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Migration and Population Study
Productivity Commission
LB2 Collins Street East
MELBOURNE VIC 8003

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Sir/Madam

Thank you for the opportunity of making a submission to this Inquiry. I do so on behalf of the national body of Sustainable Population Australia inc. (SPA). Two of our branches, Canberra region and Tasmania, have made separate submissions.

As our Canberra region indicated, SPA is an environmental organisation with over 900 members across Australia. Our main focus is on total numbers of people, whether they come from immigration or from natural increase, and their impact on the environment. We do, however, address the issue of population growth from social and economic viewpoints as well. On this latter basis, therefore, we duly make the submission that follows.

Yours sincerely

Jenny Goldie
National president

THE IMPACT OF MIGRATION AND POPULATION GROWTH ON PRODUCTIVITY GROWTH IN THE AUSTRALIAN ECONOMY

Introduction:

SPA believes that all population growth – from either immigration or natural increase - tends to be bad for the environment unless there is a concomitant reduction in consumption and/or a radical move away from environmentally damaging technologies, particularly those based on fossil fuel energy. SPA recognises, however, that Australia has international obligations to take in a reasonable number of refugees or displaced persons. In addition, we may be subject to pressure on our shores in the not-too-distant future from environmental refugees, particularly those displaced by flooding as a result of rising seas caused by climate change.

Skilled migration

In recent years the Australian immigration program has shifted its emphasis away from family reunion to skilled migration. This was probably in response to the considerable evidence coming out of the United States that unskilled mass migration tends to be a drain on the economy while, in purely economic terms, skilled migration can make a positive contribution. Sustainable Population Australia inc. (SPA) takes the view that much skilled migration is unnecessary and should only be a temporary measure until Australia's training institutions catch up and duly provide all the skills that the workplace needs. We may have a so-called skills shortage at the moment but with over a million people unemployed or underemployed, it is evident that with more training and retraining opportunities, the skills could be found from within Australia's existing residents. While immigrants are brought in to fill skilled vacancies, it means a tenth of Australia's workforce is left to wallow in a less than fully productive state. Indeed, as the scarcity of labour is reduced under population growth, the price of labour is reduced. We can see it in the rise of casualisation of the workforce and 'no money for retraining' syndrome. We would also argue that a ready supply of labour from overseas actually impedes productivity in that employers are encouraged to substitute cheap labour for improved technology.

Australia is already seeing downward pressure on wages in the computer industry because immigration. For instance, as the SPA (Tasmania) submission quoted from the 7 July 2004 Australian Financial Review:

> **Immigrants taking local IT jobs: report**
>
> By David Crowe
> Thousands of low-cost workers are entering the country and undermining the job prospects of new computer science graduates, according to a report commissioned for the federal

government that calls for drastic changes to skilled migration. Visa requirements should be tightened to end a "serious oversupply" of young overseas workers which is driving down salaries and contributing to high unemployment among information and communication technology (ICT) workers under 30, the report says. It also likens the easy entry of temporary workers to a subsidy that gives offshore outsourcers such as Indian computer companies an unfair advantage over Australian rivals…

The United States' experience

In 1997, the US National Academies of Science found few overall economic benefits from immigration. In their report <http://www4.nationalacademies.org/news.nsf/isbn/0309063566?OpenDocument> they found:

- Most immigrants work in specialized sectors of the economy such as the manufacturing and service industries, and compete primarily for jobs with each other and with Americans who don't hold high school diplomas. Through this competition, in fact, the wages of these native-born Americans may have fallen some 5 percent over the past 15 years.

- On an annual basis, new immigrant families receive more in publicly funded services than they pay in taxes... Most -- especially those from Latin America -- tend to have more school-aged children and require more educational services than other households. Although immigrants use about the same level of government services as native-born residents, most immigrants pay less taxes because they own less property and have lower-paying jobs.

- The long-term fiscal contributions that immigrants make, however, will vary depending on such factors as education and age of arrival to the United States. Immigrants with higher levels of education will pay more taxes in the long term because they have higher incomes. But immigrants who don't have high school educations and those who are age 50 or older on arrival may receive more benefits than they pay in taxes.

- Historically, the wages of immigrants who entered the country when they were 25 or younger eventually equaled those of native workers after immigrants had been in the work force for about 20 years. However, because new immigrants are coming to the United States with substantially lower education and skill levels and are starting with lower wages, it be may more difficult for them to close the wage gap. In particular, most Mexican male immigrants, who make among the lowest initial wages, have not seen any increase in wages relative to those of native workers even after 20 years in the U.S. work force.

In 1998, the Center for Immigration Studies commented on an extensive new study on immigration's impact on California <http://www.cis.org/articles/1998/IR32/impact.html>. CIS noted:

- immigration reduces job opportunities for natives (i.e. those born in the US)

- Immigration in the 1970s lowered the wages of high school dropouts by between 10 and 16 percent annually ($2,250 to $3,800) and, in the 1980s, immigration primarily affected employment, with between 128,000 and 195,000 natives in California either unemployed or withdrawn from the labor force because of immigration.

- [While] …their analysis suggest that the arrival of immigrants in an industry is positively associated with growth…[t]his positive effect on job growth *does not,* however, seem to translate into more jobs or higher wages for native-born workers. In fact, the labor market opportunities available to less-educated natives are reduced by immigration. Thus, by "benefit" to the economy the authors mean that the immigrants and employers are better off. Native-born workers either are unaffected or are harmed by immigration.

- The authors also point out that the larger fiscal burden created by immigrants is explained almost entirely by educational and other socio-economic characteristics of immigrants and not by their immigrant status *per se.* In other words, immigrants create a burden on public coffers in California because they are less educated, hold lower paying jobs, and have larger families than natives. This means that they generally pay less in taxes and have a greater propensity to consume public services than natives. It is also clear that the large differences between immigrants from different countries are almost entirely due to differences in socio-economic characteristics.

In George J Borjas's 1999 book *Heaven's Door: Immigration Policy and the American Economy,* he noted that the U.S. took in more than a million immigrants per year in the late 1990s, more than at any other time in history. As his publisher, Princeton University Press <http://www.pupress.princeton.edu/titles/6677.html> notes, while it may have been good news for humanitarian reasons…

> …it's decidedly mixed news for the American economy--and positively bad news for the country's poorest citizens. Widely regarded as the country's leading immigration economist, Borjas presents the most comprehensive, accessible, and up-to-date account yet of the economic impact of recent immigration on America. He reveals that the benefits of immigration have been greatly exaggerated and that, if we allow immigration to continue unabated and unmodified, we are supporting an astonishing transfer of wealth from the poorest people in the country, who are disproportionately minorities, to the richest.
>
> In the course of the book, Borjas carefully analyzes immigrants' skills, national origins, welfare use, economic mobility, and impact on the labor market, and he makes groundbreaking use of new data to trace current trends in ethnic segregation. He also evaluates the implications of the evidence for the type of immigration policy that the U.S. should pursue. Some of his findings are dramatic: Despite estimates that range into hundreds of billions of dollars, net annual gains from immigration are only about $8 billion.
>
> In dragging down wages, immigration currently shifts about $160 billion per year from workers to employers and users of immigrants' services. Immigrants today are less skilled than their predecessors, more likely to require public assistance, and far more likely to have children who remain in poor, segregated communities.

Relationship of population size and growth to wealth

If one considers the world rankings based on GDP per capita, Australia comes in 17th. Of the 16 countries listed above Australia, only two, the United States and Canada, have population sizes bigger than Australia. <http://www.cia.gov/cia/publications/factbook/rankorder/2004rank.html>. Most of the countries with more GDP per capita, or at the top of the wealth table, are quite small. They are found in the latter quarter of the population *size* table http://www.worldbank.org/data/databytopic/POP.pdf There is, however, no statistical correlation between population *size* and wealth.

With respect to population growth *rates*, however, there is a clearer correlation with wealth, or lack of it. Those countries with high growth rates tend to be poor. http://www.photius.com/rankings/population/population_growth_rate_2004_0.html.

Thus, the economic models for Australia should be such Western European countries as Luxembourg (164,000), Norway (4.5 million), Switzerland (7.3 million) , Denmark (5.3 million), Ireland (4 million), Iceland (290,000) and Austria (8.1 million) that have relatively small and stable populations. All of these countries have a higher GDP per capita than Australia.

Australia's current account deficit

Despite the recent surge in non-rural resource exports that meant exports exceeded imports for a change, Australia's large current account deficit remains a matter for concern. Forbes magazine noted at the end of August that:

> Export volumes rose by 1.6 per cent in the last quarter, with goods exports up 3.2 per cent, but this was offset by a 2.0 per cent increase in import volumes.
>
> The NAB economists said the implications for Australia's real gross domestic product growth are that net exports (i.e. imports) are likely to subtract 0.2 percentage points from growth in the second quarter, bringing the total subtraction to almost 2.0 percentage points over 2004-05. http://www.forbes.com/business/feeds/afx/2005/08/31/afx2198042.html

Clearly, adding to Australia's population is not going to have an appreciable effect on the quantity of non-rural exports but the wealth generated will be spread over more people. In other words, the pie will have to be cut into smaller pieces.

For rural exports such as wheat, population trends do have an effect on the level of exports. As domestic consumption goes up because of population growth, it reduces the amount left to export and the current account worsens.

Skewed investment

As population grows, extra housing is required but this skews investment away from more productive enterprises such as research and development into new technologies, and education generally. This decreases the potential for added export income that might lessen the current account deficit.

Infrastructure such as roads and freeways that service new housing developments or towns also drains investment dollars away from genuinely productive enterprises.

Likewise, cancerous population growth in Sydney has meant a shortage of affordable housing, pushing both parents into full-time work to pay for huge mortgages, with more travel time as the suburbs spread ever outwards and the roads more congested. This leads to family tension and poor child relationships, spinning off into increased investment in police, gaols and welfare - all growth industries - further decreasing investment in export-oriented research and development.

Converging catastrophes that will impact on the economy

SPA believes the global situation is deteriorating as a result of, not only climate change, but also the imminence of Peak Oil, the declining productivity of farmland, and the deterioration of ecosystems. All these 'converging catastrophes' will inevitably impact on productivity since we believe that the health of the economy is ultimately dependent on the health of the environment. Population growth tends to exacerbate all these problems and in turn lower productivity.

- *Climate change.*

  In a joint report by the Australian Medical Association and the Australian Conservation Foundation launched on 22 September 2005, it was noted that climate change caused by human activities has begun and will continue in the future. It noted

  > If we do nothing to reduce greenhouse gas pollution, by the end of this century heat-related illnesses could kill thousands of people every year and the climate in Brisbane and Sydney could become suitable for dengue fever transmission… http://www.acfonline.org.au/news.asp?news_id=565

  At the launch of the report, Professor Ian Lowe of ACF called for a reduction of 90 per cent in greenhouse gas emissions by Australia by 2050. This was based on the agreed figure of a 60 per cent reduction needed globally to stabilise the atmosphere, but as Australia's per capita emissions are way above average, there is a need to cut even more if there is to be global equity.

  Greenhouse gas emissions that cause climate change are a function of population numbers and economic activity – at least that based on the burning of fossil fuels. Without a shift away from the fossil fuel economy, population growth will exacerbate climate change. The implications for Australia are enormous, particularly for its biodiversity and agriculture as well as human health. As Professor Tim Flannery wrote in the Sydney Morning Herald recently:

> Because of its extensive shallow waters, the Great Barrier Reef is the most vulnerable to global warming. Even distant, virginal parts of the complex are dead and dying as a result of the warming ocean, which demonstrates that coal-burning, not fishermen, is the greatest threat to this national treasure.
>
> The situation in Tasmania is almost as dire. Last summer, the media ran stories on the great eucalypt dieback afflicting Tasmania's world heritage area. In the broadcast images, dead and dying trees stretched as far as the eye could see. And they had fallen victim not to loggers, but summers so hot and dry as to be without precedent. The death of the gums had been predicted over a decade ago by climate change researchers, and is a direct result of burning fossil fuels. http://www.smh.com.au/news/opinion/earth-needs-a-climate-of-change/2005/07/17/1121538862977.html

The effect of climate change on Australian agriculture may have some beneficial effects in some regions for small increases in termperature, but as the Greenhouse Office notes:

> Impacts from climate change have the potential to exacerbate other land degradation challenges being faced in Australia such as salinity and soil erosion. Changes to the water balance and water tables can increase salinisation and higher flood flows and drought induced dust storms can result in dramatic soil erosion events.
> http://www.greenhouse.gov.au/impacts/agriculture.html

Tim Flannery has warned that Australian agriculture will “go to the wall” with a three degree rise in temperature. Professor Ian Lowe, president of ACF and author of ‘Living in the Hothouse’, said at the launch of the report on health impacts of climate change that it may happen with even less warming than three degrees.

- *Declining ecosystem health*

Earlier this year, about 1400 scientists reported on their four-year study: the Millennium Ecosystem Assessment (MEA, 2005). There were four major findings, namely:

1. Humans have changed ecosystems more rapidly and extensively in the last 50 years than in any other period. This was done largely to meet rapidly growing demands for food, fresh water, timber, fibre and fuel. More land was converted to cropland in the 30 years after 1950 than in the 150 years between 1700 and 1850. Experts say that this resulted in a substantial and largely irreversible loss in diversity of life on Earth, with some 10 to 30 percent of the mammal, bird and amphibian species currently threatened with extinction.

2. Ecosystem changes that have contributed substantial net gains in human well-being and economic development have been achieved at growing costs in the form of degradation of other services. Two services – capture fisheries and fresh water – are now well beyond levels that can sustain current, much less future, demands. Experts say that these problems will substantially diminish the benefits for future generations.

3. The degradation of ecosystem services could grow significantly worse during the first half of this century and is a barrier to achieving the UN Millennium Development Goals. Experts warn that changes in ecosystems such as

deforestation influence the abundance of human pathogens such as malaria and cholera, as well as the risk of emergence of new diseases.

4. The challenge of reversing the degradation of ecosystems while meeting increasing demands can be met under some scenarios involving significant policy and institutional changes. However, these changes will be large and are not currently under way. The report mentions such options as protection of natural forests that not only conserves wildlife but also supplies fresh water and reduces carbon emissions. http://www.maweb.org/en/Article.aspx?id=58

If for no other reason, because ecosystems provide services to humanity such as clean air and water, pollination of crops etc, it is critical we reduce the demands on them. Further population growth will only cause destruction of more natural habitat for urban development. Thus, curbing population growth will reduce demands those ecosystems of which we have stewardship and allow us to better stabilise and rehabilitate them.

- *Food production concerns*

Australian agriculture has recently reaped the short-term economic benefits of increased demand from China and other newly emerging economies. Demand for Australian agricultural products will inevitably increase as global population grows to eight or nine billion in the next half-century. Climate change will allow some temperate countries to increase grain production (Canada, Russia) while grain production in the tropics will decline with an increase in temperature. What effect climate change will have on the amount of food available on the world market remains to be seen but it is possible that supply will not be able to keep pace with demand.[1]

To what extent Australia can fill some of that demand will largely depend on whether it can reverse its significant land degradation problems and also the extent to which climate change is manifest. Increasing tropical cyclones in North Queensland, for instance, may play havoc with the sugar industry.

Australia has significant land degradation problems including widespread dryland salinity, acidification and compaction of soils, and erosion. Altered fire and grazing regimes, and pests and weeds, all affect the health of the rangelands.[2] The Australia State of Environment Report 2001 notes there is continuing loss of vegetative cover for broad-acre farming, and that the large areas of acidic and sodic soils are contributing to loss of water quality. Some inland rivers such as the Macquarie in NSW, may be too saline within decades to support irrigated agriculture. The Australian Bureau of Statistics[3] notes that at the end of the 1990s, 5.7 million

[1] Brown, L.R. (2004) *Outgrowing the Earth: The food security challenge in an age of falling water tables and rising temperatures*. Earth Policy Institute
[2] Australia State of Environment 2001, p.6.
[3] ABS. Measuring Australia's Progress, 2002. p.28

hectares of Australia were assessed as having high potential to develop dryland salinity through shallow and rising watertables. Professor Peter Cullen[4] of the Wentworth Group believes up to a third of Australian farmland may have to be taken out of production and revegetated to arrest the spread of dryland salinity.

Climate change, land degradation, and declining ecosystem health will all impact adversely on Australia's ability to meet growing global demand for food. But perhaps, even more significantly, will be the advent of Peak Oil, that is, the end of the age of cheap oil.

- *Peak Oil*

Despite denials by oil producing companies, a growing number of qualified commentators are saying that the world will reach maximum oil production soon, perhaps by 2008, even 2005. Oil will not run out for some decades but will become increasingly expensive as it becomes scarcer. Energy investment banker Matthew Simmons[5] and author of *Twilight in the Desert: the Coming Saudi Oil Shock and the World Economy*[6] believes that in ten years the world will only produce 75 million barrels of oil a day rather than the current 85 mbd. This comes at a time when demand for oil is increasing dramatically, not only through population growth (over 70 million extra people a year) but also from newly emerging economies such as China.

Higher energy prices will have a flow-on effect right through the economy but the implications for agriculture are very large indeed. Oil is needed to power machinery and natural gas is necessary for the production of nitrogenous fertilisers. Oil is needed to move water around to irrigate crops. Thus irrigation that is not gravity-fed will become increasingly expensive, and pumping from deep aquifers may become uneconomic. A lot of land will have to be returned to dryland farming which, of course, has lower yields than irrigated crops.

Australia currently feeds about three times its domestic population of 20.3 million and clothes even more. Whether it can continue to do so in light of higher energy prices, stressed ecosystems, degrading land and water, and climate change is a matter for conjecture. While some rural areas would enjoy a higher population to manage the land properly, in general, a higher domestic population will reduce what can be exported, if there is any left to export at all.

Conclusion

It is evident that business-as-usual in the Australian economy is not an option. We need to move rapidly away from an oil-based economy as oil will become increasingly expensive. We cannot make a

[4] Peter Cullen, personal communication, 2002.
[5] Foreign Policy (2005) Seven questions: The Future of Oil
http://www.foreignpolicy.com/story/cms.php?story_id=3233
[6] Simmons, Matthew (2005). *Twilight in the Desert: The Coming Saudi Oil Shock and the World Economy.* John Wiley & Sons.

wholesale move to other fossil fuels such as coal because we must reduce greenhouse gas emissions by 90 per cent by mid-century. (Carbon dioxide may one day be sequestered from power stations, but not from vehicles.) Land degradation and climate change could mean we cannot even feed our own domestic population. We cannot cut down ever more natural vegetation for broad-acre farming because our ecosystems are already stressed and we need to rehabilitate what we have so they can continue to provide the ecosystem services that we need.

Should Australia's population grow to 30 million as predicted [7], that is, by another 50 per cent, it will mean that the resource-pie has to be divided into ever-smaller pieces. Investment dollars will be directed towards essentially unproductive housing and infrastructure instead of towards research and development that might restore Australia's chronic balance of payments problem, and help us cope with the various 'converging catastrophes'.

Thus, a bigger population is a hindrance to productivity, not an aid. The only kind of skilled immigration that can be justified – apart from that needed to fill short-term shortages while our training institutions catch up – are the scientists and technicians who will help Australia develop new technologies that will help us move to a new society, one not based on cheap oil as it is today. Such skilled migrants will inevitably include those who are expert in renewable technologies; ecologists and resource managers who can help restore our degraded land and ecosystems; and perhaps climatologists who can give early warning of severe weather events that will increasingly afflict us under climate change.

[7] Jessica Irvine, "NSW residents leaving in their droves" Sydney Morning Herald, September 23, 2005