

Population growth rates in modern world

[Sociology](#), [Social Issues](#)



Human Population Growth Technical Report

The purpose of this technical report is to address the issues of the world population growth and the rate that it is progressing at. Current world population trends will be addressed. Additionally, specific countries and regional population growth rates will be covered. The report will also go into elaborate detail about how the population growth rate is directly affected by various factors. The effects that population growth has on the environment will be examined, as well as possible consequences that could emerge due to the world population becoming extremely large and unsustainable.

Recently in 2011, the global population reached a colossal population count of 7 billion (1). After hitting the 7 billion mark in 2011, the population reached 7.06 billion just a year and a half later (3). Currently the world population is around 7.4 billion (5). With the population growing at such an alarming rate, the global population is estimated to reach 8.1 billion by the year 2025 (1). Just 200 years ago, the world population was less than 1 billion; evidence has shown that in a timespan of 100 years, the population grew from a mere 1.5 billion to a whopping 6.1 billion (4). To really put it into perspective, in 1950 there were 2.5 billion humans occupying the planet; 15 years later, there were 6.5 billion humans inhabiting the planet (2).

In the graph shown below, it depicts the annual growth rate of the world population from 1750 to 2016. It also shows predictions of the future growth rate all the way up to the year 2100. From the information presented on the

graph, it estimates the annual growth rate to have dropped to 0.06% and the population to have grown to 10.9 billion in 2100.

Furthermore, with more and more information being collected over the past decade, it has been predicted that by 2025 the death rate will be superior to the birth rate in the higher developed countries (3). The growth that happened in 2011 was ultimately due to the high birth rates and young populations of the less developed countries; overall, the countries accounted for 97 percent of the growth (2, 3). In addition, the less developed regions have more factors that affect their population growth.

While virtually all future population growth will be in developing countries, the poorest of these countries will see the greatest percentage increase. As defined by the United Nations, these 48 countries have especially low incomes, high economic vulnerability, and poor human development indicators such as low life expectancy at birth, very low per capita income, and low levels of education. Of these countries, 33 are in sub-Saharan Africa, such as Burundi, Ethiopia, Mozambique, and Zambia; 14 in Asia, including Bangladesh, Cambodia, Nepal, and Yemen; and one in the Caribbean, Haiti. They are growing at 2.4 percent per year and are projected to reach at least 2 billion by 2050 (3).

The graph below shows where most of the population growth will reside in, from the least, less, and more developed countries. The graph ranges from the year 1950 to 2050. It also predicts that the population will increase to around 9 billion in 2050. From the information given on the graph, nearly all

of the population growth throughout the world will have occurred in the less developed countries.

In 1800, nearly all of the population that inhabited the planet was located in Europe and Asia; given in percentages, 65 percent resided in Asia and 15 percent resided in Europe. As a result of the Industrial Revolution, the percentage went up to 25 percent in Europe as the population steadily grew (2). After World War II, the population growth sped up even more, adding an even larger population to the less developed regions. The two regions currently housing the highest population are Asia and Africa; Asia's current population is at 4.4 billion and Africa's is at 1.2 billion (5). "Rich and poor countries alike are affected by population growth, though the population of industrial countries are growing more slowly than those of developing one" (6). With an explosively growing population,

...a billion people were added between 1960 and 1975; another billion were added between 1975 and 1987. Throughout the 20th century each additional billion has been achieved in a shorter period of time. Human population entered the 20th century with 1.6 billion people and left the century with 6.1 billion (2).

The graphs below show the world population distribution by region from 1800 to 2050. Asia is predicted to stay the highest populated region, accounting for 57.3% of the world population by 2050. Coming in second is Africa, anticipated to occupy 21.7% of the world population by 2050.

Moreover, population growth is affected by numerous factors. One common-knowledge factor being political factors. Some countries try to motivate families to have multiple children by offering rewards; likewise, some countries will offer benefits to couples who do not have as many children. In regards to that subject, "...fertility rates were stable across the world until the 1960's, albeit with differences in levels between ' developed' and ' developing' countries" (4). On top of that, environmental factors can also have an impact on the rate of population growth. Whether it be natural disasters, extreme climate changes, or even pollution in the atmosphere, factors such as those can have a significant influence in making the population rate fluctuate. In like manner, cultural factors have a significant effect on the populace too. In certain cultures, it is common to have many children in order to receive respect from others and it is a way to prove a man's masculinity. Vice versa, some cultures disapprove of a big family. The biggest factor that contributes to population growth in the United States is immigration, " Immigration contributes over 2. 25 million people to the U. S. population annually (1. 5 million legal immigrants and illegal immigrants as of 2001-2002, now estimated at 1. 7 million in 2003) plus 750, 000 births to immigrant woman annually)" (7). Altogether, any of the factors listed above have the potential to alter population growth; whether it be increasing it or decreasing it.

Furthermore, a rapidly increasing population is undoubtedly putting the environment at a heightened risk.

As the century begins, natural resources are under increasing pressure, threatening public health and development. Water shortages, soil exhaustion, loss of forests, air and water pollution, and degradation of coastlines afflict many areas. As the world's population grows, improving living standards without destroying the environment is a global challenge (8).

The demand for natural resources continues to rise as the population escalates. According to the Annenberg Foundation, “ Many people (including national leaders) worry that population growth depletes resources and can trigger social or economic catastrophe if it is not contained.” If the human population keeps growing at the current, uncontrolled rate, it could eventually result in the complete burnout of non-renewable resources; for example, fossil fuels. However, even the renewable resources are in great danger if they are being used faster than they can be restored (9). In addition to important resources such as fossil fuels and renewable resources, water is immensely essential to the human population as well.

The demand for water has grown significantly over the last 50 years not only because of population growth, but also because of an increase in the uses of water for households, agriculture, and industrial production. Appropriate management of the world's water resources is essential for meeting the demands of a growing population and for expanding water uses (10).

In the graph shown below, it depicts the annual renewable freshwater availability per capita in 1950, 1995, and 2050. According to the information

that is shown on the graph, by 2050 the United States will have lost over half of the cubic meters of water that it originally had in 1950.

In the essence of a large-scale population growth that seems to be unstoppable, a major consequence that is very likely to occur is extinction.

The current mass extinction differs from all others in being driven by a single species rather than a planetary or galactic physical process. When the human race — *Homo sapiens sapiens* — migrated out of Africa to the Middle East 90, 000 years ago, to Europe and Australia 40, 000 years ago, to North America 12, 500 years ago, and to the Caribbean 8, 000 years ago, waves of extinction soon followed. The colonization-followed-by-extinction pattern can be seen as recently as 2, 000 years ago, when humans colonized Madagascar and quickly drove elephant birds, hippos, and large lemurs extinct (11).

With that being the case, studies have concluded that with the current path that the world is going on, in the course of time, the earth will become overpopulated and will no longer be able to sustain life on the planet.

In the graph that is depicted below, it shows the increasing number of extinctions that have occurred from the year 1800 to around present day. The graph clearly shows a relationship between the human population and the number of extinctions that have occurred. It can reasonably be concluded from the data that is shown that the rising population is the cause of the extinctions.

Likewise, the well-being of wildlife is also a major concern as the population rises. Consequently, more humans will result in additional destruction of animal habitats so that streets, buildings, and cities can be built. According to the Safari Club International Foundation, “ 240 acres of natural habitat is destroyed hourly, which can be directly attributed to the growth in the human population... Resulting declines of wildlife populations can be directly attributed to habitat loss.”

In conclusion, it is incontrovertible that the human population growth rate needs to be controlled somehow. After thorough examination and research over the topic, it can be deduced that the current level of growth may be sustainable for the next 100 years or so, but there will come a time when the growth becomes entirely too much for the world to handle.