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Rethinking the way science supports Australian drought policy

Submission to the Productivity Commission, October 2008 Rohan Nelson, Mark Howden & Mark Stafford Smith

Helping Australia Adapt to a Changing Climate

Rethinking the way science supports drought policy could open new opportunities to share the risks of Australia's variable and changing climate between communities and governments.

The issue

Drought policy presents Australian governments with a difficult dilemma. Providing acceptable welfare for farm families needs to be balanced with sustainability and economic efficiency goals. The science currently supporting drought policy has provided few insights or practical options for achieving this balance. Adaptive governance provides a positive alternative - pathways to locally owned systems for sharing climate risk between communities and governments.

Analysis

- There are many ways that science can be used to support drought policy. The system currently used in Australia represents one choice across a diverse spectrum of alternatives.
- The science currently used to support Australian drought policy has led to a highly centralised system of administration. This has limited the options available to policy advisers for reconciling the multiple goals of drought policy.
- An unintended consequence of this centralised administration has been to force much of the complexity and uncertainty surrounding drought policy from scientists back onto policy advisers and Australian Government Ministers for Agriculture.

Opportunity

- Adaptive governance opens pathways to locally owned, regionally relevant systems for sharing the responsibility for drought risk between communities and governments.
- Shared ownership of drought risk could be achieved through government-led, community-based regional governance systems similar to Landcare groups and Catchment Management Authorities.
- Shared management of the multiple and interacting goals of drought policy between governments and communities can be supported by science that is regionally distributed and capable of integrating local knowledge.
- The precursors of many alternative forms of drought science already exist, including those capable of informing the livelihood outcomes of critical importance to both rural communities and policy advisers.

Abstract

In this paper we show how ideas from a longstanding but little recognised literature on adaptive governance can be used to rethink the way science supports Australian drought policy. We compare and contrast alternative ways of using science to support policy to critique traditional commentary on Australian drought policy. We find that criticism from narrow disciplinary and institutional perspectives has provided few practical options for policy makers managing these complex and interacting goals. In contrast, ideas from a longstanding but little recognised literature on adaptive governance have potential to create innovative policy options for addressing the multiple interacting goals of Australian drought policy.

From an adaptive governance perspective, the deep concern held by Australian society for rural communities affected by drought can be viewed as a common property resource that can be sustainably managed by governments in cooperation with rural communities. Managing drought assistance as a common property resource can be facilitated through nested and polycentric systems of governance similar to those that have already evolved in other arenas of natural resource management in Australia, such as Landcare groups and Catchment Management Authorities. Essential to delivering these options is the creation of flexible, regionally distributed scientific support for drought policy capable of integrating local knowledge and informing the livelihood outcomes of critical importance to governments and rural communities.

More information

Contact: Dr Rohan Nelson, 02 6242 1524

http://www.csiro.au/org/ClimateAdaptationFlagship.html http://www.csiro.au/people/Rohan.Nelson.html

Read the paper

Nelson, R., Howden, S.M. & Stafford Smith M., 2008. Using adaptive governance to rethink the way science supports Australian drought policy. *Environmental Science & Policy* 11: 588-601.

http://www.sciencedirect.com/science/journal/14629011