

Adapting to Climate Change in a Federation

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Professor Garnaut in his recent report stated that “climate change is a diabolical policy problem” (2008). But it is not a new policy issue. Prime Minister Hawke in his foreword to the papers presented at the first Prime Minister’s Science Council on Global Climate Change, Issues for Australia, held in October 1989 stated:

“ The papers in this volume... provide the basis for a much improved understanding of the likelihood of global warming caused by the build-up of greenhouse gases in the atmosphere, of the possible effects in Australia of changes in climate, and the measures that can be considered to reduce the emission of greenhouse gases. If global warming occurs, it is likely to affect many aspects of our lives in the years ahead and to require considerable changes in accepted patterns of behaviour”.

Since 1989, much has been done to achieve “improved understanding of the likelihood of global warming” as articulated in the various IPCC reports. The physics and chemistry of processes that result from greenhouse gas pollution are better understood, as are the models of atmospheric and oceanic circulation, and for our purposes today, the impacts of global warming on natural and human systems. No longer can decision-makers ignore the policy implications as so many governments in Australia and elsewhere have done since 1989.

Science is telling us that Australia will be severely challenged by the forces of climate change. Our geographical position makes us most vulnerable to the impacts of changes in rainfall and higher temperatures. There is an expectation that evaporation levels will rise, and that there will be declining levels of precipitation across southern Australia having drastic effects on ecosystems, soil moisture and river flows. In addition, we are predominantly a coastal people and sea level rise is threatening hundreds of thousands of low-lying properties and infrastructure. The insurance industry is well aware of these increased risks and is adjusting their policies accordingly.

Recent reports by economists have heightened national and international concern over the urgency to mitigate greenhouse gas pollution and not to delay actions to adapt to adverse consequences of that pollution. The most recent research by climate modellers, glaciologists, oceanographers and those monitoring environmental systems indicates that worst case scenarios developed by the IPCC in 2007 are more and more likely.

But do we have the institutional capacity as a federated nation to meet the challenges of climate change as explained by scientists and economists to solve that “diabolical policy problem”?

It appears we, as a nation, have no longer the luxury to wait and see; we must plan now to adapt and to take whatever immediate decisions are necessary to minimise the long term damages to our society that scientists are telling us are highly likely to occur. The longer we wait, the harder it will be to maintain landscapes, biodiversity, lifestyles and livelihoods that we want for future generations (our children, grandchildren and their children).

So again is our federal system of government capable of managing and planning for the consequences of this change, and if not, what can we do to improve governance in ways that provide both processes and outcomes in harmony with short and long term challenges? All federated government systems are faced with similar questions. But we do have some specific issues that require all three levels of government to collaborate and reach agreement on roles and responsibilities that can extend beyond electoral cycles.

We all recognise that natural systems are interconnected—they know no political boundaries. Yet our systems of public administration rarely consider the behaviour of nature in determining outcomes that impact on biodiversity, water, estuaries, etc.

The Commonwealth Constitution limits the federal government in the management and planning of land use and natural resources. Section 100 with respect to water is quite clear in that respect. Furthermore, the Constitution does not recognise local government; this level is a creature of state legislation yet local councils typically are at the heart of many land use decisions especially in coastal regions.

Since 1901, various arrangements have been made that allow the Commonwealth to be an active participant in aspects of environmental and natural resource management (NRM). But from my perspective, current arrangements through COAG, or bilaterals, or program grants, or whatever, may not be sufficient to meet the national challenges of climate change. For many of us, the current arrangements are confusing, duplicative, dysfunctional and legally difficult.

As a legacy of history we inherit a vast array of environmental problems that have nothing to do with climate change but which are induced by human actions. European settlement has resulted in many abuses of a natural system so unlike that of Europe and North America. We have struggled to adjust to the droughts and flooding rains, to the impoverished soils, to the different types of native plants and animals, and to the impacts of crowded urban lifestyles along coastal waterways and beaches. Over-allocation of waters from rivers and groundwater, excessive land clearing, and the introduction of feral animals and weeds have all had degrading effects.

To appreciate that drought is not an “indignant surprise” and dryness really does limit rural expansion has taken decades to learn. There are many who still wish for a sustained returned of wetter years as the norm rather than the exception. Along our coasts we have allowed property subdivision and urban development to occur in places where bushfires, flooding and erosion can place human investments at risk to natural disasters.

When we add to the adverse consequences of settlement the potential impacts of climate change, it is apparent that as a nation we are faced with massive liabilities and difficulties in maintaining the rural and urban economic and environmental base that Australians have come to, and should, expect from their elected representatives.

Will desalination become more and more necessary; will weeds become more prolific as favoured opportunists affecting biodiversity and even human health; will canal estates be progressively inundated by rising sea levels and foreshore houses be eroded by storm waves and surges; will inland irrigation become a relic of the past “good days”; will farmers willingly adopt new methods to preserve soil moisture and soil carbon; and what measures will be needed to protect our ports and airports and other infrastructure so vital to our economy? And for our purposes today, how can we as a nation best improve governance to ensure that “key threatening processes”, induced by climate change, are managed in a consistent way?

Before answering these questions it is important to identify some obstacles to a “business as usual approach”. I have already mentioned the constitutional limitation. There are many recent examples of states seeking to exercise states’ rights to managing natural resources let alone land use planning. Murray Darling Basin problems highlight this point. Even more basic are the impacts on long term sustained investments by all levels of government in Australia by the short term demands and promises associated with electoral cycles.

Despite the rhetoric of ESD, there are not too many commitments being made with the welfare of future generations in mind. Financial crises do not make this any easier. Furthermore, I am struck with the need for individual political leaders to push their own barrow even at the expense of being in conflict with predecessors of the same political persuasion! This makes long term planning very precarious. Add to this are frequent turf “wars” between agencies or even sections of agencies within all levels of government which limits a government’s capacity to promote change. There are also concerns about accepting liabilities; in being exposed to litigation; in having the technical capacity in government to implement plans; and an obsession with short term accountability, and works on the ground that are attractive to politicians seeking to woo constituents.

It is not going to be easy to overcome these and other obstacles in our endeavour to meet the challenges as a federated nation of adapting to climate change. We have to seek pragmatic solutions within the framework of the three elected levels of government. For this purpose I am suggesting as a starting point three basic principles:

- 1) That for a secure future our nation must do all that is possible to promote and enjoy ecologically healthy rivers, ground waters, coasts, estuaries, and marine and terrestrial ecosystems that form the basis for resilient communities and economies;
- 2) That all levels of government agree on the establishment of policies and planning and management processes in adapting to climate change that can withstand electoral cycles and budgetary fluctuations; and
- 3) That in the national interest the Commonwealth must provide the fundamental leadership in policy and technical and financial support to offer consistent direction to achieving national objectives that minimise the adverse impacts on Australian society and landscapes of climate change.

A model of governance that could embrace this prescription will require COAG accepting these principles as a vision for the future and then developing a set of working conditions that unambiguously define roles and responsibilities. I would envisage the following being a useful starting point that would offer workable solutions to a national collaborative approach to climate change adaptation:

- 1) That the Commonwealth develop policies in consultation with the states and representatives of local government that define short term and long term approaches on matters such as vulnerability of ecosystems, infrastructure and communities to climate change in order to achieve a consistent approach to implementing national strategies/guidelines.
- 2) That the Commonwealth be responsible for a national science-based information system that is consistently used by all agencies of all governments, by the courts, and by the private sector as the source of information on which decisions and decision support systems are based.
- 3) That the federal parliament enact enabling legislation that defines a clear overriding role for the Commonwealth in matters where certain climate change impacts are defined as “key threatening processes” of national significance—this could include issues of NRM and land use planning where there are differences in approach from state to state which would limit the nation’s ability to adapt to climate change.
- 4) That one federal agency take coordinating responsibility for managing the nation’s interests in adapting to climate change, including environmental and human health, monitoring of water allocations for different purposes, infrastructure risk management, and the development of “smart” development guidelines that limit liabilities and enable investors to secure financial support and insurance.
- 5) That State governments enact complementary legislation to facilitate implementation of policy and legislative provisions of the Commonwealth in addressing adaptation requirements as agreed through COAG and that these legislative changes be made to give priority in statute to provisions that ensure adaptation measures receive the highest possible standing in the courts leading to more uniformity in judgments.
- 6) That the states receive direct payments from the Commonwealth for purposes of delivering agreed objectives in land use planning and management such as acquiring land and water “rights” where their existence is an on-going liability under emerging climate change conditions,; in supporting measures to protect biodiversity; and in finding ways to compensate land owners who lose their homes. Support may also be needed to maintain consistent compliance measures so that no state will seek a competitive advantage by not being tough on activities that impact adversely on the environment and sustainable investments linked to climate change.
- 7) That state agencies maintain a strong technical base to address regional and local issues and be in a position to underpin the actions of local councils and NRM entities in managing the natural environment under stress from climate change. Over the past two decades, I have seen too much downsizing and decline in the technical capacity of governments to assess environmental impacts.

- 8) That federal and state governments recognise the key role of local governments in making land use decisions and in managing public lands and there be direct mechanisms for these governments to increase their technical and financial support through tripartite agreements to ensure local councils have the capacity for improved decision-making consistent with national strategies and guidelines to adapt to climate change.
- 9) That Regional NRM entities be responsible for all community based NRM and environmental improvement programs following agreed guidelines involving all three levels of government and that the regional NRM entities also be responsible for monitoring environmental conditions and change to assist future investment in adaptation as climate change impacts take effect. In this connection, the Wentworth Group has developed a regional model for Accounting for Nature partially in response to a proposal from the 2020 Summit for a system of environmental accounts.
- 10) That COAG agree to the establishment of an independent national climate change adaptation advisory council to report annually on the effectiveness and efficiency of all policies and programs to COAG through a federal minister and this report be presented to all parliaments as part of the SOE or national environmental accounts reporting process.

Unless some or all these steps are undertaken, I fear for the survival of many treasured and nationally significant components of our natural resource base and ecosystems. Collaboration in governance is vital if we are to sustainably meet the challenges of climate change.