

EXPLORE

POPULATION TIME BOMB?

*The world's
population is
predicted to hit 11
billion by 2100 but
what impact will
such numbers have
on the planet?*



Every day the world's population increases by 200,000. That's 73 million people a year, with the total populace projected to hit 11 billion by 2100, according to the United Nations.

The global population has risen by more than 600% in 200 years to reach 7.6 billion, but for the past 40 years that rapid rise has been greeted with relative indifference. Not since the publication of Paul Ehrlich's 1968 book, *The Population Bomb*, has there been a sense of global emergency surrounding the world's population growth.

Now there is a growing belief that overpopulation is not only a major threat to our existence, but to the planet itself.

Writing in *The New York Times*, Bill Marsh described the world's population crisis as a "slowly unfolding catastrophe", with overpopulation especially acute in Africa. All of his short but distressing article was quotable. Not only would fast-rising populations degrade economic and agricultural resiliency, but recession and drought would magnify the human consequences.

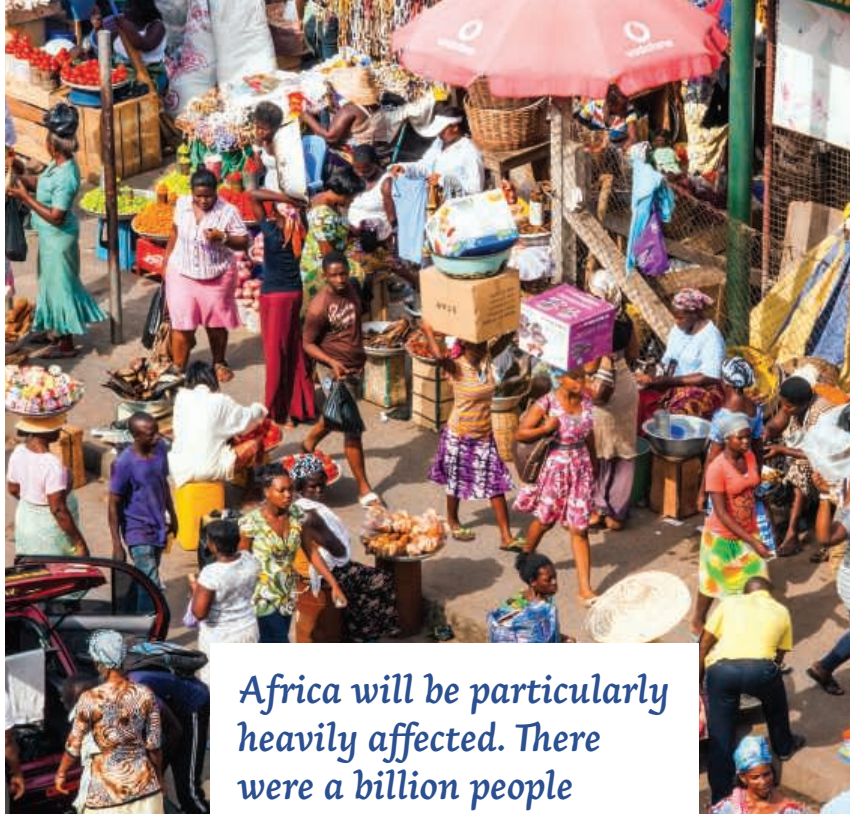
"Mass migration, starvation, civil unrest: overpopulation unites all of these," wrote Marsh. "Many nations' threadbare economies, unable to cope with soaring births, could produce even greater waves of refugees beyond the millions already on the move to neighbouring countries or the more prosperous havens of Europe."

In an accompanying article the author Eugene Linden asked: "Remember the population bomb? It's still ticking." He drew particular attention to Lesotho, a kingdom in southern Africa where the population crisis is especially acute.

In the immediate future the United Nations forecasts that the world's population will grow by more than two billion people, hitting 9.8 billion in 2050 and straining the world's already fragile ability to feed itself. Half of that population growth will be concentrated in just nine countries: India, Nigeria, the Democratic Republic of the Congo, Pakistan, Ethiopia, Tanzania, the US, Uganda and Indonesia.

Africa will be particularly heavily affected. There were a billion people living in Africa in 2010. That figure will rise to 2.5 billion in 2050 and to more than four billion in 2100, meaning that as many as one-third of all people will be African.

Meanwhile, in Egypt the population has surged to almost 100 million. It is growing by an estimated two million people a year, adding the equivalent of the entire population of Slovenia annually. Within the next 40 years – if current rates persist – Egypt will hit between 160 and 180 million people, leapfrogging Russia and Japan (both of which have falling populations) by 2050. Such increases will only compound and magnify energy, water and food shortages.



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As with elsewhere, the country's population crisis is the result of a multitude of demographic, social, economic and political factors, with Egypt currently endowed with the largest proportion of young people in its history. This so-called 'youth bulge' is associated with an increase in the population as those young people get married and have children. The country's fertility rate also stands at 3.47, far higher than 2.1, the level at which a population remains roughly stable.

In general, three major factors impact population growth: fertility, mortality and migration. The combination of declining mortality and relatively high fertility, for example, is the primary driver of rapid population growth in Africa, while other factors such as improvements in medical care and insufficient family planning have an impact too.

Egypt's efforts to combat overpopulation, however, are instructive. The country is focussing on education and family planning, with both intrinsically linked to each other and to population change. Educated women tend to have smaller, healthier families.

Similarly, fertility rates decline when women have at least seven or more years of education.

Nahla Abdel-Tawab, Senior Associate and Egypt Country Director at the Population Council, believes education is the key. “We need to enforce laws that forbid child marriage and that punish parents who take their children out of school,” she says. “We need to do everything we can to keep girls in school and to prevent them from getting married before the legal age. Build a secondary school in every village. Make the school environment more friendly to girls. Encourage women to go out for work. Help them start their own businesses by simplifying procedures and regulations. Provide incentives to business owners who make the work environment more friendly to women.”

Both education and family planning have borne fruit in Bangladesh, where the decline in the country’s fertility rate has been significant. In 1975 the average family had 6.3 children. In 2017 that figure had fallen to just over two.

Can the world handle another 3.4 billion people? The answer depends on whom you talk to. By 2100 it is estimated that population density will have increased by 50% due to increased population and rapid urbanisation, while another 1.45 million species of plants and animals will have been made extinct by humanity’s devouring of the planet. Fifty per cent of the world’s population could face food shortages, compared with 13% today.

It is this latter concern that is arguably the most widely debated. For how long can humanity sustain itself at such high numbers, and when will the depletion of natural resources reach crisis point?

Speaking as early as 2006, John Guillebaud, emeritus professor of family planning and reproductive health at University College London, told *The Independent*: “Unless we reduce the human population humanely through family planning, nature will do it for us through violence, epidemics or starvation.”

But will it? So far Ehrlich’s predictions that famines caused by overpopulation – especially in India – would kill hundreds of millions of people have not been realised, largely due to the Green Revolution. The question is whether advances in agriculture, energy, water usage, manufacturing, disease control and transportation can keep food supply ahead of the population curve.

“The absolute growth numbers are very substantial and there is reason for some concern,” admits Eckart Woertz, research coordinator and senior re-search fellow at the Barcelona Centre for International Affairs. “On the other hand, I would not be that alarmist. Let’s not forget the most prevalent problem of excessive resource use is unsustainable lifestyles, especially in the developed world, rather



than population growth, and population growth is not as steep as it used to be.”

Woertz cites the fact that the world currently produces one-and-a-half times more food than is needed and that 70% of global land is used for producing meat. If less meat were consumed, a more plant-based diet would go a long way in producing more with less. Food waste is also a huge issue.

“Population growth will actually level out between 2050 and 2100,” adds Woertz. “Most countries are well ahead in a demographic transition to lower birth rates. This includes most MENA countries. In countries like Iran, Lebanon or Tunisia, the birth rate is at or below the replacement level of 2.1 children per woman. In OECD [Organisation for Economic Co-operation and Development] countries we are well below that level and the population would actually shrink without migration. Only Sub-Saharan Africa still has very high birth rates.”

Overpopulation is a global issue that requires international cooperation and an open, honest debate. Yet the sensitivity of the topic is impeding such a discussion. Ethics, morality, equity and practicability all come into play. What is certain, however, is that overpopulation cannot be placed in a corner and forgotten. †

Above: Can the world handle another 3.4 billion people?

Below: Paul Ehrlich’s 1968 book, *The Population Bomb*

