

World is Facing a Population Bust

More education for women means fewer kids.

By [Lloyd Alter](#) Updated July 16, 2020



shot Crowd of tourists in Hawaii, 2100.

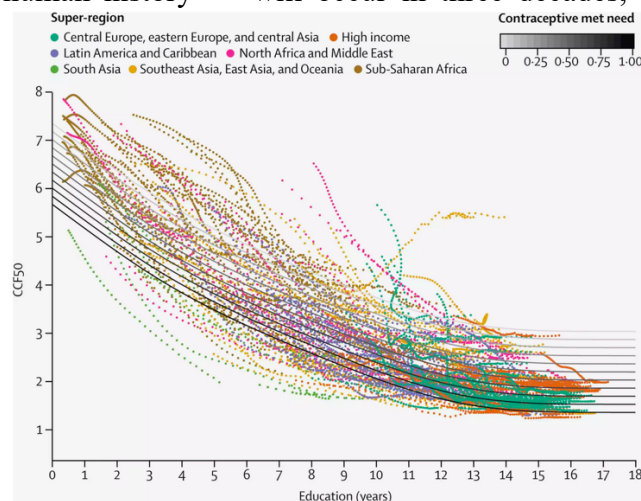
In his last book, "Billions and Billions," published in 1997, Carl Sagan wrote: "There is a well-documented worldwide correlation between poverty and high birthrates ... exponential population growth slows down or stops when grinding poverty disappears. This is called demographic transition." More recently, John Ibbitson and Darrell Bricker wrote in their book, "[Empty Planet](#)":

The great defining event of the twenty-first century — one of the great defining events in human history — will occur in three decades,

give or take when the global population starts to decline. Once that decline begins, it will never end. We do not face the challenge of a population bomb but of a population bust — a relentless, generation-after-generation culling of the human herd. Nothing like this has ever happened before.

Now a new study published in The Lancet with a paragraph-long title, [Fertility, mortality, migration, and population scenarios for 195 countries and territories from 2017 to 2100: a forecasting analysis for the Global Burden of Disease Study](#) makes the point again:

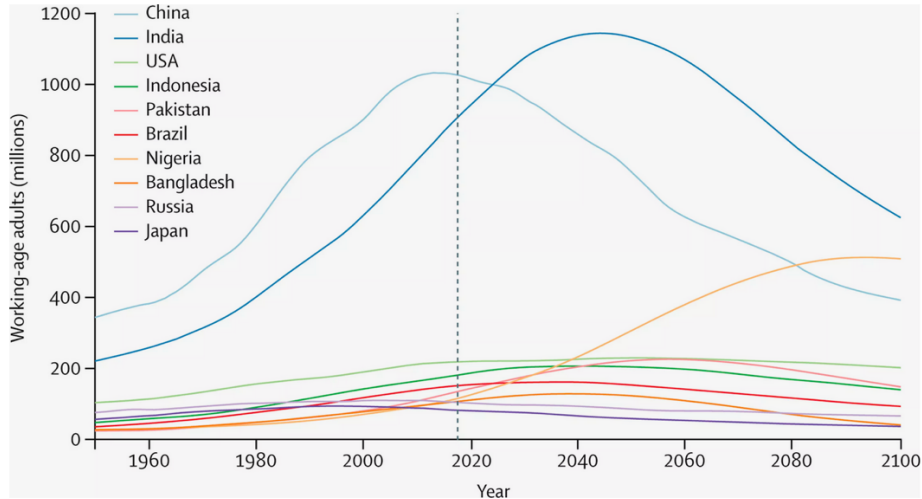
Our findings suggest that continued trends in female educational attainment and access to contraception will hasten declines in fertility and slow population growth. A sustained TFR [total fertility rate] lower than the replacement level in many countries, including China and India, would have economic, social, environmental, and geopolitical consequences. Policy options to adapt to continued low fertility, while sustaining and enhancing female reproductive health, will be crucial in the years to come.



Education and contraception effects. Prof Stein Emil Vollset et al

The decline in TFR due to education is dramatic; the CCF50 on the left-hand column is "the average number of children born to an individual

female from an observed birth cohort if she lived to the end of her reproductive lifespan (age 15–49 years)."



Population declines. Prof Stein Emil Vollset et al

It's happening almost everywhere; the working adult population is already dropping in China, it's coming in India, and only sub-Saharan Africa continues to increase to the end of the century. The world population will peak after mid-century and decline significantly by 2100. This is good news, and bad news:

Our findings show that some countries with fertility lower than replacement level, such as the USA, Australia, and Canada, will probably maintain their working-age populations through net immigration. Our forecasts for a shrinking global population have positive implications for the environment, climate change, and food production, but possible negative implications for labour forces, economic growth, and social support systems in parts of the world with the greatest fertility declines.



Robot for elderly people in Florence, Italy. Laura Lezza/Getty Images

There are two ways that nations can deal with this; they can be like Japan and reject immigration, and see their populations decline rapidly, but build lots of robots and look for high-tech solutions, or be like Canada, which accepts as many educated immigrants as are willing to tolerate the climate.

John Ibbitson reviews The Lancet study [in The Globe and Mail](#) and draws some conclusions about the rapidly aging population.

Although falling fertility is something to celebrate – it results from women acquiring greater control over their lives and bodies – the



economic strain is great, with ever-fewer young people around to drive growth and pay for the needs of old people. To keep pensions and health care systems sustainable, we need to raise the retirement age and require higher mandatory pension contributions, while expanding and improving long-term care, especially the wages of those who provide it.

It could be a very different world, where instead of building walls to keep out migrants, as [Professor Christopher Murray tells the BBC](#), we have competition for them. He notes: "I think it's incredibly hard to think this through and recognize how big a thing this is; it's extraordinary, we'll have to reorganize societies." He goes on to ask "Who pays tax in a massively aged world? Who pays for healthcare for the elderly? Who looks after the elderly? Will people still be able to retire from work?"

There are so many implications. Fewer people could be better for the environment and the climate (which is why so many readers always complain about population pressures as a driver for climate change), but if people are fewer but more affluent, they have bigger individual footprints. Treehugger has often taken the position that we never really had a population problem but a consumption problem; [Mat McDermott](#) wrote a few years ago:

On one hand, a billion or more people have problems of **underconsumption**. Unless their basic needs are met, they are unlikely to be able to make important contributions to attaining sustainability. On the other hand, there is also the issue of the "new consumers" in developing economies such as China and India, where the wealth of a sizeable minority is permitting them to acquire the consumption habits (e.g., eating a lot of meat and driving automobiles) of the rich nations.

Those developing economies, and our developed ones, have all been based on endless growth; but with a shrinking population, we face economic shrinkage. As Vaclav Smil writes, "The options are quite clear from the historical evidence. If you don't manage decline, then you succumb to it and you are gone."

John Ibbitson sums it all up in his conclusion, which will also be ours:

We've never lived in a world where the human population steadily and deliberately drops every year. There will be challenges and opportunities we haven't even imagined yet. A decreasing population isn't a good thing or a bad thing. But it is a very big thing. We need to prepare.