It’s population, stupid!

https://www.e-ir.info/2011/01/19/it%e2%80%99s-population-stupid/

SIMON ROSS, JAN 19 2011

The world is facing a sea of troubles, and is increasingly struggling to see a route through them. I’m talking less here about the global recession, than about the more fundamental issues of resource provision and allocation.

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The issues

The issues are generally not in dispute, though their causes and the solutions to them often are.

It's population, stupid!
Written by Simon Ross

Perhaps the most fundamental issue is that of food and water. One billion of the world's seven billion people go hungry. Demand for food and water is rising, driven by population growth and by the move of developing countries to less efficient 'Western' diets, with a higher proportion of meat and dairy products. At the same time, supply is becoming increasingly constrained. Development, overuse and desertification are claiming fertile land. The water essential to agriculture is being diverted to meet increasing industrial and urban requirements, while groundwater is being depleted, rainfall patterns are changing and glaciers are ever more vulnerable to climate change. Agriculture is also heavily dependent on finite supplies of oil, for fertiliser, mechanised equipment, irrigation and transport. At the same time, ocean fish stocks, a key food resource, are falling almost everywhere.

Energy is a closely related issue. We are approaching peak oil, when oil production will reach its maximum, before an inevitable decline. There are alternatives, but none are ideal. Biofuels compete with food for limited land. Hydroelectricity is dependent on plentiful water, an increasingly scarce resource in itself. Wind and solar sources of power do work, but only in some places, and only some of the time. Nuclear energy has its own problems, particularly when it comes to waste disposal, and relies on uranium, another finite resource. None of these are particularly good fuels for many transport requirements.

Minerals are a third concern. Supplies of many key minerals are limited. As demand grows with global industrialisation, prices will rise and shortages will emerge.

Shelter is another issue, with more and more people crowding into the massive slums of the developing world. Creating the utility infrastructures needed and managing the resultant congestion are major tasks.

Pollution is increasing, whether of noise, light, plastic, chemicals or a range of other by-products. Amenity and quality of life is being degraded, as wild spaces are encroached upon and we live ever more congested and crowded lives.

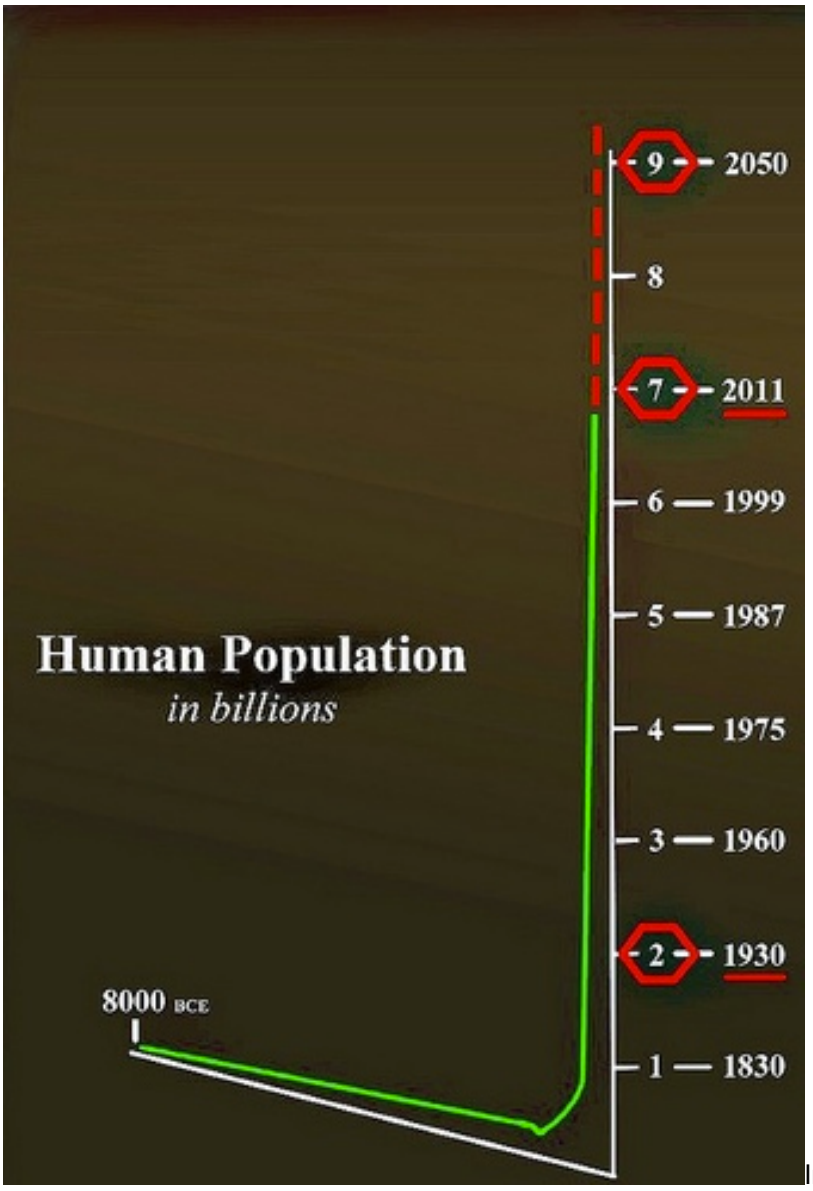
Ecosystems are collapsing worldwide, with extinctions running at one thousand times the natural rate, as the result of habitat loss, hunting and climate change. Quite apart from the moral implications of destroying our fellow animal species, this will create a whole range of resource problems, from lack of crop diversity, as wild varieties disappear, to loss of sources for new medicines.

Finally, climate change has the potential to create havoc, through rising temperatures, changing weather patterns, more frequent natural disasters and rising sea levels.

Clearly, many of these factors interact, and this is likely to lead to significant unpredictability. Two consequences of all of the above problems could be greater conflict and migration, as societies and individuals struggle to cope.

The causes

Problems rarely have just one cause. For the issues above, fingers have been pointed at irresponsible business practices and a lack of concern by governments and society as a whole, and there is some truth in these claims, particularly in the past. Our own market economy and a lack of regulation have meant that producers are often motivated by their personal and immediate needs rather than what's best for society in the long run. However, undemocratic planned economies have, if anything, a worse record.



Inequalities of power and wealth have also been blamed. It is true that the west has rates of per capita consumption many times that of the poorest nations. The 'consumer culture' has led many in the west to see the accumulation of possessions as the primary purpose of life and consumption as a value-free issue. Inequality within countries has been associated with dissatisfaction and unrealistic aspirations. Resource issues are affecting all countries and communities, if in differing degrees.

One cause of many problems, generally acknowledged but rarely addressed, is population growth. The world population was one billion (one thousand million) in 1800. It took a little over one hundred years to reach two billion in the 1920s, then only 30 years to reach 3 billion in 1960. Since then, another billion has been added every thirteen years or so, to reach approaching 7 billion now.

Improved nutrition and medicine have reduced the death rate worldwide. The birth rate has also declined, but less quickly, with the consequence that our numbers have kept growing, currently at the rate of 1.5 million more people every week.

Looking ahead, world population will continue to rise until at least 2050, when the UN thinks it will be between 8 and 11 billion, depending on the uptake and usage of contraception.

Solutions

The solutions proposed to all the problems mentioned at the start of this article depends on who you ask, with people, perhaps not surprisingly, tending to propose those that are in their own interests or, more charitably, with which they are most familiar.

Free marketers propose the roll out of unfettered capitalism across the developing world. Socialists seek redistribution of power and wealth or at least greater equity. Engineers and business people have come up with a wide range of technical solutions to address specific problems. Conservationists seek to conserve. Environmentalists advocate greener lifestyles. For vegetarians, eating less meat is part of the answer.

Those concerned about population accept these responses as worthy of consideration. But we have two concerns about them. The first is that, while necessary, they won't be enough. The problems are affecting us already, while demand for resources will continue to rise for the foreseeable future and supply of resources is looking increasing precarious. The second is that many of these solutions are generally either expensive, disruptive or provoke deep opposition.

By contrast, slowing and reversing population growth is acceptable, affordable and achievable. Most women have one or two children, given the choice. Birth rates are dropping world wide. More would like to have one or two children, if they had access to modern contraception and could afford it – 200 million don't. Modern contraception is also reliable and safe.

Today, the UN, and the US and UK governments, accept that maternal and infant health should be a priority – maternal mortality in developing countries is the equivalent of two jumbo jets full of women passengers crashing without survivors every day.

Individuals, too, are increasingly accepting that choosing the number of children one has is the single most important thing one can do for sustainability and the environment.

Criticism

It's fair to say that population concern has its critics. Some argue that the ageing of society caused by slowing population growth will combine with increasing longevity to create a society of pensioners without the producers to fund their pensions. OPT feel that such problems are manageable, with a little flexibility, and far less serious than will be the exhausting of limited resources. We believe an age-care strategy, based on an ever-increasing number of young helpers, who will themselves become old, is akin to "pyramid selling".

Such critics can also be concerned at the economic consequences of falling numbers, something which is outside the experience of most of us. However, in a highly automated world, OPT see fewer people as an opportunity rather than a threat, meaning less pressure on resources of all kinds and an opportunity for higher per capita consumption overall, allowing a levelling up for the poorest.

Others feel population is distracting from the "real issue" or is "blaming" women, or the poor, or developing countries, for problems caused by the wealthy West. By contrast, while we don't reject other solutions, we do however think that slowing population growth will make many of the problems we face easier to solve.

For some countries, people mention the importance of cultural preferences for large families or the economic necessity for having many children. However, as populations grow and available land does not, such arguments are ever less persuasive. In practice, countries with high birth rates cannot build up the resources they need to develop.

Finally, some people refer to the population policies of parts of China, or India under Indira Gandhi's state of emergency, when couples were put under intolerable pressure not to have more children than their allocation or to undergo sterilisation. No population concern group today advocates such approaches: as we've seen, most women are only too happy to use family planning where they can.

Conclusion

Society is facing a range of seemingly intractable problems. They admit of many worthwhile solutions, one of the best of which is encouraging a lower birth rate. Indefinite growth was never going to be possible in a finite world; the time to apply the brake has arrived.

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Additional reading

a) "Using an energy–economic growth model that accounts for a range of demographic dynamics, we show that slowing population growth could provide 16–29% of the emissions reductions suggested to be necessary by 2050 to avoid dangerous climate change." (*Global demographic trends and future carbon emissions,* by Brian C. O'Neill, Michael Dalton, Regina Fuchs, Leiwen Jianga, Shonali Pachauric and Katarina Zigovad. www.pnas.org/content/107/41/17521.full)

b) The report, *Fewer Emitters, Lower Emissions, Less Cost*, commissioned by the Optimum Population Trust from Thomas Wire, a post graduate student at the London School of Economics, found that "considered purely as a method of reducing future CO2 emissions", family planning is more cost-effective than leading low-carbon technologies. The report argues that family planning should be seen as one of the primary methods for reducing emissions. (www.optimumpopulation.org/releases/opt.release09Sep09.htm)

c) A study by scientists in the College of Oceanic and Atmospheric Sciences/Department of Statistics at Oregon State University concluded that: "Much attention has been paid to the ways that people's home energy use, travel, food choices and other routine activities affect their emissions of carbon dioxide and, ultimately, their contributions to global warming. However, the reproductive choices of an individual are rarely incorporated into calculations of his personal impact on the environment. Here we estimate the extra emissions of fossil carbon dioxide that an average individual causes when he or she chooses to have children. The summed emissions of a person's descendants, weighted by their relatedness to him, may far exceed the lifetime emissions produced by the original parent. Under current conditions in the United States, for example, each child adds about 9441 metric tons of carbon dioxide to the carbon legacy of an average female, which is 5.7 times her lifetime emissions. A person's reproductive choices must be considered along with his day-to-day activities when assessing his ultimate impact on the global environment." (*Reproduction and the carbon legacies of individuals*, by Paul Murtaugh and Michael Schlax, available on sciencedirect.com).

d) "We compare our estimates with the costs of numerous technical abatement options …(and) find that the population policy options are much less costly than almost all of the options Nauclér and Enkvist provide for low-carbon energy development, including solar, wind, and nuclear power, second-generation biofuels, and carbon capture and storage." (*The Economics of Population Policy for Carbon Emissions Reduction in Developing Countries,* by David Wheeler and Dan Hammer, The Centre for Global Development www.cgdev.org/content/publications/detail/1424557