

Recent Trends in and Preparedness for Extreme Weather Events

Inquiry by the Environment and Communications References Committee 2013

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Introduction

In addressing the terms of reference for the enquiry, the focus of this submission is on b) (ii), (c) and (g) and general comments on preparedness and building resilience for extreme weather events from a community risk management perspective. The perspective is specifically that of rural women and rural agricultural communities, which encompasses climate change and extreme weather events as lived experience, and draws on selected material from the expansive literature on this topic.

Whilst there are numerous theoretical frameworks within which to analyse this topic, risk management is chosen as it has been adopted as the policy framework in relation to drought (Productivity Commission (PC), 2009) and climate change adaptation (PC, 2012) by the Australian government. The concept of resilience also figures prominently in government and academic literature with the following from the Attorney General's Department:

Resilient organisations [communities] are able to continue meeting key objectives when faced with significantly challenging circumstances in their operating context/environment. Resilience tears down silos of risk, security, emergency and business continuity management through a holistic approach to help organisations survive turbulent times (TISN, 2008 p. 1).

Resilience also stems from the ability to shape the environment, not just react to changing circumstances (Attorney General's Department, 2012, p.7). The latest science is showing that the impacts of climate change are happening faster than expected, with the accelerated need for planning and funding to deal with the predicted risks and outcomes, including the likelihood of increased incidence and intensity of extreme weather events (CSIRO, 2008; IPCC, 2012).

Risk perspective

Under the definition of 'risk' in AS/NZS ISO 31000:2009 Risk Management (Standards Australia, 2009), as 'the effect of uncertainty on objectives', rural agricultural communities can use risk management principles when facing internal and external factors and influences which make it uncertain whether they will achieve the 'objectives' of the community and the households, businesses and institutions which constitute the community. Communities, like organisations, can manage risk by anticipating, understanding and deciding whether or how to modify the risk, based on knowledge of their objectives and values. Typical objectives and values might include community health, safety and wellbeing; good governance; healthy and diverse environment; robust economy with options for housing and employment; and assets and infrastructure tied to efficient service delivery.

Climate change, resource scarcity and extreme events are more likely to exacerbate existing risks, rather than create new ones. Recent events (e.g. Victorian bushfires and Queensland floods) have shown that emergency management agencies can improve management of these risks and immediate impacts now by aiming for an effective balance between prevention, preparedness, response and recovery. However, the longer term impacts of events such as drought and more frequent heatwaves may require a different balance between these elements, and community involvement in decisions about adaptation and mitigation strategies will be vital in achieving this balance and defining what the objectives being effected actually are.

Remembering Gender

From a rural women's perspective, the question is 'are the objectives of (and for) the community congruent with the objectives of women members of the community?' Within any risk management framework, governance and decision making, strategy and planning, management, information flow, values and culture are important aspects of managing risk. For all these aspects to coalesce into an effective climate and extreme weather event risk management strategy which promotes resilience, an inclusive model of decision making is essential. Yet despite the evidence that women contribute almost half the output of farming communities, the full potential of women's social and economic potential in regional Australia is still not realised due to exclusive models of decision making and governance (RIRDC, 2009, p. 5).

The imbalance in decision making arises from the gendered nature of workplaces and leadership roles, and the unequal division of labour in the household (RIRDC, 2009, p. 7) and, although not necessarily confined to rural communities, has significant implications for effective and equitable decision making (Department of Transport and Regional Services, 2005 'At the Table'). On a broader scale, climate adaptation is exacerbated by structural forces such as regional disparities and urbanisation (Corcoran, Faggian and McCann, 2010, p. 197) and globalisation which can have a disproportionate impact on men and women particularly where 'women's voices, rights and experiences are not part of the discussions, proposed policy solutions or institutions' (Bisht, 2012, p. 57). Indeed the word 'gender' appears only once in the Productivity Commission report on barriers to climate change adaptation (PC, 2012) and the word 'women' is absent from the report, likewise for the National Strategy for Disaster Resilience, in contrast to the majority of international climate adaptation and disaster literature where the gender implications are clearly acknowledged and articulated.

In Australia, significant research has been conducted on the effect of drought in rural areas based on interviews with both men and women to examine the gendered experience of drought (Stehlik, Lawrence and Gray, 2000; Alston 2006; 2007). Circumstances of drought or economic duress means additional pressures on women in looking for alternative sources of income and cost savings, out migration of male labour, and additional work burden and responsibilities inside and outside the household (North East AgCare, 2005). Therefore building resilience to drought and changes in water resource availability, as well as other extreme weather events, must be based on a full appreciation of the gendered nature of coping and adaptation mechanisms and pathways to resilience.

The gendered nature of cultural roles, decision making and access to resources also stymies the ability to effect behavioural changes which might facilitate climate resilience and adaptation (Eriksen, Gill and Head, 2010). Eriksen et al. (2010) found significant gender differences in awareness, preparedness and attitudes towards bushfire amongst landholders in rural amenity areas:

The results also underline how the tenacious and embedded nature of gender role divisions within both public and private spheres act as economic, social and political stumbling blocks for empowerment opportunities. Gender issues are thus likely to remain invisible within Australian bushfire safety policy and practice unless conventional patriarchal structures and mindsets on bushfire management are challenged at home, within communities, in the media, as well as in emergency service systems (Eriksen et al., 2010, p. 340).

There are instances where women are being proactive about bushfire preparedness, for example starting their own bushfire support group with assistance from the CFA, however it is often not until they have experienced a bushfire firsthand that they are fully aware of the implications of living in a bush fire prone area (North East News, 2013).

Despite the difficulties and barriers faced by rural women in ensuring their place ‘at the table’, particularly those tables where decisions about climate change adaptation, mitigation and emergency management are made, rural women and agricultural communities continue to adapt and innovate. They respond positively in many instances to the continuous structural adjustment occurring in regional areas, adjustment which is exacerbated by changing climatic conditions and the aftermath of extreme weather events. One strength is their relational capital¹ with the potential for innovation leading to economic prosperity (Capello and Faggian, 2005). This is one pathway by which community objectives such as a robust economy with options for housing and employment can complement other objectives such as community health and wellbeing. Economic resilience has concomitant flow on effects to other sectors of the community and access to resources (income, education, infrastructure etc.) combined with strong governance and endowments of human and environmental capital is essential in adaptation, mitigation and recovery in extreme weather events and longer term adaptations to climate change.

Conclusion

This submission has briefly considered climate and extreme weather event resilience in rural communities from the perspective of rural women within a community risk management framework. The main focus has been on acknowledging the gender implications of managing risk and fostering resilience which are often overlooked or misunderstood in government policy frameworks and by emergency and support services. Using a conventional risk management framework and principles, and including rural women’s perspective on what constitutes the community’s ‘objectives’, has demonstrated the potential for the Australian national coordination and management of extreme weather events to be more robust and inclusive. This analysis suggest that incorporating rural women’s perspective would lead to increased emphasis on mitigation, prevention and preparedness (e.g. cutting carbon emissions, strengthening environmental and social assets, targeted awareness programs), rather than response and recovery in the overall management of extreme weather events.

¹ Relational capital is defined as all relationships – market relationships, power relationships and cooperation – established between firms, institutions and people, which stem from a strong sense of belonging and a highly developed capacity of cooperation typical of culturally similar people and institutions (Capello and Faggian 2005 p. 1).

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Dr Rowan O’Hagan has a background in Agricultural Science and a PhD in regional economics from the University of Melbourne and is a graduate of the Australian Institute of Company Directors. In 2002, Rowan co-convoked a national conference on priorities for rural women’s research at Charles Sturt University (O’Hagan, Alston and Spriggs, 2003). During the last decade, Rowan has researched the impact of drought and changes in water availability on rural communities and worked in agribusiness development and the water and health sectors. Her belief in the power of rural communities to shape their own economic and cultural futures led to the founding of the Wangaratta Sustainability Network and subsequently the North East Regional Sustainability Alliance (NERSA), which is a collaboration of six sustainability groups across North East Victoria (Ecoportal, 2013).

Dr O’Hagan is currently a director of the Ovens and King Community Health Service (Wangaratta), Gateway Community Health (Wodonga), the regional water authority North East Water, an independent member of the Audit and Risk Committee of Charles Sturt University and a member of Australian Women in Agriculture Ltd. Rowan has a consultancy undertaking research and project management nationally across a variety of primary sectors and small business.