

Sustainable population

Preamble

Projections suggest that world population, currently 6.8 billion, will reach 9.1 billion by 2050. Australia's current population is just over 22 million, and has been increasing at 1.9 per cent per annum, driven largely by immigration (approximately 260,000 per year).

The latest figures from the Australian Bureau of Statistics show a growth of 2.1 per cent per annum, and nearly half a million people were added to the population in the last year. Two-thirds of that growth was attributed to immigration.

Australia's population is growing faster than most of our regional underdeveloped neighbours and all other OECD countries. If this rate remains constant, our population will double in 37 years.

At present there is an unwritten policy; the number of people in Australia is determined by economic, developmental and political needs which interact to produce an ethos of population growth. The drivers are;

- The economic system based upon growth in jobs wealth and consumption
- The need for skilled immigrants to feed economic expansion, for example in the resource industries
- The need for population growth to provide the tax base to support an ageing population
- The political pressures and clout from the development and real estate industries
- The security needs of Australia in an increasingly unstable and overcrowded world.

The fundamental problem with this ethos is that it ignores the biological principle that all living systems will grow until limited by the constraints of food and resources and there is evidence that this constraint will now be held in check only by the use of dwindling supplies of oil for food production and by unsustainable use of natural resources such as land, fish and natural vegetation.

Discussion

Discussion on the main factors impacting on Australia's population policy follows:

The economic paradigm

Today, the stability of developed countries depends on continued economic growth and consumption. Clearly this is not possible for ever on a planet with finite resources, but governments are wedded to this concept because employment and wealth is created and this is fundamental to electoral success. However some recognition that continued growth might not be possible is emerging, for example, to control of climate change, some economists (Stern) have recognised the need to control growth. Furthermore the discipline of economics has an increasing number subscribing to steady state economics. The arguments are presented here www.sd-commission.org.uk/publications/downloads/Herman_Daly_thinkpiece.pdf

The demand for population growth to service an increasing number of elderly persons provides an economic dilemma. In many Western societies including Australia an increased life expectancy has lead to an inversion of the traditional broader based demographic 'pyramid'. As a result, a greater demand for welfare and health services is placed on society by an 'ageing' population, and a

proportional reduction in the number of workers and therefore tax payers to support it. This is undoubtedly a headache for policy makers and society in general and the easiest solution is to encourage further growth through immigration or birth to swell the 'pyramid' base and provide the extra taxpayers. This merely delays and magnifies the problem for the next generation and such policy needs to be replaced according to Adair Turner by a welfare optimizing model, which takes into account the increasing years of healthy life, a slow rise in the pensionable age and capital inheritance. www.rstb.royalsocietypublishing.org/content/364/1532/3009.abstract The demography has been explained by Joseph Chamie. www.theglobalist.com/storyid.aspx?StoryId=8321

In Australia immigration has been used to stoke the economy and deliver a younger age group to service the needs of aging population. However, The Productivity Commission Research Report (2005) The Economic Implications of an Ageing Australia made it clear that migration does not reverse the ageing population. There are other, though more difficult methods of solving this problem and indeed the Australian Government has already foreshadowed one—the increase in the age for pension.

Energy

World Population growth has been fuelled by cheap energy. Indeed a review of the world population since the industrial revolution demonstrates the same exponential rates of growth, population and energy.

It is well accepted that the 'green revolution' in which crop yields increased tremendously was fostered by fossil fuels (oil in particular) for the fertilisers, mechanised agricultural processes and transport to keep the system operational. Cheap energy has allowed humanity to cultivate marginal land and overuse fertile land with resulting soil degradation. With the progressive scarcity of oil, food production and therefore population numbers will become unsustainable.

Without preparation for 'peak oil' we will have an energy 'crunch' soon after we arrive there, and the amount of food we can produce and transport will fall. This will threaten food supplies to vast numbers of people, mostly in the developing world. Australia is currently a net exporter of grain and some other land based agricultural products. Under an energy crunch scenario, Australia may be able to produce more food than our current population needs, but our moral responsibility to prevent hunger and famine in populations in other countries would be in conflict with any increase in Australian population.

Australia is also the world's largest per capita emissions of greenhouse gasses. These result because of the use of coal for power generation and energy intensive industries, and because we are profligate users of energy in our homes. The size of houses, distance from places of work and recreation and individual consumption demand ever increasing domestic energy use.

Increasing our population inevitably means increasing our energy use and thereby emissions and waste. Whilst there may be some improvement in per capita emissions from increases in population density in inner city developments, this is likely to be offset by increasing urban sprawl and scatter. We should look at this issue not only through the lens of sustainability but also that of resilience. We are determining a future whereby our ability to withstand energy shocks or other externally imposed disruptions to our society is precarious.

Environment

Human health and indeed survival depends ultimately on the integrity of ecological services. Clean freshwater and air, food, removal of pollution are all examples of absolute dependency on our environment and there are no man-made or technological alternatives. There are numerous scientific studies indicating that these services are increasingly impaired as the natural resources providing them are used or damaged (references) and that many natural resources are now used faster than nature replaces them. Population growth is a major drive of this damage which is occurring in both wealthy and poor countries.

National security

Several reports detail a likely increase in social disorder, conflict and war as climate change progresses and diminish available fresh water and productive land. (Butler C. D. in *In Search of Sustainability*, Melbourne: CSIRO. 2005; pp 33-48 www.csiro.au/resources/ps5e.html)

John Broder

www.nytimes.com/2009/08/09/science/earth/09climate.html?_r=1&th=&emc=th&pagewanted=print

said that climate change is now being taken seriously by the US Department of Defence using climate modelling based on sophisticated Navy and Air Force weather programs and other US government climate research programs at NASA and the National Oceanic and Atmospheric Administration. Climate change has national security implications for the US and the Pentagon included a climate section in the Quadrennial Defence Review in February 2010.

Although not spelled out it is likely that Australian governments, recognising the need to protect a sparsely populated country, wish to increase population. Clearly these concerns cannot be dismissed from the agenda in developing a national population policy.

Environmental refugees

It is a sad fact that although the number of asylum seeking refugees presently arriving on Australian shores is but a tiny fraction of the total number of immigrants, they raise a cacophony of xenophobic voices often fuelled for political gain. We support the practical and compassionate view expressed by Malcolm Fraser (ABC 7.30 Report 23.2.10). The point being made is that evidence suggests that the numbers of environmental refugees is increasing worldwide and in Australia we can expect the advent of thousands fleeing from the inundation of Island States and coastal regions in Asia, as well as from the hunger and starvation from the same factors which cause conflict (see national security above).

Australia should play an increasing role in working towards alleviating global and regional poverty. In developing countries we should be actively supporting and promoting all levels of education (particularly of females) and ensuring family planning programs are widely accessible and strictly adhering to human rights principles. Nevertheless, we will have to prepare for receipt and assimilation of thousands of refugees from our neighbouring countries.

www.minivannews.com/news_detail.php?id=7645

The health impacts of population growth

These are increasingly related to global environmental change of which climate change and world population are major components. Global environmental changes (GEC) such as climate change, biodiversity loss, and degradation of food-producing ecosystems on land and in the oceans are the major determinants of sustainability and future population health. In medical terms these are the life supports systems for humanity. These determinants are enmeshed in a wide set of 'global changes' typified by the growing scale, speed, and intensity of changes in social, economic and environmental conditions in the world. Fundamentally, the health of a population is related to its rate of increase and the presence of sustainable ecological resources. Humanity is now living on capital as well as interest and adverse health impacts will increase.

The present rate of population growth has imposed considerable strain on existing health services in Australia in terms of trained personnel, finance and administration. Clearly any increase in population must be constrained by the rate at which services can be maintained.

There are secondary economic consequences to unsustainable population growth in cities with health impacts from pollution, overcrowding loss of green space and recreational facilities. Present concepts of planning for urban living are likely to be unsustainable and unhealthy under peak oil and rapidly increasing energy costs. We consider the projected increase in size of some Australian cities as imprudent.

With the inevitable increase in environmental refugees, health services for these individuals will have to be provided thus increasing the existing burden on overstretched health resources.

DEA policy

By contrast to present policy, Australia's population should be based on the principles of sustainability and the future health and well being of our population within the constraints of an increasingly interdependent world.

www.unfpa.org/swp/2009/en/

The factors to be considered are;

- The constraints imposed by water shortage, climate change and loss of ecological services, and the footprint of humanity on the land of Australia
- The increase in greenhouse emissions due to population growth. Treasury modelling shows that 83 per cent of the forecast increase in emissions to the year 2020 will be attributable to population growth (Birrell & Healy 2009 www.population.org.au/images/stories/Documents/pdf/popgg.pdf)
- The availability and productivity of land taking into account the above, and the loss of littoral land due to population growth and urbanisation
- The future obligations to absorb increasing numbers of environmental refugees from neighbouring countries. Conservative estimates by the Environmental Justice Foundation amount to many millions of refugees world wide www.ejfoundation.org/pdf/climate_refugees_final.pdf
- It would be totally unrealistic to believe that the juggernaut of economic and population growth can devolve suddenly into a new policy based on science and sustainability. Here DEA will give some pointers as to the way forward. All these pointers can allow actions at the edges of the problem which will hopefully coalesce to a move to sustainability
- Australian society and its governance systems must be encouraged to accept that science should provide a basic understanding of the parameters that sustain our physical presence on this planet.
- Accordingly it would be prudent for population numbers in Australia to be based upon the ecological carrying capacity of Australia taking into account projected water and fertile land resources, and projected need to reduce greenhouse emissions in concert with expected international contraction and convergence policy
- Australia will need to recognise that population stabilisation will require progressive modification of the economic ethos of continued growth and expanding consumption
- Having defined the constraints on population growth, all major projects should have a population impact statement in order to move away from the 'given' that a new resource project must be developed immediately if economically advantageous
- The concerns of governments and society over national security must be taken into account in all deliberations
- Australia, as a wealthy developed country should play an increasing role in working towards alleviating global and regional poverty. In developing countries we should be actively supporting and promoting all levels of education (particularly of females) and ensuring family planning programs are widely accessible and strictly adhering to human rights principles. www.optimumpopulation.org/reducingemissions.pdf

Recommendation

Doctors for the Environment Australia recommends that a national task force be formed to prepare a scientific report on an environmentally sustainable population for Australia.

This report must be based upon scientific, demographic and health science and not on the opinions of community sectors with conflicts of interest. The intent will be to provide the data upon which government policy can be reliably based. An assessment is required of the wide ranging impacts and consequences of population growth on our environment, economy, energy security and infrastructure. This task force should take into account an increasing international obligation for Australia to reduce its carbon footprint.

The deliberations of the task force should be both nationally and regionally based, for example the available evidence suggests that the population of South Australia may have already reached its limits and that we are moving into adverse health impacts, the limiting factors being water and long

term desertification. By contrast population limits in Northern Australia may be influenced by national security and the advent of environmental refugees.

The views of industry, commerce and developers should be made available to the task force but the independence of the report is integral to enlightened scientific deliberation. The influence of powerful sections of the community must be divorced from the deliberations of the task force and we therefore oppose these deliberations being brought under a Federal Ministry.

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