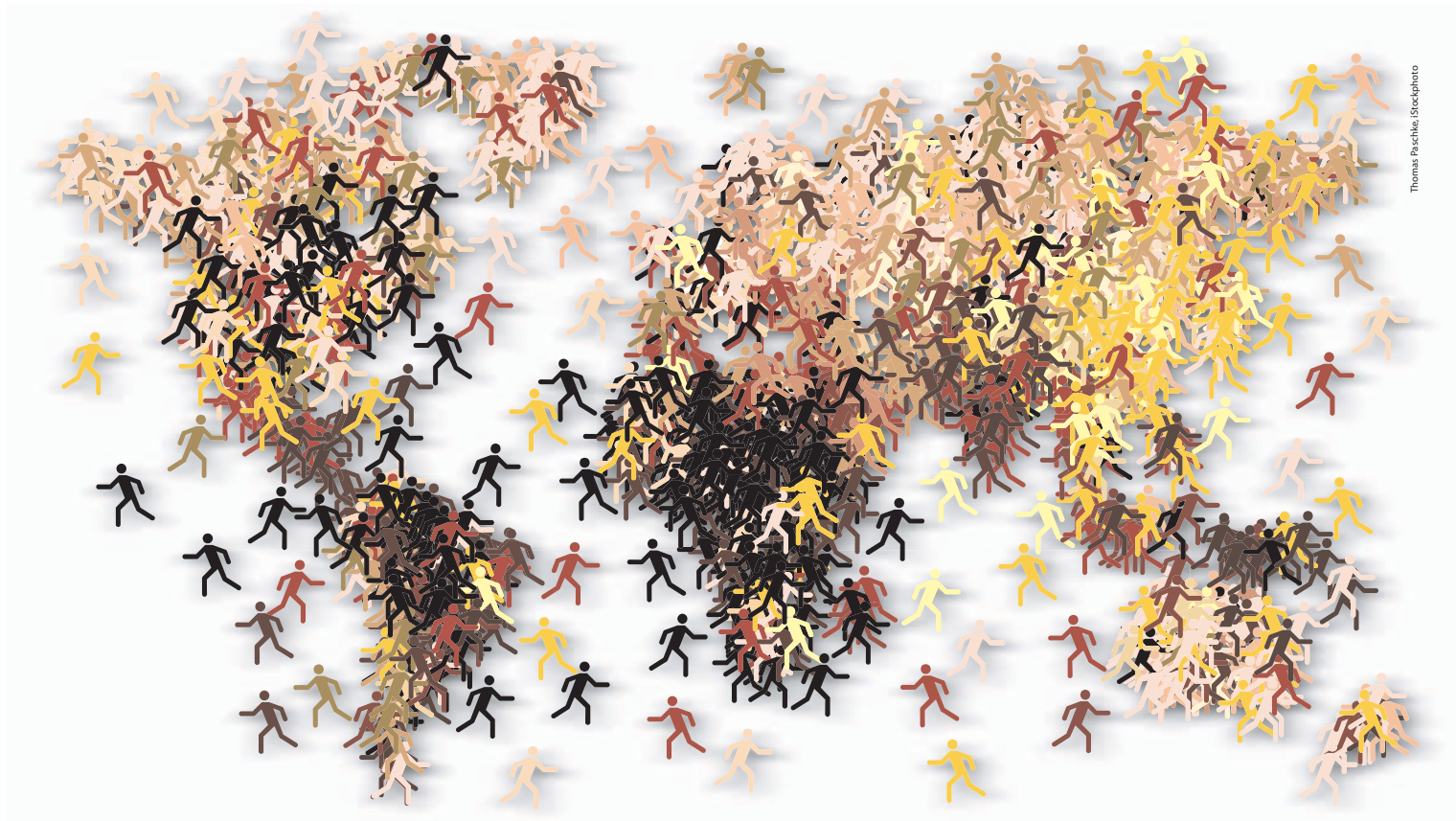


## F O C U S



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# Population: the lost priority

Australian authorities on population growth warn that it is *the* fundamental sustainability priority being perilously overlooked. **Graeme O'Neill** reports.

By the latest United Nations estimate, the world's present population of 6.7 billion is locked into a growth curve that will peak at an estimated 9.2 billion by mid-century.

Can the biosphere sustain a population of 9 billion – or to put it another way, can so many people live sustainably at the levels of material consumption currently enjoyed by affluent industrialised nations? Indeed, could a mere 30 million Australians live sustainably in the manner to which 22 million present-day Australians are accustomed?

'The answer to both questions is a resounding no,' says Dr John Coulter,

former Democrat Senator and President of Sustainable Population Australia.

'The outstanding problems are climate change and global water supplies, but we also have impending shortages in phosphate for food production and in a number of trace elements crucial for agriculture and manufacturing.'

Professor Tony McMichael, Director of the National Centre for Epidemiology and Population Health at the Australian National University, agrees that population growth is a fundamental problem.

'All of the evidence indicates that with current technologies and economic

practices, the demands for materials, energy and waste-absorption by the world population now markedly exceed the capacity of the planet to meet those demands sustainably,' he said.

'Increasingly, we are subsidising our non-sustainable way of living by eroding the life-supporting natural capital of the biosphere. Hence the evidence of climate change, stratospheric ozone loss, land degradation, fisheries exhaustion, freshwater depletion, accelerating loss of species and widespread disruption of ecological systems.'

Professor McMichael lauds the intent of

the UN's Millennium Development Goals, but describes the UN approach as 'trying to run up a down escalator'.

He says the combination of continued population growth – especially in the world's most food-insecure regions of sub-Saharan Africa and South Asia – and economic activities that increasingly impact the environment mean that a sustainable platform for attaining the Millennium Goals is unachievable.

'You can't reduce poverty, hunger, risks of infectious diseases and child mortality if the environment is becoming degraded, biologically impoverished, non-productive and unstable,' he said.

**'The outstanding problems are climate change and global water supplies, but we also have impending shortages in phosphate for food production and in a number of trace elements crucial for agriculture and manufacturing.'**

Graeme Hugo, Professor of the Department of Geographical and Environmental Studies and Director of the National Centre for Social Applications of Geographic Information Systems at the University of Adelaide, says the world needs to move to zero population growth. But Professor Hugo also believes the population–environment relationship tends to be over-simplified and that stabilising populations is no silver bullet.

'Population is just one element in the  $I = PAT$  [environmental Impact = Population  $\times$  Affluence  $\times$  Technology] equation.

'There's a tendency to think if we just fix the P component, all the rest will follow, but it's not that simple.

'We have to do things in a more environmentally sustainable way, and some of the answers lie in new technologies.

'Many from a science background argue the solution lies in halting population growth, but governments have to balance economic, social, political and environmental issues.

'Environmental and social scientists tend to talk past each other. Economists say we have to have growth, while environmentalists say we have to stop population growth. The answer lies between these extremes – we need truly multidisciplinary discussions.

'But it would be unethical for the West to say to developing nations, "We have a

high standard of living, but the world can't afford to have you living the same way".'

Dr Coulter said that, worldwide, population size and per-capita impact have combined in different proportions to affect the availability of particular resources. He highlighted that in Australia, approximately 60 per cent of the environmental impact of the economy's growth between 1975 and 2000 had been due simply to population increase, while 40 per cent was due to an increase in the rate of per-capita consumption. In other words, not only have we been dealing with more people, but those people have been consuming more rapidly.

'If we look at growth in [just] global water demand through the 20th century, around 80 per cent was due to population growth, and only 20 per cent to per-capita increases in consumption,' he said.

Dr Coulter's colleague at Sustainable Population Australia, Will Steffen, recently told a Canberra conference there had been

a 50-fold increase in human impact on the environment during the 20th century due to a sevenfold increase in population and a sevenfold increase in per-capita consumption.

'So we should be operating on both factors – seeking to reduce population as much as possible, as well as per-capita consumption,' Dr Coulter continued.

'In Australia, state governments are talking about reducing per-capita water consumption by 20–25 per cent, but it will all come to nothing if we continue with our current rapid rate of population increase of a million people every four years.

'China [for instance] is facing a rapid decline in groundwater reserves [because of population pressure], and is desperately propping up agriculture with massive diversions from its major rivers. It's also trying to cope with climate change, and the effect of global warming which could mean there will be no meltwater from ... glaciers within 20 years.'

Dr Coulter believes it is 'totally immoral' for Australia to seek to increase its population by offering a baby bonus to encourage people to have more children, when one Australian child will have the same environmental impact as 80 children in Bangladesh, or 300 in Ethiopia.

But if Australia's population were to decline rapidly, it would suffer problems



**Not just increased population on Earth, but greater rates of consumption per person, need to be factored in.** Size Fei Wong, iStockphoto



## F O C U S



The Tiananmen Gate of Heavenly Peace in Beijing. China's population growth rate has been reined in. Tor Lindqvist, iStockphoto



Bombay life. India's population continues to grow steadily. Simon Webber, iStockphoto

associated with its age structure – too few younger people paying taxes to support an ageing population of Baby Boomers. 'If our reproduction rate was 1.0, our population would go into an exponential decline, and the problem is then to correct the decline in 30 years' time before you approach the point you want to stabilise at.'

He believes a global, environmentally sustainable population would be no more than 2 billion, and fears that two-thirds of the world's projected 9 billion population could die 'from one calamity or another' by century's end.

Dr Coulter supports a reduced immigration program focused on genuine refugees, arguing that there are far better ways of helping the world's 12–20 million refugees than bringing them to Australia.

Professor Hugo agrees. 'Migration is a complex issue – the reality is you're

not going to be able to shift enough people between countries to make much difference in terms of population pressure.'

He notes that both Indonesia and China, despite continuing population growth, have reined in their fertility to a degree that seemed impossible only two decades ago. The demographic transition – the change from high to low birth and death rates due to increasing wealth and education, particularly female education – has seen Indonesia's birth rate slow to 2.3 children per family. In some areas, population growth is actually below Australia's figure of 1.83 children per couple.

China's population will begin to decline in around a decade, due to the demographic transition and its draconian one-child-per-family policy.

'It concerns me that policy tends

to be derived mainly from [anecdotal rather] than empirical evidence,' said Professor Hugo. 'We need population and environment policy-making to be much more evidence-driven – we should move away from the silver bullet of population stability to intervention measures. There are other ways forward which aren't being considered.'

Professor McMichael believes the issue of population growth has been largely discounted in the climate change debate, which is focused on the atmosphere and associated biophysical processes.

'Greenhouse gas emissions have therefore commanded the immediate attention as the point of intervention.

'Further, the broader constituency of scientific disciplines engaged in the debate – especially within the IPCC – has been dominated by climate scientists,





**Bondi Beach, Sydney, inundated with people competing in the City to Surf fun run. There are concerns about national population planning.** John Simmons, iStockphoto

other natural scientists, technologists and economists.'

Demographers have been essentially invisible – although Professor McMichael wonders what they might have contributed, given that the environmental impact of population growth remains a serious blind spot for most demographers too. He says there are at least three other reasons why the contribution of population size and growth has been unduly discounted.

'First, there has been a general assumption that, while world population will increase by around 30 per cent by mid-century, and growth will then flatten off, the energy intensity of ways of living, especially in developing countries, is on track to increase by proportionately very much more [sic].

'Second, throughout the formative 1990s period, there was a more general

reluctance to address the population question head-on. The combination of conservative hostility from the politically powerful US Government, from the Catholic Church and from many developing countries who did not wish to be instructed by the rich world made it easier for the science of climate change to sidestep the issue.

'Third, much of the political debate about emission caps and trading is expressed in the language of per-person emissions, by country and region ... which all too readily leads to non-consideration of how many persons there actually are and will be.'

Professor McMichael rejects as 'specious' an argument by US economist Julian Simon that the more people there are, the more likely it will be that solutions will be found for environmental problems.

'This ... could only apply up to the limits of the enhanced environmental carrying capacity,' he said. 'The Rwanda tragedy illustrates what happens when 8 million people compete to live on an environmental base able to carry about 6 million sustainably.'

He says the climate change problem makes it clear that nations cannot just wait patiently for population growth stabilisation. Western nations, including Australia, have a 'growth fetish', in which bigger is nearly always seen as better – bigger houses, cars, GNP, higher economic

growth rates and more consumers.

'States and nation-states are like rats on adjoining treadmills, all desperate to keep up with one another – indeed to gain economic advantage where possible.

'The deregulated, globalised free market is proving damaging in very many environmental and social ways. As the UK economist Nicholas Stern said of climate change, it is the "most disastrous market failure in human history".

'We have forged ahead with fossil fuel combustion and environmental incursions without pausing to ask about the current and future price to be paid for the resultant loss of many crucial natural-capital environmental assets.

'If we don't find internationally agreed and shared ways to radically transform our patterns of growth and activity, then, on current environmental indications, we may face serious crisis and collapse of environmental and social systems within a half-century. Capitalism may then go the way of feudalism.'

#### More information:

Sustainable Population Australia:  
[www.population.org.au](http://www.population.org.au)

National Centre for Epidemiology and Population Health: <http://nceph.anu.edu.au>

National Centre for Social Applications of Geographic Information Systems:  
[www.gisca.adelaide.edu.au](http://www.gisca.adelaide.edu.au)



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