United Nations

Population Facts

Department of Economic and Social Affairs • Population Division

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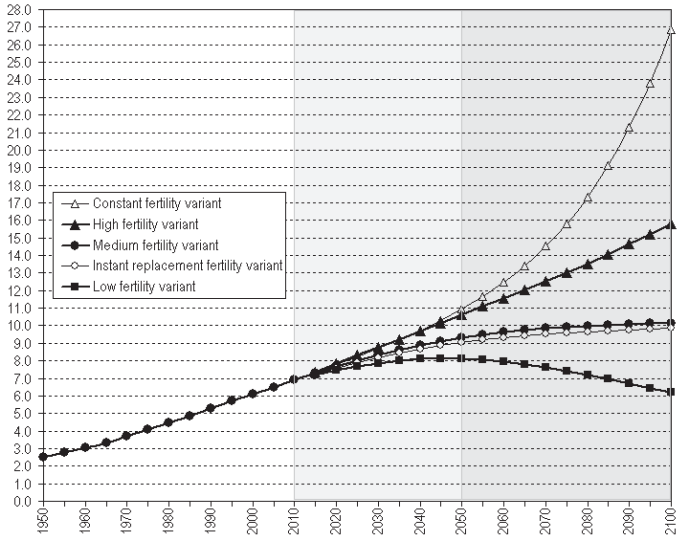
World Population Prospects: Main Results

1. World population growth by variants

The world population is expected to keep on rising during the 21st century, although its growth is projected to experience a marked deceleration during the second half of the century.

- **According to the medium variant of the 2010 Revision of World Population Prospects, the world population is expected to increase from 6.9 billion in mid-2011 to 9.3 billion in 2050 and to reach 10.1 billion by 2100.** Realization of this projection is contingent on the continued decline of fertility in countries that still have fertility above replacement level (that is, countries where women have, on average, more than one daughter) and a slight increase of fertility in the countries that have below-replacement fertility. In addition, mortality would have to decline in all countries.
- **If fertility were to remain constant in each country at the level it had in 2005-2010, the world population could reach nearly 27 billion by 2100** (see constant fertility variant in figure 1). A future fertility that remains just half a child above that projected in the medium variant would result in a population of 15.8 billion in 2100 (high variant), but if fertility remains just half a child below that of the medium variant, the world population in 2100 could be 6.2 billion, the same size it had at the start of the 21st century.
- **Today, 42 per cent of the world population lives in low-fertility countries, that is, countries where women are not having enough children to ensure that, on average, each woman is replaced by a daughter who survives to the age of procreation (i.e., their fertility is below replacement level).** Another 40 per cent lives in intermediate-fertility countries where each woman is having, on average, between 1 and 1.5 daughters, and the remaining 18 per cent lives in high-fertility countries where the average woman has more than 1.5 daughter.

Figure 1: Total Population of the world by projection variant



Source: See note 1

- **Even if the fertility of each country would reach replacement level in 2010-2015, the world population would continue to increase over the rest of the century, reaching 9.1 billion in 2050 and 9.9 billion in 2100 (see the "instant replacement variant" in the figure above).**

2. Population growth by major regions

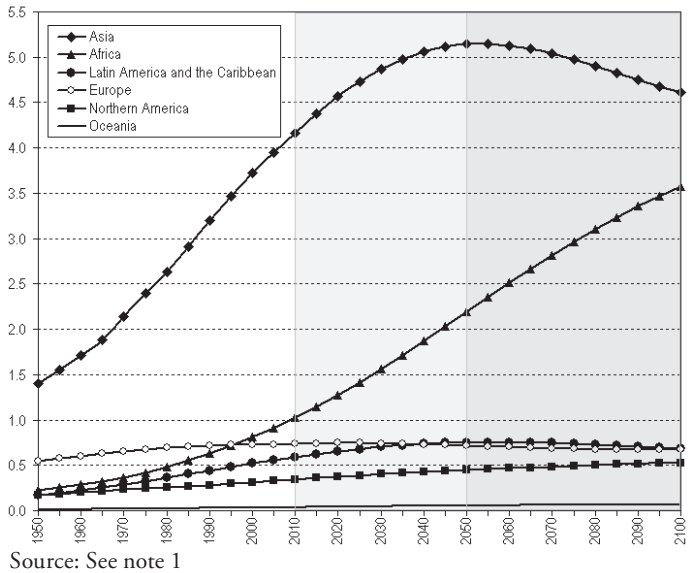
Asia will remain the most populous major area in the world during the 21st century but Africa will gain ground as its population more than triples, passing from 1 billion in 2011 to 3.6 billion in 2100.

- **In 2011, 60 per cent of the world population lived in Asia and 15 per cent in Africa.** Until the early 1990s, Europe had been the second most populous region of the world, but in 1996 the population of Africa surpassed that of Europe for the first time. Africa's population is growing very rapidly, at 2.3 per cent per year during 2010-2015, a rate more than double that of Asia's population (1.0 per cent per year). The population of Africa first surpassed a billion in 2009 and is

expected to add another billion in just 35 years (by 2044), even as its fertility drops from 4.6 children per woman in 2005-2010 to 3.0 children per woman in 2040-2045.

- **Asia's population, which is currently 4.2 billion, is expected to peak around the middle of the century (it is projected to reach 5.2 billion in 2052) and to start a slow decline thereafter.** Consequently, whereas in 2100 Asia's population was four times as large as that of Africa (4.2 billion vs. 1.0 billion), by 2100 it may be only 28 per ent higher than that of Africa (4.6 billion in Asia vs. 3.6 billion in Africa).
- **The populations of all other major areas combined (the Americas, Europe and Oceania) amount to 1.7 billion in 2011 and are projected to rise to nearly 2 billion in 2060 and then decline very slowly, remaining still near 2 billion by the turn of the century.** Among them, the population of Europe is projected to peak around 2025 at 0.74 billion and decline thereafter. The population of Latin America and the Caribbean is projected to reach a maximum around 2057 at 0.75 billion, but those of Northern America and Oceania are projected to continue increasing, albeit slowly, until 2100.
- **By the turn of the century, Africa's population, which in 2011 was equivalent to 61 per cent of the population of the Americas, Europe and Oceania taken together, might surpass them by 83 per cent**. In 2100, Africa could be five times as populous as Northern America and over 4 times more populous than either Europe or Latin America and the Caribbean

Figure 2. Total population by major region, medium variant (billions)



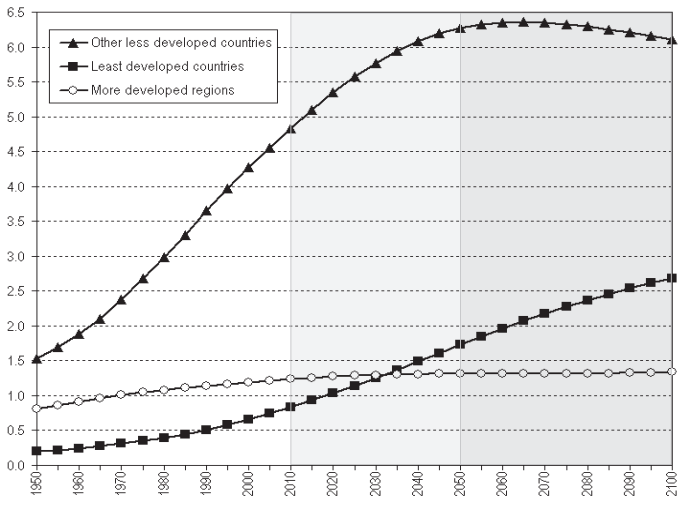
Source: See note 1

3. Population growth in least developed countries

The population of the least developed countries is projected to surpass the population of the more developed regions by 2035. By 2100, the population of the least developed countries as a group is projected to be twice that of the more developed regions according to the medium variant.

- **According to the medium variant, the population of the more developed regions will remain largely unchanged between 2011 and 2100, passing from 1.2 billion in 2011 to 1.3 billion in 2100**. In contrast, the population of the least developed countries, as a group, is projected to more than triple, passing from 0.85 billion in 2011 to 2.7 billion in 2100.
- **Such contrasting trends are shaped by the very different fertility levels that characterize those two groups of countries today. In the more developed regions, average fertility is estimated at 1.7 children per woman in 2005-2010, a number considerably below replacement level.** Although the medium variant projects increasing fertility for the more developed regions as a whole, their average fertility does not surpass replacement level during the whole projection period (2010-2100).
- **Among the least developed countries, average fertility was estimated at 4.4 children per woman in 2005-2010**

Figure 3. Projected population by development region, medium variant (billions)

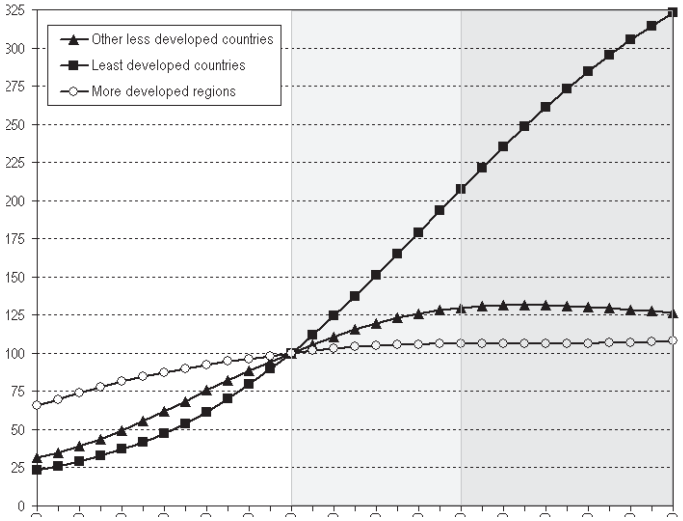


Source: See note 1

and is not expected to reach replacement level before the end of the century, implying that the population of the group will continue rising until 2100, as is shown in the figure above.

- **The population in other less developed countries, which include most of the most populous countries (China, India, Indonesia and Brazil), is expected to reach a maximum around 2060, gaining approximately 1.4 billion inhabitants between 2010 and the time when it peaks.** It is then projected to start a slow decline.
- **The population of the least developed countries is projected to triple by the end of the century according to the medium variant.** None of the other development groups are projected to experience such sharp increases in population size.
- **Between 1950 and 2010, the population of the least developed countries quadrupled and it is expected to further triple between 2010 and 2100.**

Figure 4. Population as percentage of population in 2010, medium variant



Source: See note 1

- **The population in other less developed countries also quadrupled between 1950 and 2010, but is not expected to increase by more than 27 per cent during the rest of the century.**
- **The population in the more developed regions increased the least between 1950 and 2010 and is entering a period of overall stabilization, being expected to grow minimally by just 8 per cent by 2100 according to the medium variant.**

4. Geographical distributions of the world population

According to the medium variant, the future distribution of the world population by major area is likely to change significantly.

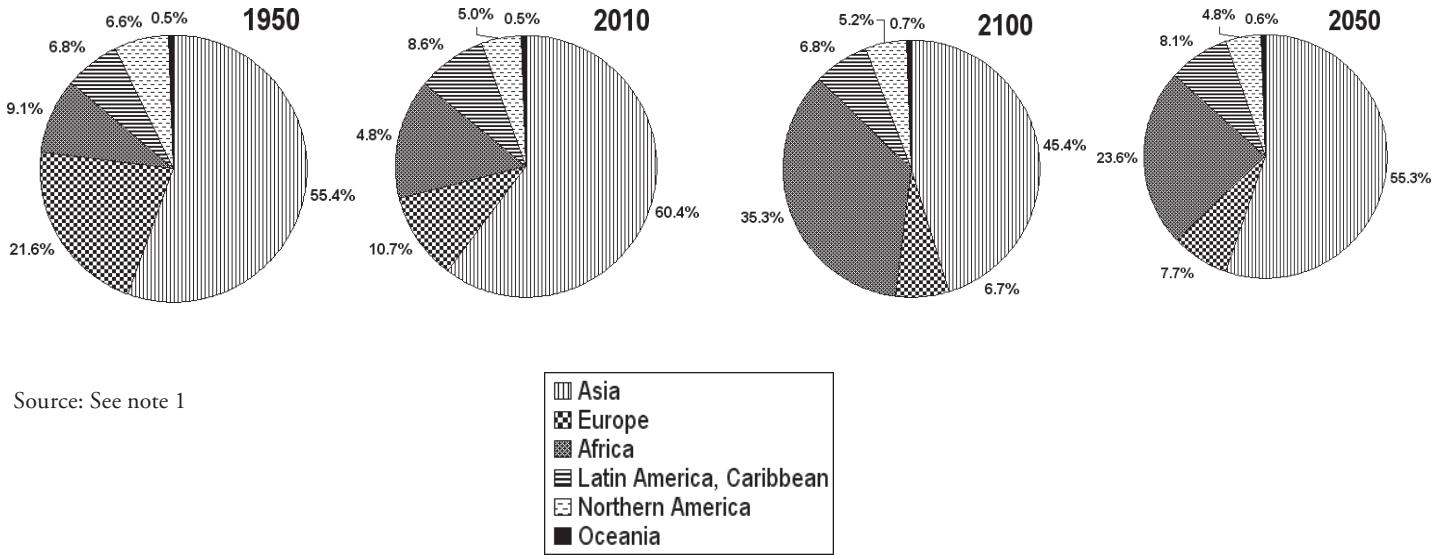
- **Over the past century, Asia has been consistently the most populous major area of the world and is expected to remain so during the 21st century.** Therefore, it accounts for the largest share of the world population, amounting to 60 per cent today and expected to decline to 55 per cent in 2050. During the second part of the 21st century, Asia is expected to lose its claim to having the majority of the world's inhabitants, because its share of the world population is projected to drop below 50 per cent (it is projected at 45 per cent in 2100).
- **Whereas between 1950 and 1996, Europe was the second most populous region, Africa overtook it in 1996 and now accounts for nearly 15 per cent of the world population, up from 9 per cent in 1950**. Furthermore, because Africa is projected to maintain a rapid population growth over the rest of the century, its population is expected to account for almost 24 per cent of the world population in 2050 and for 35 per cent in 2100.
- **By contrast, the share of Europe is expected to decline: from nearly 22 per cent in 1950 to less than 7 per cent in 2100.** The joint share of Northern America plus Latin America and the Caribbean is not expected to change markedly, passing from 13.6 per cent in 2010 to 12.0 per cent in 2100.

5. Rates of population change

Currently, the world population is growing at a rate of 1.1 per cent per year, but in most projection variants this average annual rate of change is expected to decline in the future.

- **According to the medium variant, the annual rate of population change of the world population is projected to decline from 1.1 per cent in 2010-2015 to 0.4 per cent in 2045-2050 and to drop further to a low 0.06 per cent per year in 2095-2100.** Despite that sharp decline, the rate of population change in the medium variant remains positive throughout the 21st century, implying that the world population grows continually. The trend in the annual rate of population change is similar between the instant-replacement scenario and the medium variant, with

Figure 5. Distribution of the world population by major area, medium variant

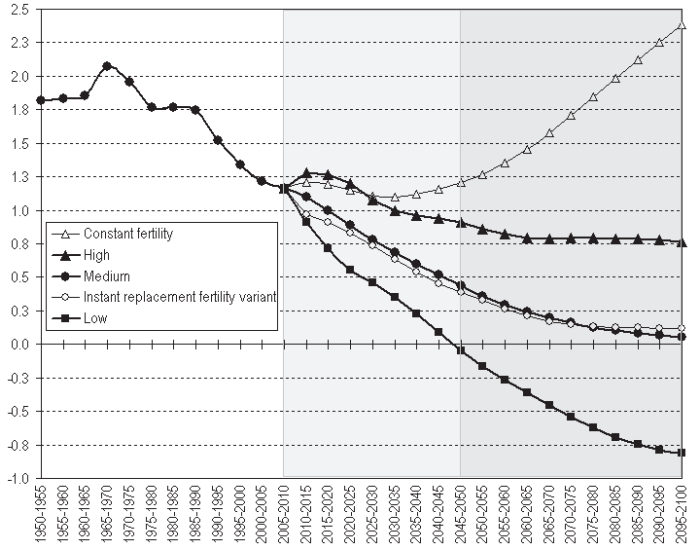


Source: See note 1

both maintaining a positive rate of change throughout 2010-2100. By 2095-2100, the annual rate of population change in the instant-replacement scenario is nearly double that in the medium variant (0.12 per cent vs. 0.06 per cent).

- **The high variant, whose fertility remains just half a child above the fertility in the medium variant over the projection period, has annual rates of population change that stabilize at 0.8 per cent per year after 2060.** Such high rates of change lead to rapid growth in the population, which keeps on gaining a billion people every 10 or 11 years during the whole 21st century.
- **The low variant, which maintains fertility half a child below that of the medium variant, produces below-replacement fertility in all countries and results in a declining global population, as indicated by the negative rates of population change that it projects after 2040-2045**. By 2095-2100, the low variant yields a world population that is declining at a rapid rate of 0.8 per cent per year which, if maintained, would halve the population in 85 years.
- **The constant-fertility variant is presented for illustrative purposes.** It shows that maintaining fertility constant at the level it had in each country in 2005-2010 would result in a population whose annual rate of population change would keep on increasing, leading to a new "population explosion", an outcome unlikely to be sustainable.

Figure 6. Average annual rate of change of the world population by projection variant



Source: See note 1

Notes:
1. United Nations, Department of Economic and Social Affairs, Population Division: World Population Prospects, the 2010 Revision. New York, 2011.