World Population to Decline from the Mid-Century?

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For several decades, many scientists and politicians have warned that a swelling global population will soon overwhelm the Earth's resources. However, an increasing number of demographic experts are ringing a different alarm. The authors of *Empty Planet: The Shock of Global Population Decline*, Darrell Bricker and John Ibbitson, are the vanguard of such experts. They argue that the world population will decline from the middle of this century.

The United Nations (UN) "World Population Prospects 2015" forecast that the planetary population would grow to 11 billion in this century before stabilizing after 2100 ("Middle Projection" in **Figure 1**). On the other hand, the authors of *Empty Planet* believe the UN projections are far too high. They say the world population will peak between 2040 and 2060 and then decline. The book lacks any graphs or tables but gives two numbers: 9 billion for 2050 and 7.7 billion for 2100. The curve passing through these two points approximates the UN's "Low Projection" shown in **Figure 1**.

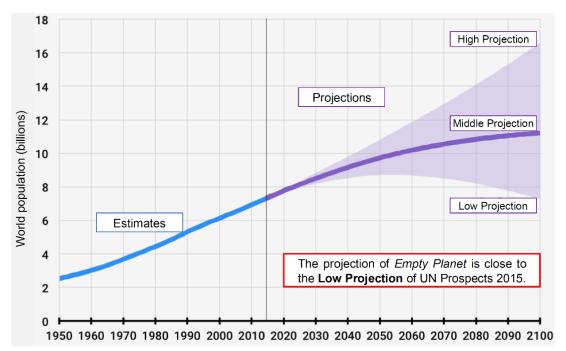


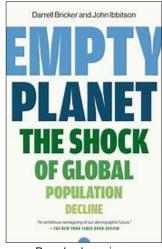
Figure 1. UN's world population prospects in 2015. [Source] United Nations "World Population Prospects 2015"

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Empty Planet: The Shock of Global Population Decline

There are already more than twenty countries in the world whose populations have begun to decline. Korea, Japan, Spain, Italy, and many Eastern European countries are shrinking in population size every year. However, population shrinkage in high-income countries is not news.

The big news is that the largest developing countries are also about to shrink, as their birthrates decrease. China already started losing people at the beginning of the 2020s. By the middle of this century, Indonesia and Brazil will follow the precedent. Even India will see its numbers level off in about 25 years and then begin to shrink. Furthermore, the authors also predict that high birthrates in Africa will end much earlier than the UN's prediction.



Paperback version

Research method

Empty Planet, published in 2019 by Crown, projected population decline by combining literature research and fieldwork. The two authors found some indications of an accelerating decline in fertility in government reports and scholarly studies. Moreover, they obtained strong evidence by talking with people on the street. They traveled to cities on six continents: Brussels, Vienna, Seoul, Mumbai, Beijing, Nairobi, Palm Springs, São Paulo, and Canberra. They talked with academics and public officials. More importantly, they communicated with young people at various places, such as university campuses, research institutes, and slums. They elicited thoughts from young people about their important decisions for the future, namely, whether and when to have a baby.

Two main factors for the declining birthrate

Why is the fertility rate declining? The authors indicate two key factors: (1) urbanization, and (2) women's empowerment. Urbanization and women's empowerment permeated the developed world during the 19th and 20th centuries. Today, these two factors are equally at work in developing countries. The difference is that the pace of permeation is much faster than before. As a result, fertility rates are declining rapidly around the world.

(1) Urbanization

Undoubtedly, the most significant factor is "urbanization." There is an overwhelming body of data showing that fertility declines with urbanization. What are the reasons? As urbanization progresses, young brawn is no longer needed; on the contrary, children become an economic burden.

Going back to the Middle Ages, 90% of Europeans lived in agriculture. In rural areas, having children is an "investment," as they provide more arms to plow the fields and more hands to milk the cows. After that, the factories that accompanied the Industrial Revolution attracted workers to cities. However, in cities children are a "liability." A child is just one more mouth to feed.

Urbanization continues to this day (**Figure 2**). In 2007, for the first time in human history, the urban population exceeded the rural population. Urbanization lowers fertility rates because urban residence would likely increase the costs of raising children. Urban housing is more expensive, and children are probably less valuable in household production.

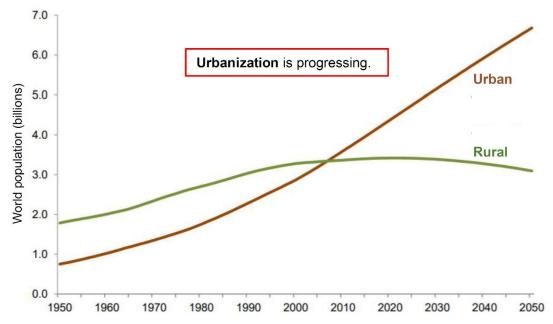


Figure 2. World urban and rural population trends. [Source] United Nations "World Urbanization Prospects 2018"

(2) Women's empowerment

Another factor for the declining birthrate is "women's empowerment," which is related to urbanization. Cities have schools, libraries, and other cultural facilities. Moving to cities, women began to become better educated. For women who have increased their knowledge, subordinating themselves to men is not natural but becomes a mistake that must be corrected. First, women worked for equality before the law in property rights and pensions. Then they demanded the right to vote, as well as the right to work and equal pay for men and women. As women gained greater power and more rights, they stopped having so many children.

Meanwhile, having children is not always good for women. In the 19th century, pregnancy and childbirth were serious health risks, particularly for women who had many children. Even with today's medical advances, child rearing is still a burden. Furthermore, women with children are more likely to be limited in their work outside the home. If they cannot continue working outside the home, their income and potential for independence are

jeopardized. As women seek to reduce the burden of child rearing and pursue independence, the number of children they bear naturally decreases.

"Is this trend permanent?" "Probably YES!"

In the past, famines and plagues decreased human populations. Currently, we are decreasing ourselves by our own choice. Will this choice be permanent? The authors say, "The answer is probably yes."

Once we fall into the "low fertility trap," having fewer children becomes the norm. Couples no longer see having children as an obligation to family or to God. Rather, they choose to raise a child as an act of personal satisfaction. Usually, they are satisfied with raising one or two children.

Some who fear the side effects of population decline advocate policies allowing couples to have more children. However, the evidence suggests this is fruitless. Supportive measures such as generous government subsidies for child rearing have sometimes increased the number of children a couple is willing to have. However, no government has succeeded in raising the fertility rate to the population replacement level of around 2.1 children per woman needed to sustain a population. Moreover, these support measures are expensive and easily cut back during recessions. Furthermore, it is arguably unethical for a government to try to force a couple to have a child that they otherwise would not have had.

UN projections also suggest a rapid population decline

UN projections also suggest a fast population decline. First, looking again at the trends in urbanization shown in **Figure 2**, it is predicted that urbanization will continue to increase worldwide in the future. Since urbanization is the largest factor in the decline in fertility rates, it is likely to cause population decline as well.

In addition, the latest UN population projection, "World Population Prospects 2024," has brought forward the timing of the world's population decline. The previous projection that the population would stabilize after 2100, the "Medium Projection" in **Figure 1**, has been revised so that the population will peak at around 10.3 billion in the mid-2080s and then decline.