



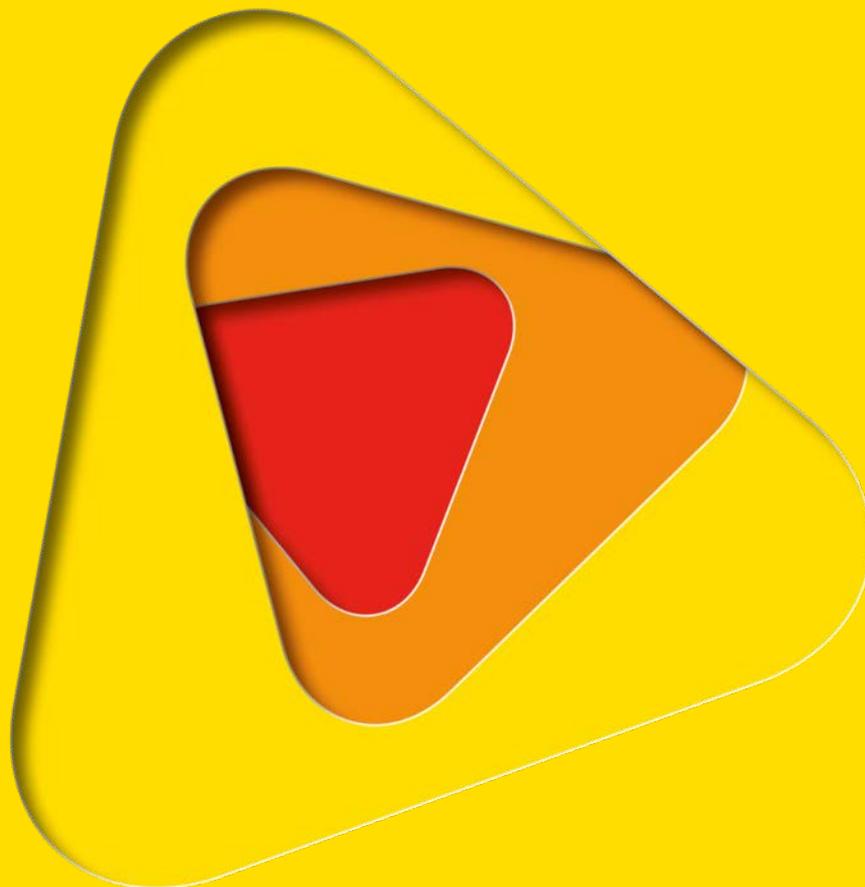
# IMPLEMENTING POLICY FOR ENABLING DISASTER RESILIENCE IN THE AUSTRALIAN FEDERATION: WHAT ROLE FOR GOVERNMENT?

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## INTRODUCTION

This paper reports on work being done by the author at the ANU and funded, in part, by the Bushfire and Natural Hazards Co-operative Research Centre to investigate how disaster resilience policy can be enabled in the Australian federal system through implementation arrangements. It aims to contribute to the academic literature on disaster resilience and policy implementation and will also provide information about operationalising disaster resilience policy that can potentially be applied in policy and program development settings.

The central premise is that, while Australia's fundamental disaster resilience policy choices may be sound, policy goals cannot be achieved without effective implementation, which is constrained by a shortage of evidence-based information in this area.

This work will also contribute to discussion about the role of government in optimising disaster resilience, which is relevant to contemporary debate about the future of federalism in Australia.

## BACKGROUND

In early 2011, all Australian governments adopted the National Strategy for Disaster Resilience (NSDR) (Commonwealth of Australia, 2011) which emphasises disaster prevention, preparedness and mitigation over the historical focus on relief and recovery. The NSDR, like many high level government policies, consists of broadly based principles designed to be picked up by state and territory governments with subsequent flow-on to local government and other sections of the community. While this approach provides flexibility, there is, at the same time, insufficient information and guidance about implementing disaster resilience policies and programs. This is a barrier to both the uptake and success of disaster resilience policy.

Learning more about how disaster resilience policy implementation occurs within and between the different tiers of government and the community, including downstream and upstream impacts of federalism will help understand the most appropriate approaches to implementing disaster resilience policy for strengthening Australia's disaster resilience.

Mainstream commentary tends to emphasise the limitations of resilience research and the effect this has on resilience policy efficacy, particularly policymakers' capacity to analyse and evaluate resilience policies and programs. This is not entirely accurate: The rise of resilience in public policy has seen the resilience evidence base grow substantially over the past decade, primarily in the areas of definitional, and conceptual model development and instruments for measuring resilience. It is also likely that this trend has contributed to research failing to keep pace in the area of policy implementation where gaps continue to be evident (Cork, 2010), with the possible exception of ecological resilience policy implementation (Walker and Salt, 2012; Alliance, 2010; Salt and Walker, 2006).

## DEVELOPING A DISASTER RESILIENCE IMPLEMENTATION FRAMEWORK

Qualitative methods are being used to developing an analytical framework consisting, at one level, of factors that have been identified in the literature as essential for supporting community resilience and for operationalising these characteristics. On another level, the framework represents the three levels of government in Australia, which provide the platforms and the mechanisms for policy implementation. The framework, once tested and refined will become a product of the research that could potentially be used as a resource for guiding disaster resilience policy implementation.



Several evidentiary domains provide the structure and the data that is being used to populate the disaster resilience implementation framework: Theoretical concepts and characteristics of disaster resilience, theoretical and empirical evidence from policy implementation studies, qualitative and quantitative information from evaluation of Australian national strategic policies, and case studies that will be conducted specifically for this research.

## **THEORETICAL CONCEPTS AND CHARACTERISTICS**

The work of Norris *et al.* (2008) has been chosen as the theoretical model because it links individual resilience to collective or community resilience in the context of disasters. Resilience is described by Norris as “a process linking a set of adaptive capacities to a positive trajectory of functioning and adaptation after a disturbance”. This definition is disaster-appropriate because it explicitly refers to a shock or disturbance which is connected to, or triggers a dynamic process leading to an improvement in functioning. The four networked adaptive capacities of economic development, social capital, community competence and information and communication each have inherent qualities or attributes of robustness (strength), redundancy (substitutable), rapidity (timeliness) and resourcefulness. The validity of this theory was strengthened by the work of Kulig *et al.* who expanded on Norris’ model with the Index of Perceived Community Resilience (IPCR) which was tested in two fire-affected communities in Canada using interviews, community profiles and a household survey. The IPCR proposed additional characteristics of leadership and empowerment, community engagement, and non-adverse geography which align with Norris’ social capital and community competence capacities (Kulig *et al.*, 2013).

## **ISSUES IN DISASTER RESILIENCE POLICY IMPLEMENTATION RESEARCH**

In spite of the widespread take-up of disaster resilience and disaster risk reduction policy in Australia and overseas, academic studies on disaster resilience policy implementation are relatively scarce, with what there is to be found mainly in ecological and environmental policy literature. Some information is also available in the grey literature, including in various government and non-government reports (particularly relating to event-specific recovery initiatives).

Policy implementation research had its hey-day in the 1970s and 1980s and some of this early discussion remains relevant for disaster resilience today. For example, the debate about top-down vs bottom-up approaches and the view that, in a system of multi-level governance, a combination of these two approaches is a legitimate option (Sabatier, 1986), particularly for implementing disaster resilience policy (Buckle *et al.*, 2001).

Effective implementation at the very least needs to be legal and to have functional capability (can get the job done) with outcomes and actions that are consistent with the goal of building the four networked adaptive capacities for disaster resilience.

Evidence about implementing policy that enables the four adaptive capacities and their complementary sub-scales (community engagement, leadership and empowerment and non-adverse geography) informs normative outcomes at the broadest level of the disaster resilience policy implementation framework. It should be noted that there is overlap between these, as there is between their corresponding policy implementation mechanisms and actions at the lower level. This does not limit the usefulness of the implementation framework but rather, provides a comprehensive menu and awareness of the mutual dependencies within the system.



## **IMPLEMENTATION AND THE FOUR NETWORKED ADAPTIVE CAPACITIES: ROLE OF GOVERNMENT?**

Social capital is enabled by implementing policies that build informal relationships, networks and stakeholder trust, by providing information to people relevant to their own roles and values, and by giving people the skills to socially engage and to deal with conflict (Productivity Commission, 2003). Ecological resilience is also linked to social capital, and is reflected in the non-adverse geography sub scale (Kulig et al., 2013). This highlights the importance of the physical environment in community well-being and provides evidence supporting the inclusion of environmental and natural resource management policy implementation within this resilience implementation framework.

A role for government in fostering community competence centres around engaging with communities to ensure that citizens are empowered to participate in policy development and implementation, including by facilitating local level leadership.

Normative policy outcomes of equity and diversity of economic assets (Norris et al., 2008) within communities can be influenced via government policies on taxation, social welfare and other redistributive strategies, employment, small business, regional development, foreign investment, competition, superannuation, energy to name a few.

In relation to information and communication, communities tend to look toward government for reliable and accurate information about issues of national public importance. Similarly, the importance of the role of government in formulating and leading effective strategic communications activities during and in the aftermath of disasters is well recognised (Conkey H, 2004). Governments are well placed to marshal the professional skills and substantial financial resources needed for conducting national public awareness and information campaigns using the mass media. Evidence supporting the effectiveness of this approach can also be found in national strategies relating to public health and road safety (Delaney A et al., 2004). On the other hand, a role for government in ensuring a responsible media, (another key element of information and communication adaptive capacity) is less clear.

## **IMPLEMENTATION CONTEXT - THE AUSTRALIAN FEDERATION**

The context for policy implementation is critical for shaping its outcomes (Coffey, 2014). Analysis of the policy context informs decisions about allocation of responsibility, the role of different levels of government, and the mechanisms that are available to government for implementing government policy.

The notion of multi-level governance, the overarching theoretical model for the Australian federal system provides the context and the superstructure for the proposed framework. This translates into national, sub-national and local implementation platforms. The Australian Constitution, at the highest level, provides the legal framework for the system.

The federalism literature provides a number of reference points for developing a disaster resilience framework, including, but not limited to, the Australian Constitution, Federal financial arrangements, intergovernmental agreements and institutions (or lack thereof), political economy of Australian states and territories, the role of regional and local government, principle and practice of subsidiarity, and power sharing arrangements (Jordan, 1999; Fenna and Hollander, 2013; Galligan, 2002).



These reference points inform consideration of implementation approaches at the outset. For example, questions such as does a policy need to be whole-of-government i.e. initiated and/or overseen at federal government level through a body such as the Council of Australian Governments, and have corresponding implementation machinery within each state and territory government, then similarly be reconstituted at local government level down to households and individuals? The answer to this surely is, it depends. It depends on the nature of the policy – what it is seeking to achieve or change and the capability for achieving that change at each level of the system. These issues are fundamental to subsidiarity and the associated debate about centralism vs devolution. Therefore, in terms of a principle for successful policy implementation, subsidiarity is key and “a potentially powerful concept around which a debate about the optimal assignment of tasks across different administrative levels could be constructed” (Jordan, 1999).

Pathways to achieving outcomes that lie outside of government become increasingly less evident as the goal of implementation moves away from government toward the grass roots or community and household level. Reviewing the NSDR involves a renewed commitment by all levels of government to “an integrated approach for building disaster resilience through behaviour change and partnerships between governments, communities, businesses and individuals, and engagement with the private and not-for-profit sectors” (Law Crime and Community Safety Council, 2014). This means it has become even more critical to illuminate, within this structure, implementation mechanisms, currently obscure or non-existent, for supporting community empowerment through engagement, participation and partnerships for disaster resilience,.

The framework, therefore, needs to represent the system or machinery that gives rise to policy implementation. This policy implementation machine includes mechanisms such as sub-policies, laws and regulations, programs, and institutions and governance arrangements that operate at each level within the broader context of Australia’s federal system, i.e. at national, sub-national (state and territory government), and local government levels. They have been incorporated into the framework because they offer relatively tangible units for analysis and provide structure that helps manage complexity. They can also help in identifying an appropriate role for government, including pinpointing the types of disaster resilience building activities that may be within its remit, or within the remit of other non-government actors.

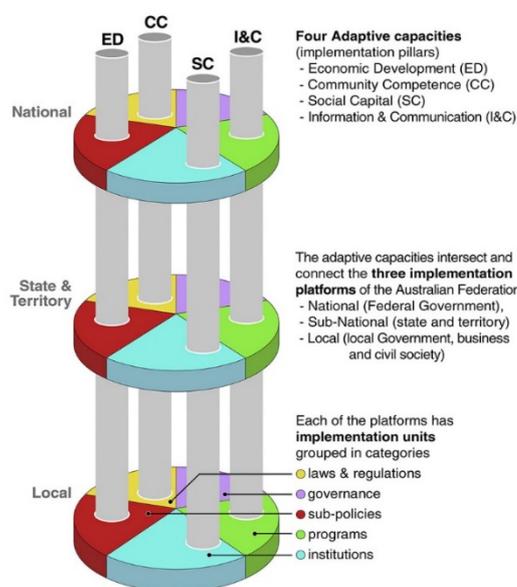


Figure 1 provides a concept for the disaster resilience implementation framework.



## CASE STUDIES

Four case studies corresponding to each of the four adaptive capacities will be conducted to provide an empirical component to the research. Five programs or initiatives with explicit disaster resilience and/or natural hazard risk reduction/mitigation objectives have been selected for data collection, with one from each of the three levels of government and one each from the business and the not-for-profit sectors.

Data collection will involve initial document study, followed by structured interviews. The interview questions have been designed to draw out detailed contextual information about the way each of the disaster resilience initiatives are being implemented in relation to the actions/outcomes in Table 1. The interview responses will be analysed in terms of the actions/outcomes in Table 1 as well as in relation to the policy implementation information obtained from the document study. Particular regard will be given to whether or not, and how, approaches to implementation are a function of federalism. Consistent with the key principle of subsidiarity, the notion of centralism vs devolution and the direction of implementation (vertical, horizontal or multi-directional) will also be considered in the analysis.

**Table 1** provides terms that will be used in the data analysis and form part of the framework. They have been adapted from Norris et al (2008) and Kulig et al (2013), the Productivity Commission (2003) and Australian Bureau of Statistics (2004) on social capital; Handmer and Dovers (2013) on information and communication as a “universal” policy instrument and the role of community participation; Richardson (2014) in relation to security as an outcome for economic development; Hussey et al (2013) regarding intra governmental and administrative policy mechanisms; links between stakeholder engagement and leadership and empowerment (Porteous, 2013); and Fenner and Hollander (2013), Jordan A (2013) and McAllister *et al.* (2003) on principles of co-operative federalism. In developing the methodology, guidance has been obtained from *Statutory frameworks, institutions and policy processes for climate adaptation: Final Report* (Hussey et al., 2013).

**Table 1**

<b>DISASTER RESILIENCE POLICY IMPLEMENTATION – NETWORKED ADAPTIVE CAPACITIES</b>				
<b>ADAPTIVE CAPACITY</b>	Social Capital	Community Competence	Economic Development	Information & communication
<b>Actions and outcomes</b>	1.Networks 2.Non-adverse geography/place-based 3.Community engagement 4.Leadership (internally focused)	1.Political partnerships 2.Stakeholder engagement 3.Leadership (externally focused) & empowerment 4.Community participation	1.Security 2.Economic diversity 3.Equity of resource distribution 4.Sustainability 5.Shared (equitable) risk allocation	1.Narratives 2.Responsible media/access to trusted information 3.Skills and infrastructure 4.Information flow between sectors



## CONCLUSION

If building disaster resilience requires long term commitment to action underpinned by attitudinal and behavioural change at all levels of government and the community, better and more detailed information and guidance is needed, not only on how to develop disaster resilience policy, but also on how to construct and design the apparatus of disaster resilience policy implementation i.e. the laws and regulations, sub-policies, programs, institutions and governance. At the very least there needs to be a greater level of knowledge and awareness about how to avoid undermining resilience, including as an unintended consequence of poorly designed and ill-conceived implementation practice.

This paper has outlined a concept, broad architecture and methodology for a framework to guide effective ways of implementing disaster resilience policy. The disaster resilience policy implementation framework will provide more clarity around actions and actors for achieving the four disaster resilience adaptive capacities of community competence, social capital, economic development and information and communication.



## REFERENCES

- Alliance, R., 2010. Assessing resilience in social-ecological systems: Workbook for practitioners, *Version, 2*: 53.
- Australian Bureau of Statistics, 2004. *Measuring social capital: an Australian framework and indicators*, Canberra.
- Buckle, P., Marsh, G. and Smale, S., 2001. *Assessment of personal and community resilience and vulnerability*, Emergency Management Australia,
- Coffey, B., 2014. Overlapping forms of knowledge in environmental governance: Comparing Environmental Policy Workers' Perceptions, *Journal of Comparative Policy Analysis: Research and Practice*.
- Commonwealth of Australia, 2011. *National Strategy for Disaster Resilience: Building the resilience of our nation to disasters*, Council of Australian Governments,,
- Conkey H, 2004. National crisis communication arrangements for agricultural emergencies, *The Australian Journal of Emergency Management*, **19**(3): 43-46.
- Cork, S., 2010. *Resilience and transformation: preparing Australia for uncertain futures.*, CSIRO Publishing,
- Delaney A, Lough B, Whelan M and M., C., 2004. *A review of mass media campaigns in road safety*, Monash University Accident Research Centre,,
- Fenna, A. and Hollander, R., 2013. Dilemmas of Federalism and the Dynamics of the Australian Case *Australian journal of public administration*, **72**(3): 220-227.
- Galligan, B., 2002. Australian Federalism: A Prospective Assessment, *Publius*, **32**(2): 147-166.
- Handmer, J. and Dovers, S., 2013. *Handbook of Disaster Policies and Institutions: Improving Emergency Management and Climate Change Adaptation*, Routledge,
- Hussey, K., Price, R., Pittock, J., Livingstone, J., Dovers, S., Fisher, D. and Hatfield-Dodds, S., 2013. *Statutory frameworks, institutions and policy processes for climate adaptation.*, National Climate Change Adaptation Research Facility, Gold Coast.
- Jordan, A., 1999. The multi-level politics of European environmental governance: a review article, *Public Administration [H.W.Wilson - SSA]*, **77**(3): 662.
- Kulig, J. C., Edge, D. S., Townshend, I., Lightfoot, N. and Reimer, W., 2013. Community Resiliency: Emerging theoretical insights., *Journal of Community Psychology*, **41**(6): 758-775.
- Law Crime and Community Safety Council, 2014. *Communique*, Available at: <http://www.lccsc.gov.au/agdbasev7wr/sclj/lccsc%20meeting%204%20july%202014%20-%20communique.pdf>
- McAllister, I., Dowrick, S. and Hassan, R., 2003. *The Cambridge handbook of the social sciences in Australia*, Cambridge University Press, New York.
- Norris, F. H., Stevens, S. P., Pfefferbaum, B., Wyche, K. F. and Pfefferbaum, R. L., 2008. Community Resilience as a Metaphor, Theory, Set of Capacities, and Strategy for Disaster Readiness, *American Journal of Community Psychology*, **41**(1-2): 127-150.
- Porteous, P., 2013. Localism: from adaptive to social leadership, *Policy Studies*, **34**(5-6): 523-540.
- Productivity Commission, 2003. *Social Capital: Reviewing the Concept and its Policy Implication*, Canberra.
- Sabatier, P. A., 1986. Top-Down and Bottom-Up Approaches to Implementation Research: a Critical Analysis and Suggested Synthesis, *Journal of Public Policy*, **6**(01): 21-48.
- Salt, D. and Walker, B., 2006. *Resilience thinking: sustaining ecosystems and people in a changing world* Island Press, Washington.
- Walker, B. and Salt, D., 2012. *Resilience practice: building capacity to absorb disturbance and maintain function*, Island Press,