Economic & Social Affairs

2015

World Fertility Report

United Nations

[Highlights]

ST/ESA/SER.A/415

Department of Economic and Social Affairs

World Fertility Report 2015

Highlights

United Nations
New York, 2017

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.

The Population Division of the Department of Economic and Social Affairs provides the international community with timely and accessible population data and analysis of population trends and development outcomes for all countries and areas of the world. To this end, the Division undertakes regular studies of population size and characteristics and of all three components of population change (fertility, mortality and migration). Founded in 1946, the Population Division provides substantive support on population and development issues to the United Nations General Assembly, the Economic and Social Council and the Commission on Population and Development. It also leads or participates in various interagency coordination mechanisms of the United Nations system. The work of the Division also contributes to strengthening the capacity of Member States to monitor population trends and to address current and emerging population issues.

Notes

The designations employed in this report and the material presented in it do not imply the expression of any opinions 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.

This report is available in electronic format on the Division's website at 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, USA, by Fax: 1 212 963 2147 or by e mail at population@un.org.

Suggested citation:

United Nations, Department of Economic and Social Affairs, Population Division (2017). *World Fertility Report 2015 - Highlights* (ST/ESA/SER.A/415).

Official symbols of United Nations documents are composed of capital letters combined with numbers, as illustrated in the above citation.

This publication has been issued without formal editing.

Front cover photos:

"Family in Tarialan, Mongolia" by Eskinder Debebe, 2009

https://www.flickr.com/photos/un_photo/6189290329 , used under CC BY-NC-ND 2.0, cropped from original.

Back cover photos:

"After Years of Displacement, Mahammid Group Returns to North Darfur" by Albert Gonzalez Farran, 2012

https://www.flickr.com/photos/un_photo/6836008884 , used under CC BY-NC-ND 2.0, cropped from original.

Photos on page 3:

"Mother and child at Taipo Market, Hong Kong Special Administrative Region of China, New Territories", by A. Jongen, 1965, https://www.flickr.com/photos/un_photo/3546872096/in/album-72157618489342030/

Published by the United Nations

World Fertility Report 2015: Key findings

- In 2010-2015, the median total fertility rate (TFR) was 2.3 live births per woman, less than half of the 5.5 births per woman estimated for the period 1970-1975.
- In the early 1970s, only 22 countries or areas had made the transition to low fertility, namely, having a TFR below the replacement level of 2.1 births per woman, the number required over the long term to ensure the replacement of generations in low-mortality populations. By 2013, the number of countries with below-replacement fertility almost quadrupled, reaching 83.
- More and more people are living in countries with below-replacement fertility. In 2013, almost half of the world's population lived in the 83 countries or areas that had below-replacement fertility. In 1973, the share of the world's population that lived in countries with below-replacement fertility was only 15 per cent and in 1953 it was less than half of a per cent.
- In 2010-2015, the TFR averaged more than 3.5 births per woman in 55 countries or areas, 42 of which were in Africa, 8 in Asia and 5 in Oceania. Two thirds of these countries belonged to the group of the Least Developed Countries (LDCs). In 47 of these 55 "high-fertility" countries, fertility declines were smaller than the world median fertility decline of 3.2 births per women since 1970-1975. However, fertility declined quickly over the past 40 years in the other 8 countries, namely, Jordan, Kenya, Mayotte, State of Palestine, Rwanda, Tajikistan, Yemen and Zimbabwe.
- Many middle-income countries that only recently reached below-replacement fertility levels, had undergone far more rapid transitions than most of the current high-income countries that had completed their fertility transitions decades ago and at a slower pace. Those countries with more recent and more rapid declines in fertility had less time to adjust to and cope with the rapid changes in the age structure of their populations, including challenges associated to population ageing.
- Adolescent fertility, measured by the adolescent birth rate (ABR)—the annual number of live births per 1,000 women aged 15-19 years—has declined globally since 1970-1975. However, the ABR remains over 100 births per 1,000 adolescent women in 25 countries, all but one of which are in Africa and 18 of these 25 countries are LDCs. These countries had very high levels of adolescent fertility, of more than 200 births per 1,000 adolescent women in Niger, followed by levels above 150 live births in Mali, Angola, Mozambique and Chad. By the year 2030, more than half of the countries or areas of the world are expected to have adolescent birth rates of over 20 births per 1,000 adolescent women. But by 2050, a majority of the countries in the world are projected to have ABRs under that low level.
- High fertility remains the largest contributor to population growth in the LDCs. Specifically, fertility above the replacement level is projected to add more than 600 million people in the LDCs between 2010 and 2050. In Africa, above-replacement fertility is expected to account for 87 per cent of the region's projected population increase, adding more than 900 million people over this same period.

Introduction

The demographic transition that began about two centuries ago in Europe had ushered in major changes in fertility levels and patterns around the world. Globally, total fertility declined at unprecedented rates and to unprecedented levels, reaching a median level of 2.3 live births per woman over a lifetime in 2010-2015, down from almost 5 births per woman in 1950-1955. More than 83 countries,[1] with close to half of the world's population, are now experiencing below-replacement fertility levels.[2] However, fertility levels remain high in many countries, particularly those in sub-Saharan Africa and in the group of the least developed countries (LDCs).[3]

Fertility levels and trends are fundamentally interrelated with development. The linkages between population dynamics and sustainable development have been recognized since the adoption of the 1992 Rio Declaration on Environment and Development and Agenda 21 that placed humans at the centre of development. This was reiterated in the Programme of Action of the International Conference on Population and Development (ICPD), in 1994, that approached population and development issues from a human rights perspective, including the promotion of reproductive health and family planning, education and gender equality as intrinsic components of development. The ICPD also recognized population ageing as a growing global phenomenon. While the Millennium Declaration did not make specific references to the relationship between population and development, several of the Millennium Development Goals reflected in their targets and indicators timebound commitments to improve reproductive health of women and young girls and to promote inclusive societies. The Sustainable Development Goals (SDGs) of the 2030 Agenda for Sustainable Development bring together major threads of development thinking from these past 25 years by linking population dynamics with the three dimensions of sustainable development, social, economic and environmental. This new framework contains goals on healthy lives and gender equality, and timebound targets on sexual and reproductive health, including adolescent fertility and family planning, and on issues related to population ageing.

This Highlights provides a summary analysis of trends in adolescent fertility at the global, regional as well as national levels; the timing of childbearing; fertility transitions; and the effect of fertility on population growth over the period 2010 to 2050. It also offers a brief discussion on fertility data coverage and related data gaps and concludes with a set of policy considerations to be taken into consideration by interested governments.

---

[1] The term "country" as used in this publication refers, as appropriate, to countries, territories or areas.

[2] Replacement fertility represents the level at which each generation just replaces the previous one, thus leading to zero population growth for given level of mortality and absence of migration, or to the net reproduction rate equal one. Replacement fertility varies with level of mortality; the higher the mortality levels are in a given population, the higher is their respective replacement fertility. For low-mortality populations, replacement fertility is just above two births per women, often approximated by a level of 2.1 births per woman. Below-replacement fertility results eventually in the negative population growth and extinction of population in a long term.

[3] The group of least developed countries, as defined by the United Nations General Assembly in its resolutions (most recently, 68/18) includes currently 47 countries in 2015: 33 in Africa, 9 in Asia, 4 in Oceania and one in Latin America and the Caribbean. The list of countries is reviewed every three years by the Committee for Development (CDP).

Trends in Fertility from 1950 to 2015

The world has experienced significant fertility declines over the past six decades (table 1). Total fertility[4] at the global level fell from an average of 5 births per woman aged 15-49 year in 1950-1955 to 2.5 births per woman in 2010-2015 (table 1). Among the world's regions, Africa remained the region with the highest fertility, averaging 4.7 births per woman in 2010-2015, with particularly high levels of fertility, on average 5.1 births per women, observed in sub-Saharan Africa. Fertility was also high in the group of LDCs with 4.3 births per woman in 2010-2015. Oceania had an average of 2.4 births per woman in 2010-2015, followed by Asia and Latin America and the Caribbean with fertility levels of 2.2 births per woman. In Northern America and Europe, fertility fell below the replacement level to as low as 1.9 births per woman in Northern America and 1.6 birthsper woman in Europe.

Table 1.
Total fertility for the world, development groups and regions, selected time periods

	Total fertility (average number of births per woman)			
Development group or region	***1950-1955***	***1970-1975***	***1990-1995***	***2010-2015***
World	5.0	4.5	3.0	2.5
Least developed countries	6.6	6.7	5.8	4.3
Africa	6.6	6.7	5.7	4.7
Sub-Saharan Africa	6.6	6.8	6.2	5.1
Asia	5.8	5.1	3.0	2.2
Europe	2.7	2.2	1.6	1.6
Latin America and the Caribbean	5.9	5.0	3.0	2.2
Northern America	3.4	2.0	2.0	1.9
Oceania	3.8	3.2	2.5	2.4

Source: United Nations (2015a).

The timing and pace of this decline varied considerably across world regions (figure 1). Between 1950-1955 and 1970-1975, the world experienced a modest fertility decline of just under half a child, from 5.0 births per woman to 4.5 births per woman. Declining fertility characterized all regions outside of Africa over this period, with declines more rapid in some parts of the world than in others. Total fertility declined by more than one child per woman in Northern America, Eastern Asia, South America and Polynesia. In contrast, some subregions such as Central America, Central Asia and Southern Europe, fertility declines were small,

[4] The level of total fertility for a given period reflects the average number of children women would bear if current fertility rates remained unchanged during their reproductive lifespans (15-49 years of age).

less than 0.25 births per woman. Many countries in Europe and Northern America that had experienced a post-war "baby boom" during the 1950s and 1960s, saw their fertility fall again in 1970-1975. In contrast to the declines experienced in most countries of the world over the referred period, total fertility increased in Eastern, Middle and Western Africa.

The pace of global fertility decline picked up since the period 1970-1975. At the world level, total fertility fell from an average of 4.5 births per woman in 1970-1975 to 2.5 births per woman in 2010-2015, a decline of an average of 2.0 births. Most of this change, more than 80 per cent, was attributable to the enormous fertility reductions that took place in Asia. Fertility in Asia declined from 5.1 births per woman in 1970-1975 to 2.2 birth in 2010-2015, led by the reductions in Eastern, South-Eastern and Southern Asia where total fertility dropped on average by 3.0 births per woman. An equally pronounced decline took place in Latin America and the Caribbean where fertility fell from 5.0 births per woman in 1970-1975 to 2.2 births in 2010-2015. Central America experienced a rather rapid decline, with a reduction of 4.1 births per woman, from 6.5 to 2.4 births per woman in 40 years. In the case of Africa, fertility fell from 6.7 to 4.7 births per women, with the largest declines, 3.1 births per women on average, observed in Northern and Southern Africa. Western and Eastern Africa saw smaller, but still significant declines: 2.2 and 1.3 births per woman, respectively. In Middle Africa, the decline was only slightly more than half a child. Middle Africa stood out as the subregion with the highest fertility in 2010-2015, at 5.8 births per woman, reaching more than 6 births per woman in Chad, Angola and the Democratic Republic of the Congo.

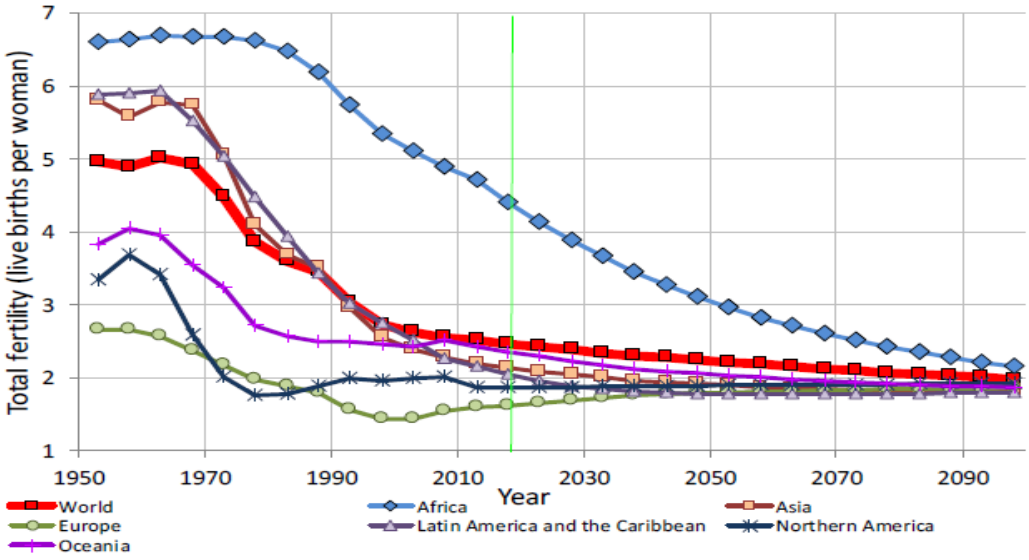
Large reductions in fertility were also observed in high-fertility[5] regions such as Oceania, Melanesia, Micronesia and Polynesia, where total fertility fell on average by 2.4 births per woman, from 5.6 births per women in Oceania to 3.2 births per women in Polynesia. Given that in Australia and New Zealand total fertility was already low and approaching replacement levels in the 1970s, the decline was relatively small, only 0.7 births per woman. Similarly, in Europe and Northern America where total fertility had already come down to the replacement level by 1970-1975; further declines thereafter were small, compared to those that occurred in other parts of the world.

[5] For the analysis, the countries or areas have been divided into five groups according to their level of fertility in each period: a) high: more than 5 births per woman; b) medium-high: from 3.5 to 5 births per woman; c) medium : from 2.1 to 3.5 births per woman; d) low : fewer than 2.1 but higher than 1.5 births, and e) very low fertility: 1.5 births and less.

Fertility in the future

At the world level, total fertility is expected to decline from 2.5 births per woman in 2010-2015 to 2.3 birth in 2045-2050 and further to 2.0 births per woman in 2095-2100 (figure 1). Similar gradual and uniform declines are expected in Asia, where total fertility is projected to fall from 2.2 births per woman in 2010-2015 to 1.8 births in 2095-2100, and in Oceania, where a decline from 2.4 births to 1.9 births per woman is expected. A slightly different trajectory of future fertility is projected for Latin America and the Caribbean: starting from a level of 2.2 births per woman in 2010-2015, total fertility is projected to drop to a low of 1.8 births per woman in the mid-2050s, and to remain around this low level through the end of the century. Europe and Northern America are the two regions where total fertility was already below replacement levels in 2010-2015—1.6 births and 1.9 births per woman, respectively. In both regions, fertility is expected to converge to 1.9 births per woman by the end of the century.

Figure 1.
Total fertility trajectories for the world and regions, 1950-2015 estimation and 2015-2100 projection (medium variant)



Source: United Nations (2015a).

Fertility today

High and medium-high fertility, more than 3.5 births per woman, is concentrated in countries located in sub-Saharan Africa (figure 2), with the exception of Southern Africa with notably lower fertility, and in selected countries of Asia and Oceania. The most populous countries in this group are, in descending order of population size, Nigeria, Ethiopia, the Democratic Republic of Congo and the United Republic of Tanzania.

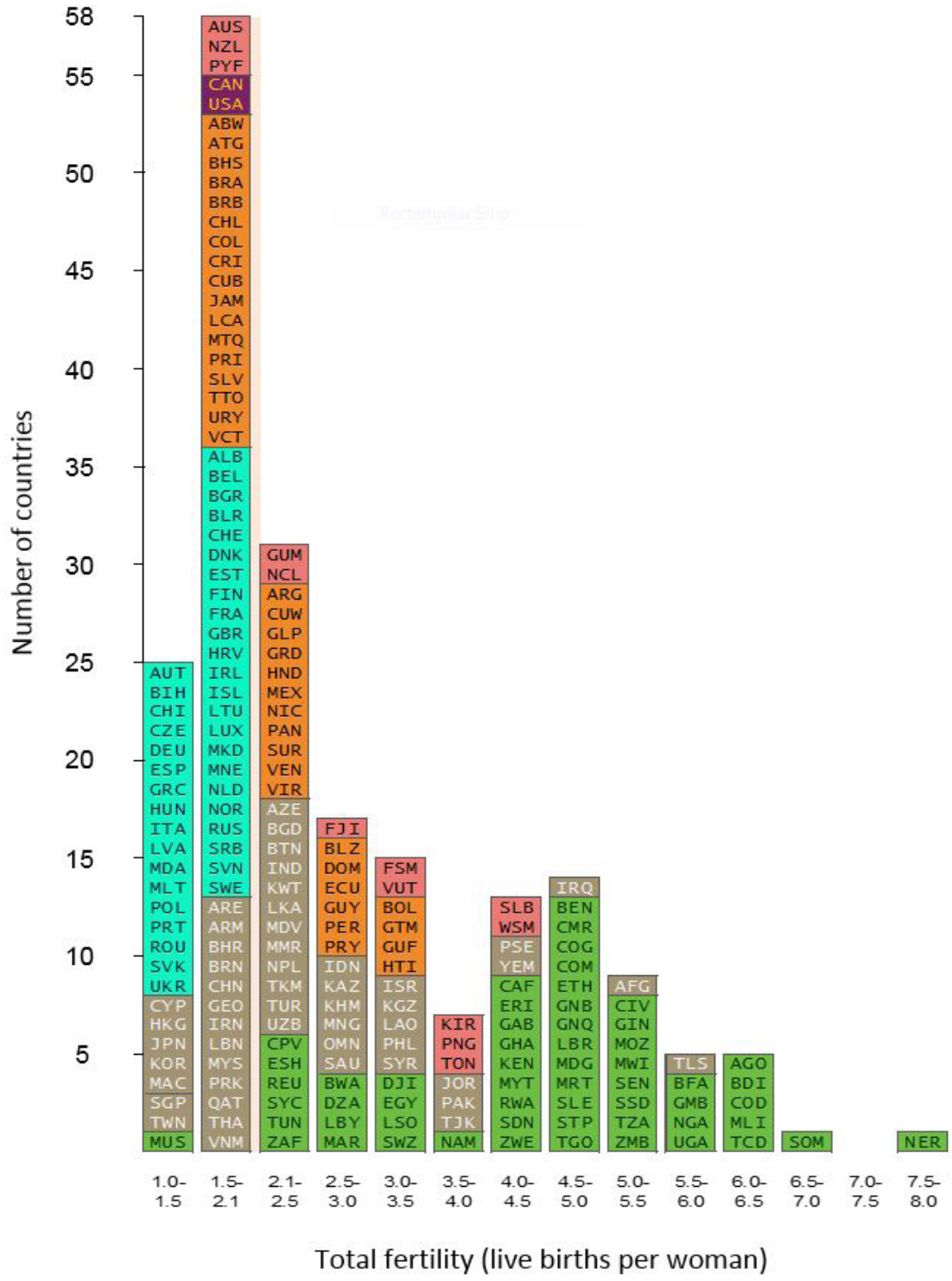
Intermediate-fertility countries with levels of 2.1 to 3.5 births per woman, are found in all regions, except in Europe and Northern America. The most populous countries in this group are, in descending order of population size, India, Indonesia, Pakistan, Bangladesh, Mexico and the Philippines, all with 100 million people or more.

Most countries globally have below-replacement fertility, which were located in all regions of the world. This category includes all European and Northern American countries, almost half of the countries of Latin America and the Caribbean and of Asia, the developed countries of Oceania and only one country in Africa, Mauritius. Very low levels of fertility, below 1.5 births per woman, were found in 25 countries. Seventeen of these were in Europe, 7 in Asia and 1 in Africa. The most populous countries with below-replacement fertility were China, the United States of America, Brazil, the Russian Federation and Japan.

Total fertility levels in Europe in 2010-2015 were concentrated in the narrow range of 1.3 to 2.0 births per woman in the latest period, the narrowest range for any major region of the world. In contrast, total fertility levels in Africa were characterized by the largest variation, from 1.5 in Mauritius to 7.6 in Niger.

Figure 2.

Distribution of countries by level of fertility in 2010-2015



Source: United Nations (2015a).

Below-replacement fertility

Consistent with the global fertility decline, an increasing proportion of the world's population in 2010-2015 was living in countries where total fertility has fallen below the replacement level. Also, a relatively small proportion of the world's population still lived in countries with high levels of total fertility.

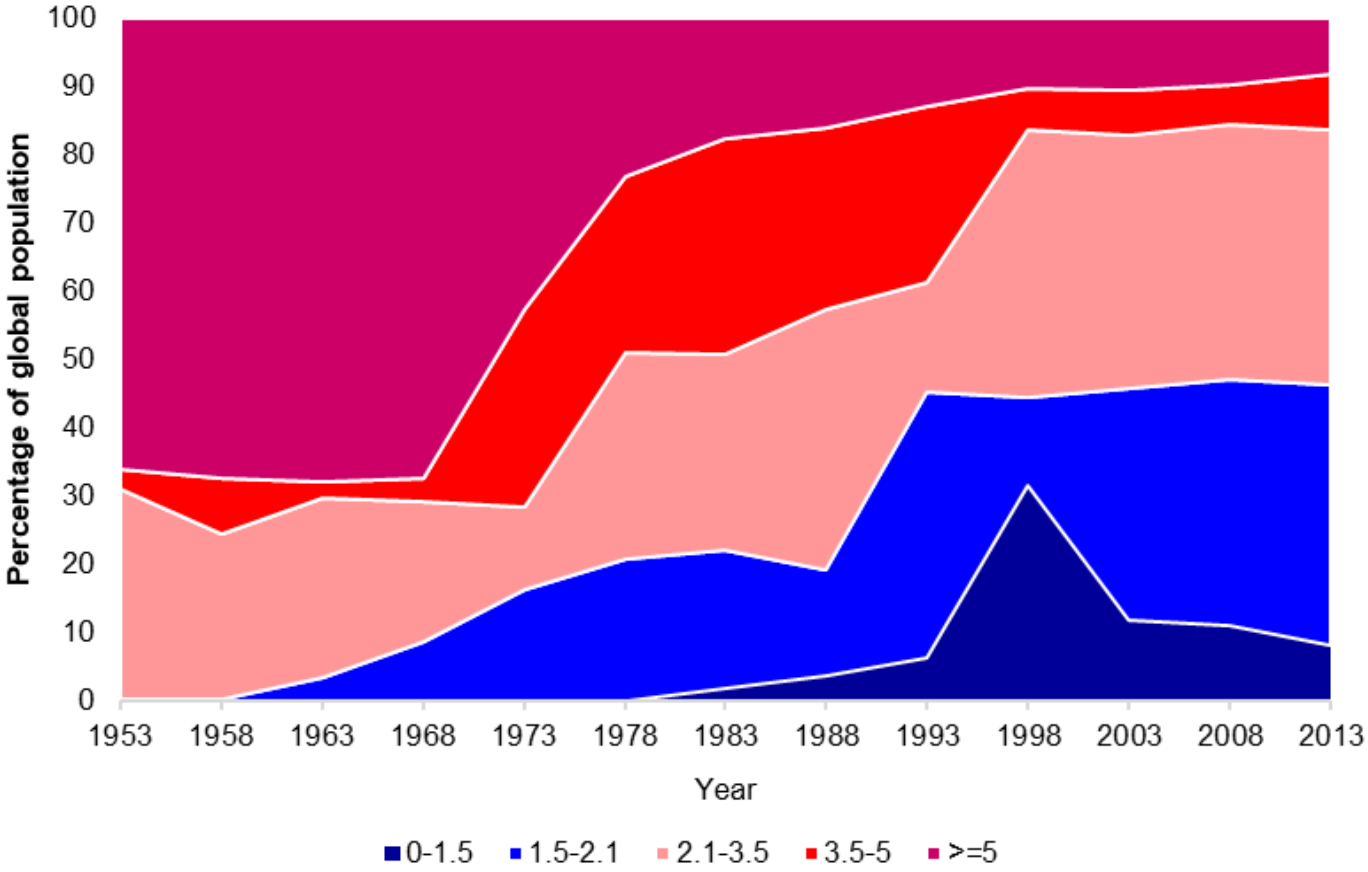
The distribution of the world's population by levels of total fertility from 1953 to 2013 (figure 3) shows that the proportion of the world's population living in high-fertility countries declined rapidly. Whereas, in 1965-1970, two thirds of the world's population lived in high-fertility countries, in 1995-2000, 30 years later, this share fell to 10 per cent and by 2010-2015, it declined further to 8 per cent.

Similarly, the share of the world's population living in countries with total fertility above the replacement level also declined noticeably. In the 1950s, almost the entire world's population, except for the populations of four rather small countries,[6] lived in countries with fertility above the replacement level. Thirty years later (1980-1985), that share declined to less than 80 per cent and another 30 years later, it fell below 55 per cent of the world's population. At the same time, the share of the world's population living in countries with below-replacement fertility increased from almost zero in the 1950s to more than 45 per cent in 2010-2015. Projections suggested that by 2020-2025, there will be an even split of the world's population living in countries above and below the replacement-fertility level.

In the late 1970s, a first in human history, fertility in several countries dropped to very low levels of 1.5 children per woman and below (dark blue area of figure 3). The share of the world's population living in countries with very low fertility peaked in 1995-2000 at nearly one third of the world's population, and then declined to 8 per cent in 2010-2015 due to recent fertility increases in low fertility countries.

[6] Channel Islands, Estonia, Latvia and Luxembourg.

Figure 3.
Proportion of the world's population by levels of total fertility



Changes in fertility

The net change in total fertility rates between 1970-1975 and 2010-2015 was negative in 197 of the 201 countries or areas (figure 4). As indicated by the data points below the diagonal line that reflects fertility levels in 2010-2015 equal to those in 1970-1975. In 1970-1975, the median value of total fertility across all countries of the world was 5.5 births per woman, meaning that, in half the countries, total fertility had fallen to below 5.5 births per woman and half the countries had total fertility above that median value. Forty years later, in 2010-2015, the median fertility had fallen to 2.3 births per woman, a decline of 3.2 births per woman over that period. Countries where changes in total fertility were close to the changes in the median fertility were located mostly in Asia and Latin America and the Caribbean. In figure 4, such countries are located close to the large green square showing the change of the world's median fertility level. Examples of countries with magnitudes of change similar to the median include the Dominican Republic, Myanmar, Paraguay and Turkey. Only four countries experienced net increases in total fertility over this period. Among high-fertility countries, fertility increased in Niger and Timor-Leste, and among low-fertility countries fertility increased in Finland and Sweden.

Fertility declined at a more rapid pace than the median decline in about one quarter of all countries since 1970-1975. Out of the 51 countries with such "accelerated" fertility declines, 26 were in Asia, 13 in Africa, 10 in Latin America and the Caribbean and 2 in Oceania. Exceptionally large declines occurred in Libya, Maldives, Mongolia and Kuwait, where total fertility fell by more than 4.8 births per woman. Among the countries that reached below-replacement levels in 2010-2015, total fertility had declined particularly fast in Iran, Qatar, Viet Nam and the United Arab Emirates, countries that had total fertility of more than six births per woman in 1970-1975.

Of the countries with fertility levels above the median in the 1970s, 52 experienced slower fertility declines than the median fertility decline of 3.2 births per woman. These "delayed" fertility transition countries are inside the blue parallelogram (figure 4). A majority (37) of these countries were in sub-Saharan Africa, and most of them belonged to the group of LDCs. Among the remaining delayed transition countries, two were in Northern Africa, six in Asia, three in Latin America and the Caribbean, and four in Oceania.

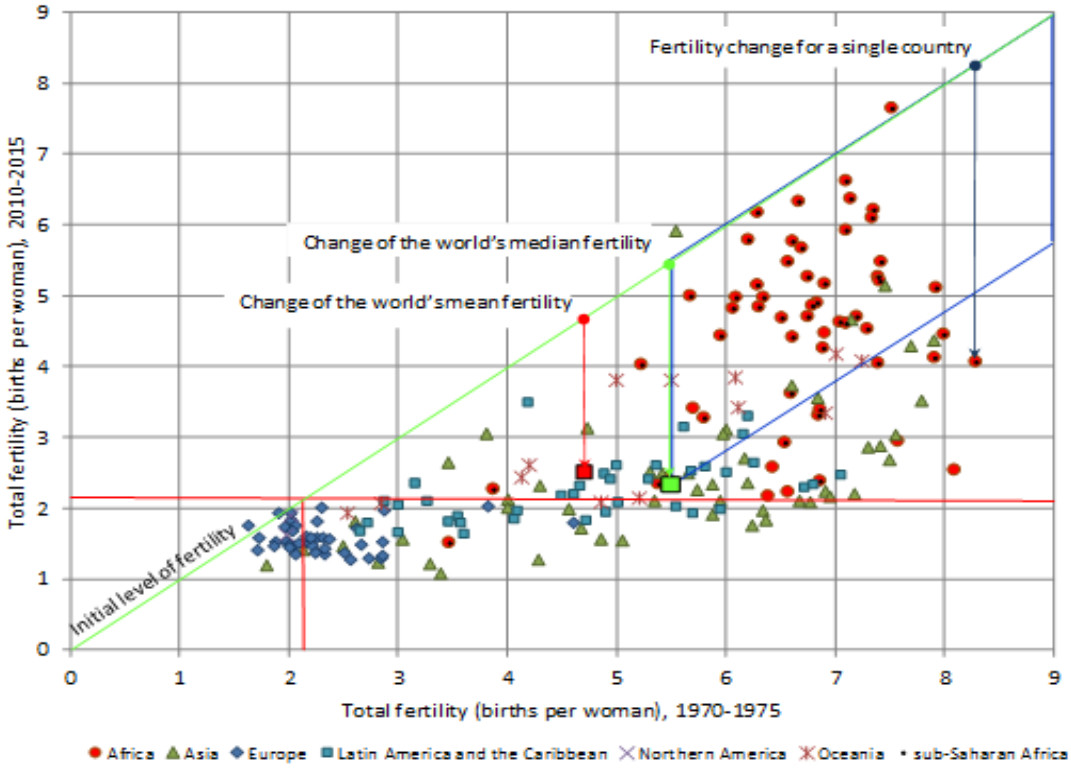
The overall fertility decline of 2.0 births per woman in Africa during the 40-year period between 1970-1975 and 2010-2015, summarized fertility trends in African countries. About 50 per cent of the fertility decline in the region was attributed to declines in total fertility in Northern Africa, particularly in Egypt, Algeria and Morocco; another 30 per cent was due to fertility reductions in Eastern Africa, as experienced by Ethiopia and Kenya; and 15 per cent could be ascribed to fertility declines in Southern Africa in a single country, namely South Africa. In Western and Middle Africa, fertility changes were very small.

[7] Comparing median or mean total fertility at two points in time masks the heterogeneity of fertility trends among individual countries. For many countries fertility trends were far from uniform. Fertility trends for individual countries can be explored in annex figure 3 of the 2015 World Fertility Report.

[8] See the large square green marker in figure 4.

The aggregate fertility declines for sub-Saharan Africa observed over the same period was 1.7 births per woman and was due generally to declines that took place in Eastern Africa, that accounted for 50 per cent of the total change, and in Southern Africa, that accounted for another 25 per cent of the total change. In order of the magnitude of their contribution to fertility declines in sub-Saharan Africa, South Africa, Ethiopia, Kenya and the United Republic of Tanzania, taken together, contributed more than half of the fertility decline in sub-Saharan Africa between 1970-1975 and 2010-2015.[9]

Figure 4.
Change in total fertility for countries and areas between 1970-1975 and 2010-2015



Source: United Nations (2015a).

NOTES: The vertical distance between the diagonal labelled "Initial level of fertility" and a given data point shows the change in total fertility between 1970-1975 and 2010-2015. The large green square shows the position of the world's median fertility in 1970-1975 and 2010-2015: 5.5 and 2.3, respectively. In 1970-1975, half the countries of the world had total fertility levels below 5.5 and half were above this level. In 2010-2015, half the countries of the world had total fertility levels below 2.3 and half were above this level. The large red square shows the position of the world's mean fertility in 1970-1975 and 2010-2015: 4.7 and 2.5 respectively. The blue parallelogram in the upper right corner highlights the countries with "delayed" fertility transitions, with total fertility higher than the median level in 1970-1975 and a decline from 1970-1975 to 2010-2015 slower than the decline in median fertility during that same time.

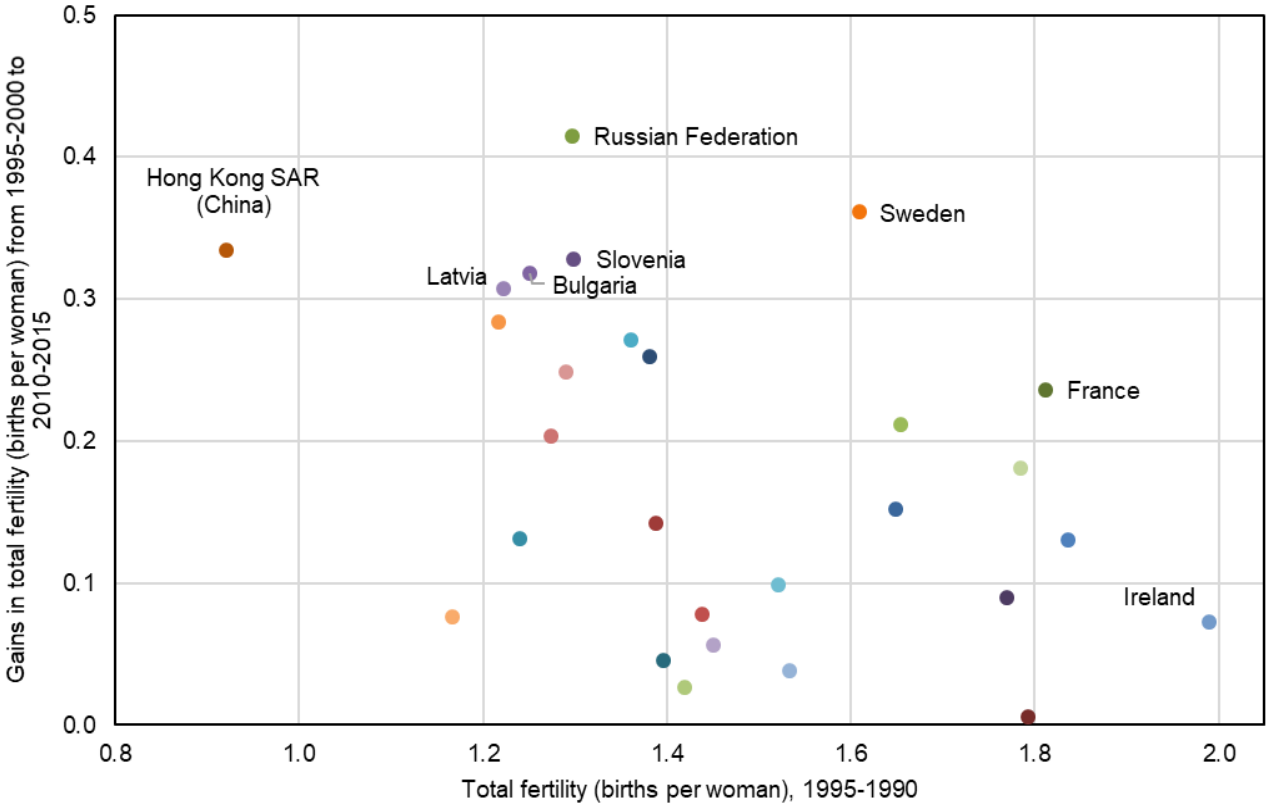
Continued reductions in fertility led to a growing number of countries that had reached below-replacement fertility levels in 2010-2015, indicated by their position below the red horizontal line in figure 4. In the early 1970s, 19 out of the 20 countries with below-replacement fertility levels were in Europe or Northern

[9] The percentage of the decline attributed to a group of countries incorporates both the magnitude of the fertility decline and the total population of the countries.

America, whereas the 83 countries with below-replacement fertility in 2010-2015 comprised all 42 countries of Europe and Northern America and included also 20 countries in Asia, 17 in Latin America and the Caribbean, 3 in Oceania and 1 in Africa.[10] In 25 countries, total fertility fell to very low levels of 1.5 or fewer children per woman in 2010-2015. Seventeen of these very low fertility countries were in Europe, seven in Asia and one in Africa.

Between 1995-2000 and 2010-2015, total fertility increased in 28 countries with below-replacement fertility levels. The largest fertility gains were observed in the Russian Federation, followed by Sweden, Hong Kong special administrative region (SAR) of China, Slovenia, Bulgaria and Latvia;[11] all of which have experienced increases in total fertility larger than 0.3 births per woman (figure 5). However, in countries and areas with very low fertility, total fertility is not expected to reach the replacement level at current paces of fertility recovery until the year 2030 in the case of the Russian Federation, until 2040 in Bulgaria and Latvia, and until 2055 in Hong Kong SAR of China.

Figure 5.
Gains in total fertility between 1995-2000 and 2010-2015 in countries and areas with below-replacement fertility in 2010-2015



Source: United Nations (2015a).

[10] Mauritius.

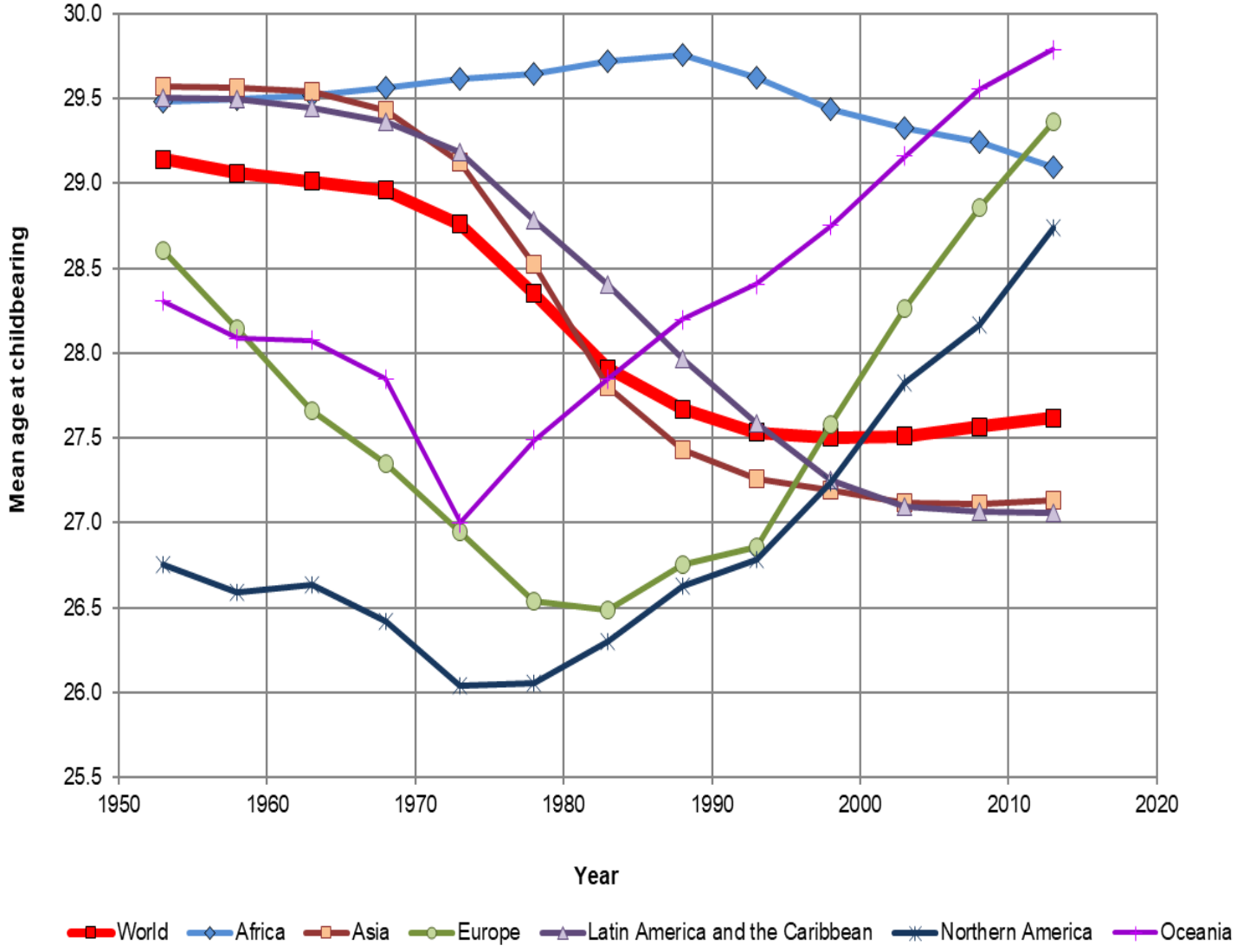
[11] The countries are listed in order by the size of the fertility gains experienced from largest to smallest.

Trends in mean age at childbearing

Along with the transition to lower levels of total fertility, the world has witnessed substantial changes in the age patterns of childbearing. Figure 6 presents the levels and trends in the mean age at childbearing (MAC), globally and for all regions.[12] At the world level, the MAC declined from 29.1 years in 1950-1955 to 27.5 years in 1990-1995 and remained around this level through 2015. The trends in the age at childbearing in Asia and in Latin America and the Caribbean followed roughly the trend of the global average, with some delay in the case of Latin America and the Caribbean. Starting in the early 1970s, the MAC declined very rapidly, especially in Asia. However, by the end of the 1990s, the decline had decelerated and the average has since remained stable, at around 27 years in both regions. Initially, the MAC in Europe, Northern America and Oceania declined through the mid-1970s, dropping to the lowest levels recorded in any major region and reversed since, reflecting the continued and sustained postponement of fertility towards older reproductive ages. In Europe, for example, the MAC declined from 28.6 years of age in 1950-1955 to a minimum of 26.5 years in 1980-1985, and then rose over the next 30 years to 29.4 years of age in 2010-2015. In Oceania, the MAC reached an all-time high with 29.8 years of age in 2010-2015, from a low of 27.0 years of age in the mid-1970s, driven mostly by the steep rise in the average age at childbearing in Australia and New Zealand. The evolution of the MAC in Africa was different from the rest of the world, as it has been relatively stable over the past 60 years, with variations of less than one year. Many countries in this region are still at the beginning of the fertility transition, and the MAC in Africa has remained above 29 years of age, although there are signs of a gradual decline since the 1990s (see the blue line in figure 6). The estimates of the MAC in Africa pertaining to earlier years, especially to years before 1970, should be interpreted with caution, given the limited availability of reliable data for this region.

[12]The mean age at childbearing (MAC) is the mean age of mothers at the birth of their children, assuming that women are subject throughout their lives to the age-specific fertility rates observed in a given time period.

Figure 6.
Mean age at childbearing (in years), world and regions, 1990-1995 to 2010-2015



Source: United Nations (2015a).

Adolescent fertility

Reducing adolescent pregnancies and adolescent birth rates, measured as the number of births per 1,000 women aged 15-19 years, is an important priority for many Governments (United Nations, 1994; United Nations, 2013).[13] The ABR was one of the indicators of the Millennium Development Goals target to achieve universal access to reproductive health and it has also been included as an indicator within health Goal 3 to monitor progress in the implementation of the 2030 Agenda for Sustainable Development adopted by the United Nations in 2015.[14]

Early pregnancies are associated with a wide range of risks for young mothers and their newborns. Elevated health risks (Nove and others, 2014; WHO, 2014) and increased risks of death of newborns are of particular concern in low- and middle-income countries, where the risk of deaths of infants born to teenage mothers is about 50 per cent higher than the risk for mothers aged 20 to 29 years (WHO, 2014).

Unsafe abortions often lead to maternal deaths, or lingering post-abortion health problems. Young women are particularly vulnerable, as they are more likely than older women to undergo late-term abortions (Lim and others, 2012) and to have repeat abortions (Collier, 2009). Globally, about three million teenage girls undergo unsafe abortions every year (Shah and Ahman, 2012; WHO, 2014). Apart from health risks for the mother and the child, adolescent pregnancies curtail opportunities for continued education and socio-economic advancement, limiting adolescents' access to good job opportunities, in many cases leading to lower future earnings, the perpetuation of poverty and social and political exclusion (United Nations, 2013).

Adolescent birth rates have declined globally from an average of 66 births per 1,000 women aged 15-19 years in 1990-1995 to an average of 46 births in 2010-2015 (figure 7). In 2010-2015, Africa had the highest ABR (98 births), followed by Latin America and the Caribbean with an average ABR of 67 births per 1,000 women. At the subregional level, the highest average ABRs were observed in Middle Africa (133 births), Western Africa (120 births) and Eastern Africa (99 births). Other subregions with ABRs above the world's average were Central America (69 births), South America (66 births) and the Caribbean (60 births).

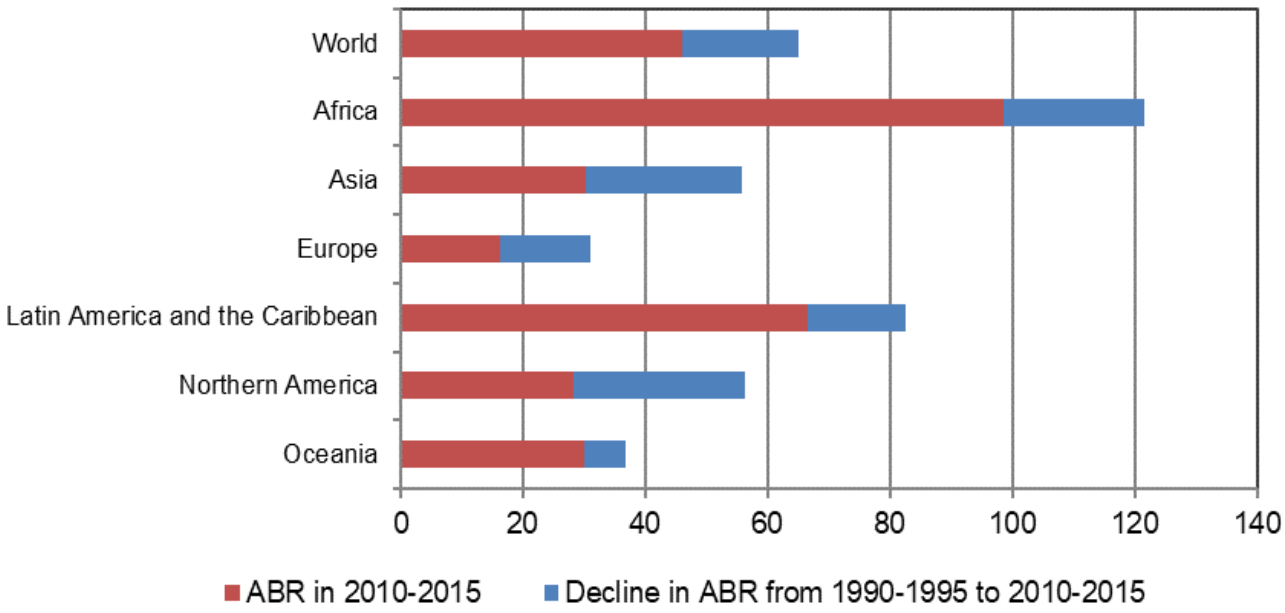
In 1990-1995, the average ABR exceeded 100 births per 1,000 women aged 15-19 years (considered, for this analysis, to be "high adolescent fertility") in 56 countries: 41 in Africa, 8 in Asia, and 7 in Latin America and the Caribbean. In 2010-2015, only 25 countries, all but one of them in Africa, had such high adolescent fertility. Although the average ABR remains relatively high in Africa, important progress was made since the early 1990s. By 2010-2015, the ABR had fallen below 100 births per 1,000 women aged 15-19 years in 17 African countries. Rapid declines in ABRs of more than 50 births per 1,000, were recorded in 21 countries, of which, 9 are in Africa, 9 in Asia and 3 in Latin America and the Caribbean. Particularly fast declines occurred in Afghanistan, Bhutan, Gabon, Maldives, Uganda and Yemen, where adolescent fertility fell by more than 70 births per 1,000 during the 20 years between 1990-1995 and 2010-2015. Globally, adolescent fertility declined in all but 10 of the 201 countries or areas of the world over this period, during which the number of countries with high adolescent birth rates fell by more than half.

[13] Fertility rates in the age group 10-14 years of age, are not discussed in this analysis due to the current lack of empirical data and estimates.

[14] Available from http://www.un.org/sustainabledevelopment/sustainable-development-goals/.

Among the 10 countries where the ABR increased since 1990-1995, the largest increases took place in Azerbaijan, from 38 to 54 births per 1,000 women aged 15-19 years; Iraq, from 67 to 80 births per 1,000 women; and Somalia, from 102 to 110 births per 1,000. It is important to note that these increases took place during a period in which these countries' total fertility levels was declining, in some cases substantially. The remaining countries experienced increases of less than eight births per 1,000 women aged 15-19 years.

Figure 7.
Adolescent birth rate for the world and regions in 2010-2015 and decline since 1990-1995 (births per 1,000 women aged 15-19 years)



Source: United Nations (2015a).

Contribution of fertility to population growth

Population growth can be attributed to four demographic components: fertility, mortality, migration and the age structure of a given population, each of which can have a positive or negative impact on population growth. The contribution of each demographic component to future population growth was assessed in the present analysis by making cohort-component population projections under four projection scenarios, or "variants": standard, natural, replacement and momentum (United Nations, 2015c).[15]

The world's population is projected to increase by 40 per cent,[16] from 6.9 billion in 2010 to 9.7 billion in 2050 according to the medium projection variant of the 2015 Revision. Out of this 40 per cent, 26 per cent, or more than half of the projected population growth, is due to population momentum, 8 per cent is due to above-replacement fertility and 6 per cent can be credited to mortality declines. Population momentum[17] alone is projected to account for the addition of 1.8 billion people to the world's population between 2010 and 2050.

The more developed regions are projected to experience a slight increase in their total population over the period 2010 to 2050, of about 4 per cent of the 2010 population, from 1,2 billion to 1.3 billion people. Declining mortality and positive net migration are expected provide positive contributions to population growth, while population momentum and below-replacement fertility will contribute negatively. Low fertility is the most important driver of the negative population change expected to characterize these countries. Its contribution of negative 9.8 per cent or a decline of 121 million people, largely offsets the expected population increase resulting from positive net migration of 10.2 per cent or 123 million people (United Nations, 2015a) The contribution of mortality decline to population growth is 5.8 per cent or 72 million people, and the contribution of the population momentum is -1.9 per cent or -23 million people.

The population in the less developed regions is projected to increase by 48 per cent, from 5.7 billion to 8.4 billion people between 2010 and 2050. The demographic transition in these countries started later than in the more developed regions and in most countries, the population age structures are still young. In this group of countries, the largest positive impact on population growth can be attributed to the population momentum (about 32 per cent of the 2010 population, or a total of 1.8 billion people). Fertility, although quite diverse across countries in the less developed regions, is expected to account for an additional 12 per cent (or a total of 695 million people) to population growth in this group of countries relative to 2010 while declining mortality is expected to contribute a 7 per cent growth (or a total of 399 million people). The contribution of migration is small but negative, about -2 per cent (or a total of -114 million people).

Population growth is expected to be fastest in the LDCs. The projection indicates that the population of the LDCs will increase by more than a billion people, from 847 million in 2010 to 1.9 billion in 2050. This represents a growth of 124 per cent during that period. The growth is largely due to above-replacement fertility, which may account for 73 per cent growth from the 2010 population, representing more than 600 million

[15] For further details, refer to: K. Andreev, V. Kantorová and J. Bongaarts, (2013) and United Nations (2015c).
[16] The percentage values discussed here are percentage increases of the total population until 2050 relative to the total population in 2010.
[17] The population momentum is the population growth resulting from constant levels of: mortality, zero net migration and replacement-level fertility. In this situation, a youthful age structure promotes more rapid growth, because the births being produced by the relatively large number of women of reproductive age outnumber the deaths occurring in the total population. See also K. Andreev V. Kantorová and J. Bongaarts (2013). Demographic components of future population growth. Technical Paper No. 2013/3. New York: United Nations.

people. The second largest contributor is expected to be the young age structure in this group of countries: 48 per cent or more than 400 million people will be added due to the effects of the population momentum. The contributions of mortality declines and migration are small and partially offsetting each other, at 8 and -6 per cent, or 68 million and -50 million people, respectively.

Among regions, population growth over the 40 years from 2010 to 2050, is expected to be largest in Africa: more than 1.4 billion people will be added to the population of the continent (figure 8). Fertility is by far the largest contributor to population growth in this region. More than 900 million people or 87 per cent of the 2010 population in Africa, will be added as a result of high fertility alone (figure 8).

In Asia, more than 1 billion people will be added during the same time period. However, unlike Africa, the major contributor will be population momentum, adding 1.1 billion people, of which 440 million will be contributed by India alone. Fertility will contribute negatively to population growth in this region, with a reduction of 192 million people (figure 8), largely due to below-replacement fertility levels of China.[18]

Fertility will also make large negative contributions to population growth in Europe, Latin America and the Caribbean, and Northern America (figure 8). In Oceania, the contribution of fertility will be negative in Australia and New Zealand but will be outweighed by the positive contribution of fertility in the other countries of this region. Negative population growth due to below-replacement fertility is projected to take place in Europe, Northern America and Latin America and the Caribbean. This negative effect will be offset by positive net migration in Europe, by positive net migration and population momentum in Northern America and, for the most part, by population momentum in Latin America and the Caribbean. Mortality is projected to be declining in the future and its impact on the projected total population growth is expected to be positive in all regions. Europe, with the longest history of below-replacement fertility, is now the only region in the world that experiences a negative population momentum. Even if fertility was brought immediately to the replacement level, the population of Europe would still decline if there was zero net migration and mortality levels did not change.

Future trends in fertility will have a major impact on projected population growth in many countries in Africa. Nigeria's future fertility trends will make the largest absolute contribution to population growth globally. Nigeria's fertility will also contribute more to the global population growth than any other demographic component, except for the contribution of India's population momentum. In Nigeria, the fertility component alone is estimated to account for the addition of 170 million people by 2050 (or more than double Nigeria's population in 2010). In other populous African countries with high fertility, such as the Democratic Republic of the Congo, Egypt, Ethiopia, Kenya, Niger, Uganda and the United Republic of Tanzania, the fertility component is expected to account in total for more than 365 million additional people by 2050 (figure 9). Apart from Africa, the largest contributions of fertility to absolute population growth are expected in Pakistan and Iraq, 60 and 33 million additional people, respectively.

[18] Recent changes in China's fertility policy are not incorporated into the projections of fertility for China.

Figure 8.
Projected population growth during 2010-2050 by regions, total net change and change attributed to each of the demographic components

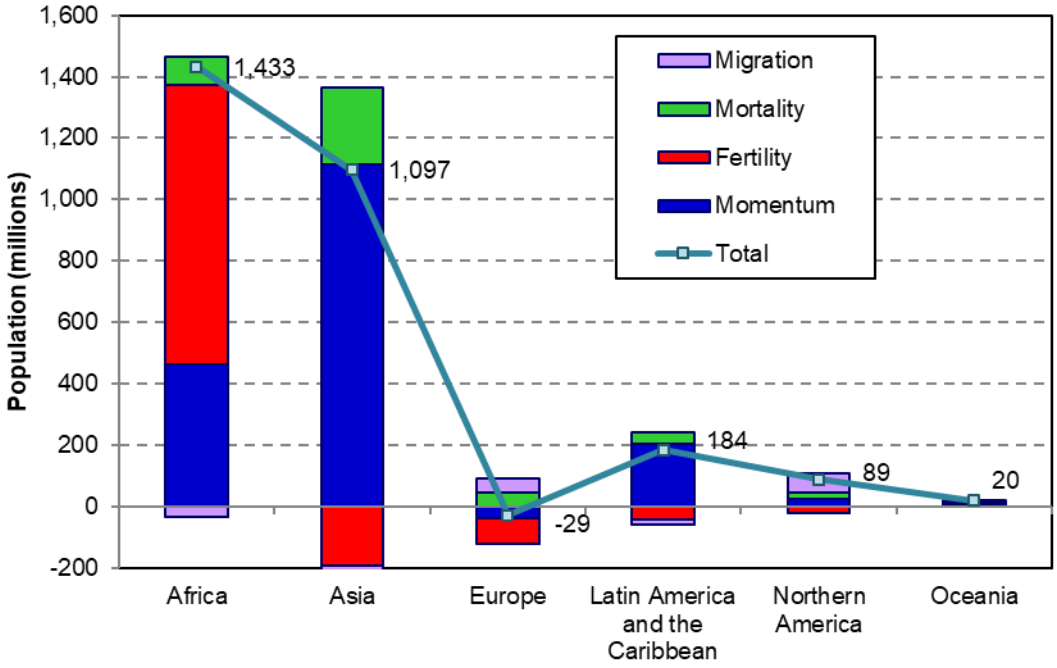
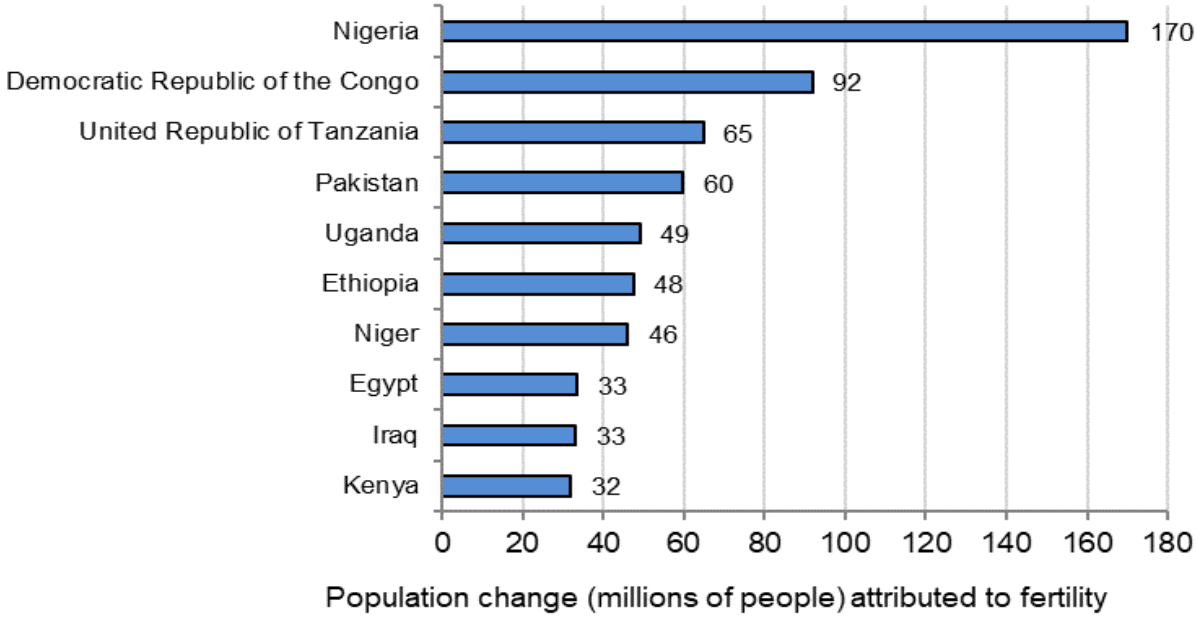


Figure 9.
Countries with the largest absolute contributions of fertility to population growth between 2010 and 2050 (million)



Source: United Nations (2015a).

Box 1. Gaps in fertility data

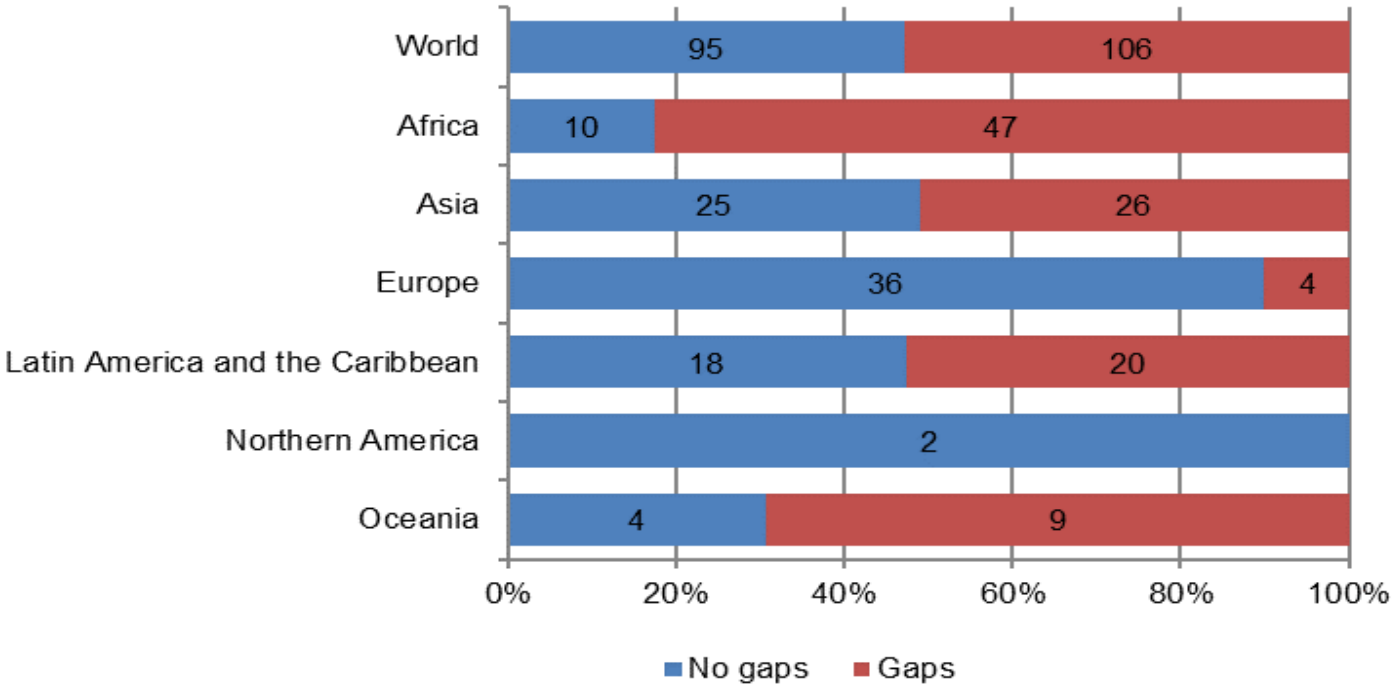
Ensuring complete coverage of birth registration is one of the targets of the 2030 Agenda for Sustainable Development: "By 2030, provide legal identity for all, including birth registration" (target 16.9).[19] The primary information required for estimating fertility is the number of live births by age of the mother during a specified time interval and the number of women by age over the same time interval. Most fertility estimates, however, are not obtained from complete civil registration and vital statistics systems. Rather, the data are more often than not derived either from population censuses or from sample household surveys. To help assess the quality, sources and uncertainty of fertility estimates for all countries in the world, the Population Division collects, organizes and documents available empirical fertility data and publishes all information, including documentation (United Nations, 2015b).

There are significant fertility data gaps for the period 1950-2015. A country is considered to have gaps in its fertility data if there are no empirical data in any of the decades since 1950 or for the period 2010-2015.[20] At the world level, gaps in fertility data exist in 106 out of 201 countries or areas with populations of at least 90,000 in 2015 (figure 10). The most extensive data gaps are found in Africa, where 47 out of 57 countries or areas (more than 80 per cent) lack data for some portion of the period from 1950 to 2015. In Oceania, 9 out of 13 countries (about 70 per cent) have data gaps, and in Asia and Latin America and the Caribbean, such gaps are present in about half of the countries in each of these regions. The situation is much better in Europe, where only four countries (United Kingdom, Channel Islands, Latvia and Moldova), or about 10 per cent of all countries, don't have complete fertility data sets. In Northern America, both Canada and the United States of America have complete fertility statistics for the entire period.

[19] Available from https://sustainabledevelopment.un.org/sdg16.

[20] Computations are based on the 2015 World Fertility Data (United Nations, 2015b). Outliers and unadjusted empirical estimates of total fertility rates have been excluded.

Figure 10.
Data gaps in fertility data by region



Source: United Nations (2015a).

NOTE: Based on tabulations from United Nations (2015b). A country is classified as a country with "gaps in fertility data" if there are no empirical data for at least for one decade since 1950 or for the period 2010 and later.

Summary and conclusions

The analysis of trends in fertility from 1950 to 2050 and beyond shows steady fertility declines in most countries in the world. Continuous declines are characteristic of most of the high- and middle-high-income countries in Europe and Northern America, but are also observed in much of Oceania, Asia, Latin America and the Caribbean, and in Northern and Southern Africa. Similar trends, albeit with a time lag, are beginning to take place in low-income countries in Africa and Asia. More countries are reaching below-replacement fertility levels resulting in population ageing and, in some cases, in population decline (negative growth). At the other extreme, the least developed countries in sub-Saharan Africa are still characterized by high fertility levels.

Childbearing in adolescence has undergone major transformations over the observed period. Between 1990-1995 and 2010-2015, the world's average adolescent birth rate declined by nearly 30 per cent, from 65 births per 1,000 women aged 15-19 years to 46 births per 1,000. The reductions were largest in Asia, Europe and Northern America and were modest in Africa, Latin America and the Caribbean, and Oceania. In Latin America and Caribbean in particular, adolescent fertility has declined much slower than the fertility rates in all the other age groups.

The United Nations projections (United Nations, 2015a) foresee fertility declines in high-fertility countries that would lead to below-replacement fertility levels in most, but not all countries by the end of this century. At the other end of the spectrum, above-replacement fertility in Africa alone will add more than 900 million people until 2050, which would account for 87 per cent of the projected population growth in Africa.

There is no compelling evidence that recent increases in period fertility in some European countries will be emulated by countries in other regions with very low fertility, such as Eastern Asia. The projections of future fertility levels and trends (United Nations, 2015a) indicate that very low fertility levels are likely to eventually recover towards replacement levels. Despite this feature of the projections, below-replacement fertility is projected to be the single largest contributor to population decline in the more developed regions, particularly in Europe, over the period 2010 to 2050.

Continued investments in education and health, including increased access to family planning and reproductive health care services, especially in the poorest countries, will add to the forces underlying the fertility transitions and contribute to the attainment of the goals and targets of the 2030 Agenda for Sustainable Development.

References

Andreev, K., V. Kantorová and J. Bongaarts (2013). Demographic Components of Future Population Growth. Technical report, Population Division, United Nations. Available from www.un.org/en/development/desa/population/publications/technical/2013-3.shtml.

Bongaarts, J., and R. A. Bulatao (1999). Completing the demographic transition. *Population and Development Review*, vol. 25, No. 3, pp. 515-529.

Collier, J. (2009). The rising proportion of repeat teenage pregnancies in young women presenting for termination of pregnancy from 1991 to 2007. *Contraception*, vol. 79, No. 5, pp. 393-396.

Lim, L., and others (2012). Profiles of women presenting for abortion in Singapore: focus on teenage abortions and late abortions. *European Journal of Obstetrics and Gynecology and Reproductive Biology*, vol. 160, pp. 219-222.

Nove A., and others (2014). Maternal mortality in adolescents compared with women of other ages: Evidence from 144 countries. *Lancet Global Health*, vol. 2, No. 3, pp. e155-e164. doi: 10.1016/S2214-109X (13)70179-7.

Shah, I. H., and E. Ahman (2012). Unsafe abortion differentials in 2008 by age and developing country region: High burden among young women. *Reproductive Health Matters*, vol. 20, No. 39, pp. 169-173.

United Nations (1994). Report of the International Conference on Population and Development. United Nations: A/CONF.171/13/Rev.1.

United Nations, General Assembly (2018). Resolution 71/313, Global indicator framework for the Sustainable Development Goals and targets of the 2030 Agenda for Sustainable Development. A/RES/71/313.

United Nations, Department of Economic and Social Affairs, Population Division (2013). Adolescent Fertility since the International Conference on Population and Development (ICPD) in Cairo. United Nations: New York. Available from http://www.un.org/en/development/desa/population/publications/pdf/fertility/Report_Adolescent
-Fertilitysince-ICPD.pdf.

_____ (2015a). World Population Prospects: The 2015 Revision. United Nations: New York.

(2015b). World Fertility Data 2015. POP/DB/Fert/Rev2015. United Nations, New York. Available from http://www.un.org/en/development/desa/population/publications/dataset/fertility/wfd2015.shtml.

Annex table

Key fertility indicators, and the contribution of fertility to population growth 2010-2050

Major area, region, country or area	Total fertility rate			Mean age at childbearing		Adolescent birth rates		Contribution of fertility to population growth, 2010-2050	
	1970-1975	2010-2015	2045-2050	1970-1975	2010-2015	1970-1975	2010-2015	Absolute (thousands)	Percentage
WORLD	**4.48**	**2.51**	**2.25**	**29**	**28**	**75**	**46**	**572,296**	**8**
More developed regions	2.15	1.67	1.82	27	29	39	19	-121,293	-10
Less developed regions	5.42	2.65	2.30	29	27	85	50	697,648	12
Least developed countries	6.73	4.27	2.91	29	29	152	97	615,112	73
Less developed regions, excluding LDCs*	5.25	2.37	2.09	29	27	77	39	82,536	2
Less developed regions, excluding China	5.68	2.98	2.37	29	28	110	59	941,169	22
Sub-Saharan Africa	**6.75**	**5.10**	**3.23**	**30**	**29**	**152**	**109**	**847,602**	**101**
AFRICA	**6.67**	**4.71**	**3.11**	**30**	**29**	**145**	**98**	**911,943**	**87**
Eastern Africa	**7.13**	**4.94**	**3.02**	**30**	**29**	**142**	**99**	**336,826**	**98**
Burundi	7.34	6.08	3.69	31	31	48	30	13,551	143
Comoros	7.05	4.60	2.86	30	30	128	74	540	77
Djibouti	6.85	3.30	2.09	32	32	53	23	110	13
Eritrea	6.62	4.40	2.67	31	30	115	61	3,556	76
Ethiopia	7.10	4.59	2.28	31	30	119	67	47,565	54
Kenya	7.99	4.44	2.85	29	29	181	94	31,883	79
Madagascar	7.30	4.50	3.03	29	28	163	123	21,164	100
Malawi	7.40	5.25	3.32	30	29	197	140	18,650	126
Mauritius	3.47	1.50	1.61	28	28	56	29	-258	-21
Mayotte	7.91	4.10	2.48	29	30	186	62	143	69
Mozambique	6.58	5.45	3.39	30	29	127	154	28,571	117
Réunion	3.88	2.24	1.84	29	28	62	42	-13	-2
Rwanda	8.28	4.05	2.21	32	30	75	30	4,857	47
Seychelles	5.38	2.33	1.86	28	27	146	60	-0	-0
Somalia	7.10	6.61	3.79	32	30	54	110	15,297	160
South Sudan	6.90	5.15	3.01	29	30	148	78	8,568	85
Uganda	7.10	5.91	3.37	29	28	182	127	49,095	148
United Republic of Tanzania	6.75	5.24	3.42	29	28	155	123	64,849	142
Zambia	7.43	5.45	3.73	30	29	189	103	20,707	149
Zimbabwe	7.40	4.02	2.43	30	28	174	113	7,991	57
Middle Africa	**6.45**	**5.82**	**3.38**	**29**	**29**	**180**	**133**	**164,407**	**126**
Angola	7.35	6.20	3.64	28	28	234	176	31,662	149
Cameroon	6.31	4.81	3.01	29	29	190	116	17,033	83
Central African Republic	5.95	4.41	2.55	29	30	175	98	2,105	47

Major area, region, country or area	Total fertility rate			Mean age at childbearing		Adolescent birth rates		Contribution of fertility to population growth, 2010-2050	
	1970-1975	2010-2015	2045-2050	1970-1975	2010-2015	1970-1975	2010-2015	Absolute (thousands)	Percentage
Chad	6.67	6.31	3.46	28	28	209	152	15,738	132
Congo	6.35	4.95	3.29	29	28	147	125	4,615	114
Democratic Republic of the Congo	6.29	6.15	3.43	29	30	156	124	91,777	139
Equatorial Guinea	5.68	4.97	2.70	30	29	130	114	539	74
Gabon	5.23	4.00	2.54	28	29	201	111	788	51
Sao Tome and Principe	6.52	4.67	3.04	28	30	137	89	149	87
Northern Africa	6.40	3.27	2.34	29	29	121	47	64,342	32
Algeria	7.57	2.93	1.96	30	31	103	11	4,004	11
Egypt	5.70	3.38	2.38	28	28	128	55	33,458	41
Libya	8.10	2.53	1.77	29	33	132	6	-105	-2
Morocco	6.43	2.56	1.88	30	30	128	33	1,039	3
Sudan	6.90	4.46	2.85	29	29	152	84	26,517	73
Tunisia	6.39	2.16	1.83	31	31	43	7	-525	-5
Western Sahara	6.57	2.20	1.68	30	31	131	23	-46	-9
Southern Africa	5.57	2.51	1.92	31	28	82	54	-539	-1
Botswana	6.55	2.90	1.97	30	30	158	39	240	12
Lesotho	5.80	3.26	2.21	30	28	82	90	386	19
Namibia	6.60	3.60	2.34	30	29	139	80	978	45
South Africa	5.47	2.40	1.87	31	28	76	51	-2,343	-5
Swaziland	6.87	3.36	2.13	30	28	151	86	200	17
Western Africa	6.79	5.54	3.53	30	30	171	120	346,908	113
Benin	6.83	4.89	2.96	31	29	93	90	7,930	83
Burkina Faso	6.70	5.65	3.34	29	29	169	115	19,361	124
Cabo Verde	6.86	2.37	1.74	30	28	116	75	-17	-4
Côte d'Ivoire	7.93	5.10	3.39	30	29	217	135	19,075	95
Gambia	6.20	5.78	3.48	28	30	216	116	2,369	140
Ghana	6.90	4.25	2.83	30	30	142	70	14,791	61
Guinea	6.29	5.13	3.04	29	29	181	146	10,658	97
Guinea-Bissau	6.10	4.95	3.00	29	29	108	99	1,240	76
Liberia	6.80	4.83	3.02	29	29	214	117	3,577	90
Mali	7.15	6.35	3.57	29	29	194	179	23,873	157
Mauritania	6.75	4.69	3.10	30	30	121	82	2,872	80
Niger	7.52	7.63	4.87	29	29	214	208	46,049	283
Nigeria	6.61	5.74	3.59	30	30	168	117	170,052	107
Senegal	7.41	5.18	3.36	30	30	188	87	16,108	124
Sierra Leone	6.06	4.79	2.53	29	29	191	125	3,179	55
Togo	7.20	4.69	3.00	31	29	145	92	5,793	91
ASIA	5.06	2.20	1.92	29	27	70	30	-192,889	-5
Eastern Asia	4.43	1.55	1.73	29	27	27	7	-270,061	-17
China	4.85	1.55	1.74	29	26	30	8	-235,946	-18
China, Hong Kong SAR	3.29	1.20	1.63	29	32	18	4	-1,361	-19

Major area, region, country or area	Total fertility rate			Mean age at childbearing		Adolescent birth rates		Contribution of fertility to population growth, 2010-2050	
	1970-1975	2010-2015	2045-2050	1970-1975	2010-2015	1970-1975	2010-2015	Absolute (thousands)	Percentage
China, Macao SAR	1.79	1.19	1.74	31	30	6	4	-109	-20
Dem. People's Republic of Korea	4.00	2.00	1.82	30	29	4	1	-1,958	-8
Japan	2.13	1.40	1.69	28	31	5	5	-15,769	-12
Mongolia	7.50	2.68	2.10	31	29	83	19	359	13
Republic of Korea	4.28	1.26	1.60	29	31	14	2	-9,172	-19
Other non-specified areas	3.38	1.07	1.45	27	31	37	4	-6,105	-26
South-Central Asia	5.63	2.57	1.93	29	27	114	38	25,141	1
Central Asia	4.76	2.70	2.08	29	28	39	26	6,886	11
Kazakhstan	3.46	2.64	2.10	29	28	33	31	1,840	11
Kyrgyzstan	4.73	3.12	2.28	30	28	43	42	1,605	29
Tajikistan	6.83	3.55	2.46	29	28	65	39	3,652	48
Turkmenistan	6.19	2.34	1.81	31	28	30	18	-246	-5
Uzbekistan	5.65	2.48	1.89	30	27	38	18	35	0
Southern Asia	5.67	2.56	1.93	29	27	118	39	18,255	1
Afghanistan	7.45	5.13	2.09	30	29	145	88	13,022	47
Bangladesh	6.91	2.23	1.67	28	26	204	85	-16,205	-11
Bhutan	6.67	2.10	1.59	29	29	110	28	-119	-17
India	5.41	2.48	1.89	29	26	109	30	-17,423	-1
Iran (Islamic Republic of)	6.24	1.75	1.61	29	28	136	29	-16,554	-22
Maldives	7.17	2.18	1.67	28	29	212	9	-43	-13
Nepal	5.87	2.32	1.69	29	26	130	75	-3,113	-12
Pakistan	6.60	3.72	2.31	30	29	110	41	59,792	35
Sri Lanka	4.00	2.11	1.80	30	30	49	18	-1,102	-5
South-Eastern Asia	5.48	2.35	1.94	30	28	84	44	3,792	1
Brunei Darussalam	5.87	1.90	1.69	31	29	55	22	-52	-13
Cambodia	6.16	2.70	1.97	30	28	90	49	1,626	11
Indonesia	5.30	2.50	1.91	28	28	129	52	6,891	3
Lao People's Democratic Republic	5.99	3.10	1.89	30	28	105	66	956	15
Malaysia	4.56	1.97	1.72	30	31	48	13	-3,248	-12
Myanmar	5.74	2.25	1.79	30	30	91	18	-3,808	-7
Philippines	5.98	3.04	2.20	31	29	56	57	21,866	24
Singapore	2.82	1.23	1.38	28	31	25	4	-1,211	-24
Thailand	5.05	1.53	1.58	30	27	61	45	-13,350	-20
Timor-Leste	5.54	5.91	2.99	30	30	58	52	1,272	120
Viet Nam	6.33	1.96	1.92	32	27	19	36	-7,150	-8
Western Asia	5.70	2.91	2.24	28	29	107	42	48,239	21
Armenia	3.04	1.55	1.63	27	26	41	26	-598	-20
Azerbaijan	4.29	2.30	1.94	29	26	29	54	-294	-3
Bahrain	5.95	2.10	1.67	30	30	74	14	-88	-7
Cyprus	2.49	1.46	1.60	28	30	21	5	-219	-20
Georgia	2.60	1.81	1.86	25	26	87	47	-404	-10
Iraq	7.15	4.64	3.17	30	29	121	80	33,039	107

Major area, region, country or area	Total fertility rate			Mean age at childbearing		Adolescent birth rates		Contribution of fertility to population growth, 2010-2050	
	1970-1975	2010-2015	2045-2050	1970-1975	2010-2015	1970-1975	2010-2015	Absolute (thousands)	Percentage
Israel	3.81	3.05	2.38	28	30	43	12	1,912	26
Jordan	7.79	3.51	2.18	31	30	100	26	2,299	35
Kuwait	6.95	2.15	1.86	28	30	143	12	-116	-4
Lebanon	4.67	1.72	1.72	29	30	69	14	-683	-16
Oman	7.41	2.88	1.69	31	31	137	11	120	4
Qatar	6.77	2.08	1.65	28	30	89	12	-96	-5
Saudi Arabia	7.30	2.85	1.84	31	32	125	11	2,363	8
State of Palestine	7.69	4.28	2.71	30	29	111	61	3,271	80
Syrian Arab Republic	7.54	3.03	1.94	30	29	118	42	3,694	18
Turkey	5.34	2.10	1.75	27	28	113	32	-5,860	-8
United Arab Emirates	6.36	1.82	1.63	29	27	163	28	-823	-10
Yemen	7.90	4.35	2.16	31	30	169	65	10,725	45
EUROPE	2.17	1.60	1.79	27	29	36	16	-82,442	-11
Eastern Europe	2.14	1.55	1.79	26	28	37	25	-37,850	-13
Belarus	2.25	1.58	1.82	28	27	21	21	-1,094	-12
Bulgaria	2.16	1.52	1.81	25	27	71	42	-795	-11
Czech Republic	2.21	1.45	1.78	25	30	50	11	-1,315	-13
Hungary	2.06	1.34	1.64	25	29	56	19	-1,629	-16
Poland	2.23	1.37	1.56	27	29	26	15	-7,603	-20
Republic of Moldova	2.56	1.27	1.52	28	27	33	26	-1,058	-26
Romania	2.65	1.48	1.72	26	27	64	37	-2,744	-14
Russian Federation	2.03	1.66	1.87	27	28	32	27	-14,528	-10
Slovakia	2.51	1.37	1.68	26	29	41	21	-909	-17
Ukraine	2.08	1.49	1.76	26	27	39	28	-6,176	-14
Northern Europe	2.05	1.87	1.89	27	30	38	14	-5,696	-6
Channel Islands	1.86	1.46	1.62	28	30	21	8	-23	-15
Denmark	1.96	1.73	1.85	27	31	28	4	-434	-8
Estonia	2.15	1.59	1.82	27	29	34	16	-138	-10
Finland	1.62	1.75	1.82	27	30	28	7	-412	-8
Iceland	2.87	1.96	1.78	27	30	71	8	-21	-6
Ireland	3.82	2.01	1.95	30	32	22	12	-141	-3
Latvia	2.00	1.48	1.77	26	29	39	15	-264	-13
Lithuania	2.30	1.57	1.81	28	29	23	14	-347	-11
Norway	2.25	1.80	1.85	27	30	32	6	-358	-7
Sweden	1.91	1.92	1.94	27	31	33	5	-385	-4
United Kingdom	2.01	1.92	1.89	27	30	43	18	-3,171	-5
Southern Europe	2.54	1.41	1.66	28	31	32	10	-22,233	-14
Albania	4.60	1.78	1.77	30	27	29	21	-354	-12
Bosnia and Herzegovina	2.73	1.28	1.51	27	29	51	11	-807	-21
Croatia	1.98	1.52	1.63	26	29	53	11	-621	-14
Greece	2.32	1.34	1.56	27	31	39	9	-1,966	-18
Italy	2.32	1.43	1.71	28	31	30	6	-7,212	-12

Major area, region, country or area	Total fertility rate			Mean age at childbearing		Adolescent birth rates		Contribution of fertility to population growth, 2010-2050	
	1970-1975	2010-2015	2045-2050	1970-1975	2010-2015	1970-1975	2010-2015	Absolute (thousands)	Percentage
Malta	2.01	1.43	1.69	29	30	13	18	-57	-14
Montenegro	2.62	1.71	1.69	28	29	33	13	-81	-13
Portugal	2.83	1.28	1.52	29	30	32	12	-1,994	-19
Serbia	2.36	1.56	1.73	26	29	65	21	-1,148	-13
Slovenia	2.20	1.58	1.83	26	30	56	4	-195	-9
Spain	2.85	1.32	1.61	29	32	17	9	-7,460	-16
TFYR Macedonia	2.86	1.51	1.71	27	28	46	19	-314	-15
Western Europe	1.96	1.66	1.80	27	30	38	8	-16,663	-9
Austria	2.04	1.47	1.73	26	30	55	9	-1,051	-13
Belgium	2.01	1.82	1.88	27	30	31	9	-676	-6
France	2.30	2.00	1.96	27	30	38	10	-1,593	-3
Germany	1.71	1.39	1.62	26	31	42	8	-11,115	-14
Luxembourg	1.72	1.57	1.75	27	31	27	7	-58	-11
Netherlands	2.06	1.75	1.83	28	31	19	4	-1,267	-8
Switzerland	1.87	1.52	1.75	28	31	20	3	-898	-11
LATIN AMERICA AND THE CARIBBEAN	5.03	2.15	1.78	29	27	95	67	-41,119	-7
Caribbean	4.37	2.29	1.86	28	27	115	60	-1,322	-3
Antigua and Barbuda	3.26	2.10	1.84	28	27	94	49	-4	-4
Aruba	2.65	1.68	1.70	28	28	60	27	-14	-13
Bahamas	3.54	1.89	1.75	28	29	85	34	-42	-12
Barbados	2.72	1.79	1.84	27	28	92	47	-23	-8
Cuba	3.60	1.63	1.67	27	26	143	48	-1,598	-14
Curaçao	2.87	2.10	1.90	28	28	65	35	-4	-3
Dominican Republic	5.68	2.53	1.84	29	26	131	101	297	3
Grenada	4.60	2.18	1.76	29	29	108	35	-7	-6
Guadeloupe	4.49	2.17	1.91	29	30	64	17	-5	-1
Haiti	5.60	3.13	2.03	31	30	64	41	1,199	12
Jamaica	5.00	2.08	1.77	27	27	182	64	-240	-9
Martinique	4.08	1.95	1.80	29	30	55	21	-26	-7
Puerto Rico	2.99	1.64	1.65	27	27	80	47	-603	-16
Saint Lucia	5.69	1.92	1.66	28	28	158	56	-24	-14
Saint Vincent and the Grenadines	5.54	2.01	1.69	28	27	164	55	-13	-12
Trinidad and Tobago	3.45	1.80	1.70	27	28	92	35	-189	-14
United States Virgin Islands	4.66	2.30	1.86	26	27	166	47	-1	-1
Central America	6.52	2.37	1.79	29	27	124	69	-4,440	-3
Belize	6.25	2.64	1.89	27	27	175	70	29	9
Costa Rica	4.06	1.85	1.69	28	27	97	59	-657	-14
El Salvador	5.95	1.97	1.66	29	27	135	67	-917	-15
Guatemala	6.20	3.30	2.19	29	28	138	84	4,787	32
Honduras	7.05	2.47	1.76	29	28	151	68	-340	-5
Mexico	6.71	2.29	1.72	29	27	120	66	-7,187	-6

Major area, region, country or area	Total fertility rate			Mean age at childbearing		Adolescent birth rates		Contribution of fertility to population growth, 2010-2050	
	1970-1975	2010-2015	2045-2050	1970-1975	2010-2015	1970-1975	2010-2015	Absolute (thousands)	Percentage
Nicaragua	6.79	2.32	1.74	29	27	158	93	-324	-6
Panama	4.88	2.48	1.92	28	26	133	79	170	5
South America	4.61	2.05	1.77	29	27	81	66	-35,357	-9
Argentina	3.15	2.35	1.94	28	28	68	64	1,214	3
Bolivia (Plurinational State of)	6.15	3.04	2.13	30	29	95	73	1,758	18
Brazil	4.72	1.82	1.67	30	26	75	68	-31,853	-16
Chile	3.57	1.78	1.73	28	28	85	49	-2,139	-13
Colombia	4.90	1.93	1.67	29	27	88	58	-6,711	-15
Ecuador	5.80	2.59	1.92	30	28	115	77	1,011	7
French Guiana	4.18	3.48	2.56	27	28	114	83	106	45
Guyana	5.00	2.60	2.00	28	27	116	90	53	7
Paraguay	5.35	2.60	1.94	30	28	94	60	356	6
Peru	6.00	2.50	1.84	30	29	86	52	622	2
Suriname	5.29	2.40	1.86	28	28	113	48	-1	-0
Uruguay	3.00	2.04	1.83	28	28	65	58	-201	-6
Venezuela (Bolivarian Republic of)	4.94	2.40	1.85	29	27	107	81	428	1
NORTHERN AMERICA	2.01	1.86	1.90	26	29	59	28	-21,199	-6
Canada	1.98	1.61	1.67	27	30	37	11	-4,650	-14
United States of America	2.02	1.89	1.92	26	29	61	30	-16,536	-5
OCEANIA	3.23	2.42	2.06	27	30	67	30	2,061	6
Australia/New Zealand	2.59	1.94	1.79	27	30	52	17	-1,883	-7
Australia	2.54	1.92	1.78	27	31	49	16	-1,670	-8
New Zealand	2.84	2.05	1.82	26	30	65	25	-212	-5
Melanesia	5.80	3.67	2.57	28	30	123	54	3,665	42
Fiji	4.20	2.61	1.98	28	28	59	43	70	8
New Caledonia	5.20	2.13	1.81	29	30	77	19	-12	-5
Papua New Guinea	6.09	3.84	2.63	27	30	140	57	3,190	47
Solomon Islands	7.24	4.06	2.68	30	30	142	54	317	60
Vanuatu	6.11	3.41	2.45	30	29	86	45	100	42
Micronesia	5.28	2.84	2.25	29	29	85	30	98	20
Guam	4.12	2.42	1.93	27	28	93	50	6	4
Kiribati	5.00	3.79	2.74	30	31	54	21	54	53
Micronesia (Fed. States of)	6.90	3.33	2.24	30	31	75	19	29	28
Polynesia	5.74	2.95	2.31	29	30	69	30	180	27
French Polynesia	4.86	2.07	1.76	27	29	96	38	-18	-7
Samoa	7.00	4.16	2.86	30	30	62	28	122	65
Tonga	5.50	3.79	2.72	31	31	31	17	56	54

Notes

* Least developed countries

While population trends are not explicitly mentioned in the recently adopted 2030 Sustainable Development Agenda, several of the Sustainable Development Goals (SDGs) are directly or indirectly related to future demographic trends. As part of the mandate of the Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat to provide regular updates on fertility estimates and projections and in recognition of the importance of fertility as a fundamental factor affecting sustainable development, the present report provides highlights of fertility estimates and projections at the national, regional and global levels for a period covering 80 years from 1970 to 2050. It also takes a closer look at the status of fertility transition in various parts of the world, examines trajectories of adolescent fertility and discusses the impact of the four population components on future population growth.