

## Suicide by population

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By the time you read this editorial I will have reached my 81st year and whatever decisions the world makes on population growth will have little effect on my remaining years. They will, however, massively affect the lives of my grandchildren, and if you are a decade or so younger than I am, they will also disrupt your life. For the present the world has decided not to control population growth, with many nations, including Australia, actively encouraging larger and ever-growing populations. Neither limits to population size nor regulation of the rate of population growth are discussed by any bar a few individuals. The failure to discuss population issues or set policies limiting population growth occurs despite the size and growth rate of the world's population and the increasing demands of a growing middle class for resources being the foundation causes of the world's environmental problems. The loss of biodiversity, climate change, decline of world fisheries, clearing of forests, pollution of air and water, and the displacement of tens of millions of people from their homes through war and famine are in whole or part the consequences of too many people and humanity's rapacious consumption of world resources. Yet, when environmental problems are discussed at local, national, and global levels there is hardly any mention of population size and growth as the key drivers of environmental degradation.

There are many reasons why the size and growth of the world's human population are not core topics of political and environmental debate. Religion is one reason and the presumed right to have children another, but the most important is economic theory stipulating that population growth and/or increased productivity are essential for economic growth and job creation. Unfortunately growing the population seems easier for Australia than increasing productivity.

This dogmatic economic theory is short-sighted, and, if not addressed, suicidal. We live on a finite world, with finite resources. Endless growth is not possible and must sooner or later cease, despite the way world economics is imagined by Australian and other governments. The question the world faces is whether growth can be capped before global ecosystems collapse and with them civilisation as we know it. As cogently expressed by Kenneth E. Boulding, a greatly honoured, but unorthodox economist, philosopher, and social scientist, '*Anyone who believes in indefinite growth in anything physical, on a physically finite planet, is either mad or an economist*'.

Particularly since the 2008 Global Financial Crisis, Australian governments have moved away from environmental protection

and the conservation of biodiversity. They justify their actions on the grounds that protecting the environment and the conservation of nature interfere with economic development and the creation of jobs. As a consequence, the environmental gains made over two generations are being reversed and the population encouraged to continue to grow beyond ecological sustainability.

As a nation, Australia, just as all nations, needs to ask 'what is an ecologically sustainable population for Australia?', and then establish a social and economic framework to reach sustainability. Population size and growth, sustainability, and the consequences of unrestrained development need to be topics of national discussion and debate, but they are not. They are matters of greater importance for the survival of the nation than same-sex marriage or the presumptive citizenship of Parliamentarians, topics that have recently consumed vast sums of taxpayer dollars and Parliamentary time. These are issues that could have been easily resolved by Parliament itself. Achieving sustainability will be harder, but not impossible.

There are ways to measure the ecological sustainability of an economy, criteria which can then be used to measure the ecological and environmental health of the economy. Among the most important is how successful the economy is in conserving local and continental biodiversity. Does the rate of loss of populations and species exceed long-term evolutionary averages? Are other species increasing in abundance? Do these increases exceed natural variation in numbers and do the increases threaten the survival of other species?

On all these measures, Australia has a poor record. For mammals the proportional extinction of Australian species exceeds that of all other continents, with an increasingly large number of species in northern Australia in rapid decline. The rate of loss of bird, reptile, and frog populations and the genetic diversity they represent is equally high and concerning. These losses and the increasing abundance of feral animals and some native species, such as miners (*Manorina* spp.), threaten the survival of entire ecosystems and confirm that continental ecosystems are no longer functional.

This is evidence that the Australian economy is not ecologically sustainable. The same applies to Australia's agricultural systems where productivity is maintained or increased only through the addition of ever greater amounts of fossil energy and the transfer of nutrients and water from other systems, usually to their detriment. The environmental health of Australia's massive Murray–Darling Basin is threatened by

these trends, as are the catchments of nearly every waterway on the continent.

Australians, as with all people, have an ethical responsibility to moderate their use of resources to allow other species to survive and realise their own evolutionary potential. Although ethical arguments and the needs of other species may not be appreciated or even understood by government or the general public, ecological sustainability is a necessity because of the fundamental dependence of civilised societies, including Australia's, on natural ecosystems and global life-support systems. Short-term economic, health, and social gains are irrelevant when considering the long-term sustainability of ecosystems on which people ultimately depend. If these systems are healthy, our economic and social systems can be healthy. If global, continental, and regional ecosystems are dysfunctional and unsustainable, then human economic and social systems are also unsustainable, and the world made poorer.

Human and natural ecosystems, including those of Australia, are presently unsustainable and dysfunctional, as measured on the criteria outlined above. If nothing else, the rapidly unfolding threats of climate change illustrate the magnitude of the

problems humanity faces in the next few decades. Technology and innovation, shifts to renewable sources of energy, and low carbon economies can buy time, but they do not guarantee ecological and economic sustainability, much less the survival of the world's other species. They are strategies that may buy time, but do not solve the long-term problems of overpopulation, excessive consumption, and environmental degradation.

Solving national environmental problems, protecting biodiversity and ecosystem function, and the creation of an ecologically sustainable economy can only be attained through an end to Australia's population growth, with its ever-increasing consumption of resources. This must then be followed by the reduction in the size of Australia's population to ecologically sustainable levels.

Politically here is no easy way to do this, but the alternative, from which Australia is not immune, will be the collapse of civilised society and social chaos: suicide by overpopulation.

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