Sustainable Population Strategy: Public Policy and Implementation Challenges

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Academy Proceedings 2/2011

The Academy of the Social Sciences in Australia Canberra 2011
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The debate about what constitutes a sustainable population for Australia has been long running, intermittent and often ill-informed. The recent release of population projections that estimate an additional 13 million Australians by 2050 resulted in a dichotomised debate ‘for’ and ‘against’ population growth. However, the issue of population sustainability is much more complex than this oversimplified representation suggests. Australia’s population is undergoing a demographic metamorphosis in the form of structural ageing, which is associated with many potential challenges for labour force participation and the country’s economic wellbeing. Given this, what is a sustainable population in the Australian context, and what should a strategy to ensure population sustainability look like?

This paper contextualises and reports the proceedings and recommendations of the roundtable discussion on the implementation of a sustainable population strategy, held in Canberra on 15 April 2011, by the Institute of Public Administration Australia.

1. The current population debate and policy context

The recent population debate was prompted by the release in 2008 of the Australian Bureau of Statistics’ population projections, which project a population of 35.5 million people by 2056. Following this, and Prime Minister Kevin Rudd’s endorsement of a ‘big Australia’, projections contained in the third Intergenerational Report suggested that Australia’s population would grow to 35.9 million by 2050. The resultant debate centred on whether population growth is sustainable for Australia. In April 2010 after much public and media interest, Tony Burke was appointed Australia’s first Minister for Population, and tasked with developing a sustainable population strategy.

Australia has not had an explicit population policy; rather, it has had policies that relate to population; these include health, families, children, workforce, and immigration. Hence, it could be said that Australia does have an implicit or de facto population policy, which has arguably been effective so far. Having no population policy in the past has not meant that there has been no planning. However, as Australia’s population becomes increasingly older it is pertinent to ensure a sustainable population in economic, environmental and population terms, and thus a more coordinated approach is needed.

2. Population dynamics and drivers

Australia’s 22.5 million people form just a small part of the almost seven billion global population. By 2050 the United Nations projects that global population will grow to 9.3 billion, at which point it is likely to stabilise. The majority of this growth will occur in less developed countries, with likely environmental, economic and population consequences for Australia.

The key challenge facing Australia’s population is structural ageing. This is the result of high fertility experienced in the decades post World War II (the baby boom) and the subsequent decline in fertility – to below replacement level for the past 33 years – combined with the fact that people are living longer. This has had a lasting
demographic effect on Australia – both good and bad. The demographic dividend of the baby boom saw proportionally more of the population in the labour force and thus paying tax. This has been good for the Australian economy but it will be short lived. The baby-boomers are now entering older age brackets and retiring, leading to possible adverse effects as the number entering the workforce will not replace the numbers exiting. If left unchecked, population ageing will have significant consequences for Australia including on the provision of healthcare, labour force participation, skilled labour, housing and social cohesion, and it will place increased pressure on the economy. According to the United Nations, population ageing is a significant issue as it is unprecedented, pervasive, profound, enduring and irreversible. Compared to other OECD countries, however, and because of its relatively high international immigration intake, Australia is faring well.

International migration is integral to Australia’s economic prosperity, as without it labour supply growth would be almost zero. In response, Australia’s immigration program is largely labour driven. In-demand skills are identified by Skills Australia each year and these skills form the basis of the Department of Immigration and Citizenship’s skilled migration program. Over half of Australia’s population growth is now attributed to net overseas migration (NOM) over natural increase. If the current trends in fertility, mortality and migration continue, immigration will need to be relied on even more as natural increase is projected to fall to zero by 2101. The benefits of overseas immigration are threefold: migrants offset the adverse effects of an ageing population by contributing to the labour force, they provide much needed skills, and they are considerably younger compared to the Australian population.

There are, however, optimal levels of annual NOM for gross domestic product (GDP) growth. Having very low levels of NOM will potentially lead to wage inflation and infrastructure problems, due to the lack of skills and labour. According to McDonald and Temple the optimal level of NOM is between 180,000-230,000 persons per annum. However, the effect of NOM on the age structure of the population plateaus after 180,000.

NOM figures have been at historically high levels in recent years, but in 2009-10 they fell to 215,600 persons, the first decline since 2003-04. This fall is projected to continue and then to stabilise at around 180,000 persons per year by 2012. The record high levels of NOM seen from 2006 to 2009 (average of 244,000 persons per year) were a result of the increase in temporary migrants (including students and the business long-stay subclass 457 visa holders), and a new methodology for the calculation of NOM by the Australian Bureau of Statistics. New changes to immigration intake, which include changes to visa subclass 457, a new points system and state and territory migration plans, will result in the stabilisation of NOM at around 180,000 per annum.

3. Sustainability: the way forward?

Sustainability is not just about the environment. Sustainability encompasses economic and social wellbeing, as well as infrastructure to support the population now and into the future. Inherent in this is the need to ensure Australia’s prosperity and resources are at or above current standards, so as to ensure the country we leave to subsequent generations is as close to (if not better than) the one we enjoy today. Productivity is integral to Australia’s future sustainability, as a means to ensure economic prosperity.
and environmental and social wellbeing. Population and NOM are key drivers of productivity, but it is important that productivity does not come at an environmental or social cost.

Labour force participation and employment are important to Australia’s economic growth and prosperity. Maintaining optimal levels of GDP growth is integral to keeping employment constant (ie, not falling). When employment is growing, unemployment is very low and long-term unemployment is not a significant problem. However, in a declining economy jobs are not created, and people entering the labour force experience significant barriers and long-term unemployment increases. It is a common misconception that immigration leads to increased unemployment. Skilled migrants do not merely bring skills and labour force participation, they contribute to labour demand more than supply and increase the employment prospects of unemployed Australians by directly contributing to the economy by spending their financial assets upon arrival. Migrants also make a rich contribution to the cultural and social wellbeing of the country. It is important to note, however, that, while overseas immigration generally does not cause unemployment, depending on the composition of immigrants it can contribute to it.

Many migrants from poorer countries who come to Australia have had their education financed by their countries of origin. Where immigrants are educated in developing countries an appropriate recompense should be made either via aid or other payments or investments in overseas educational institutions.

The place and communities we live in are an important element of sustainability. Communities house and provide employment for Australians and need to be sustainable in their own right. Place-based services and access are vital to social, economic and environmental sustainability. For example, commuting long distances to employment places pressure on families, increases car (and transport) usage, contributes to pollutants, and expends non-renewal resources. Direct investments can be made to enable equitable access to housing and place-based services. This requires a coordinated partnership between all levels of government.

In addition to the economic and social measures to achieve population sustainability, there are a number of environmental measures that will enable a sustainable population. These include:

- **Natural capital** – natural resources are assets and as such have value. Assessment to determine Australia’s capital stock (including water and non-renewable resources) will assist in understanding its value and the investments required to maintain it in a suitable condition into the future.
- **Farming** – investment in research and development to improve soil and farming lands will enable increased productivity and efficient use of resources.
- **Biodiversity** – maintenance and protection of national parks will ensure that landscapes are more resilient.
- **Energy consumption** – targets to reduce per capita energy consumption will better protect natural capital.
- **Transport** – investment and upgrade of public transport.
4. Settlement patterns, dynamics and absorptive capacity

Australia’s population distribution is heavily concentrated along the east coast, with the majority (more than two-thirds) living in the major cities. Given that settlement patterns of international migrants are also largely to these major cities, the capacity of cities to accommodate the projected increase in the population, and the number of households, is a fundamental question to be addressed in a sustainable population strategy. How will the major cities house, and provide jobs for, millions more people? Accommodating millions more will likely mean a larger geographic footprint, greater demand for land, and increased pressure on the ageing transport infrastructure. An effective population strategy can safeguard the fundamental infrastructure required for the provision of housing, employment, education, and health care.

Current urban development has seen the footprint of cities and outer suburbs expand, and housing density increase. High density housing, however, does not currently equate to more efficient ‘greener’ living. Energy consumption per capita is greater in high-density housing compared to low or medium density. This is because of the additional operational energy used in common areas in high-density housing (for example hallways, foyers and lifts), in addition to the increased number of electrical appliances and water usage per capita.

The development and implementation of a settlement strategy could help ease the pressure placed on the larger urban areas. The development of regional business or employment hubs, as well as incentives for people to move or settle in regional communities, could potentially alter Australia’s traditional settlement patterns. The old adage ‘if you build it they will come’ might well provide a good mantra for regional development. Financial incentives such as lower taxation, low or no stamp duty where people are moving to a smaller house or a regional area, and assistance for first homebuyers could provide a good basis for a settlement scheme. However, if people are encouraged to move to a regional area it is important that service provision, for example, jobs, transport, housing, health care and social welfare, is adequate to cater for the population.

The ageing of the population will be experienced differently by different population subgroups and across geographical areas. The differing age structure of populations across Australia means that some communities will experience population ageing more rapidly than others, while areas with much younger age profiles will be faced with a different set of issues. Some examples of important subgroups for consideration are the Indigenous population and young people. The Indigenous population has a considerably younger population age structure than non-Indigenous persons and experiences higher fertility rates and a lower life expectancy. Indigenous persons also experience a greater burden of disease. It is important that Indigenous persons are not further disadvantaged by a population strategy. Likewise, with a focus on the ageing of the population it is important not to exclude or overlook children, youth and young adults. Young people, for example, are the future workforce and are vulnerable to unemployment. Training and education programs that address skill shortages are integral to ensuring competitiveness in the labour market.

When it comes to the issue of absorptive or carrying capacity, the optimum population for Australia has never been scientifically ascertained or proven. Likewise, setting a population target is not terribly helpful in the Australian context given the basic rights
Australians enjoy. Further due to the ageing population, international migration intake will be largely needs driven and may fluctuate from year to year. Caldwell warns that:

…we must avoid numerical population targets because pretending we can calculate them is utter nonsense. We have come this way before: between the wars we had something called ‘optimum population’ theory. That collapsed partly because no two persons could arrive at the same answer.\textsuperscript{34}

It is important however, that the absence of an overall population target is not used as an excuse to fail to adequately plan for the somewhat foreseeable population outcomes.

5. Progressing and implementing a sustainable population policy

The development and implementation of a population policy is complicated because the policy jurisdiction is large and the policy environment complex. When it comes to a population policy everyone is a stakeholder. Population on its own encompasses varied policy areas, not to mention the environmental domain that a sustainable population strategy potentially occupies.

Further complicating the broad nature of the policy domain is the fact that while we can project and, based on data derived observations\textsuperscript{35}, hypothesise future population prospects with some degree of confidence, we can never be certain what Australia’s future population will be. Population targets are thus not terribly helpful. In fact population should not be considered the ‘end game,’ rather it is merely one input into sustainability and should be considered as such.

To progress and balance the development and implementation of a sustainable population policy for Australia first requires a good evidence base. The core issues of the current debate about population centre on growth and immigration and whether they are in Australia’s economic, social, and environmental best interests. Australia’s population will continue to increase (in the short to medium term) because of natural increase, however immigration is needed to fill the gaps in the labour force that will be left as the baby boomers exit the workforce. We can anticipate the impacts of an ageing population, and, based on the experience of other countries, we can prepare and plan. A sustainable population strategy should base its objectives in ensuring economic wellbeing whilst balancing the environmental impacts. This means that we need to identify and make investments in indicators and measures to ensure we are tracking well against the objectives of a sustainable population.

Whilst immigration is key to a population policy there are other obvious social, environmental and cultural considerations. Ensuring a sustainable population means the wellbeing of current and future generations is guaranteed through the transfer of economic and natural capital. The choices we make now, whether about population or the environment (or both) will have impacts on the economy and natural capital. Any decisions need to be intrinsically sustainable. This means thinking not just about economic and material wellbeing, but also about family and social wellbeing. Fundamental to this is adequate investment (by government and/or business) in city renewal, with particular attention to making cities more sustainable through retrofitting buildings and houses to make the built environment more energy and water efficient. Increasing public transport options and effectiveness is also an important element of making cities more sustainable.
Achieving a sustainable population for Australia requires consideration of all the possible population, economic and environmental scenarios. This includes realising and celebrating the positives and diverse outcomes of an ageing population. This will be the key to an effective and enduring policy and requires a whole-of-government approach. Moreover, population strategies cannot be applied and achieved in a single political term of three to four years. Rather, the effective outlook of a population strategy is considerably longer. Bipartisan political commitment and support is critical to an effective population policy.

6. The role of information and engagement in policy making and implementation

Underpinning any policy should be a solid evidence base informed by appropriate and robust data. Information derived from data can be a powerful driver (and evaluation) of policy if harnessed correctly, but, like any measure, data are not perfect and are subject to error. Information, and the data that forms it, should be understood in the context of the data limitations.

Data does not equate to information in its own right and it is therefore important to make adequate investment in the collection, analysis and interpretation of data to produce the required information. Australia is in a comparatively good position when it comes to population, economic, health, and, to some degree, natural resource data. However, there is a gap between the collection and the analysis of nationally consistent data to produce translatable information. More importantly, there is a divide between information providers and policy makers. Bridging this divide will lead to a greater return on information and better interpretation and utilisation of that information.

In addition to data collection, more refined information can be derived from investing in and improving methods and techniques for analysis. Improved methods can enable the building of a series of indicators that can provide measures of progress on population and environmental health. Indicators and or a suite of numbers can provide more information than simply one number on its own. Engagement and consultation with stakeholders will enable effective development of appropriate indicators and methods.

There are some areas for possible data development relating to the way in which fertility and population projections are calculated. As population projections provide the core information on Australia’s future population prospects it is pertinent that they provide the best possible information. Professor Peter McDonald and Dr Rebecca Kippen have developed a more refined method for calculating fertility projections, which factor in not just age of mother, but age, parity and parity progression. According to Professor Graeme Hugo, the method for producing population projections could be improved by using scenario-based calculations of population projections rather than the current deterministic models. Such scenario-based calculations would include the current inputs of fertility, mortality and migration in addition to various economic and environmental scenarios. Whilst scenario-based population projections will produce many different projections, the results will provide powerful information for policy makers and planners. Such data developments together will provide more refined information to better inform policy and enable better planning and preparedness.
7. Conclusion
A sustainable population strategy for Australia is a positive step toward planning and preparation for the country’s future population prospects. Whilst we cannot predict future population outcomes we need to take steps now to plan and prepare for likely scenarios. As Australia’s population continues to undergo structural ageing, our reliance on overseas migration as a means to ensure economic sustainability will continue. Overseas migration will provide Australia with much needed labour and skills, and help to maintain a growing economy into the future. Adequate investment in housing and transport infrastructure to ensure that the country can sustainably accommodate population growth and change is an integral component of a sustainable population strategy. This requires a long-term whole-of-government approach and bipartisan commitment.

While a sustainable population strategy is a broad and complex policy domain, there are five fundamental areas that, if addressed effectively, will ensure that Australia’s population is economically, socially and environmentally sustainable. These include:

1. **Labour** – for Australia to be economically prosperous requires adequate labour force participation and growth;
2. **Skilled immigration** – international immigration will help fill the shortfall in domestic labour and skills;
3. **Settlement strategy** – development and implementation of a coordinated settlement plan with a focus on developing regional areas;
4. **Equitable communities** – provision of equitable access to housing and place-based services; and
5. **Environmental management** – pricing of natural capital, efficient farming practices, biodiversity, decreased energy consumption, and improvements to transport options.

Addressing these areas now will mean that the current standard of living will continue to be enjoyed by future Australians.

8. Postscript
Following a yearlong process of consultations with advisory panels, stakeholder roundtable discussions and public submissions, the government released its sustainable population strategy: *Sustainable Australia – Sustainable Communities* on Friday 13 May. The strategy is a framework with the fundamental aim to build a sustainable Australia through building sustainable communities, and thus has a regional focus on wellbeing – economic prosperity, liveable communities and environmental sustainability. As a result the strategy states four new measures to support and apply the framework. These new measures are: suburban jobs; sustainable regional development; measuring sustainability; and promoting regional living. In addition, the strategy also identifies a number of initiatives to:

1. address skill shortages and increase labour force participation,
2. increase the effectiveness of the migration program,
3. invest in infrastructure such as roads and inner city renewal, and
4. provide investment in regional areas.

The strategy does not set a population target. *Sustainable Australia – Sustainable Communities* purposely avoids committing to a population target as a means by which...
to enable the flexibility to anticipate and be responsive to economic and other demands and/or constraints. Rather it identifies measures by which planning and preparedness is ensured.

The strategy recognises that population is just one part of the total issue of sustainability, and as such ‘[p]opulation is not the cause of, or solution to, all of Australia’s challenges’\(^4\). Rather, infrastructure, environment, population and the economy are interconnecting elements key to ensuring the maintenance of our current standard of living and future wellbeing. The strategy is supported by the Government’s complementary report *Our Cities, Our Future*, released five days after the strategy\(^41\). *Our Cities, Our Future* marks Australia’s first National Urban Policy and provides a practical and monetary translation of the *Sustainable Australia – Sustainable Communities* strategy. The National Urban Policy aims ‘to increase the productivity, sustainability and liveability of our cities’\(^42\) through 14 initiatives ranging from ensuring future water and food security, decreasing the reliance on motor vehicles and increasing communities’ self reliance, to climate change, and improving the planning and management of Australian cities.

Underpinning the strategy framework are six principles: freedom of choice; valuing diversity; enhancing our prosperity; good custodianship; place; and joint responsibility; which simply translate as a means to ensure that the current Australian ‘way of life’ is maintained across generations while ensuring that measures are put in place to enable sustainability. It will be interesting to see how the strategy is applied and whether its objectives are achieved. Only data and time will tell.

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1 Australian Bureau of Statistics (2008). ‘Population Projections Australia, 2006 to 2101’, Cat. No. 3222.0, Canberra; Population projections are calculated based on assumptions about fertility, mortality and net overseas migration rates to project (not forecast or predict) future population. Population projections are somewhat hypothetical and represent many unknowns.


3 Department of Treasury (2010). Australia to 2050: future challenges, Canberra; The ABS and Treasury projections differ slightly because the Treasury calculations assume a slightly higher level of fertility.

4 Tony Burke’s portfolio has been renamed twice. It is now Minister for Sustainability, Environment, Water, Population and Communities.


9 Ibid.

10 Based on data obtained online from the United Nations Department of Economic and Social Affairs, Population Division, Population Estimates and Projections Section http://esa.un.org/unpd/wpp/index.htm

11 The average total number of births per woman required to replace her and her partner.


15 McDonald, P and Temple, J (2009). Demographic and Labour Supply Futures for Australia, Department of Immigration and Citizenship, Canberra.

16 The Skilled Occupation Lists are available from the Department of Immigration and Citizenship’s website: http://www.immi.gov.au/skilled/sol/

17 The number of births in excess over the number of deaths; Australian Bureau of Statistics (2010). ‘Population by age and sex, Australian states and territories, June 2010’, Cat. No. 3201.0, Canberra.


19 Around 89 per cent of new migrants are aged less than 40 years compared to 55 per cent of Australians, with the median age of overseas migrants considerably less than that of Australians at around 27 years compared to 37 years, respectively. Refer to Department of Treasury (2010). op cit; Australian Bureau of Statistics (2011). ‘Migration, 2009-10’, Cat. No. 3412.0, Canberra; Australian Bureau of Statistics (2010). ‘Population by age and sex, Australian states and territories, June 2010’, op cit.


21 Ibid.


Ibid.


Population projections and other demographic methods used to produce population statistics are only as good as the data inputs and methods used.

This work will be published as a working paper by the Australian Bureau of Statistics later this year.


To view the publicly available submissions made to the sustainable population strategy issues paper see:


For the full report see:

