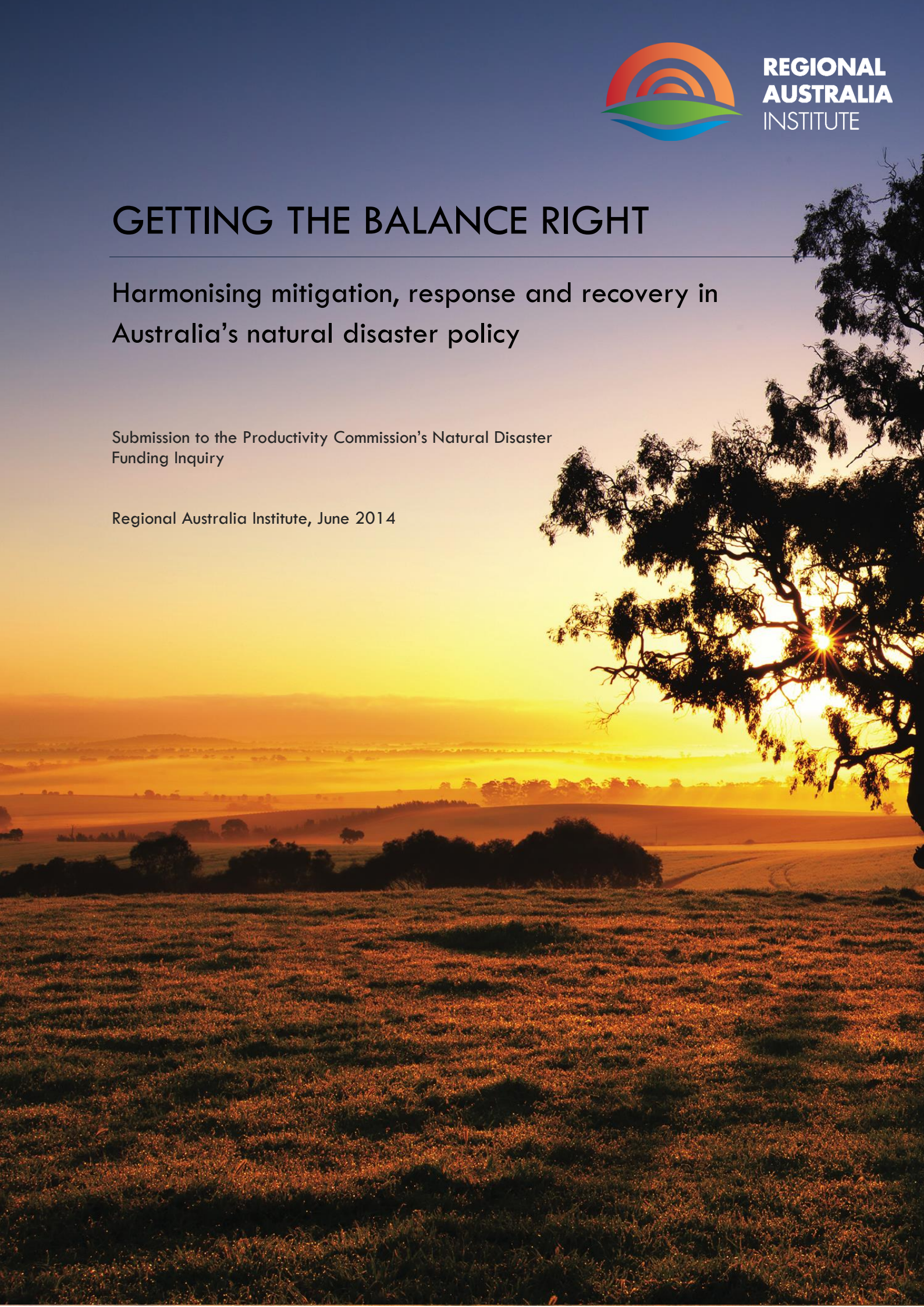

REGIONAL AUSTRALIA INSTITUTE

GETTING THE BALANCE RIGHT

Harmonising mitigation, response and recovery in Australia's natural disaster policy

Submission to the Productivity Commission's Natural Disaster Funding Inquiry

Regional Australia Institute, June 2014

Executive summary

Natural disasters have been and remain a constant part of the Australian landscape. The significant impact on communities due to the loss of life, emotional trauma and economic costs means that there needs to be a coherent, effective and sustainable natural disaster policy in place across all levels of government.

Regional Australia presents a particular challenge for disaster policy. Risk, as currently measured in proportion to population size, means that regions are often considered less exposed despite the frequency and severity of the natural disasters that affect regional communities.

Current disaster arrangements have favoured response and recovery over mitigation. This has done very little to reduce Australia's risk exposure and is incurring rising costs. With the severity and frequency of weather extremes anticipated to increase, it is necessary to re-assess our current objectives and programs at the national level to achieve a better balanced policy approach.

Reducing Australia's risk exposure should be the first priority for future natural disaster policy and programs. This will require a rebalancing of expenditure and effort towards mitigation and preparedness by local and state governments.

The incentive effect of Commonwealth policy approaches should be used actively to promote greater preparedness and mitigation efforts. This is consistent with the Australian Government's role as leader, coordinator and safety net provider.

Simply shifting cost back to other levels of government will achieve little for the nation in overcoming our disaster challenges.

A growing disaster bill and perceived shift in responsibility to the Australian Government beyond its traditional role in disaster policy has been a driver for this inquiry, but this will not safeguard communities. Financial considerations should be secondary to the need to reduce Australia's exposure to the risks presented by natural disasters.

On its own, shifting the costs between government, business and communities may do little to change the overall impact of disasters on Australia. Such changes should be judged by their efficacy in reducing the future exposure to natural disaster impacts, not on the bottom line or contingency liability outcomes for the Australian Government.

Response and recovery should be shaped around a need for flexibility. The varying impacts

of different disasters and the unique needs and challenges of different regions cannot be addressed by a rigid policy approach. Identifying these needs and challenges will come from an understanding of the pre-disaster community.

In many cases of severe disaster, a key focus of the immediate response should be business recovery and minimising population displacement. As this develops into recovery, betterment should be an informing principle rather than the traditional approach of replacing like with like. The current position on betterment is perverse and results in multi-dimensional policy failure and high on-going costs.

The Australian Government should also build stronger systems of information to support policy development and implementation across mitigation, response and recovery.

Recommendations and policy imperatives

Based on the research undertaken by the Regional Australia Institute (RAI) it seems imperative that natural disaster policy:

- Should shift its approach to treat mitigation as the first priority with the objective of reducing the overall exposure of communities to the impacts of natural disasters.
    - This must be supported by policies that incentivise state and local government to utilise mitigation activities.
- Has access to and utilises better information on communities, natural disasters and mitigation options. This applies to:
    - A wider understanding of the exposure to different types of risks, beyond population size.
    - Mitigation, response and recovery catering to the needs of the affected community based on its pre-disaster state and the impacts of the natural disaster.
    - Ensuring that all parties relevant to natural disaster mitigation, response and recovery have access to this information.
- Moves recovery arrangements beyond a focus on response and reconstruction to incorporating local renewal and adaption to help communities achieve a 'new normal' post-disaster.
    - Prioritising population displacement and business recovery as part of the immediate relief effort and into the recovery phase.
    - Understand the needs of the community before making decisions regarding interventions; this includes the use of more formalised betterment processes and reducing specific commitments made in the early response stage.

Introduction

Australia is a regular victim of natural disasters. Their devastating impacts are regularly felt by the community, the economy and government budgets. With their severity and frequency set to increase, so too will the human, social and economic costs.[i]

The current national policy for natural disasters is framed by the National Strategy for Disaster Resilience (NSDR). Although this approach covers all aspects of resilience, there is a clear emphasis on response and recovery, as seen in the distribution of resources and funding.

The focus on response and recovery has made Australia's approach costly and ineffective in reducing national exposure to the impacts of natural disasters.

The RAI sees the Productivity Commission (the Commission) Inquiry into Natural Disaster Funding as a once in a generation opportunity to build a policy for the future that this submission, along with the RAI's past and future work, can help to inform.

The specific terms of reference to which this submission most closely relates are:

1. *The sustainability and effectiveness of current arrangements for funding natural disaster mitigation, resilience and recovery initiatives, including – where directly relevant to an improved funding model – the management of disaster relief and recovery.*

4. *Options to achieve an effective and sustainable balance of natural disaster recovery and mitigation expenditure to build the resilience of communities, including through improved risk assessments. The option should assess the relationship between improved mitigation and the cost of general insurance. In doing this, the Commission should consider:*

    a. *Mechanisms and models to prioritise mitigation opportunities and evaluate the costs and benefits of a range of mitigation options.*

About the Regional Australia Institute

Independent and informed by both research and ongoing dialogue with the community, the Regional Australia Institute (RAI) develops evidence-based policy and advocates for change to build a stronger economy and better quality of life in regional Australia – for the benefit of all Australians.

The RAI was specifically formed to help bridge the gap between knowledge, debate and decision-making for the potential and future pathways of regional Australia. It exists to ensure local, state and Federal policy makers, researcher, business and members of the community have access to the information they need to make informed choices about the future of regional Australia.

Definition of regional Australia

The RAI defines regional Australia as the non-metropolitan areas of the nation that lie beyond Australia's major capital cities and their immediate surrounding suburbs.

Submission contacts

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(Regional) Australia exposed

The devastating impacts of natural disasters are regularly felt throughout Australia. The emotional and financial trauma that they create makes it a priority issue for the Australian Government.

Regional Australia is particularly susceptible to the impacts of natural disasters. From November 2010 to February 2011, a significant portion of regional Australia was declared a natural disaster impacted area (see Figure 1).

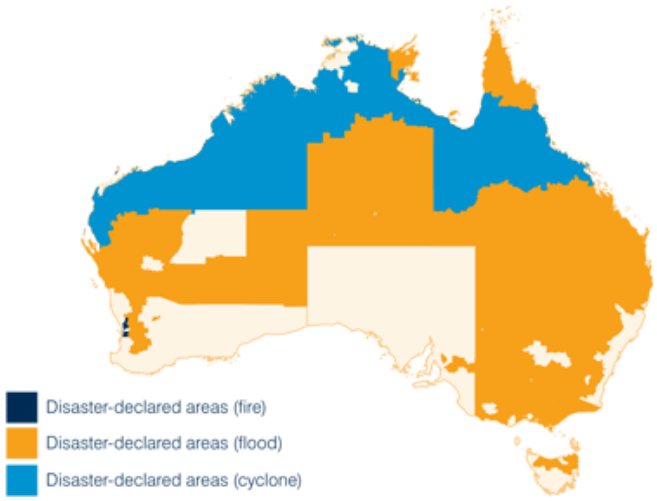


Figure 1: Map of Disaster declared LGAs November 2010-February 2011
Budget Overview, May 2011

The National Strategy for Disaster Resilience (NSDR) states that:

> '*Australian communities are varied in their composition and in their level of exposure to disaster risk. Factors that can influence disaster resilience include remoteness, population density and mobility, socio-economic status, age profile and percentage of population for whom English is a second language.*'

The way many of these factors play out in regional Australia makes regions more vulnerable to the impacts of natural disasters.

For example, regional Australia has a larger portion of its population aged over 50 years.[ii] Older populations can be vulnerable due to pre-existing medical conditions, decreased mobility and more limited access to technology reducing their access to information.[iii] Of the 173 people killed in the 'Black Saturday' fires (Victoria 2009), 89 were aged 50 years and older.[iv]

Likewise, the location of many regional communities makes them more exposed to natural disasters. For example, the northwest Australian coastline between Broome and Exmouth is the most cyclone-prone region of the entire Australian coastline. As seen in Figure 2, almost all tropical cyclones over the last 35 years have occurred in regional Australia.

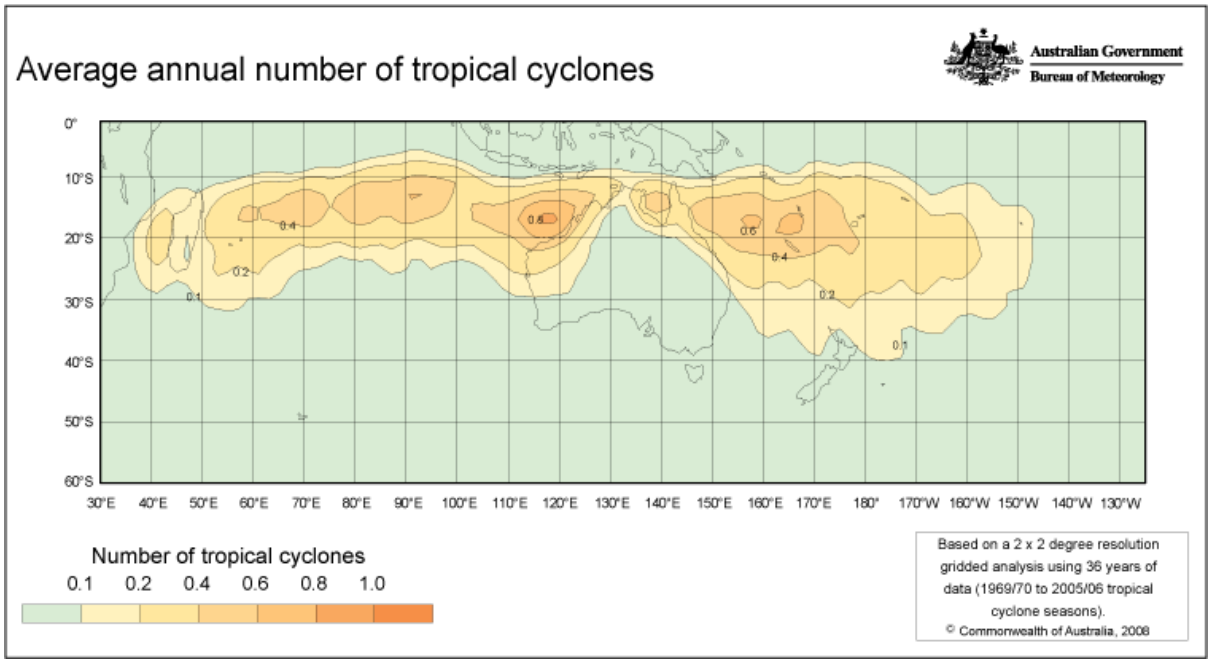


Figure 2: Tropical cyclones in Australia
Source: Bureau of Meteorology, product code IDCJCM0011

Given this exposure and often heightened vulnerability, the effectiveness of natural disaster policies is central to the future of regional Australia. In particular the ability of policy frameworks to respond successfully to the unique combination of the community and the disaster risk and impacts. The ability to manage these unique circumstances is fundamental to effective outcomes and the efficient use of resources.

Reducing Australia's exposure to disasters should be the first priority

Australia is highly exposed to the risk of natural disasters. This exposure is predicted to increase in the future as a consequence of climate change.[v] If natural disasters in Australia do increase in severity and frequency as predicted, the already high cost of natural disasters (currently estimated at $16.1 billion between 2000 and 2012) will only increase.[vi]

Because of the devastating human and economic impacts of natural disasters, every reasonable effort should be taken to stop, or at the very least reduce, the occurrence and consequences of natural disasters. As a result, the first priority of natural disaster policy and funding must be to effectively target and manage disaster risks and their consequences.

THE RAI'S PROPOSED APPROACH TO NATURAL DISASTERS

Objective:

- Reducing the exposure of Australian communities to natural disasters.
- Where exposure cannot be reasonably managed, reducing the scale and duration of disaster impacts.

Informing principles:

- Effectiveness: ability to realise the desired objective.
- Sustainability: ability to fund effective policies over time.

Managing the predicted increase in natural disasters and the associated costs requires a strong and comprehensive policy approach. This will be measured by two key criteria: effectiveness and sustainability.

Effectiveness comes from the ability to meet your objective. For natural disaster policy this means building less exposed and better prepared communities. The current focus on response and recovery does not help communities before a disaster strikes, it only helps them manage the aftermath.

Sustainability is the ability of policy to continue to meet the objectives over time. The Australian Business Roundtable for Disaster Resilience and Safer Communities' report *Building our Nation's Resilience to Natural Disasters* estimates that by 2050 the annual cost of natural disasters will average $23 billion if we continue with our current approach. This suggests that current approaches do not meet the key criteria.

To best meet the criteria of effectiveness and sustainability, Australia will need to shift its policy to a more balanced distribution of effort and resources between the different stages of natural disaster mitigation, response and recovery.

As with any risk management approach decreasing the impacts of natural disasters, wherever possible at reasonable cost, is the most important approach to managing increasing disaster risk. Finding more efficient ways to respond and manage impacts is a necessary but secondary objective to this overall goal.

Figure 3 below describes the shift in focus and funding required to achieve an effective and sustainable disaster response for Australia. This presents a hierarchy of policy responses consistent with the prioritisation of avoidance. The 'spinning top' shape on the left hand side represents the scale of effort and investment in each phase under the current system. The 'onion' on the right hand side represents a more effective distribution of effort and resources under a revised policy approach.

Figure 3: Disaster policy priority hierarchy and current and future allocation of effort and investment

Focusing our efforts firstly on mitigation, and then response and recovery is likely to achieve superior outcomes. Well planned mitigation will reduce the impacts of natural disasters by making communities better protected and prepared. In the longterm, this should decrease the need for response and recovery spending; therefore reducing the cost of natural disasters for Australia as a whole and the Australian Government.

Acting to reduce exposure is consistent with the Australian Government's role as the 'safety net'

There has been reticence amongst policy makers to 'expand' the Australian Government's

engagement in disaster policy in line with a broader approach. The Global Financial Crisis (GFC) reinforced that part of the role of the Australian Government is to act as a safety net or lender of last resort for the financial system. The GFC experience has highlighted the need for the Government to effectively regulate financial institutions to eliminate or reduce the extent to which this safety net is required.

Similarly the rising costs of natural disasters should focus the policy approach of the Australian Government towards reducing the circumstances in which they would need to provide a safety net.

Given that the occurrence and severity of natural disasters cannot be directly regulated, an increase in the investment of Australian Government resources in well targeted mitigation should be an important part of future policy and funding approaches. Such an approach is consistent with the current Australian Government's roles and responsibilities for disaster management, as well as being firmly in the national interest.

Focusing on shifting responsibility and costs will lead to limited progress in managing disaster exposure and reducing the national liability

The alternative to reducing Australia's exposure to natural disasters is shifting costs and responsibilities to other parties.

The growing disaster bill and the perceived shift in responsibilities to the Australian Government appear to be informing much of the current policy discourse around disaster management. An example of this can be seen in the recommendation to limit the Australian Government's contribution to the state and territory Governments to 25 to 33 per cent of the estimated reconstruction costs.[vii]

Appropriately distributing responsibility and costs across governments, business and individuals is an important consideration in disaster management policy.

However proposals, such as those put forward by the Commission of Audit for the Australian Government to simply place limits on its contribution to natural disaster funding, thereby shifting costs back to the states and local government, will do little to progress better outcomes for Australia in relation to natural disasters. While this may be in the Australian Government's interest (narrowly defined) it is not clear how such a policy approach is in the national interest.

Given the political interest in being generous during the aftermath of disaster events, it is likely that political leaders will choose to relax these restraints over time and arrangements would creep back towards the present situation.

Managing the growing disaster bill for the Australian Government (although an important component) should not be the primary objective. Shifting financial responsibilities but continuing with an inherently limited policy approach will not achieve better outcomes for Australia as a whole.

New policy settings and funding arrangements: delivering an increased focus on mitigation, preparedness and resilience

The discussion above emphasises the need for fundamental changes to the way the Australian Government understands and engages with its role as both the coordinator and leader of natural disaster policy and also as the 'safety net' for other levels of government.

Current arrangements provide a basic but very expensive safety net but do little to reduce Australia's exposure to risk over time or encourage responsibility and action from other levels of government, individuals and business in terms of mitigation and preparedness.

The Commission notes in its issues paper that 'the funding that the Australian Government provides inevitably influences the way lower levels of government manage natural disaster risks'. Future policy arrangements should seek to actively use this key policy lever to incentivise proactive policies by lower levels of government and thereby achieve better outcomes for Australia and the Australian Government's fiscal sustainability.

Investing in and using better information on disaster exposure

Risk is inherently different between cities and highly populated areas and the regions. The difference can be seen by comparing the impacts of two of the most expensive natural disasters in the past 30 years – the hailstorm that hit Sydney in 1999 ($486 million) and Cyclone Larry in Far North Queensland in 2011 ($540 million).

Much of the expense in Sydney resulted from damage to the built environment (homes and personal property, and infrastructure). A large portion of the damage from Cyclone Larry, on the other hand, was inflicted upon agricultural areas. Losses included 80 per cent of Australia's banana crop (amounting to approximately $300 million) as well as at least $15 million worth of avocados.[viii]

The damage from both of these disasters was a result of the type of area that they struck. The hailstorm hit a major city with a concentrated population. If the same storm had hit a regional

area which had a more dispersed population, the cost would not have been as high. Cyclone Larry on the other hand had such a significant impact because of the damage to agricultural areas, the main industry of that region.

An understanding of the different types of risks is just one of the criteria necessary for making good mitigation decisions. Figure 4 shows the different information needed to assess mitigation decisions.

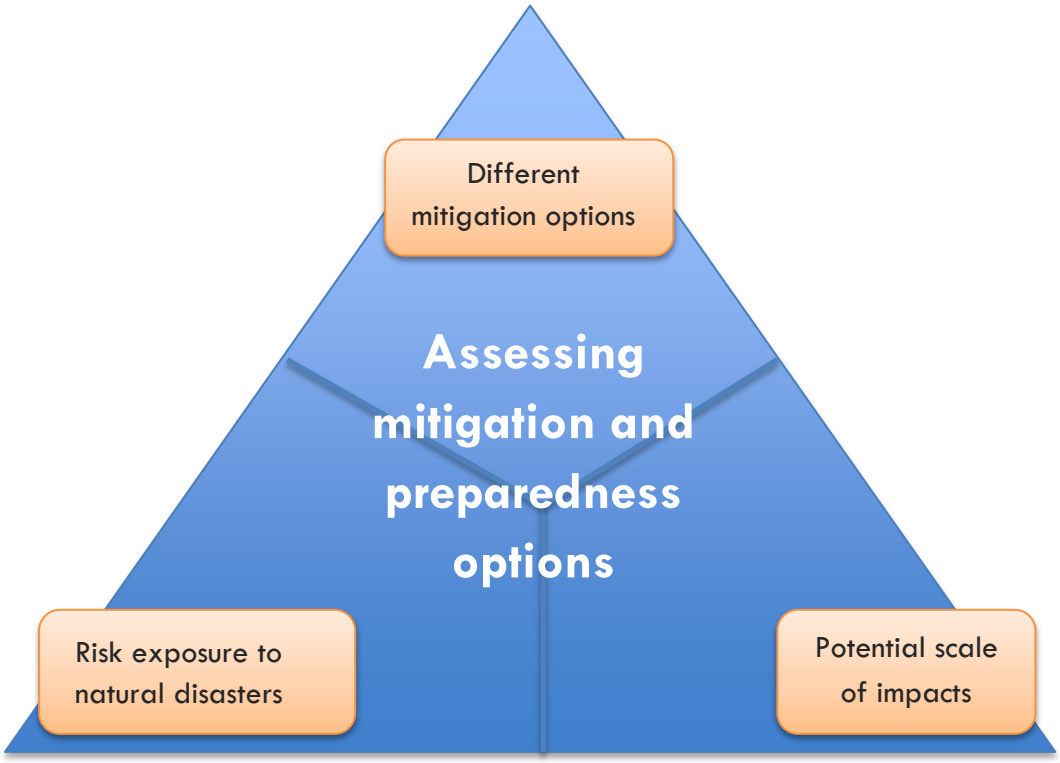


Figure 4: Necessary information for assessing mitigation options

The likelihood of a disaster occurring and the scale of the damage are arguably the better understood components of risk mitigation. Organisations such as the CSIRO, Geoscience Australia and the Bushfire and Natural Hazards CRC all provide relevant information on disaster risk. Additionally, under the National Partnership Agreement on Natural Disaster Resilience (NPANDR) all states and territories are required to publish a natural disaster risk assessment (although the RAI notes that it is not clear how well these state level assessments will promote understanding of risk at the regional level).

Increased attention is required on how this information is integrated and relayed to the general population. To ensure good decisions are made on the ground, it is vital that local government and the wider community understand the different levels of risk in their area.

The third component, understanding the different mitigation options available and the associated costs, presents a significant challenge. A wide range of different mitigation options are available to communities depending on their different levels of risk exposure to different types of disasters.

The lack of a single point of knowledge, or key bodies and information sources, makes understanding the full scope of options and their anticipated costs and outcomes difficult at all levels without time-consuming in-depth research.

Consideration must also be given to the types of mitigation that may not ordinarily be associated with natural disaster policy. This includes urban planning, land use policy and infrastructure investment. These can act as passive yet important tools to mitigate against future disaster risk.

In many States, building regulations and Asset Protection Zones (APZs) comprise part of the conditions of consent for developments in bushfire prone areas. These regulations and APZs mitigate against risk to individual property and surrounding residents. Similarly, building regulations are used to reduce risk to property from cyclones and land use zoning is employed as a strategy to reduce risk to residential properties.

Zoning and the release of lands for development has long been used as a mitigation against natural disaster risk. Natural floodways and flood prone areas have been zoned as unsuitable for development or have stipulations to guard against property loss. In acute cases, such as the recent example of Grantham (QLD), whole neighbourhoods have been relocated to ward-off future risk.[ix]

Critical infrastructure assessments are undertaken on infrastructure networks to mitigate against risk to economic and social transactions. For example, mitigating for risk in coastal towns and cities in Queensland needs to be coupled with assessment of critical points of connectivity to the wider infrastructure network.

Despite the important role of practices such as urban planning, land use policy and infrastructure investment to help to mitigate against the risk of natural disasters, they should be accompanied by a stronger mitigation framework.

A new information capability

Given this complexity, the issues paper states that 'identifying the optimal level of disaster mitigation, resilience and recovery at an aggregate level is arguably elusive'.

It is likely that this statement has previously been correct. However the steps forward in basic

information made by agencies such as Geoscience Australia and the Bureau of Meteorology have not yet been effectively integrated into policy frameworks. In the future, new capabilities that are emerging from 'big data' innovations are likely to make a reasonable top-down or aggregate evaluation of this issue available to decision makers.

Recent workshops held by the Australian Government and CSIRO and new work being undertaken by the Australian Business Roundtable for Disaster Resilience and Safer Communities emphasise that the approach to overcoming information constraints for policy at the national level has been fragmented and ineffective.

A recent workshop on mitigation research identified 63 projects currently underway that could meaningfully impact on the question of optimality and how much to invest where. An example of this is some of the work currently being undertaken by Risk Frontiers[1]. Current projects are looking at developing a framework for decision-making amongst a set of proposed mitigation options, given finite project funding and a framework model for practically measuring community resilience. While centrally mandated mitigation strategies may not be feasible, active use of information to guide investment prioritisation (both spatially and technically) and support local option assessments is essential to effective and sustainable policies.

As a result, it should not be accepted or assumed by the Inquiry or policy makers that better use of information to guide decision making is not possible. Given the impact this information would have on the efficacy of disaster management policy, it should be the focus of coordinated effort and investment in future policy and funding arrangements at the national level.

To pursue this option and provide a better foundation for tackling the mitigation challenge at all levels of government, establishing an on-going function at the Australian Government level to develop information for use in disaster policy decision making should be part of future arrangements. This should seek to enable:

BIG DATA

Big data is 'the vast amount of data that is now being generated and captured in a variety of formats and from a number of disparate sources.' The advances in technology now allow us to analyse, store and process data in a cost effective way, enabling Government to potentially realise benefits from the use of this technology more easily.

The Australian Public Service Big Data Strategy states that government has a responsibility to realise the value of this data and the information contained within it. Government already uses big data to inform natural disaster. The Australian Business Register automatically extracts and sends relevant data in the event of a disaster to all applicable parties.

The Australian Public Service Big Data Strategy, Department of Finance and Deregulation (2013)

[1] Risk Frontiers is an independent research centre, based at Macquarie University, and sponsored by the insurance industry to aid better understanding and pricing of natural hazard risks in the Asia-Pacific region. Source: Risk Frontiers Natural Hazard Research Centre http://www.riskfrontiers.com/index.htm

- The Australian, state, territory and local governments to effectively and consistently target investment to areas of high vulnerability.

  Developing a clear framework for identifying and evaluating mitigation options that is accessible to all parties involved in disaster management is vital. *Building our Nation's Resilience to Natural Disasters* makes the case for increased action to reduce the exposure of different communities to natural disasters using a benefit-cost analysis (BCA). The RAI supports the implementation of a similar framework informed by centrally managed data and information for assessing the different mitigation and preparedness projects.

- The Australian Government to monitor exposure outcomes and reduction in disaster response and recovery costs as a result of mitigation, preparedness and resilience investments.

  This is essential to ensure that the benefits of mitigation investments are understood and demonstrated over time. Without this in place, policy may not slide back toward the current overwhelming and expensive focus on response and recovery activities.

This information approach should not just be for emergency service capability and risk assessment, as has been the trend, but also for physical mitigation infrastructure and preparedness activities. It should also be driven by a policy for economic perspectives in disaster issues.

Future policy design

Incentives to drive mitigation and preparedness activities by states and local government

The Commission should consider how future funding arrangements can provide active incentives to local and state governments (and possibly individuals or businesses) to mitigate against the risks and actively prepare for natural disasters.

Consideration of options to create positive incentives for mitigation activities is important. Direct Australian Government investment in these activities on a matching basis is one option.

An alternative or complementary option is for the Australian Government to establish arrangements where it would offer to assume a larger amount of recovery costs or provide more flexible/faster access to recovery and reconstruction funding for all local governments who have actively mitigated and prepared for natural disasters. This should also be extended to state governments who have invested in mitigation and preparedness activities in those areas with the greatest levels of disaster exposure.

This approach would be cost effective where it could be demonstrated that mitigation and preparedness activities meaningfully reduce the scale and cost of disaster impacts.

While under these arrangements, the Australian Government may nominally foot a larger percentage of the final bill for some recovery activities, if the quantum of costs is significantly reduced then the overall Australian Government liability would be less than where mitigation and preparedness had not been undertaken.

Such an approach to share the burden of costs is essential to motivate action by state and local Government.

Improving local infrastructure policies and programs

A crucial consideration in mitigation and preparedness is the effectiveness of other Commonwealth policies and programs in supporting disaster mitigation and preparedness. The costs associated with road repair are noted by the Commission as a significant contributor to natural disaster costs.

Previous RAI submissions to the Commission have identified the significant limitations of local and regional infrastructure arrangements.[x] The ineffectiveness of these policies in improving the state of local roads in particular and the often substandard management of infrastructure by local governments is a key factor exacerbating the scale of disaster costs.

This situation has also hamstrung the move towards an effective incorporation of betterment policies in disaster funding. The Federal Government has been wary of the Natural Disaster Relief and Recovery Arrangements (NDRRA) being used as a proxy source of local infrastructure funding for state and local government.

This situation is resulting in a series of perverse outcomes and incentives. The lack of maintenance and effective management of local infrastructure (including through Australian Government investment) is inflating the cost of disasters. In response to this the Australian Government is refusing to invest in betterment as part of reconstruction and renewal despite the fact that in local areas where disasters frequently occur it is likely to lead to higher costs longer term for the Australian Government. In some areas it is likely that the Commonwealth and local governments are making repeated investments in sub-standard infrastructure.

It is important that future funding arrangements seek to eliminate this situation through better incentives in natural disaster programs and the proper consideration of natural disaster risks and liabilities in the development of infrastructure programs in other parts of government.

Improving disaster recovery strategies

By definition, natural disasters are unpredictable. Therefore, although reducing the occurrence of natural disasters should be our main objective, Australia will need to continue to be prepared for managing the post-disaster impacts. This means having the best possible response, recovery and renewal practices in place.

In 2013, the RAI published *From Disaster to Renewal: the centrality of business recovery to community resilience* (a copy of this work is attached).

This work was informed by case studies of four disaster-affected communities and a review of international and domestic literature about post-disaster business recovery. The four case studies undertaken in this research were:

- Cardwell (QLD) after Tropical Cyclone Yasi in February 2011;
- Carisbrook (VIC) after the 2011 flash floods;
- Emerald (QLD) after the 2010-11 floods; and,
- Marysville (VIC) after the February 2009 'Black Saturday' Bushfires.

This work used the following breakdown of the recovery phases (Figure 5) to identify and examine the different stages of recovery.

Figure 5: Inside the recovery phase

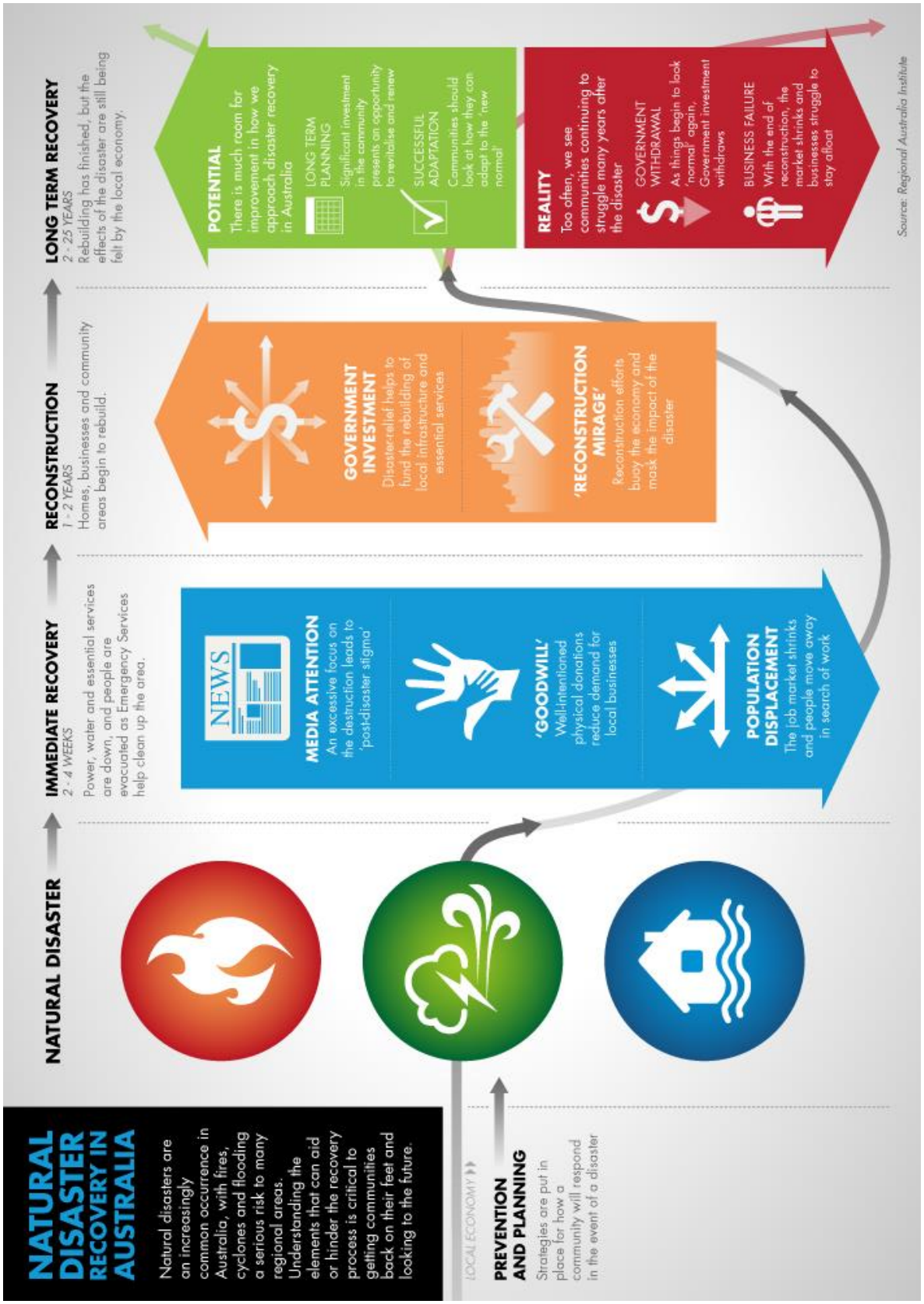
Differentiating between the unique stages of recovery allowed the RAI to look at each step in detail, identify the relationships between the various stages, better understand the timings and, arguably most importantly, identify where in the recovery phase communities and the various levels of government are likely to encounter significant barriers to long-term overall

recovery.

This research found that within a resilience framework; 'bouncing back' is not the right approach. Communities that are impacted by natural disasters are challenged to positively adapt and achieve a new state of normal, as the pre-disaster situation cannot be regained and may also not be the optimal outcome.

Establishing a 'new normal' is the challenge for each community. The impacts of a disaster are never straightforward, nor are they generic. Each disaster impacts a community in a different way, depending on the intensity of the disaster, and the pre-existing economic and social features of the community.

Central to any community recovery is the recovery of local businesses. This is key to helping to overcome population displacement, restoring confidence within the community about the future and ensuring resources available in the recovery phase have maximum local impact.


NATURAL DISASTER RECOVERY IN AUSTRALIA
Natural disasters are an increasingly common occurrence in Australia, with fires, cyclones and flooding a serious risk to many regional areas. Understanding the elements that can aid or hinder the recovery process is critical to getting communities back on their feet and looking to the future.
LOCAL ECONOMY
PREVENTION AND PLANNING
Strategies are put in place for how a community will respond in the event of a disaster
NATURAL DISASTER
IMMEDIATE RECOVERY
2 - 4 WEEKS
Power, water and essential services are down, and people are evacuated as Emergency Services help clean up the area.
MEDIA ATTENTION
An excessive focus on the destruction leads to 'post-disaster stigma'
'GOODWILL'
Well-intentioned physical donations reduce demand for local businesses
POPULATION DISPLACEMENT
The job market shrinks and people move away in search of work
RECONSTRUCTION
1 - 2 YEARS
Homes, businesses and community areas begin to rebuild.
GOVERNMENT INVESTMENT
Disaster-relief helps to fund the rebuilding of local infrastructure and essential services
'RECONSTRUCTION MIRAGE'
Reconstruction efforts buoy the economy and mask the impact of the disaster
LONG TERM RECOVERY
2 - 25 YEARS
Rebuilding has finished, but the effects of the disaster are still being felt by the local economy.
POTENTIAL
There is much room for improvement in how we approach disaster recovery in Australia
LONG TERM PLANNING
Significant investment in the community presents an opportunity to revitalise and renew
SUCCESSFUL ADAPTATION
Communities should look at how they can adapt to the 'new normal'
REALITY
Too often, we see communities continuing to struggle many years after the disaster
GOVERNMENT WITHDRAWAL
As things begin to look 'normal' again, Government investment withdraws
BUSINESS FAILURE
With the end of reconstruction, the market shrinks and businesses struggle to stay afloat
Source: Regional Australia Institute

The response stage

Australia's natural disaster policy is world-class in regards to the immediate response stage directly following a natural disaster. The four case studies undertaken in *From Disaster to Recovery* highlighted the massive support that communities received at this stage from government and Australia as a whole:

> '*…from trauma counselling to hardship grants, to the mass donation of toothbrushes and mobile phones, there is extensive support and focus on the immediate disaster relief stage.*'

That said there are a number of unintended consequences that can arise from the response stage that, if better managed, would help regions recover better in the long-term.

The influx of material donations is one such example. Case studies showed that while community members were overall appreciative of the donations, these can be problematic for local businesses. Donations undercut the local demand for goods and services by saturating it with free goods, adding a further blow to businesses already dealing with business interruption and reduced cash flow. Vouchers redeemable at non-local businesses had a similar impact. To help with recovery, 'buy local' strategies were identified as useful particularly in the relief and reconstruction phases.

Specific commitments made early in the response stage to rebuild damaged infrastructure can likewise limit long-term recovery. Political leaders guaranteeing funding or infrastructure immediately following a natural disaster may limit the ability to make objective and considered decisions throughout the recovery stages in regards to genuine community need.

Early commitments tend to lock-in pre-existing vulnerabilities and miss opportunities to fundamentally shape the future of a disaster-affected community.

Overcoming these limitations requires a shift in the approach to policy implementation; they are perhaps reflective of wider issues within Australia's approach to natural disasters. Although largely informed by good intentions, decisions such as these made in the response stage reflect poor information on the disaster specific impacts and community and economic situation. The RAI research suggests that it is feasible for targeted information on the economic, social and disaster situation to be used systematically from the early phases to guide decision making.

Political leaders will always be motivated to help and will find it mostly impossible to ignore the opportunities presented by natural disasters to gain 'political capital'. The challenge for policy makers is to build systematic and objective decision frameworks that can be activated and used to guide early decisions in the post-disaster environment.

Betterment

Government infrastructure and assets are still being rebuilt like for like, and notwithstanding minor improvements in design, this misses the opportunity to fundamentally rethink the

vulnerability of key infrastructure and plan accordingly.

Betterment provisions currently exist within the Natural Disaster Relief and Recovery Arrangements (NDRRA) however they have not been widely accessed. Guideline number seven of the NDRRA states:

> *Under subclauses 3.6.6 and 3.6.7 of the Determination, states can seek reimbursement of a portion of the costs to restore an essential public asset that was damaged by an eligible disaster to a more disaster-resilient standard than its pre-disaster standard, subject to the following:*
>
> *(i) The asset must be an essential public asset in accordance with subclause 3.6.1;*
> *(ii) The state informs the Secretary of its decision to restore the asset to a more disaster-resilient standard, and of its reasons for doing so;*
> *(iii) The Secretary is satisfied with the cost-effectiveness of the proposal; and*
> (iv) *The Secretary is satisfied that the increased disaster-resilience of the asset will mitigate the impact of future natural disasters.*

The use of vague terminology in the guideline about the provision of betterment funding has limited its success. The RAI's research into natural disasters has highlighted this as a significant barrier. This is antagonised by the poor funding arrangements and the policy issues outside of natural disaster policies described above.

Currently betterment activities receive no budget allocation, and must be funded by savings elsewhere in the Attorney-General's portfolio. More easily accessed funding by making available a pool of money for betterment projects would in the long term decrease risk exposure and therefore the finances required to respond to future natural disasters.

Improving betterment processes does require improvements to natural disaster policy. More formalised processes supported by better funding arrangements would remove some of the current vulnerabilities of the built environment.

Rather than continuing to replace like with like, communities should be provided with infrastructure that is more able to survive local weather conditions, therefore decreasing the likelihood of having to replace the same infrastructure following the next natural disaster.

Reconstruction

Following the response phase comes reconstruction - the re-establishment of the built environment. This phase often sees an influx of both workers and capital into the affected community. The influx can create what is referred to as a reconstruction 'mirage' that is, the false impression of the region beginning to function once again.

Despite appearances during the reconstruction phase, communities are often still plagued by issues such as loss of population and poor business performance.

Perpetuating the reconstruction 'mirage' is the 'thing' theory. 'Thing' theory is the emphasis on building 'things' as a sign of commitment and action. Despite there often being a need to

replace infrastructure in affected communities, governments need to avoid action that exacerbates the reconstruction boom yet fails to meet the needs of the community or support longer-term recovery.

The hotly debated $11 million community centre in Marysville embodies this problem. Despite the expense of building it, community members believe that it is unnecessary and highly under-utilised. The tendency to over invest in social infrastructure while crucial economic infrastructure remains out-of-action leads to poor outcomes for communities.

> '*…building upon our existing emergency planning arrangements, we need to focus more on action-based resilience planning to strengthen local capacity and capability, with greater emphasis on community engagement and better understanding of the diversity, needs, strengths and vulnerabilities within communities. Disasters do not impact everyone in the same way…*'[xi]

To help understand the local environment, there are a variety of data sources that can provide information on the pre-disaster state of the community. The RAI's *[In]Sight: Australia's Regional Competitiveness Index* provides information at the local government level on a variety of different aspects of the community. This includes human capital, economic fundamentals, and infrastructure and essential services.

Government data such as the Australian Business Register (ABR) is also available on communities who have suffered a natural disaster. In the event of a natural disaster, relevant data will be extracted and sent to all relevant disaster contacts. The provided information can help with identifying businesses:

- For the distribution of emergency communications;
- That accommodate vulnerable people, including hospitals and aged care facilities;
- Eligible for grants and assistance; and,
- That can help with reconstruction work.

Information on local businesses is especially important for disaster recovery. To some extent the ability of a community to recover from a disaster is dictated by the ability of its business environment.

The role of local businesses

The loss of housing during a natural disaster has the immediate flow-on effect of displacing the local population. The longer residents are away from the region, the less likely they are to return.

Business recovery plays a significant role in encouraging people back to the area. In spite of the existence of infrastructure and housing, without confidence in the future of the local economy, recovery is highly unlikely. The negative adaptation spiral (Figure 6) demonstrates the relationship between displaced populations and the business market as a barrier to recovery.

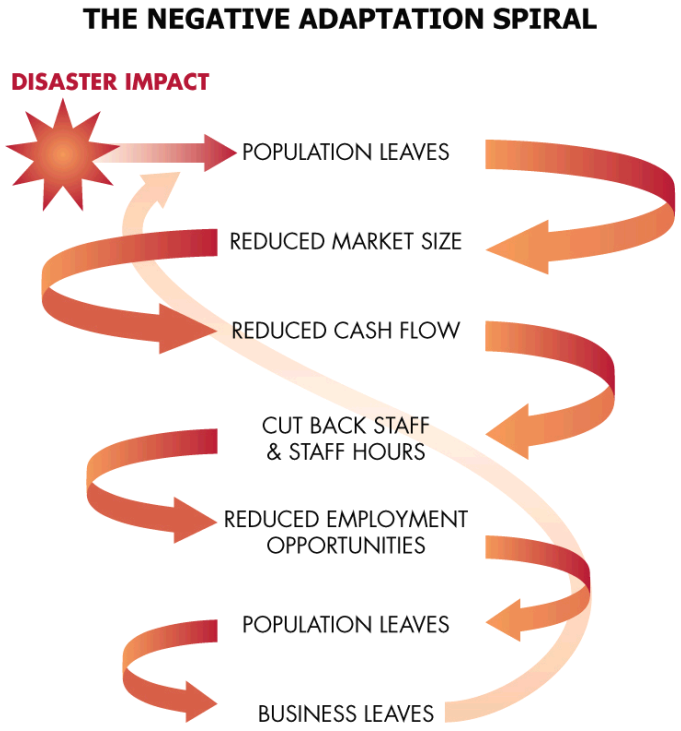


Figure 6: Negative adaptation spiral

From the perspective of displaced residents, a key factor in the decision to return to a disaster-affected region is the extent to which businesses commit to rebuild and re-open. Research suggests that this relationship is more heavily weighted towards businesses re-opening, meaning that business re-opening will pull residents back into a disaster affected region.[xii]

Overall, natural disaster policy in regards to the recovery phase needs to be increasingly able to adapt to the unique circumstances and challenges of each region, in particular the business community and the 'betterment'. This should be driven by a desire to create communities that are stronger than their pre-disaster state, rather than working towards the development of communities that are better prepared for natural disasters.

Conclusion

Natural disaster policy in Australia is informed by the desire to create communities that are better prepared for disasters. The current emphasis on response and recovery, with limited attention on mitigation, is only capable of retaining the status quo.

This is to the detriment of the whole of Australia, in particular regional areas that, because of their relatively smaller populations, are considered less exposed to the impacts of natural disasters than our capital cities.

To overcome these limitations the RAI recommends shifting our focus to treat mitigation as the first priority of natural disaster policy. This should be supported by increasing information on communities, natural disasters and mitigation (and the availability of this information to all relevant parties) and better incorporating local renewal into the different stages of recovery.

Attachments

1. Regional Australia Institute, *From Disaster to Renewal: the centrality of business recovery to community resilience Final Report* 2013

2. Regional Australia Institute, *From Disaster to Renewal Case Studies Report* 2013

3. Regional Australia Institute, *Domestic and International Practices in Long-Term Economic Recovery Literature Review* 2013

4. Regional Australia Institute, *Helping Regions Impacted by Natural Disaster to Recover and Renew Policy Briefing* 2013

5. Regional Australia Institute, *Setting a New Course for National Disaster Management Policy* 2014

[i] The Productivity Commission Inquiry *Barriers to Effective Climate Change Adaption Report*, 2012

[ii] The Regional Australia Institute, *Population Dynamics in Regional Australia*, unpublished

[iii] Australian Emergency Management Institute, *Australian Emergency Management Handbook Series, Disaster Health Handbook 1* 2004

[iv] Centre for Risk and Community Safety RMIT University and Bushfire CRC *Review of fatalities in the February 7, 2009*, bushfires April 2010

[v] The Productivity Commission Inquiry *Barriers to Effective Climate Change Adaption Report*, 2012

[vi] Australian Business Roundtable for Disaster Resilience and Safer Communities, *Building our Nation's Resilience to Natural Disasters*, 2013

[vii] National Commission of Audit, *Towards Responsible Government* 2014
[viii] Australian Emergency Management, Knowledge Hub http://www.emknowledge.gov.au/

[ix] National Climate Change Adaption Research Facility, *Grantham – Planned Relocation in the Lockyer Valley*

[x] The RAI submission to the Productivity Commission Inquiry Public Infrastructure, *An integrated national approach to investment in local and regional infrastructure* 2014

[xi] Australian Attorney-General's Department, National Strategy for Disaster Resilience 2011

[xii] Xiao, Y. and Van Zandt, S. "Building Community Resiliency: Spatial Links between Household and Business Post-disaster Return", *Urban Studies*, 49: 2523-2542. 2012