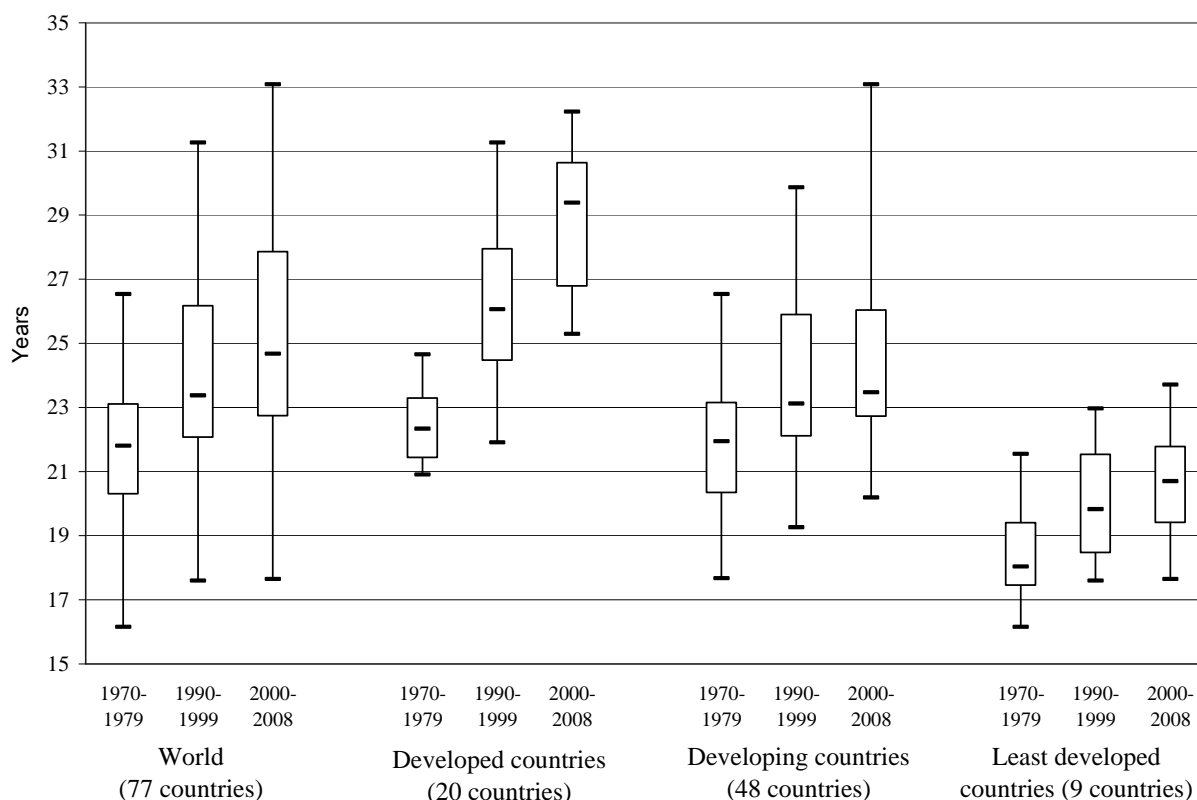
Information on the prevalence of marriage is usually derived from censuses or surveys because many countries lack data on the number of marriages registered every year and civil registration only provides information on formal marriages. In order to assess the average age at marriage in a population, a measure called the singulate mean age at marriage or SMAM is calculated from the proportions of single persons in different age groups. The SMAM represents the average length of single life among persons aged 15 to 49. The SMAM can be measured for men and women separately.

Data allowing the calculation of the female SMAM for three points in time within the periods 1970-1979, 1990-1999 and 2000-2008 were available for 77 countries or areas.<sup>4</sup> In 1970-1979, the highest female SMAMs were in the Netherlands Antilles (26.5 years) and in South Africa (26.1 years). The lowest female SMAM was reported in Niger (16.2 years), closely followed by Bangladesh (16.4 years), the Maldives and Nepal (17.5 years) and India (17.7 years). The central half of the countries or areas with data had female SMAMs ranging from 20.3 to 23.1 years (figure II.1).

Between 1970-1979 and 2000-2008, the distributions of the female SMAM shifted upward and variability around the median increased. The median female SMAM rose from 21.8 to 24.7 years and the length of the interquartile range passed from 2.8 years to 5.2 years (figure II.1). By 2000-2008, the female

SMAM had surpassed 32.0 years in Sweden (32.2 years) and French Polynesia (33.1 years). Three countries had female SMAMs still below 20 years: Niger (17.6 years), Bangladesh (18.7 years) and Nepal (19.4 years). In the central half of the countries or areas, the female SMAMs ranged from 22.7 to 27.9 years (figure II.1).

**Figure II.1. Distribution of the singulate mean age at marriage for women, the world and the development groups**



The female SMAM rose in 75 of the 77 countries considered and fell in only two (Azerbaijan and Nigeria). Among the 75 countries where the female SMAM rose, the fastest increase of more than 2.5 years per decade was recorded in Algeria (from 18.4 years in 1966 to 29.5 years in 2002), France (from 22.3 years in 1970 to 31.6 years in 2006) and Norway (from 21.9 years in 1970 to 31.9 years in 2007).

Among the 20 developed countries having the required data, the distribution of the female SMAM changed markedly over time: from a very tight distribution in 1970-1979 (with an interquartile range of 1.9 years) to a distribution covering a much wider range, having considerably higher values and more variability (an interquartile range measuring 3.8 years in length) in 2000-2008. The median of the distribution had increased by 7.1 years from 22.3 years in 1970-1979 to 29.4 years in 2000-2008. As a result, in 2000-2008, none of the developed countries had a female SMAM below the highest value recorded in 1970-1979 (24.7 years in Japan). The increases in the SMAM recorded in the developed countries between 1970-1979 and 2000-2008 were especially notable because prior to the 1970s, age at first marriage in most of Europe, Australia and the United States had been declining for several decades.

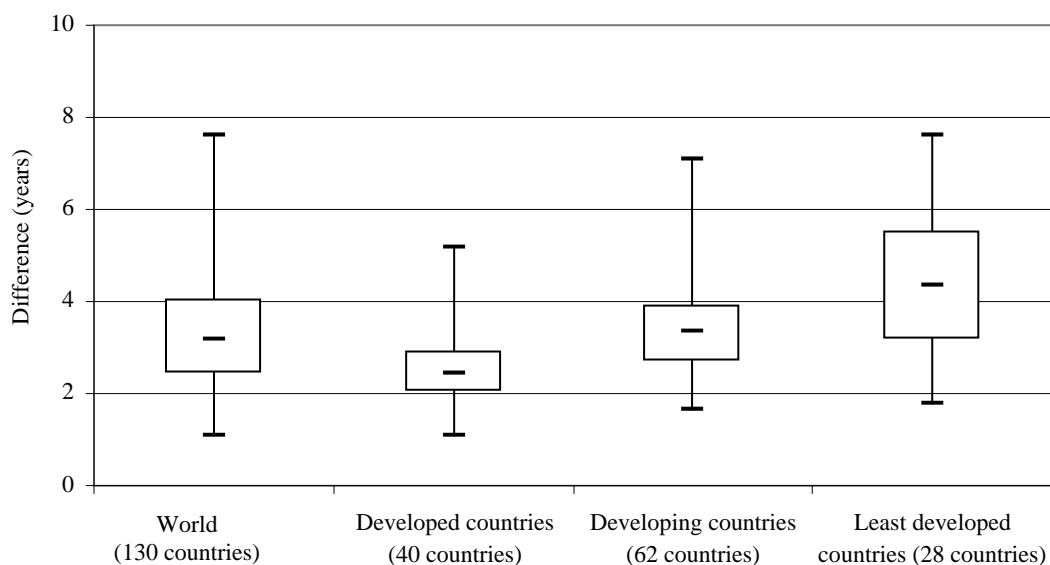
Among the 48 developing countries or areas with data, the distribution of the female SMAMs also shifted upward and its variability increased between 1970-1979 and 2000-2008, though less markedly than among developed countries. The median increased from 21.9 years to 23.5 years and the length of the interquartile range expanded from 2.9 to 3.3 years.

Female SMAMs were substantially lower among the nine least developed countries with the required data. In 1970-1979, the median female SMAM was 18.0 years. As in other development groups, the distribution of the female SMAMs for the least developed countries shifted upward over time, with the median rising to 20.7 years 2000-2008. In 2000-2008, two least developed countries had female SMAMs greater than 23.0 years: Burundi (23.7 years) and the Maldives (23.0 years), which also recorded the fastest rise in the female SMAM among the least developed countries (averaging 1.9 years per decade). The countries with the lowest female SMAMs among the least developed countries—Bangladesh, Nepal and Niger—also had the lowest female SMAMs in the world in all three periods.

Changes in the distribution of the male SMAMs parallel those in the distribution of the female SMAMs. Grooms are almost universally older than brides and in all countries with data on both the male and female SMAMs, the male SMAMs are higher. Of the 130 countries with data available for comparison in the period 2000-2008, the difference between the male and female SMAMs ranged from 1.1 years in Ireland to 7.6 years in Mauritania (figure II.2).

Among 40 developed countries with required data the difference between the male and female SMAMs is generally small with the median at 2.4 years. In the central half of the developed countries the difference is between 2.0 and 2.9 years. The biggest difference in the male and female SMAMs is found in Montenegro (5.2 years), followed by other countries in Southern Europe – Greece (4.4 years), Albania and Serbia (3.8 years) and Croatia (3.6 years). On the opposite side, the developed countries with very small gaps between the male and female SMAMs are Ireland (1.1 years), New Zealand (1.4 years) and Japan (1.7 years).

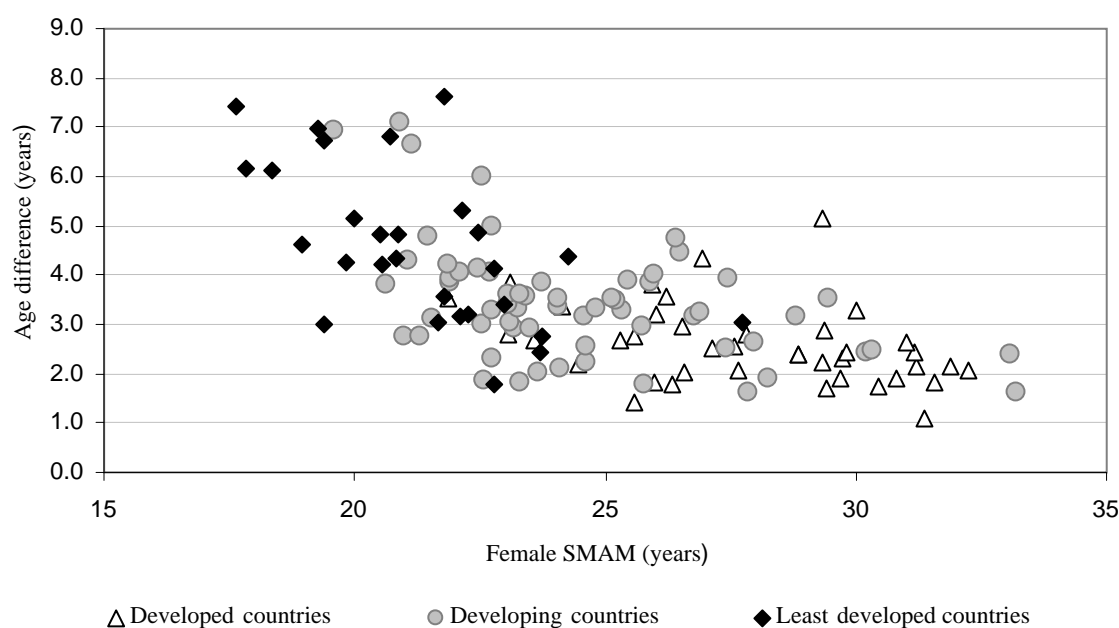
**Figure II.2. Distribution of the difference between singulate mean age at marriage for men and women, the world and the development groups, 2000-2008**



Among developing countries, the difference between the male and female SMAMs is larger than 3.3 years in a half of 62 countries with available data. The largest gap is in Nigeria (7.1 years). The smallest difference in the male and female SMAMs is in Macao SAR of China and Jamaica (1.6 years). The gap between the male and female SMAMs is even larger among the least developed countries with the median of the distribution reaching 4.3 years. The distribution spans across a large interval with the minimal difference in Cambodia (1.8 years) and the largest difference in Mauritania (7.6 years). The interquartile range of 2.3 years is more than double of that among developed countries (0.9 years).

In addition, in the countries where women tend to marry at young ages, the differences between the singulate mean age at marriage between men and women are generally large (Figure II.3). Three countries with the lowest female SMAMs in 2000-2008, Niger (17.6 years), Mali (17.8 years) and Chad (18.3 years), had age differences between male and female SMAMs larger than 6.0 years.

**Figure II.3. Relationship between the singulate mean age at marriage for women and the difference between singulate mean age at marriage of men and women, 2000-2008**



#### B. PERCENTAGE OF EVER MARRIED WOMEN AMONG THOSE AGED 45-49

The percentage of women aged 45-49 who had ever been married is less directly related to the timing of childbearing than SMAM. It is, nevertheless, indicative of the overall prevalence of marriage in a population, the likelihood that women may remain childless and the degree of social stigma of those who never married. The composition of the female population by marital status among those aged 45-49 is related to fertility levels in the preceding three decades. Thus, examining the percentage of women aged 45-49 who had ever been married in 1990-1999 is informative for fertility developments from the 1960s onwards and, similarly, in 2000-2008 for the 1970s onwards.

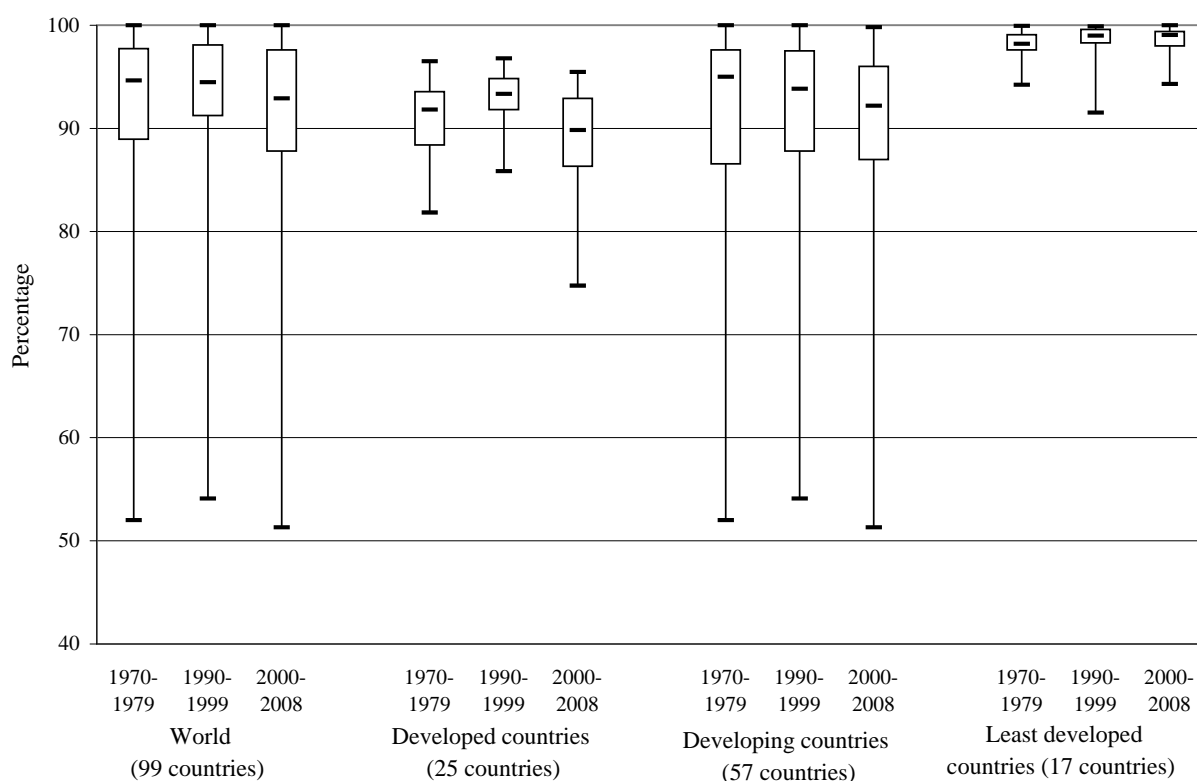
Among the 99 countries or areas having the required data for 1970-1979, 1990-1999 and 2000-2008,<sup>5</sup> there has been remarkable stability in regard to the prevalence of marriage among women reaching the



end of the reproductive period. As figure II.4 shows, in half of the countries or areas with data, the proportion of ever married women among those aged 45-49 was 90 per cent or higher in all three periods.

The largest changes in the proportion of women aged 45-49 who had ever been married were among developed countries. Most of the data for the developed countries are based on data sources reporting formal (legal) marriages only. In 1970-1979, the lowest proportions of ever married women among the 25 developed countries considered were found in Ireland (81.8 per cent) and Italy (86.2 per cent). The high proportion of never married women aged 45-49 is indicative of a high proportion of women remaining childless in the respective cohorts since, in these countries, the majority of children were born to women

**Figure II.4. Distribution of the percentage ever married among women aged 45-49, the world and the development groups**



in formal (legal) marriages. In comparison to these earlier cohorts, the proportion of ever married women among those aged 45-49 had increased by 1990-1999. All European countries, with the exception of Sweden and France, had fewer never married women aged 45-49 in 1990-1999 compared to 1970-1979. In contrast, all developed countries experienced a decrease between 1990-1999 and 2000-2008 in the proportion of ever married women among those aged 45-49 years old, due in part to an increasing acceptance of consensual unions as a replacement for marital unions. In six countries the proportions of women ever married declined to 85 per cent or below in 2000-2008: with the lowest proportion of ever married in Sweden (74.7 per cent), followed by Finland (80.0 per cent), Norway and Denmark (82.4 per cent), France (83.3 per cent) and the Netherlands (85.0 per cent).

Developing countries show considerable variation in the prevalence of marriage and consensual unions, reflected by the wide interquartile ranges for this group (11.1 percentage points in 1970-1979, 9.7 in 1990-1999 and 9.0 in 2000-2008). Regional differences are marked. In Latin America and the Caribbean, percentages of women who ever married by age 50 are lower compared to other developing countries. Some of the data sources available do not include consensual unions (and visiting unions, where common) and thus underestimate the number of women ever living in union. In Asia, China and India have persistently high percentages of ever married women among those aged 45-49 (over 99 per cent in all three periods). Among African countries, the differences are large. While in Cameroon, Nigeria and Zimbabwe more than 99 per cent of women age 45-49 had ever been married in 2000-2008, in Botswana only 73.3 per cent and South Africa 82.3 per cent had ever been married in 2000-2008 (data sources for both countries report also consensual unions). Among 57 developing countries with the required data, the median value declined from 95.0 per cent in 1970-1979 to 92.2 per cent in 2000-2008.

Marriage or living in a union was nearly universal in the majority of the 17 least developed countries with the required data and changes observed among the three time periods were minimal. The median rose slightly from 98.2 per cent in 1970-1979 to 99.1 per cent in 2000-2008. Moreover, differences among the least developed countries are small: the interquartile range was less than two percentage points in all three periods (1.5 percentage points in 1970-1979, 1.3 in 1990-1999 and 1.4 in 2000-2008).

### C. EXTRAMARITAL BIRTHS

The extent to which marriage is a determinant of fertility levels depends in part on the prevalence of extramarital fertility and whether it is socially acceptable. In countries where consensual unions have been traditionally accepted, extramarital fertility is common. In other countries where childbearing used to occur mostly within marriage, the social stigma attached to extramarital births has been weakening and marriage and childbearing have become less closely linked. In such cases, it is possible for the prevalence of marriage to decline and yet for fertility to change little as cohabitation and extramarital births increase. It is of interest, therefore, to consider the prevalence of extramarital births to assess the likely strength of the relationship between the prevalence of marriage and fertility levels.

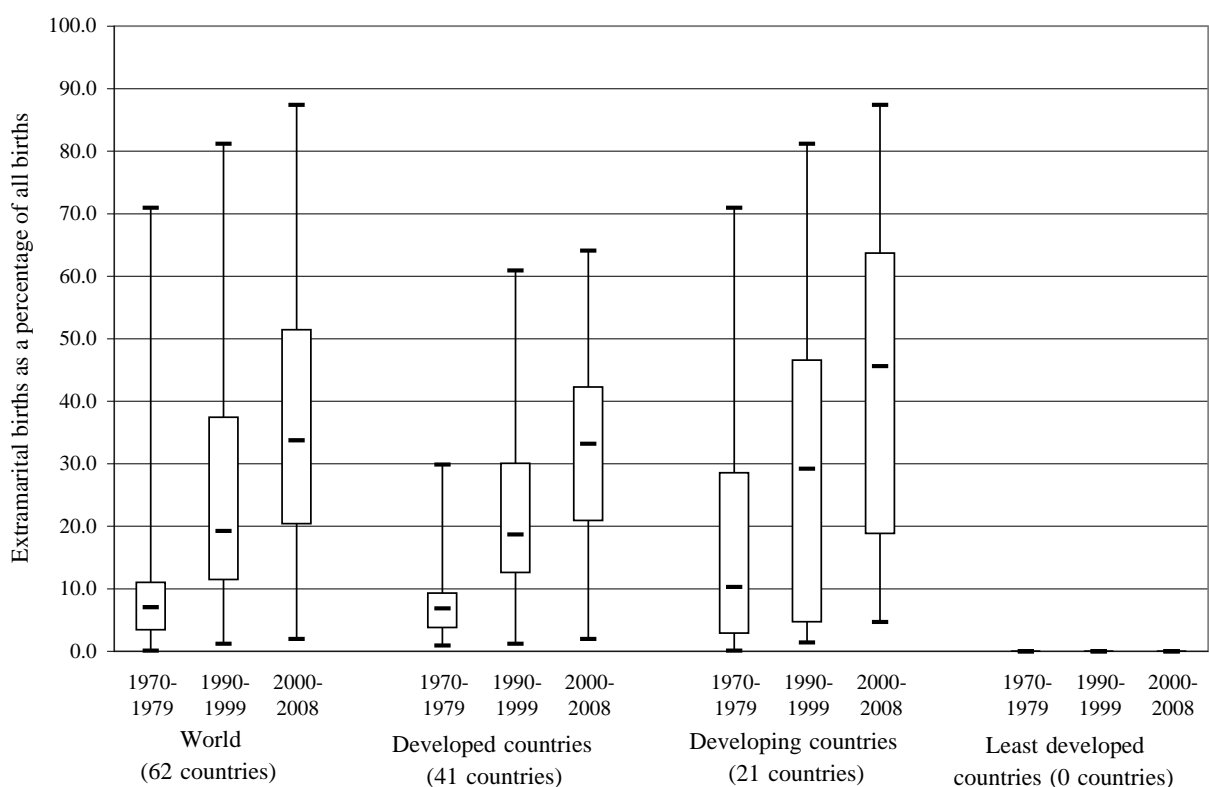
As figure II.5 shows, the proportion of extramarital births among all births has increased markedly among 62 countries with data for all three time periods.<sup>6</sup> In 1970-1979, the median percentage of extramarital births was 7.1 per cent and in the central half of the distribution that percentage varied from 3.4 per cent to 11.0 per cent. In four countries or areas where consensual unions had been common, the percentage of extramarital births was 50 per cent or higher already in 1970s: Panama (70.9 per cent), El Salvador (67.8 per cent), French Guiana (63.1 per cent) and Martinique (50.9 per cent). Extramarital births were extremely rare in Hong Kong SAR of China (0.1 per cent), Cyprus and Georgia (each with 0.2 per cent), Israel (0.7 per cent) and Japan (0.9 per cent).

In all countries or areas, the percentage of extramarital births increased between 1970-1979 and 2000-2008 and the distribution shifted upward and widened. The median rose from 7.1 per cent in 1970-1979 to 19.3 per cent in the 1990s and 33.8 per cent in 2000-2008. The length of the interquartile range increased from 7.6 percentage points in 1970-1979 to 26 percentage points in 1990-1999 and 31.1 percentage points in 2000-2008. The highest proportions of extramarital births in 2000-2008 were recorded in French Guiana (87.4 per cent), Panama (83.8 per cent) and El Salvador (73.6 per cent). Only five countries or areas recorded a percentage of extramarital births below 10.0 per cent: the lowest value in Japan (2.0 per cent), followed by Israel (4.7 per cent), Greece (5.9 per cent), Hong Kong SAR of China (8.8 per cent) and Cyprus (9.0 per cent).

The proportion of births occurring outside marriage rose between the first two periods by more than one percentage point per year in 12 countries, rising fastest in Norway (from 6.9 per cent in 1970 to 47.6 per cent in 1995). Between the last two periods, the proportion of births outside marriage rose by more than one percentage point per year in 22 countries with the largest increase in the Netherlands (from 15.5 per cent in 1995 to 41.2 per cent in 2008).

In most of the 41 developed countries considered, the proportion of extramarital births was low in 1970-1979, thus showing a strong link between marriage and childbearing. In the central half of the developed countries considered, extramarital births accounted for between 3.8 per cent and 9.3 per cent of all births. Because of the traditionally high prevalence of consensual unions in some regions, especially in Latin America and the Caribbean, 21 developing countries with data available for all three periods showed greater variability than developed countries in the level of extramarital childbearing. Between 1970-1979 and 2000-2008 both developed and developing countries experienced a marked increase in the proportion of births occurring outside marriage.

**Figure II.5. Distribution of extramarital births as a percentage of all births, the world and the development groups**



## NOTES

<sup>1</sup> In this report, 192 countries have data on marital status for at least one period. In 95 countries data sources used to calculate the proportion of ever married women include also women in consensual unions. These cases are indicated in the country profiles. The data on marital status by individual categories are published in *World Marriage Data 2008* (United Nations, 2009c). There is considerable variation among the definitions of consensual unions and visiting partnerships used in surveys and censuses. Information on the definitions used in surveys or censuses can be obtained from the original source of the data.

<sup>2</sup> In addition to informal co-residential unions, in some Caribbean countries as well as in some Latin American countries, a significant proportion of men and women enter “visiting” unions, which enjoy social recognition but do not involve co-residence. In this report two data sources include visiting unions: the 2001 census in Antigua and Barbuda and the 2000 census in Belize.

<sup>3</sup> Eighteen developed countries in this report have one or two data sources including consensual unions among categories of marital status. Most of these data come from the 2000 round of censuses; for example, the 2001 census in Austria, the 2001 census in Bulgaria, the 2006 census in Canada and the 2000 census in Estonia. In some countries, such as the 2007 census in Finland, only registered unions are reported. In other countries, all co-residential consensual unions are reported. Information on the definitions used in censuses and other national estimates can be obtained from the original source of the data.

<sup>4</sup> In this report, 101 countries have data on ever married women by age group for all three periods considered. To ensure comparability over time, 24 countries were excluded from the analysis because they had one or two data sources that included consensual unions and the percentages of women in consensual unions were not negligible (i.e., over five per cent in any of the age groups). For the reference period 1970-1979, four countries have data for 1965-1969 and 11 countries have data for 1980-1989.

<sup>5</sup> All countries with data sources in all three periods are included in the analysis of ever married women aged 45-49. Some of the data sources include women living in consensual unions among ever married women aged 45-49. Among older women, those living in consensual unions likely include large proportions of widowed, divorced or separated women, who would otherwise be included in the proportion of ever married women. For the period 1970-1979, six countries have data for 1965-1969 and 12 countries have data for 1980-1989.

<sup>6</sup> Due to an inconsistency in the definition of extramarital births, Argentina was excluded from the analysis of the levels and trends of extramarital births. Data on extramarital births for Argentina in 2007 do not include children born to mothers living in consensual unions; instead, these births are classified as being born in a marital union. While the reported value for extramarital births is 26.1 per cent in 1966 and 46.0 per cent in 1995 (both values are for formal marriages only), in 2007 the reported value is 13.0 per cent. For the reference period 1970-1979, one country has data for 1969 and four countries have data for 1980.

### III. USE OF CONTRACEPTION

The increasing use of contraception, particularly modern contraceptive methods, is one of the major factors associated with declines in total fertility. Changes in marriage patterns and fertility preferences also play important roles in declining fertility, but the availability of safe, effective, affordable and acceptable methods of contraception has been a critical enabling factor for lowering fertility. In this chapter, data on contraceptive use among women aged 15 to 49 who are married or in a union will be examined from three perspectives: use of any contraceptive method compared to use of modern contraceptive methods; differences in use of contraceptives among the different development groups; and changes in contraceptive use over time. For each country, data referring to three time periods—1970-1989,<sup>1</sup> 1990-1999 and 2000-2009—are used in the descriptive analysis that follows.<sup>2</sup> Analysis of contraceptive use trends within and across countries is challenging in large part because the number of data points for a country is often quite sparse and many countries, especially developing countries, did not have national-level data on contraceptive prevalence until the late 1980s. While the present analysis is limited to countries with data in each of the three broad time periods, comparable analysis of levels and trends in contraceptive use could be improved with modeled estimates of contraceptive prevalence. The values of the median, lower and upper quartiles, and the minimum and maximum corresponding to the distributions displayed graphically are presented in tables III.1 to III.3 in the annex of the report.

Surveys of contraceptive use generally collect information on the use of individual contraceptive methods among women of reproductive age who are married or living in a consensual union. Examination of the level of use of broad categories of methods provides useful insights about the dramatic changes in the use of contraception that have taken place over the past four decades. Comparing the use of all types of contraceptive methods, including both traditional methods and modern methods, with the use of modern methods alone provides an indication of the availability and acceptability of modern methods. Modern methods include male and female sterilization; hormonal pills, injectables and implants; intra-uterine devices; condoms and vaginal barrier methods. Traditional methods include all other types of methods used to prevent pregnancy, the most important of which are withdrawal and the calendar or rhythm method of periodic abstinence. The level of contraceptive use or contraceptive prevalence is measured as the percentage of women using any method of contraception among all women of reproductive age who are married or in a union. The level of modern method use or the prevalence of modern method use is the proportion of women using modern methods among all those of reproductive age who are married or in a union. Therefore, the level of modern-method use is always lower than or equal to the overall level of contraceptive use.

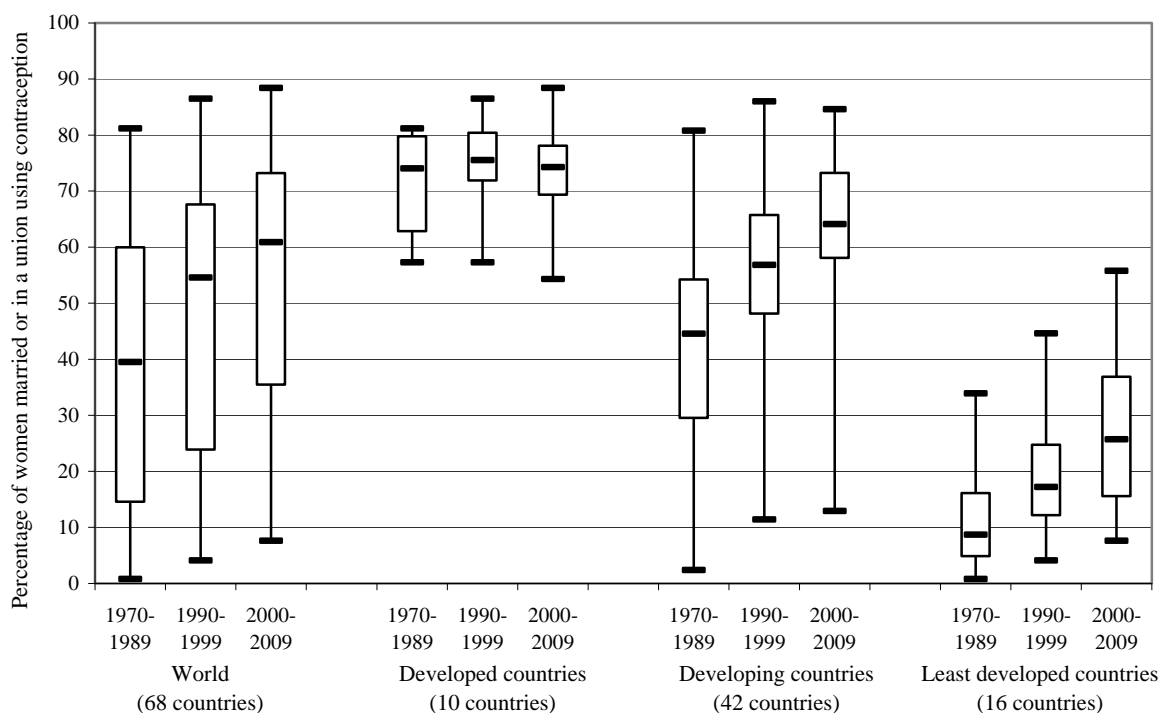
#### A. CONTRACEPTIVE USE

The distribution of countries according to their level of contraceptive use (any method) is shown in figure III.1 for the three time periods. Figure III.2 shows the distribution of countries according to their level of modern-method use. Both at the world level and among the developing countries and the least developed countries, the level of contraceptive use and the use of modern methods increased dramatically since the 1970s. In at least nine out of ten countries with the requisite data, contraceptive prevalence of any method and of any modern method increased from the 1970s to the most recent period.

At the world level, the 68 countries with data on contraceptive use for the three periods considered showed great variation in contraceptive prevalence during 1970-1989 (figure III.1). Whereas at least 80.0 per cent of women married or in a union were using contraceptives in four countries or areas (Belgium, France, Hong Kong SAR of China and the United Kingdom), in Mauritania overall contraceptive prevalence was just 0.8 per cent in 1981. Contraceptive prevalence was below 10.0 per cent in 13 countries during 1970-1989 and a quarter of the countries with data had an overall contraceptive

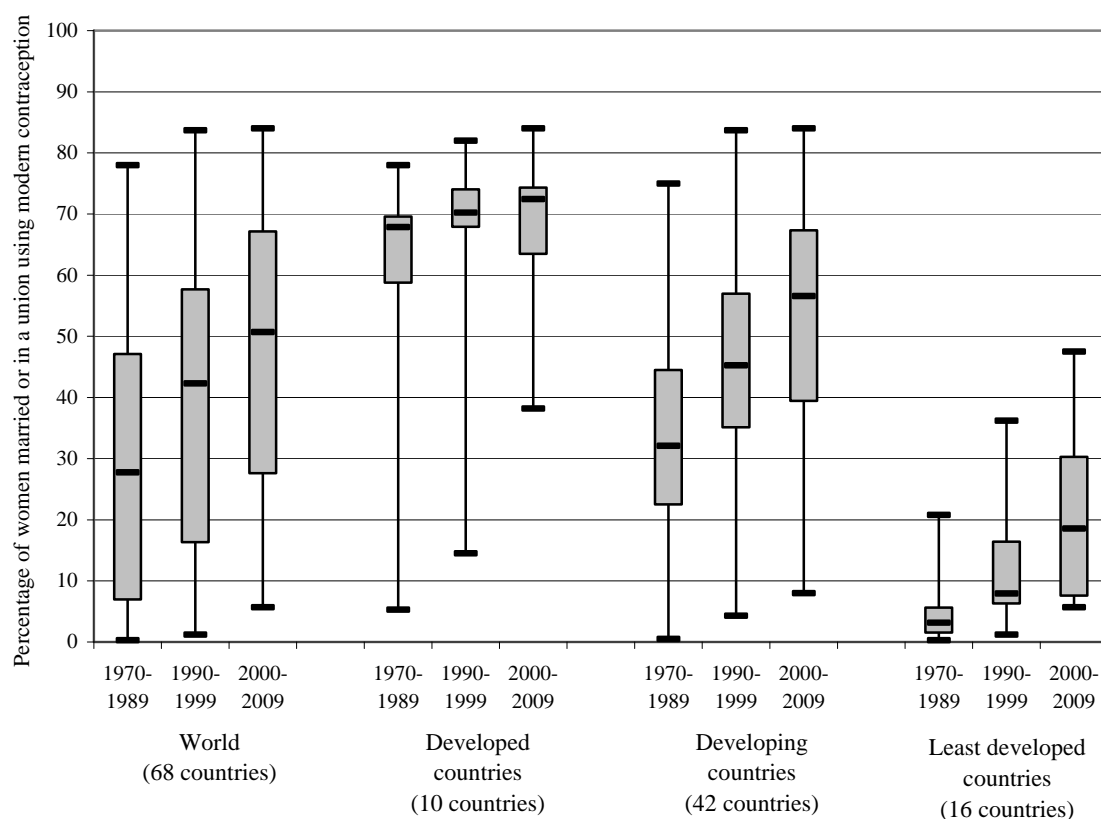
prevalence below 14.6 per cent. Median contraceptive prevalence was 39.5 per cent, but there was a wide variation around it, with the interquartile range spanning 45.4 percentage points (from 14.6 per cent to 60.0 per cent).

**Figure III.1. Distribution of contraceptive prevalence (any method), the world and development groups**



By 1990-1999, overall contraceptive prevalence had risen markedly in most of the countries considered and their distribution by level of contraceptive use had shifted upward. The median level of contraceptive use rose from 39.5 per cent to 54.6 per cent. Norway had reached an overall contraceptive prevalence of 86.5 per cent and Mauritania remained the country with the lowest contraceptive prevalence, at 4.1 per cent. Contraceptive prevalence continued to rise until the most recent period, 2000-2009. The median level of contraceptive use was 60.9 per cent and contraceptive prevalence remained below 10.0 per cent in just three countries (Mali, Mauritania and Sudan). Although there was still wide variation in contraceptive use among countries, the interquartile range decreased slightly from 43.7 percentage points in 1990-1999 (ranging from 23.9 per cent to 67.6 per cent) to 37.8 percentage points in 2000-2009 (ranging from 35.4 per cent to 73.2 per cent).

Use of modern methods was a major reason for the rapid expansion of contraceptive use over the past four decades (figure III.2). In all but three countries (Japan, Mauritius and the Netherlands) modern contraceptive use increased from the earliest to the most recent time period. During 1970-1989, the median level of modern contraceptive use among countries with the required data was 27.8 per cent and the interquartile range spanned 40.1 percentage points, from 7.0 per cent to 47.1 per cent, implying that there was less variation around the median in the level of modern-method use than in the overall level of contraceptive use. The median of the distribution rose substantially over time to 50.7 per cent in 2000-2009, but the magnitude of variation around the median remained virtually unchanged, with an interquartile range of 39.6 percentage points in 2000-2009.

**Figure III.2. Distribution of contraceptive prevalence (any modern method), the world and development groups**

In nearly three-quarters of countries the share of modern-method use in overall contraceptive prevalence increased over time as well. In China and the United Kingdom, virtually every woman using contraception relied on a modern method in 2000-2009, with modern-method use reaching 84 per cent in each country. The countries in the lower end of the distribution of modern-method use tended to be either among the least developed countries or in sub-Saharan Africa. The four countries with the lowest levels of modern contraceptive use in 2000-2009 were Sudan (5.7 per cent), Democratic Republic of the Congo (5.8 per cent), Benin (5.9 per cent) and Mali (6.3 per cent).

Trends in contraceptive use among developed countries were very different from the overall pattern. Among the 10 developed countries having the required data, levels of contraceptive use were already high in 1970-1989: the lowest level of use was 57.3 per cent in Japan and the highest was 81.2 per cent in France (figure III.1). The distribution of levels of contraceptive use was narrow and there was little variability around the median, with an interquartile range from 62.8 per cent to 79.8 per cent, a difference of 17.0 percentage points. Modern-method use comprised most contraceptive use in this early time period. The median level of modern-method use (67.9 per cent) among the 10 countries in 1970-1989 was somewhat lower than that for overall contraceptive use (74.1 per cent). Romania had the lowest level of modern-method use (5.3 per cent) owing in part to strong pro-natalist policies and restrictions on access to family planning during this time period.

By 1990-1999, overall contraceptive use had risen in six of the 10 developed countries having the required data and had fallen slightly in four (Belgium, France, the Netherlands and Romania).<sup>3</sup> A similar pattern describes changes in contraceptive use between 1990-1999 and 2000-2009. Given the high levels

of overall contraceptive use already reached in 1970-1989, the increases recorded by 1990-1999 and 2000-2009 were generally modest. By 2000-2009, the highest levels of contraceptive use reached in the 10 developed countries considered were those in Norway (88.4 per cent), the United Kingdom (84.0 per cent) and the United States (78.6 per cent). The reliance on modern methods of contraception also increased in developed countries, so that the distribution of modern-method use moved upward, the median rose from 67.9 per cent in 1970-1989 to 72.5 per cent in 2000-2009 and the ratio of the median of modern-method use to the median of overall use also increased over time (table III.1). In the most recent period, three quarters of the developed countries considered had levels of modern-method use at or above 63.5 per cent.

Among the 42 developing countries with data on contraceptive use for the three time periods, the use of contraceptive methods was moderate to low in 1970-1989. In three quarters of the developing countries considered, contraceptive prevalence was below 54.3 per cent and modern use was below 44.5 per cent. In Cameroon and Côte d'Ivoire fewer than 3.0 per cent of women who were married or in union used some form of contraception. However, in this period China had already reached a very high contraceptive prevalence (69.5 per cent) and most of it involved the use of modern methods (66.7 per cent of married women used them). The lowest levels of modern-method use were recorded in three countries (Cameroon, Côte d'Ivoire and Nigeria), where almost no women used modern methods (less than 1.0 per cent).

Contraceptive use rose substantially by 2000-2009 among the majority of the 42 developing countries considered, paralleling the rapid declines in fertility that they had experienced since the 1970s. The median level of contraceptive prevalence increased from 44.6 per cent in 1970-1989 to 56.9 per cent in 1990-1999 to 64.1 per cent in 2000-2009 (table III.1). Nevertheless, contraceptive prevalence remained persistently low in a number of countries in the most recent period, particularly those in sub-Saharan Africa, such as Côte d'Ivoire (12.9 per cent) and Nigeria (14.6 per cent). At the other extreme of the distribution, contraceptive prevalence was remarkably high not only in China (84.6 per cent) but also in Thailand (81.1 per cent) and Brazil (80.3 per cent). In three quarters of the developing countries considered, contraceptive prevalence was at or above 58.1 per cent in 2000-2009.

**TABLE III.1. MEDIAN LEVELS OF OVERALL CONTRACEPTIVE USE AND MODERN-METHOD USE BY DEVELOPMENT GROUP**

Development group	1970-1989				1990-1999				2000-2009			
	Any	Modern	Difference	Ratio	Any	Modern	Difference	Ratio	Any	Modern	Difference	Ratio
	method	methods			method	methods			method	methods		
	(1)	(2)	(1) - (2)	(2)/(1)	(1)	(2)	(1) - (2)	(2)/(1)	(1)	(2)	(1) - (2)	(2)/(1)
World	39.5	27.8	11.8	0.70	54.6	42.3	12.3	0.77	60.9	50.7	10.2	0.83
Developed countries	74.1	67.9	6.2	0.92	75.6	70.3	5.3	0.93	74.3	72.5	1.8	0.98
Developing countries	44.6	32.1	12.5	0.72	56.9	45.3	11.6	0.80	64.1	56.6	7.5	0.88
Least developed countries	8.7	3.2	5.6	0.36	17.2	8.0	9.3	0.46	25.7	18.6	7.2	0.72

The increasing use of modern methods accounted for most of the rise in contraceptive prevalence in the developing countries. The median level of use of modern methods increased from 32.1 per cent in 1970-1989 to 45.3 per cent in 1990-1999 to 56.6 per cent in 2000-2009, a gain of 24.5 percentage points. The gap between the median level of overall contraceptive use and modern-method use also became smaller over time. Once more, modern contraceptive use was uncommon in Côte d'Ivoire (8.0 per cent) and Nigeria (8.1 per cent) and was almost universal among contraceptive users in China (84.0 per cent) and Thailand (79.8 per cent). There was greater variability in the distribution of modern contraceptive use than in the distribution of overall contraceptive prevalence, with the length of the interquartile range for modern contraceptive use (27.9 percentage points) surpassing that for overall contraceptive prevalence (15.2 percentage points) in 2000-2009.



Among the 16 least developed countries with the required data, contraceptive prevalence was very low in 1970-1989. Half of the least developed countries had contraceptive prevalence levels below 8.7 per cent and modern-method use was even lower, with the median at 3.2 per cent. The distribution of levels of contraceptive use around the median was narrow, with an interquartile range from 4.9 per cent to 16.1 per cent, a difference of 11.2 percentage points. The concentration of countries at low contraceptive use levels was even more pronounced for modern methods: Half of the least developed countries in 1970-1989 had levels of modern-method use between 1.5 per cent and 5.7 per cent.

Between 1970-1989 and 2000-2009, contraceptive use in these 16 least developed countries rose, but they had only started approaching levels comparable to those of developing countries in the 1970-1989 period. In 2000-2009, the median level of contraceptive prevalence was 25.7 per cent and three quarters of the least developed countries had contraceptive prevalence below 36.9 per cent. The median level of modern-method use was also low (18.6 per cent), but the variation among the least developed countries increased over time as the interquartile range expanded from 4.2 percentage points in 1970-1989 to 22.7 percentage points in 2000-2009. Modern-method use was lowest in Sudan (5.7 per cent) and highest in Bangladesh (47.5 per cent), the latter country having experienced a substantial decline in fertility over this time period as well.

## B. UNMET NEED FOR FAMILY PLANNING

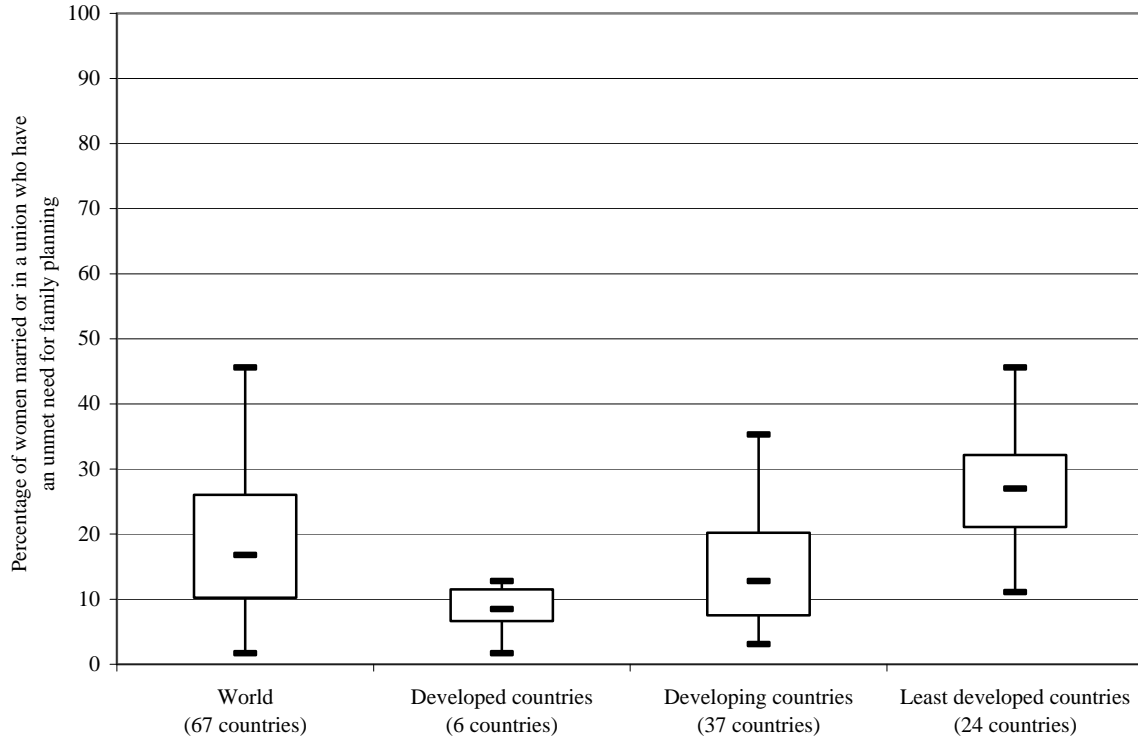
Unmet need for family planning reflects the degree to which women want to delay or avoid pregnancy, but are not using any form of contraception. The measure indicates the gap between the actual level of contraceptive use and the potential level of contraceptive use, though the reasons may vary widely as to why women do not use family planning despite their desire to prevent pregnancy. Unmet need is measured as the ratio of the number of women of reproductive age married or in a union who are fecund, not using contraception and who report that they do not want any more children or wish to delay the next child divided by the number of women of reproductive age who are married or in a union, expressed as a percentage. The availability of estimates of unmet need for family planning is even more restricted than that for contraceptive use. Countries lacking the data necessary to estimate the unmet need for family planning are located mainly in the more developed regions (only six developed countries had data for the most recent period).

Despite increases in contraceptive use among the developing and least developed countries with data in the three time periods, the level of unmet need for family in 2000-2009 was still moderate to high. Among the 37 developing countries with data for the most recent period, the level of unmet need for family planning ranged from a low of 3.1 per cent in Thailand to a high of 35.3 per cent in Ghana (figure III.3). Half of the developing countries had levels of unmet need for family planning below 12.8 per cent and the interquartile range was from 7.5 per cent to 20.2 per cent. Unmet need for family planning was substantially higher among the 24 least developed countries with data compared to other developing countries. The median level of unmet need was more than double that among other developing countries (27.0 per cent versus 12.8 per cent, respectively) and half of the least developed countries had levels of unmet need between 21.1 per cent and 32.2 per cent.

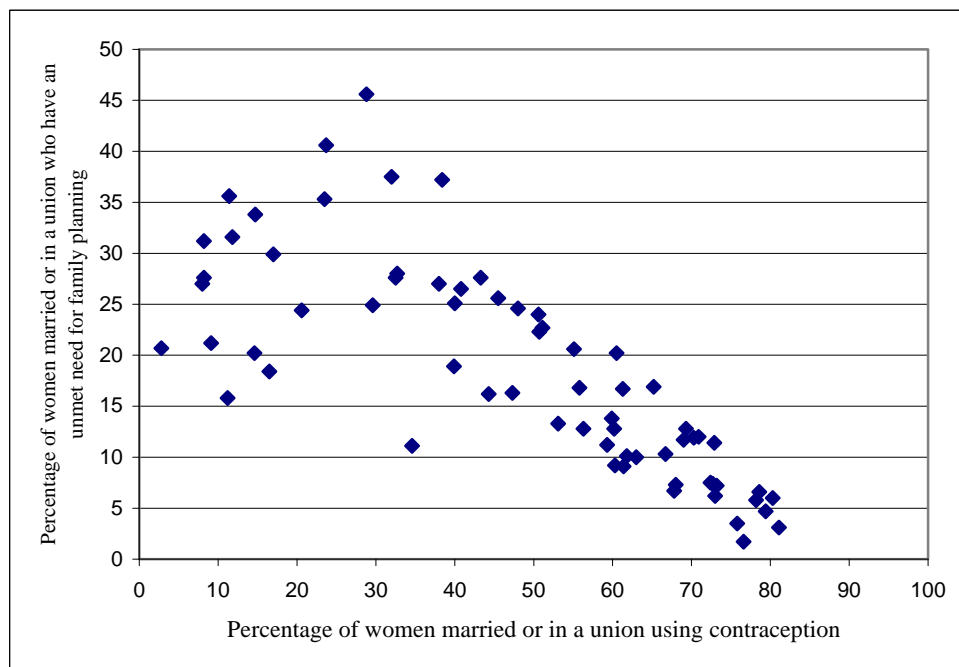
Figure III.4 shows that unmet need for family planning tends to be highest in countries where contraceptive prevalence is low and lowest in countries where contraceptive prevalence is already high (above 60 per cent). Fifteen of the 67 countries with data in 2000-2009 had levels of unmet need for family planning below 10 per cent and all 15 countries had a contraceptive prevalence of 60 per cent or higher. Among the nine countries that had levels of unmet need of 30 per cent or higher, contraceptive

prevalence ranged from 8.2 per cent (Mali) to 38.4 per cent (Sao Tome and Principe) and all but one country (Ghana) was a least developed country.

**Figure III.3. Distribution of unmet need for family planning, the world and development groups (2000-2009)**



**Figure III.4. Distribution of contraceptive use and unmet need for family planning, 2000-2009**



In sum, while overall contraceptive use and modern-method use have remained relatively high and stable among developed countries, dramatic improvements in contraceptive use occurred in developing countries, many of which approached in the past two decades levels of contraception similar to those of developed countries. Furthermore, in most developing countries, a rapid rise in modern-method use was driving a large part of the overall increase in contraceptive use. Among the least developed countries the uptake of contraceptive use over the past four decades has been more gradual and the median levels of contraceptive use and modern-method use continue to remain far below those of other countries in developing regions. High levels of unmet need for family planning suggest that increases in contraceptive prevalence could be accelerated in the least developed countries by addressing the barriers women and men face in using contraception, particularly modern-method use.

Governmental support for family planning programmes mirrors these trends in demand for contraception. An increasing percentage of Governments since the 1970s have policies that provide direct support for family planning programmes. In 1976, 74 per cent of Governments worldwide supported family planning programmes and the distribution of contraceptives either directly (63 per cent) through government facilities or indirectly (11 per cent) by supporting the activities of non-governmental agencies (United Nations, 2010b). By 2009, 91 per cent of Governments supported family planning programmes and the distribution of contraceptives (75 per cent through direct means and 16 per cent through indirect means). While governmental support for family planning among the least developed countries was less common in the 1970s (57 per cent of Governments), all Governments of these countries supported family planning programmes in some way by 2009. However, the funding needed to implement programmes in these countries has been waning: Per capita donor assistance for family planning programmes in most of the least developed countries has declined by 50 per cent or more from 1998 to 2008 (United Nations, 2011b).

#### NOTES

<sup>1</sup> The earliest time period extends from 1970 to 1989 and among the 68 countries with the required data, nine have data in the 1970s for the earliest time period, 18 have data from 1980 to 1984 and the remaining 41 countries have data from 1985 to 1989.

<sup>2</sup> Data from four countries (Australia, Botswana, Greece and Namibia) were dropped from the analysis because data for at least one time period in each country represented all women instead of women who were married or in a consensual union, and thus estimates of contraceptive prevalence were likely to be biased downward.

<sup>3</sup> These declines may be spurious and caused by differences in the way contraceptive use was measured in different surveys (United Nations, 2004b).



## IV. FERTILITY AND NUPTIALITY AMONG YOUTH

The world population of youth, defined as those between 15 and 24 years of age,<sup>1</sup> was estimated to be 1.22 billion in 2010, increasing from 0.67 billion in 1970, though the proportion of youth among the total population changed only slightly from 18.1 per cent in 1970 to 17.6 per cent in 2010 (United Nations, 2009a). Differences in the growth of the youth population are large among development groups. Between 1970 and 2010 the youth population in the least developed countries nearly tripled (from 58 to 173 million) and in developing regions doubled (from 441 to 887 million), while it slightly declined in developed regions (from 166 to 159 million).

The assessment of fertility and nuptiality levels and trends among people aged 15-19 and 20-24 is important for understanding the timing of other life transitions among young people. Childbearing and union formation are linked with other transitions in schooling, employment, leaving the parental home and migration (for education, work or marriage reasons). The diversity among countries in the fertility rates and the proportions of ever married among those aged 15-19 and 20-24 highlights the diversity in family formation among young people worldwide. Furthermore, early childbearing increases the risk of maternal death or physical impairment and children born to young mothers have higher levels of morbidity and mortality. In the framework of the Millennium Development Goals, the adolescent birth rate is one of the indicators used for tracking the improvement of maternal health (United Nations, 2010c).

### A. ADOLESCENT FERTILITY LEVELS AND TRENDS

The box plots shown in figure IV.1 provide a summary view of the 161 countries with data on adolescent birth rates for three time periods 1970-1979, 1990-1999 and 2000-2007.<sup>2</sup> The values of the median, lower and upper quartiles, and the minimum and maximum corresponding to the distributions displayed graphically in this section are presented in tables IV.1 to IV.5 in the annex of the report. In half of these countries in 1970-1979, adolescent birth rates were at least 66 births per 1,000 women aged 15-19. Among the 43 developed countries with data for all three periods, the highest levels of adolescent fertility in 1970-1979 were in Iceland (73 births per 1,000 women aged 15-19) and in Bulgaria (71 births per 1,000 per women aged 15-19). The lowest level (5 births per 1,000 per women aged 15-19) was in Japan. The central half of developed countries had adolescent birth rates between 28 and 46 births per 1,000 women aged 15-19.

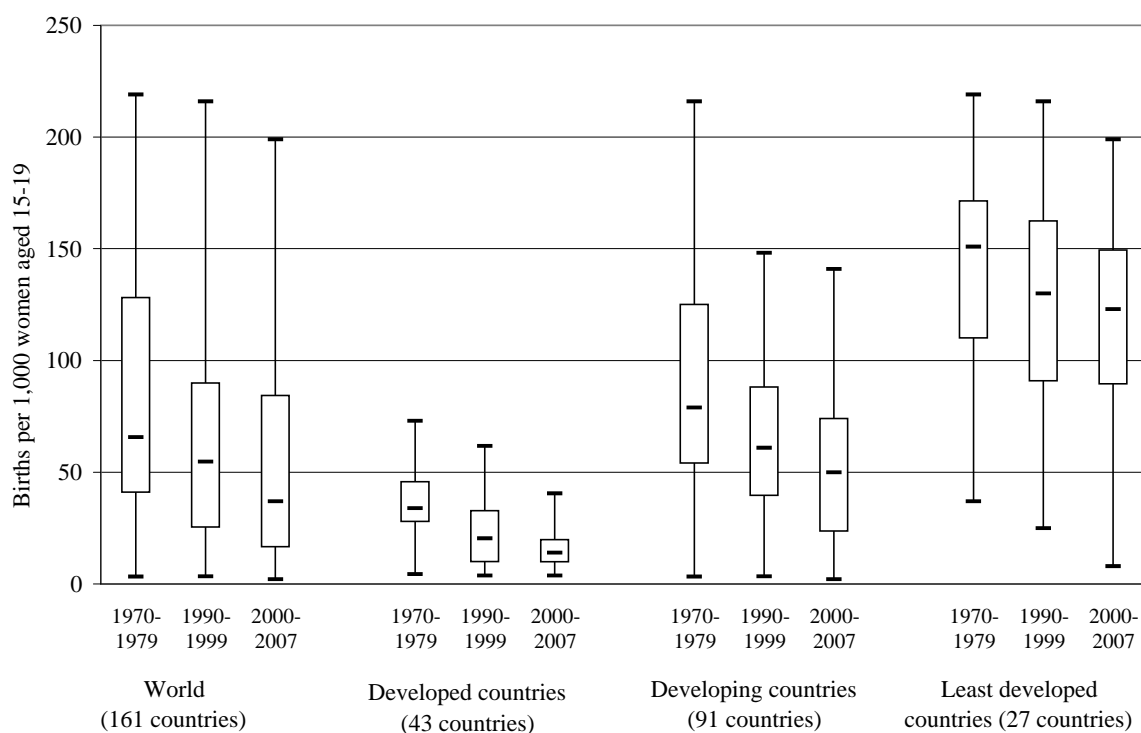
Adolescent fertility levels were very diverse in 1970-1979 among the 91 developing countries with data for all three periods. The lowest quartile of developing countries had adolescent fertility rates that were less than 54 births per 1,000 women aged 15-19 and the highest quartile had adolescent fertility levels that were at least 125 births per 1,000 women aged 15-19. Among the 27 least developed countries with data for all three periods, four countries had adolescent fertility levels of more than 200 births per 1,000 women aged 15 to 19 in 1970-1979, namely Bangladesh (219 births), Mali (201 births), Niger (211 births) and Sierra Leone (212 births).

In line with trends indicating a major shift in the timing of childbearing (as discussed in Section I), the world witnessed significant declines in adolescent birth rates between 1970-1979 and 2000-2007. The median adolescent birth rate at the world level declined from 66 to 37 births per 1,000 women aged 15-19. The largest absolute decline was registered among developing countries, where the median adolescent birth rate dropped from 79 to 50 births per 1,000 women aged 15-19. The Republic of Korea had the lowest adolescent fertility in 2000-2007 among developing countries (2 births per 1,000 women aged 15-19), whereas Cameroon in 2000-2007 had the highest adolescent births rate 141 births per 1,000 women

aged 15-19). By 2000-2007, the distribution of developing countries shifted downwards and the central half of developing countries had 24 to 74 births per 1,000 women aged 15-19.

There were also significant reductions in the adolescent birth rate among developed countries, where the median adolescent birth rate dropped from 34 to 14 births per 1,000 women aged 15-19 from 1970-1979 to 2000-2007. In 2000-2007, half of the developed countries had adolescent birth rates in the narrow range of 10 to 20 births per 1,000 women aged 15-19. The decline in adolescent fertility was fastest in Iceland (from 73 births among 1,000 adolescents in 1970 to 14 in 2006) and Austria (61 births among 1,000 adolescents in 1970 to 12 in 2006). By 2000-2007, only a quarter of developed countries had adolescent birth rates higher than 20 with the highest level reaching 41 births per 1,000 women aged 15-19 in the United States. In contrast, the adolescent birth rate in Japan, the Netherlands, Slovenia and Switzerland was five or less births per 1,000 women aged 15-19.

**Figure IV.1. Distribution of fertility rates of women aged 15-19, the world and the development groups**



Given the initially high levels of adolescent fertility in the least developed countries, the declines in adolescent fertility were relatively small, from 151 births per 1,000 women aged 15-19 in 1970-1979 to 123 births per 1,000 women aged 15-19 in 2000-2007. Mali and Niger, which were among the top 10 countries with the highest adolescent fertility rates in 1970-1979 and each had more than 200 births per 1,000 women aged 15-19, continued to have the adolescent fertility rates in 2000-2007 of at least 190 births per 1,000 women aged 15-19. Among the least developed countries with the largest absolute annual declines in adolescent fertility between 1970-1979 and 2000-2007 were Bangladesh (from 219 to 127 births per 1,000 women aged 15-19), the Maldives (from 131 to 8 births per 1,000 women aged 15-19) and Yemen (from 175 to 80 births per 1,000 women aged 15-19). As a result of generally modest

declines, half of the least developed countries in 2000-2007 still had adolescent birth rates over 123 births per 1,000 women aged 15-19.

### B. FERTILITY LEVELS AND TRENDS AMONG THOSE AGED 20-24

The fertility trends of women aged 20-24 are very diverse among the 159 countries with the requisite data for the three periods under study (figure IV.2).<sup>3</sup> Even as the median fertility rates among those aged 20-24 declined markedly at the world level from 242 births per 1,000 women aged 20-24 in 1970-1979 to 109 births per 1,000 women aged 20-24 in 2000-2007, the intervals between the maximum and minimum fertility rates and between upper and lower quartiles remained large in all three periods.

There has also been a striking variation in the decline of fertility rates of women aged 20-24 among the development groups. Among the 43 developed countries with the required data for the three periods, there was a significant reduction in the fertility rate among women aged 20-24 due to a postponement of childbearing to older ages. The median declined from 158 births per 1,000 women aged 20-24 in 1970-1979 to 57 births per 1,000 women aged 20-24 in 2000-2007. Albania had the fastest annual rate of decline from 275 births per 1,000 women aged 20-24 in 1970 to 78 births per 1,000 women aged 20-24 in 2006.

**Figure IV.2. Distribution of fertility rates of women aged 20-24, the world and the development groups**



Similarly, among the developing countries with data for the three time periods, the median declined from 256 births per 1,000 women aged 20-24 in 1970-1979 to 123 births per 1,000 women aged 20-24 in 2000-2007. The differences among developing countries are large. While in some developing countries the age group 20 to 24 constitutes the prime childbearing age with high fertility rates, in other developing countries the start of childbearing is postponed to later ages and fertility rates are not very high among

women aged 20-24. In 1970-1979, Mayotte had the highest fertility rate in this age group at 381 births per 1,000 women aged 20-24, while Macao SAR of China had the lowest, at 68 births per 1,000 women aged 20-24. By 2000-2007, the highest fertility rate in developing countries among women aged 20-24 was in Kenya at 248 births per 1,000 women in this age group and the lowest was in the Republic of Korea at 18 births per 1,000 women aged 20-24. All 89 developing countries with available data for the three periods experienced a decline in fertility among women aged 20-24 between 1970-1979 and 2000-2007.

In the 27 least developed countries with the requisite data, fertility rates declined from a median of 294 births to 233 births per 1,000 women aged 20-24 between 1970-1979 and 2000-2007. In 1970-1979 only Haiti had a fertility rate less than 200 births per 1,000 women aged 20-24 (Haiti at 198 births). By 2000-2007, Haiti and only four other countries (Bangladesh, the Maldives, Mauritania, and Samoa) had fertility rates below 200 births per 1,000 women aged 20-24. While the Maldives had the lowest level of fertility in 2000-2007 among women aged 20-24, with 94 births per 1,000 women, Uganda had the highest fertility rate for this age group (314 births per 1,000 women aged 20-24), followed by Niger (302 births per 1,000 women aged 20-24).

### C. PERCENTAGE OF EVER MARRIED WOMEN AND MEN AMONG THOSE AGED 15-19

Levels in childbearing among adolescents and young women usually track closely to levels of marriage at these ages. Data on the percentage of women ever married among those aged 15-19 for the three periods 1970-1979, 1990-1999 and 2000-2008 were available for 78 countries.<sup>4</sup> At the world level, the percentage of ever married women among those aged 15-19 has declined steadily over the three periods (figure IV.3). The median of the distribution declined from 13 per cent in 1970-1979 to 10 per cent in 1990-1999, and declined further to 6 per cent in 2000-2008, with declines in both the lower and upper bounds. The fastest declines, of more than one percentage point per year in the observed period, occurred in three countries: Algeria (from 47 per cent to 2 per cent in 36 years), the Maldives (from 56 per cent to 5 per cent in 29 years) and Sierra Leone (from 60 per cent to 34 per cent in 19 years).

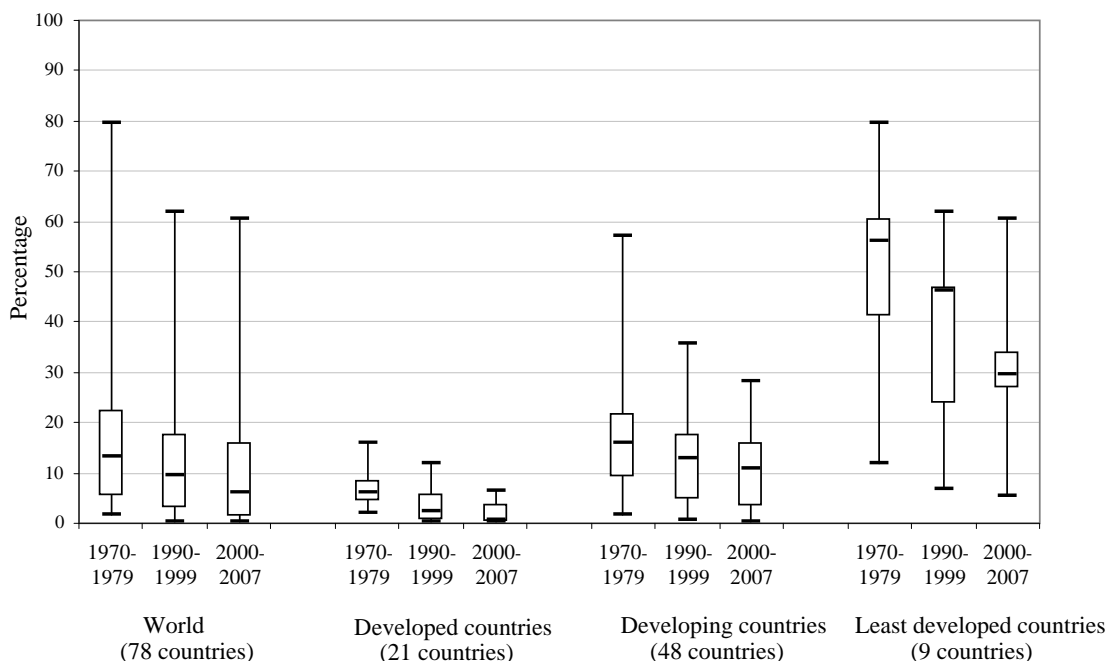
In the 21 developed countries with data over the three time periods, the proportion of ever married women among those aged 15-19 declined. Marriage is a rare event in the lives of adolescents in developed countries, though some adolescents are living in consensual unions, which are not reflected in majority of the data sources available for the developed countries. The median of the proportion of ever married women among those aged 15-19 fell from 6 per cent in 1970-1979 to below 1 per cent in 2000-2008. In 1970-1979, the highest proportion of ever married among women 15-19 was recorded in Romania and Ukraine, at 16 per cent, while the lowest proportion was in Ireland, Japan and Sweden at 2 per cent. By 2000-2008, only two countries had proportions of ever married women among those aged 15-19 higher than 5 per cent—United States (6 per cent) and Ukraine (7 per cent)—while in twelve countries less than 1 per cent of adolescents had ever been married.

Among the 48 developing countries, median of the percentage of ever married women among those aged 15-19 declined from 16 per cent in 1970-1979 to 13 per cent in 1990-1999 and to 11 per cent in 2000-2008. However, the variability around the median remained virtually unchanged at around 13 percentage points between upper and lower bounds. The largest changes occurred in the maximum value. In 1970-1979, the maximum value was in India at 57 per cent of women aged 15-19 having ever been married. By 2000-2008 the highest proportion of ever married female adolescents was 28 per cent in India and Nicaragua. Among developing countries in East Asia, such as China, Hong Kong SAR of China, Macao SAR of China, Singapore and the Republic of Korea, adolescent marriage has always been a rare event; less than 5 per cent of women aged 15-19 in 1970-1979 and less than 2 per cent in 2000-2008 had ever been married in all five countries.



Among the least developed countries, only nine had data for all three time periods. The decline in the percentage of ever married women among those aged 15-19 was very marked and the median of the distribution fell from 56 per cent in 1970-1979 to 30 per cent in 2000-2008. Niger has always had the highest proportion of ever married female adolescents, at 80 per cent in 1970-1979 and 61 per cent in 2000-2008. The least developed countries with the lowest proportions of ever married female adolescents were Burundi, with 12 per cent in 1970-1979, and the Maldives, with 5 per cent in 2000-2008.

**Figure IV.3. Distribution of the percentage of ever married women among those aged 15-19, the world and the development groups**



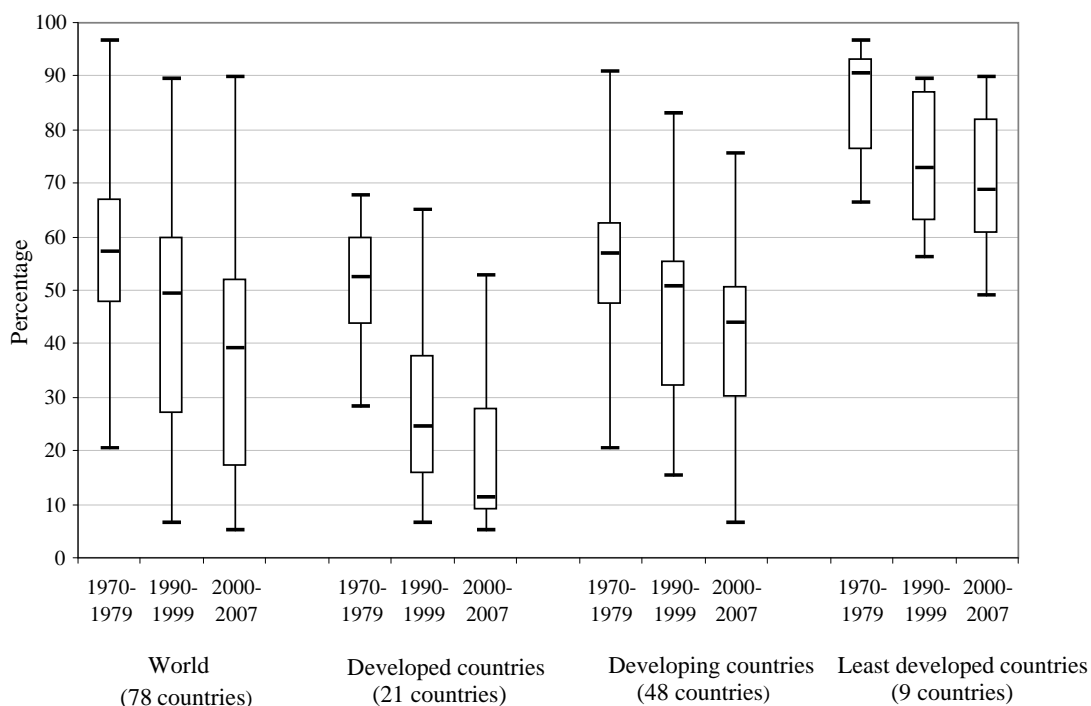
The percentage of ever married men among those aged 15-19 has been low in all of the 64 countries with available data for the three periods. In 1970-1979 only in three countries—the Maldives (12 per cent), Nepal (27 per cent) and Niger (15 per cent)—more than one in ten male adolescents had ever been married. By 2000-2008, only Nepal remained in this group with 11 per cent of male adolescents ever married. Compared to the diversity of marriage levels experienced by female adolescents worldwide, marriage is rarely experienced by male adolescents in most countries.

#### D. PERCENTAGE OF EVER MARRIED WOMEN AND MEN AMONG THOSE AGED 20-24

Data on the percentage of ever married women among those aged 20-24 for the three periods 1970-1979, 1990-1999 and 2000-2008 were available for 78 countries. Worldwide the percentage of ever married women among those aged 20-24 declined. While in 1970-1979 in a half of the countries more than 57 per cent of women aged 20-24 were ever married, by 2000-2008 the median had declined to 39 per cent (figure IV.4). The decline in the proportion of ever married women aged 20-24 was especially pronounced in the developed countries as a result of the postponement of union formation and an increase in the prevalence of consensual unions, which are not covered by the data available for most of the developed countries. In developing countries, the decline of marriage in this age group was slower

compared to the developed regions. In the least developed countries, despite some declines, marriage in this age group is still common.

**Figure IV.4. Distribution of the percentage of ever married women among those aged 20-24, the world and the development groups**



In the 21 developed countries with data for the three time periods, marriage among young women aged 20-24 is far less common now than it was in the 1970s. While in half of developed countries in 1970-1979 more than 52 per cent of women aged 20-24 were ever married, by 2000-2008 the median was just 11 per cent. In 1970-1979, more than two-thirds of women aged 20-24 were ever married in the Czech Republic, Hungary, Romania and Ukraine. The Czech Republic and Hungary experienced the largest absolute declines over the observed period among the developed countries, and in 2000-2008 less than 10 per cent of women aged 20-24 were ever married in these two countries. Most of this decline happened after 1990, when the percentage ever married among women aged 20-24 was still 65 per cent in the Czech Republic in 1991 and 59 per cent in Hungary in 1990. By contrast, in 2000-2008 Ukraine had the largest proportion of women aged 20-24 who had ever been married (53 per cent) followed by the United States and the United Kingdom (31 per cent in each country). Ireland and France each had the smallest percentage of women aged 20-24 who had ever been married in 2000-2008 (5 and 6 per cent, respectively).

Among the 48 developing countries with data over time, the declines in marriage levels were slower. The median of the distribution decreased from 57 per cent in 1970-1979 to 44 per cent in 2000-2008. Variation among countries remained large, where the difference between maximum and minimum values stayed at around 70 percentage points. By 2000-2008, while 74 per cent of women aged 20-24 were ever

married in India (the maximum value in this time period), only 6 per cent of women aged 20-24 were ever married in the Republic of Korea, a minimum value similar to that among developed countries.

In 1970-1979, the highest proportion of ever married among women aged 20-24 was in India (91 per cent) followed by Algeria (89 per cent). Algeria had the largest absolute decline over time, in parallel with the decline experienced in adolescent marriage, and in 2002 only 17 per cent of women aged 20-24 were ever married. Yet in other developing countries there were slight increases over time in the percentage of women aged 20-24 who had ever been married, such as in Azerbaijan, Bolivia, Brazil and Nicaragua. In many of the developing countries, the changes in the proportion of ever married women among those aged 20-24 marked the trend of delayed family formation.

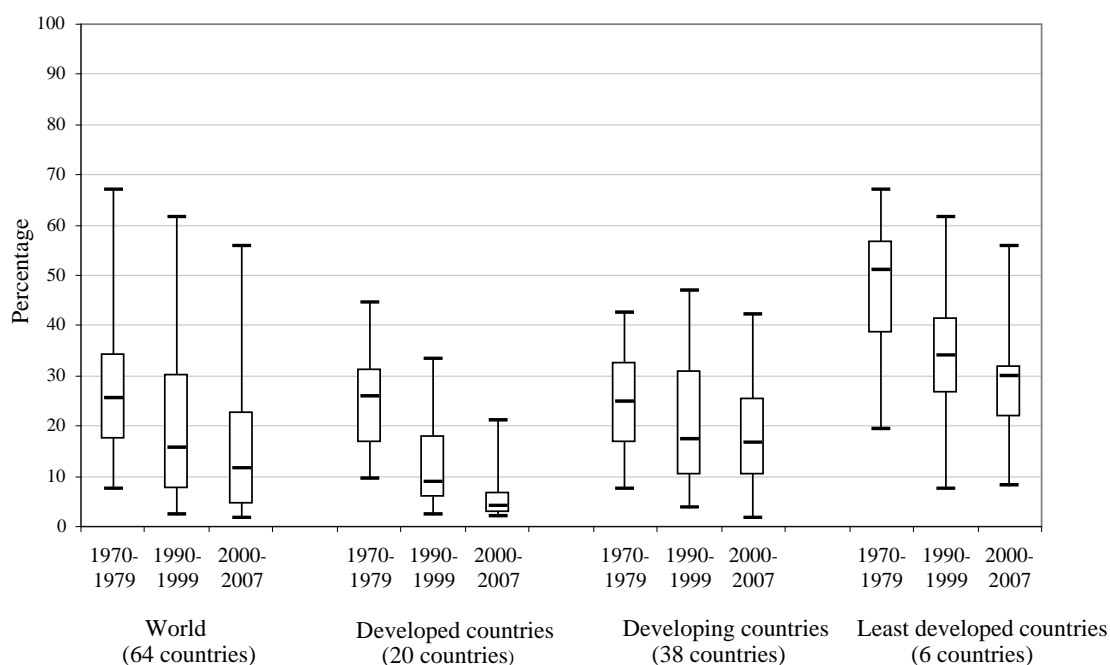
Among the nine least developed countries, declines in marriage among women aged 20-24 were slow and in 2000-2008 most women in this age group have been married. The median of the distribution declined from 90 per cent in 1970-1979 to 69 per cent in 2000-2008. In 1970-1979, more than two thirds of women aged 20-24 were ever married. Bangladesh had the highest percentage of ever married women in this age group at 97 per cent. By 2000-2008, 49 per cent or more of women aged 20-24 were ever married. The Maldives experienced the largest absolute percentage decline (from 93 per cent in 1977 to 53 per cent in 2006). Such a large decline was exceptional among countries with a high prevalence of marriage among young women. In Bangladesh, Nepal, Niger and Zambia at least 75 per cent of women aged 20-24 were ever married in 2000-2008, reaching 90 per cent in Niger.

Marriage is much less common among men aged 20-24 compared to women. In half of the countries in 2000-2008, 12 per cent or more of men aged 20-24 had ever been married versus 39 per cent for women aged 20-24. Similar to trends among young women, there has been a decline in the proportion of men aged 20-24 who have ever been married, with the largest declines in the developed countries (figure IV.5). For the three periods under observation, 64 countries<sup>5</sup> were available for assessment of marriage trends among young men.

Among the 20 developed countries with data over time, the median of the distribution decreased from 26 per cent in 1970-1979 to just 4 per cent in 2000-2008. In 1970-1979, more than a third of men aged 20-24 were ever married in Belgium, the Czech Republic, the United Kingdom and the United States. By 2000-2008, the proportion of ever married men had declined in all countries. The largest overall declines were recorded in the Czech Republic and Belgium, where the percentage of ever married men declined from 36 per cent in 1970-1979 in both countries to 3 per cent in the Czech Republic and 4 per cent in Belgium in 2000-2008. The United States consistently had the highest percentage men aged 20-24 who had ever been married: 45 per cent in 1970 and 21 per cent in 2000. By 2000-2008, in only four countries (Poland, Portugal, United Kingdom and the United States) were 10 per cent or more of men aged 20-24 ever married.

Declines in marriage among young men were varied among the 38 developing countries with data. The median of the distribution of developing countries declined from 25 per cent in 1970-1979 to 18 per cent in 1990-1999 and just 17 per cent in 2000-2008. In 1970-1979, in Bahrain and Indonesia more than 40 per cent of men aged 20-24 had ever been married, yet only 7 per cent of men aged 20-24 were ever married in the Republic of Korea (the minimum value in that time period). Between 1970-1979 and 2000-2008, some countries showed no trend of postponement of marriage among young men and in nine countries, all of them in Latin America and the Caribbean, the proportion of men aged 20-24 ever married even slightly increased. By 2000-2008, the highest proportion of young men who had ever married was in Nicaragua (42 per cent) and Bolivia (41 per cent) and the lowest proportion of young men who had ever married was in the Republic of Korea (2 per cent).

**Figure. IV. 5. Distribution of the percentage of ever married men among those aged 20-24, the world and the development groups**



Only six of the least developed countries had the requisite marriage data for young men over time. In all six countries, the proportion of men aged 20-24 who had ever married declined over time and the median of the distribution decreased from 51 per cent in during 1970-1979 to 30 per cent in 2000-2008. The fastest decline was in the Maldives from 57 per cent in 1979-1979 to 20 per cent in 2000-2008. Marrying at a relatively early age is common among men in Nepal (in 2006 56 per cent of men aged 20-24 had ever married), and the country had the highest percentage of ever married men in all three time periods. Mauritania had the lowest percentage in all three time periods of young men who had ever married.

#### E. GOVERNMENTS' VIEWS AND POLICIES ON ADOLESCENT FERTILITY

Many Governments have expressed concern about high levels of adolescent fertility. In 2009, among the 191 Governments whose views regarding fertility among adolescents were known, 87 per cent expressed concern about the level of adolescent fertility, including 57 per cent of countries expressing major concern (United Nations, 2010b). Despite declines over time in the adolescent birth rate in developed countries, the proportion of Governments expressing major concern with the level of adolescent fertility increased slightly from 27 per cent in 1996 to 31 per cent in 2009. Similarly, among developing countries the proportion of Governments expressing major concern regarding the level of adolescent fertility increased from 53 per cent in 1996 to 65 per cent in 2009. Rising levels of concern about adolescent fertility are matched in part by having policies and programmes in place to address adolescent fertility levels: 82 per cent of the 191 Governments reported having such policies and programmes, a marked increase from 60 per cent in 1996 (United Nations, 2010b).

## NOTES

<sup>1</sup> “Youth”, “adolescents” and “young people” are terms often used interchangeably to describe people within the transitional phase between childhood and adulthood. The United Nations, for statistical purposes, defines youth, as those persons between the ages of 15 and 24 years, without prejudice to other definitions by Member States. This definition was made during preparations for the International Youth Year (1985) and endorsed by the General Assembly (see A/36/215 and resolution 36/28, 1981). For the purpose of this report, the term “adolescents” is used to refer to people aged 15-19.

<sup>2</sup> For the reference period 1970-1979, 15 countries have data for 1966-1969 and nine countries have data for 1980-1989.

<sup>3</sup> For the reference period 1970-1979, 15 countries have data for 1966-1969 and nine countries have data for 1980-1989.

<sup>4</sup> To ensure comparability over time, 24 countries were excluded from the analysis because they had one or two data sources that included consensual unions and the percentages of women in consensual unions were not negligible (i.e., over five per cent in any of the age groups). For the reference period 1970-1979, four countries have data for 1965-1969 and 10 countries have data for 1980-1989.

<sup>5</sup> For the period 1970-1979, two countries have data for 1966-1969 and seven countries have data for 1980-1989.



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## **ANNEX TABLES**



TABLE I.1. DISTRIBUTION OF TOTAL FERTILITY, THE WORLD AND THE DEVELOPMENT GROUPS (values corresponding to figure I.1)

Distribution values	World				Developed countries				Developing countries				Least developed countries			
	1970-1979	1990-1999	2000-2007	1970-1979	1990-1999	2000-2007	1970-1979	1990-1999	2000-2007	1970-1979	1990-1999	2000-2007	1970-1979	1990-1999	2000-2007	
Minimum.....	1.8	1.2	1.0	1.8	1.2	1.2	2.0	1.2	1.0	4.9	3.4	2.1	3.4	5.4	4.6	
Lower quartile.....	3.1	1.8	1.7	2.1	1.4	1.3	4.6	2.4	2.0	6.0	5.4	5.4	5.4	5.9	5.4	
Median.....	5.6	3.0	2.4	2.3	1.6	1.4	5.7	3.0	2.5	6.5	6.7	6.0	6.7	7.0	6.0	
Upper quartile.....	6.5	4.8	3.8	2.6	1.8	1.8	6.5	4.1	3.3	7.0	6.7	6.0	6.7	7.0	6.0	
Maximum.....	8.5	7.6	7.4	5.2	2.8	2.1	7.9	7.4	5.7	8.5	7.6	7.4	8.5	7.6	7.4	
Number of countries or areas...	185	44	44	44	44	102	102	102	39	39	39	39	39	39	39	

TABLE I.2. DISTRIBUTION OF THE MEAN AGE AT CHILDBEARING, THE WORLD AND THE DEVELOPMENT GROUPS (values corresponding to figure I.2)

Distribution values	World				Developed countries				Developing countries				Least developed countries			
	1970-1979	1990-1999	2000-2007	1970-1979	1990-1999	2000-2007	1970-1979	1990-1999	2000-2007	1970-1979	1990-1999	2000-2007	1970-1979	1990-1999	2000-2007	
Minimum.....	24.7	24.2	25.1	24.7	24.2	26.2	25.6	24.8	25.5	27.5	25.9	25.1	27.5	28.7	28.9	
Lower quartile.....	27.6	27.1	27.7	26.7	25.9	27.9	28.3	27.1	27.3	28.7	28.7	28.9	28.7	28.7	28.9	
Median.....	28.8	28.5	28.7	27.1	28.0	29.1	29.4	28.1	28.2	29.4	29.6	29.4	29.4	29.6	29.4	
Upper quartile.....	29.9	29.5	29.8	27.8	29.0	30.1	30.1	29.4	29.4	30.3	30.4	30.0	30.3	30.4	30.0	
Maximum.....	31.8	31.8	32.3	30.3	30.3	31.1	31.7	31.4	32.3	31.8	31.8	31.4	31.8	31.8	31.4	
Number of countries or areas...	161	43	43	43	43	91	91	91	27	27	27	27	27	27	27	

TABLE I.3. DISTRIBUTION OF THE PERCENTAGE CHILDLESS AMONG WOMEN AGED 45-49, THE WORLD AND THE DEVELOPMENT GROUPS (values corresponding to figure I.3)

Distribution values	World				Developed countries				Developing countries				Least developed countries			
	1970-1979	1990-1999	2000-2008	1970-1979	1990-1999	2000-2008	1970-1979	1990-1999	2000-2008	1970-1979	1990-1999	2000-2008	1970-1979	1990-1999	2000-2008	
Minimum.....	1.5	0.6	1.1	9.6	8.3	8.0	2.3	1.9	1.6	1.5	0.6	1.1	1.5	0.6	1.1	
Lower quartile.....	4.9	3.3	2.8	10.6	8.7	8.7	5.0	3.4	3.2	3.7	1.6	1.7	3.7	1.6	1.7	
Median.....	7.2	5.6	4.5	11.3	9.6	9.1	7.2	4.8	4.6	5.0	4.5	2.6	5.0	4.5	2.6	
Upper quartile.....	11.1	8.8	8.2	12.4	10.4	10.5	9.9	7.5	7.1	7.3	7.3	3.1	7.3	7.3	3.1	
Maximum.....	15.8	17.0	16.8	14.6	10.7	14.4	15.8	17.0	16.8	12.8	14.9	6.2	12.8	14.9	6.2	
Number of countries or areas...	36	4	4	4	4	24	24	24	8	8	8	8	8	8	8	

TABLE II.1. DISTRIBUTION OF THE SINGULATE MEAN AGE AT MARRIAGE FOR WOMEN, THE WORLD AND THE DEVELOPMENT GROUPS (values corresponding to figure II.1)

Distribution values	World				Developed countries				Developing countries				Least developed countries			
	1970-1979	1990-1999	2000-2008	2000-2008	1970-1979	1990-1999	2000-2008	2000-2008	1970-1979	1990-1999	2000-2008	2000-2008	1970-1979	1990-1999	2000-2008	2000-2008
Minimum.....	16.2	17.6	17.6	17.6	20.9	21.9	21.9	25.3	17.7	19.3	20.2	20.2	16.2	17.6	17.6	17.6
Lower quartile.....	20.3	22.1	22.7	22.7	21.4	24.5	24.5	26.8	20.3	22.1	22.7	22.7	17.5	18.5	19.4	19.4
Median.....	21.8	23.4	24.7	24.7	22.3	26.1	26.1	29.4	21.9	23.1	23.5	23.5	18.0	19.8	20.7	20.7
Upper quartile .....	23.1	26.2	27.9	27.9	23.3	27.9	27.9	30.6	23.2	25.9	26.0	26.0	19.4	21.5	21.8	21.8
Maximum .....	26.5	31.3	33.1	33.1	24.7	31.3	31.3	32.2	26.5	29.9	33.1	33.1	21.6	23.0	23.7	23.7
Number of countries or areas...		77				20				48				9		

TABLE II.2. DISTRIBUTION OF THE DIFFERENCE BETWEEN SINGULATE MEAN AGE AT MARRIAGE FOR MEN AND WOMEN, THE WORLD AND THE DEVELOPMENT GROUPS, 2000-2008 (values corresponding to figure II.2)

Distribution values	World		Developed countries		Developing countries		Least developed countries	
	2000-2008	2000-2008	2000-2008	2000-2008	2000-2008	2000-2008	2000-2008	2000-2008
Minimum.....	1.1	1.1	1.1	1.6	1.6	1.6	1.8	1.8
Lower quartile.....	2.4	2.4	2.0	2.7	2.7	2.7	3.2	3.2
Median.....	3.2	3.2	2.4	3.3	3.3	3.3	4.3	4.3
Upper quartile .....	4.1	4.1	2.9	3.9	3.9	3.9	5.5	5.5
Maximum .....	7.6	7.6	5.2	7.1	7.1	7.1	7.6	7.6
Number of countries or areas...	130	130	40	62	62	62	28	28

TABLE II.3. DISTRIBUTION OF THE PERCENTAGE EVER MARRIED AMONG WOMEN AGED 45-49, THE WORLD AND THE DEVELOPMENT GROUPS (values corresponding to figure II.4)

Distribution values	World				Developed countries				Developing countries				Least developed countries			
	1970-1979	1990-1999	2000-2008	2000-2008	1970-1979	1990-1999	2000-2008	2000-2008	1970-1979	1990-1999	2000-2008	2000-2008	1970-1979	1990-1999	2000-2008	2000-2008
Minimum.....	52.0	54.1	51.3	51.3	81.8	85.8	85.8	74.7	52.0	54.1	51.3	51.3	94.2	91.5	91.5	94.3
Lower quartile.....	88.9	91.2	87.8	87.8	88.4	91.8	91.8	86.3	86.5	87.8	87.0	87.0	97.6	98.3	98.3	98.0
Median.....	94.7	94.5	92.9	92.9	91.8	93.4	93.4	89.8	95.0	93.8	92.2	92.2	98.2	99.0	99.0	99.1
Upper quartile .....	97.7	98.1	97.6	97.6	93.6	94.8	94.8	92.9	97.6	97.5	96.0	96.0	99.1	99.6	99.6	99.4
Maximum .....	100.0	100.0	100.0	100.0	96.5	96.8	96.8	95.5	100.0	100.0	99.8	99.8	99.9	99.9	99.9	100.0
Number of countries or areas...		99				25				57				17		

TABLE II.4. DISTRIBUTION OF EXTRAMARITAL BIRTHS AS A PERCENTAGE OF ALL BIRTHS, THE WORLD AND THE DEVELOPMENT GROUPS (values corresponding to figure II.5)

Distribution values	World				Developed countries				Developing countries				Least developed countries			
	1970-1979	1990-1999	2000-2008	1970-1979	1990-1999	2000-2008	1970-1979	1990-1999	2000-2008	1970-1979	1990-1999	2000-2008	1970-1979	1990-1999	2000-2008	
Minimum.....	0.1	1.2	2.0	0.9	1.2	2.0	0.1	1.2	2.0	0.1	1.4	4.7	0.1	1.4	4.7	
Lower quartile.....	3.4	11.5	20.4	3.8	12.6	20.9	2.9	12.6	20.9	2.9	4.7	18.9	2.9	4.7	18.9	
Median.....	7.1	19.3	33.8	6.9	18.7	33.2	10.3	18.7	33.2	10.3	29.2	45.6	10.3	29.2	45.6	
Upper quartile.....	11.0	37.5	51.5	9.3	30.1	42.3	28.6	30.1	42.3	28.6	46.6	63.7	28.6	46.6	63.7	
Maximum.....	70.9	81.2	87.4	29.9	60.9	64.1	70.9	60.9	64.1	70.9	81.2	87.4	70.9	81.2	87.4	
Number of countries or areas...	62			41			21			0			0			

TABLE III.1. DISTRIBUTION OF CONTRACEPTIVE PREVALENCE (ANY METHOD), THE WORLD AND THE DEVELOPMENT GROUPS (values corresponding to figure III.1)

Distribution values	World				Developed countries				Developing countries				Least developed countries			
	1970-1989	1990-1999	2000-2009	1970-1989	1990-1999	2000-2009	1970-1989	1990-1999	2000-2009	1970-1989	1990-1999	2000-2009	1970-1989	1990-1999	2000-2009	
Minimum.....	0.8	4.1	7.6	57.3	57.3	54.3	2.4	11.4	12.9	0.8	4.1	7.6	0.8	4.1	7.6	
Lower quartile.....	14.6	23.9	35.4	62.8	71.9	69.3	29.5	48.1	58.1	4.9	12.2	15.6	4.9	12.2	15.6	
Median.....	39.5	54.6	60.9	74.1	75.6	74.3	44.6	56.9	64.1	8.7	17.2	25.7	8.7	17.2	25.7	
Upper quartile.....	60.0	67.6	73.2	79.8	80.4	78.1	54.3	65.7	73.3	16.1	24.8	36.9	16.1	24.8	36.9	
Maximum.....	81.2	86.5	88.4	81.2	86.5	88.4	80.8	86.0	84.6	33.9	44.6	55.8	33.9	44.6	55.8	
Number of countries or areas...	68			10			42			16			16			

TABLE III.2. DISTRIBUTION OF CONTRACEPTIVE PREVALENCE (ANY MODERN METHOD), THE WORLD AND THE DEVELOPMENT GROUPS (values corresponding to figure III.2)

Distribution values	World				Developed countries				Developing countries				Least developed countries			
	1970-1989	1990-1999	2000-2009	1970-1989	1990-1999	2000-2009	1970-1989	1990-1999	2000-2009	1970-1989	1990-1999	2000-2009	1970-1989	1990-1999	2000-2009	
Minimum.....	0.3	1.2	5.7	5.3	14.5	38.2	0.5	4.3	8.0	0.3	1.2	5.7	0.3	1.2	5.7	
Lower quartile.....	7.0	16.3	27.6	58.8	67.9	63.5	22.5	35.1	39.4	1.5	6.3	7.6	1.5	6.3	7.6	
Median.....	27.8	42.3	50.7	67.9	70.3	72.5	32.1	45.3	56.6	3.2	8.0	18.6	3.2	8.0	18.6	
Upper quartile.....	47.1	57.7	67.2	69.6	74.1	74.4	44.5	57.0	67.3	5.7	16.4	30.3	5.7	16.4	30.3	
Maximum.....	78.0	83.7	84.0	78.0	82.0	84.0	75.0	83.7	84.0	20.8	36.2	47.5	20.8	36.2	47.5	
Number of countries or areas...	68			10			42			16			16			

TABLE III.3. DISTRIBUTION OF UNMET NEED FOR FAMILY PLANNING, THE WORLD AND THE DEVELOPMENT GROUPS (values corresponding to figure III.3)

Distribution values	World		Developed countries			Developing countries			Least developed countries		
	1970-1979	2000-2009	1970-1979	1990-1999	2000-2009	1970-1979	1990-1999	2000-2009	1970-1979	1990-1999	2000-2009
Minimum.....	3.4	1.7	4.5	3.8	1.7	3.4	3.4	3.1	37.0	25.0	11.1
Lower quartile.....	41.0	10.2	28.0	9.9	6.6	54.1	39.6	7.5	110.0	91.0	21.1
Median.....	65.7	16.8	33.9	20.4	8.5	79.0	61.0	12.8	151.0	130.0	27.0
Upper quartile.....	128.2	26.1	45.8	32.9	11.5	125.1	88.2	20.2	171.5	162.5	32.2
Maximum.....	219.0	45.6	73.0	61.8	12.8	216.0	148.2	35.3	219.0	216.0	45.6
Number of countries or areas...		67		43	6		91	37		27	24

TABLE IV.1. DISTRIBUTION OF FERTILITY RATES AMONG WOMEN AGED 15-19, THE WORLD AND THE DEVELOPMENT GROUPS (values corresponding to figure IV.1)

Distribution values	World		Developed countries			Developing countries			Least developed countries		
	1970-1979	2000-2007	1970-1979	1990-1999	2000-2007	1970-1979	1990-1999	2000-2007	1970-1979	1990-1999	2000-2007
Minimum.....	3.4	2.1	4.5	3.8	3.8	3.4	3.4	2.1	37.0	25.0	8.0
Lower quartile.....	41.0	16.6	28.0	9.9	9.9	54.1	39.6	23.7	110.0	91.0	89.5
Median.....	65.7	37.0	33.9	20.4	14.0	79.0	61.0	50.0	151.0	130.0	123.0
Upper quartile.....	128.2	84.4	45.8	32.9	19.9	125.1	88.2	74.0	171.5	162.5	149.5
Maximum.....	219.0	199.0	73.0	61.8	40.6	216.0	148.2	141.0	219.0	216.0	199.0
Number of countries or areas...		161		43	43		91	27		27	27

TABLE IV.2. DISTRIBUTION OF FERTILITY RATES AMONG WOMEN AGED 20-24, THE WORLD AND THE DEVELOPMENT GROUPS (values corresponding to figure IV.2)

Distribution values	World		Developed countries			Developing countries			Least developed countries		
	1970-1979	2000-2007	1970-1979	1990-1999	2000-2007	1970-1979	1990-1999	2000-2007	1970-1979	1990-1999	2000-2007
Minimum.....	68	18	97	28	33	68	38	18	198	159	94
Lower quartile.....	169	73	137	64	44	202	124	97	268	230	211
Median.....	242	109	158	83	57	256	160	123	294	271	233
Upper quartile.....	290	177	170	111	74	296	205	171	319	298	264
Maximum.....	381	314	275	170	103	381	305	248	346	322	314
Number of countries or areas...		159		43	43		89	27		27	27

TABLE IV.3. DISTRIBUTION OF THE PERCENTAGE OF EVER MARRIED WOMEN AMONG THOSE AGED 15-19, THE WORLD AND THE DEVELOPMENT GROUPS (values corresponding to figure IV.3)

Distribution values	World			Developed countries			Developing countries			Least developed countries		
	1970-1979	1990-1999	2000-2008	1970-1979	1990-1999	2000-2008	1970-1979	1990-1999	2000-2008	1970-1979	1990-1999	2000-2008
Minimum.....	1.9	0.3	0.2	2.1	0.3	0.2	1.9	0.8	0.4	12.0	6.9	5.4
Lower quartile.....	5.6	3.1	1.3	4.4	0.8	0.5	9.0	4.6	3.5	41.3	23.9	26.9
Median.....	13.4	9.6	6.0	6.1	2.4	0.8	16.1	12.8	10.7	56.2	46.4	29.7
Upper quartile .....	22.3	17.7	15.8	8.7	5.7	3.6	21.9	17.8	16.1	60.7	46.9	34.1
Maximum .....	79.6	61.9	60.7	16.1	12.0	6.6	57.0	35.7	28.4	79.6	61.9	60.7
Number of countries or areas...		78		21			48				9	

TABLE IV.4. DISTRIBUTION OF THE PERCENTAGE OF EVER MARRIED WOMEN AMONG THOSE AGED 20-24, THE WORLD AND THE DEVELOPMENT GROUPS (values corresponding to figure IV.4)

Distribution values	World			Developed countries			Developing countries			Least developed countries		
	1970-1979	1990-1999	2000-2008	1970-1979	1990-1999	2000-2008	1970-1979	1990-1999	2000-2008	1970-1979	1990-1999	2000-2008
Minimum.....	20.3	6.6	5.0	28.3	6.6	5.0	20.3	15.2	6.3	66.2	56.0	49.1
Lower quartile.....	47.5	26.8	16.9	43.5	15.8	9.0	47.4	31.8	29.8	76.1	62.8	60.4
Median.....	57.3	49.5	39.3	52.4	24.6	11.3	56.8	50.7	44.0	90.4	72.9	68.7
Upper quartile .....	66.9	60.0	52.0	59.9	37.7	28.0	62.6	55.4	50.6	93.3	87.1	82.1
Maximum .....	96.8	89.5	89.7	67.7	64.9	52.8	91.0	83.0	75.4	96.8	89.5	89.7
Number of countries or areas...		78		21			48				9	

TABLE IV.5. DISTRIBUTION OF THE PERCENTAGE OF EVER MARRIED MEN AMONG THOSE AGED 20-24, THE WORLD AND THE DEVELOPMENT GROUPS (values corresponding to figure IV.5)

Distribution values	World			Developed countries			Developing countries			Least developed countries		
	1970-1979	1990-1999	2000-2008	1970-1979	1990-1999	2000-2008	1970-1979	1990-1999	2000-2008	1970-1979	1990-1999	2000-2008
Minimum.....	7.4	2.3	1.8	9.5	2.3	2.0	7.4	3.7	1.8	19.5	7.5	8.1
Lower quartile.....	17.4	7.6	4.6	16.5	5.9	2.6	16.8	10.2	10.4	38.5	26.6	21.7
Median.....	25.5	15.6	11.7	25.7	8.7	4.2	25.0	17.5	16.7	51.0	33.9	29.9
Upper quartile .....	34.4	30.2	22.7	31.3	18.0	6.9	32.6	30.8	25.7	56.8	41.6	32.0
Maximum .....	66.9	61.7	55.9	44.5	33.3	21.3	42.5	47.1	42.1	66.9	61.7	55.9
Number of countries or areas...		64		20			38				6	