



**DISASTER RESILIENT  
FUTURE READY**

Helping communities better withstand  
the impacts of natural disasters





## CLARENCE HOUSE

Having been at school in, and then visited, Australia on many occasions over the past fifty years, I am only too aware of the devastating cycle of natural disasters experienced by many rural and regional communities. Not only in Australia, but around the world, it seems to me that significant effort goes into recovery after a disaster, but far less attention is given to identifying the steps needed to prevent and mitigate crises within communities before they occur. For a preventative approach to be effective, we need to understand the risks and have a clear and precise set of actions that allow communities both to identify and mitigate them.

Arising from a partnership between my Prince's Charities Australia and the Foundation for Rural and Regional Renewal, the *Disaster Resilient: Future Ready* project will enlist the help of a wide range of people from rural and regional communities to identify the key actions needed, and effective ways to engage communities in their implementation. This project will seek to embed community action plans that not only better understand risk, but also develop actions that support communities to better prepare and recover from disasters.

In doing so, it will draw and build upon the remarkable spirit of community-mindedness and care demonstrated by so many Australians.

I hope you will join us in this most worthwhile of endeavours.

Charles

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# Introduction

In 2012, the total economic cost of natural disasters in Australia was estimated to have exceeded \$6 billion. In 2015, when both financial and social costs are included, it is estimated the total cost of natural disasters in Australia exceeded \$9 billion, or 0.6% of GDP. This is expected to double by 2030 and to reach an average of \$33 billion per year by 2050<sup>1</sup>, with proportionally increasing costs in relation to increased mental health issues, impacts to health and wellbeing, and increased disadvantage.

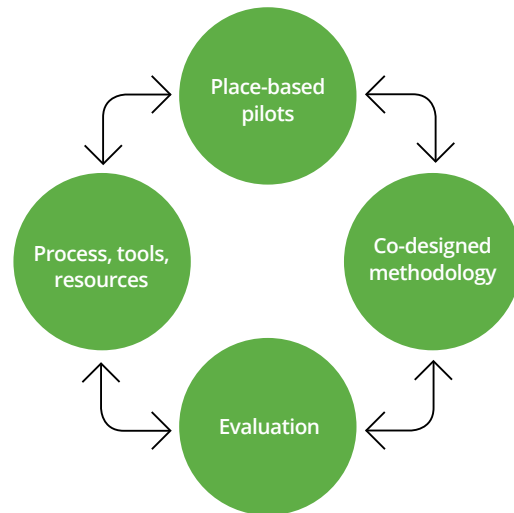
With the seemingly increasing number of natural disasters in any one year and the resultant strain on the public purse, it's not surprising that governments are seeking greater community ownership of preparedness and recovery.

Research<sup>2</sup> confirms that communities with higher levels of social capital pre-disaster will respond and recover better than those with lower levels of social capital. The communities that are engaged and understand the emergency management system, and the community's role in this, are better equipped at the time of a disaster.

Despite increased and widespread recognition of this fact, there remain ongoing challenges for communities in being better prepared and recovery is costing more and more each year. If communities are not better prepared and more resilient, what will happen? How can communities acquire the necessary capability to ensure they are **Disaster Resilient: Future Ready**?

This is a critical issue that needs national leadership and a coordinated, collaborative approach. The Prince's Trust Australia and the Foundation for Rural & Regional Renewal (FRRR) have begun working together in an effort to help answer these questions. In June 2015, The Prince's Trust Australia and FRRR co-hosted a roundtable with a range of interested parties, including Red Cross Australia, Phoenix Australia, Regional Australia Institute, and a number of philanthropic organisations interested in disaster preparedness.

There was agreement among this group, and others, that research is required to understand what it takes for community groups to be better prepared, and critically, develop practical and evidence-based methods that communities can adapt to be **Disaster Resilient: Future Ready**.



Leveraging our combined experience in community recovery, bridging disaster recovery and preparedness with community development approaches, we have scoped an applied research project to develop the framework and processes for communities to use to enable disaster resilience. The **Disaster Resilient: Future Ready** project will utilise an action research and co-design methodology, leveraging current research and engaging a broad range of stakeholders, to work with communities to develop and evaluate reality-tested indicators, methods and tools for building resilience.

**Disaster Resilient: Future Ready** is a five stage, three year project.

If you share our views about the urgency of this issue, please get in touch. We are keen to work collaboratively to develop systemic, sustainable and community-led, place-based responses to this high-impact challenge.

*Natalie Egleton*

**Natalie Egleton**  
Chief Executive Officer  
FRRR

*Janine A Kirk*

**Janine Kirk AM**  
Chief Executive  
The Prince's Trust Australia

# Disaster Resilient: Future Ready

We believe that communities that are supported to build their capacity will be better able to respond to the impacts of natural disasters.

The question is what is it that makes a community adaptive? What skills, resources, assets and tools do communities need to be able to respond to disaster impacts and adapt to the changed environments? And how do they acquire and sustain these?

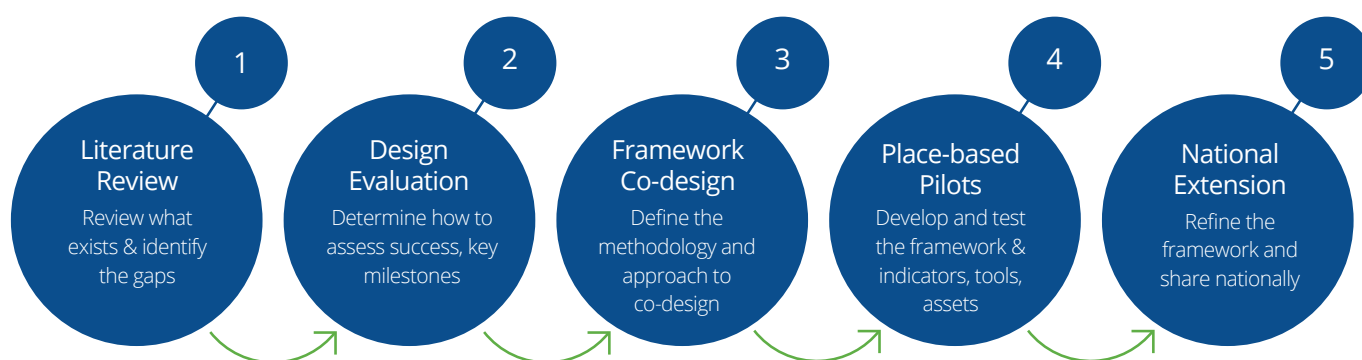
The **Disaster Resilient: Future Ready** project takes the view that communities are best placed to determine the most effective approaches for their situation. **Disaster Resilient: Future Ready** will therefore utilise an action research and co-design methodology to work with communities to develop and evaluate practical indicators, methods and tools for building resilience. The project will involve communities, researchers and subject matter experts to collaboratively develop tools, tactics and processes that enable communities to ensure they can withstand the impacts of natural disasters and adapt to new or changed social, economic and environmental conditions.

The objectives of the project are to:

- Investigate with community the processes involved in building and sustaining their adaptive capacity
- Understand and measure the indicators (characteristics, qualities, conditions, capabilities) that can be applied
- Understand and measure how and why community energy and momentum is built, or blocked
- Work with two or three pilot communities to test and validate processes and measures, through access to resources, skills, research and lived experience
- Leverage existing research in the field of resilience and community development, and enable application of identified best practice.

The expected outcomes of the project include improved coordination and collaboration within and between communities, agencies and governments, improved mental health outcomes post disaster, increased levels of local leadership, and reduced costs to the Australian economy.

This will be a five-stage project, over three years:



# Disaster Resilient: Future Ready

- Participatory design - project methodology & community pilots
- Asset based community development
- Collective impact
- Action research



## The Challenge

- Increasing frequency & severity of natural disasters
  - Increasing costs to the economy, and long term impacts on wellbeing of individuals and communities;
- No practical, whole-of-community evidence-based approach that communities can adopt to build their resilience & adaptive capacity



## Our Goal

Enable communities to build their capacity and capability to be able to adapt and respond to the impacts of natural disasters

## Inputs

- \$1.5 million for research and up to 3 pilots
  - Partner expertise, networks, experience
- FRRR charitable status, networks, experience and expertise
  - Project Reference Group

## Outputs

- Literature review to confirm existing work and identify any gaps
- Place-based pilots with periodic reviews and evaluation papers / reports to share learnings
  - Resources, tools, measurements, project case studies
- Participatory disaster preparedness process and framework

## Outcomes



### Short Term

(1 year)

- 1-3 pilot communities engaged
- Literature distilled and shared broadly
- Potential for practical application of literature and existing indicators identified and reality-tested with pilot communities
- Cross-sectoral engagement and dialogue about community resilience, adaptive capacity and capability in a localised context
- Community-defined goals and aspirations for strengthened resilience and capability and community-level understanding of existing assets and capabilities
- Co-designed metrics aligned to indicators, for measuring the factors contributing to progress



### Med Term

(2 years)

- Community goals and aspirations translated into community led projects
- Community projects produce practical tools, case studies and resources
- Evidence base of characteristics, qualities, processes and conditions contributing to resilient and adaptive communities; measured by indicators, community narrative, and evaluation of community projects
- Communities equipped to connect and engage with disaster management process and organisations, systems, and structures
- The **Disaster Resilient: Future Ready** project methodology and approach is evaluated for effectiveness and broader applicability



### Long Term

(3 years plus)

- Increased capacity to adapt to sudden shocks or interruptions to community life
- Increased local leadership capacity and capability, and associated planning, coordination, organising, communication skills
- Processes, methods, projects available for broader national adoption
- Increased ownership by community of aspirations & actions, and ongoing momentum to manage change
- Improved coordination and collaboration within and between communities, agencies and governments
- Improved community wellbeing and mental health outcomes post-disaster
- Reduced costs to the Australian economy

## Assumptions

- Resilience indicators exist & can be captured in the Literature Review
  - Communities are capable & able to invest the time in this work
- There is adequate urgency to do things differently at both community and system levels

## The objectives of the Disaster Resilient: Future Ready project

1. Investigate with community the processes involved in building and sustaining their adaptive capacity across economic development, social capital, information & communication, and community competency.
2. Understand and measure the indicators (characteristics, qualities, conditions, capabilities) that can be applied
3. Understand and measure how and why community energy and momentum is built or blocked
4. Work with 1-3 pilot communities to test and validate processes and measures, through access to resources, skills, and research and lived experience
5. Leverage the substantial work in the field of research and community development and enable application of identified best practice

## A collaborative, place-based process

The **Disaster Resilient: Future Ready** project offers a unique community-centred approach that will equip communities with the ability to better prepare, so they can withstand the impacts of natural disasters and adapt to new or changed social, economic and environmental conditions.

Being in the community, understanding the physical and social landscape and the particular factors affecting each community is vital. We therefore plan to undertake the project in a number of communities with different geographic, industry, and socio-economic profiles, so that we can better understand those factors and the impacts they have.

Building on the extensive body of research already undertaken, we will use action research techniques to determine the indicators of what makes communities **Disaster Resilient: Future Ready**.

It will be critical to reality-test theories and academic research at the local level and understand the required capacity and barriers that may hinder communities. Resources for pilot regions to implement local initiatives will then be made available. As noted in the Deloitte Access Economics paper<sup>1</sup>, a consensus approach to decision-making enhances community ownership of the plan. Participation in identifying shared problems, and developing and implementing solutions, creates a better sense of community.

The culmination of this project will be a set of reality-tested indicators that help to define the conditions, qualities, characteristics and capabilities of resilient communities, and tools, design processes and strategies that community groups can adopt to strengthen their community's ability to withstand the impact of natural or man-made disasters.

# Strong communities recover more quickly

One of the variables known to improve the quality of recovery in a community is its level of preparedness for disaster prior to it occurring. Any work done in the preparedness space contributes to the response and recovery of the community.

In 2011, through its work supporting communities affected by floods and cyclones, FRRR observed that those communities with a history of community leadership development, and the resulting bonding, bridging and networking capital, could more readily self-organise and more quickly commence a community recovery process.

In the preceding years, FRRR had supported some of these communities to develop community emergency plans, community leadership programs, and practical training programs such as chainsaw handling, mental health first aid and governance for non-profit organisations.

Coming from a community that's regularly impacted by natural disasters, I know it's critical to invest in disaster preparedness. It needs to be a whole-of-community conversation, underpinned by a clear vision and a solid plan. Without that unified approach, it's really hard to recover when disasters happen.

*Fleur Anderson, Theodore, Qld*

FRRR's investments enabled some of the affected communities to take control, as they had built the capacity and skills to deploy in the event of a disaster.

However, there is a recognised gap in identification of the indicators that point to increased resilience and adaptive capacity following natural disasters and critically, limited evaluation of effective methods for communities and individuals to build their resilience.

The National Strategy for Disaster Resilience, 2011 (NSDR) recognises that recovery programs should consider long-term sustainability and enable a reduction in exposure to future disasters. Some of the actions it recommends are:

- **partnering** with those who affect change;
- **empowering individuals and communities** to exercise choice and take responsibility; and
- **supporting capabilities** for disaster resilience within communities.

Given the widespread and long-term nature of the social impacts after a natural disaster, it is important that communities, not-for-profits, emergency management agencies, businesses and governments collaborate to design and implement preparedness programs that integrate with community priorities. These programs must educate communities as well as encourage and foster a culture of connectedness and resilience. It is critical they be evidence-based to ensure cost effective investment and continual improvement. It is important, too, to evaluate their effectiveness and draw out their key learnings<sup>1</sup>.

# The case for a new approach

There is a growing body of evidence indicating that natural disasters will increase in frequency and severity and that the economic and social costs will continue to increase, placing immense pressure on systems at all levels of society and leaving impacted people living with the effects of trauma for many years.

## Economic and social costs rising

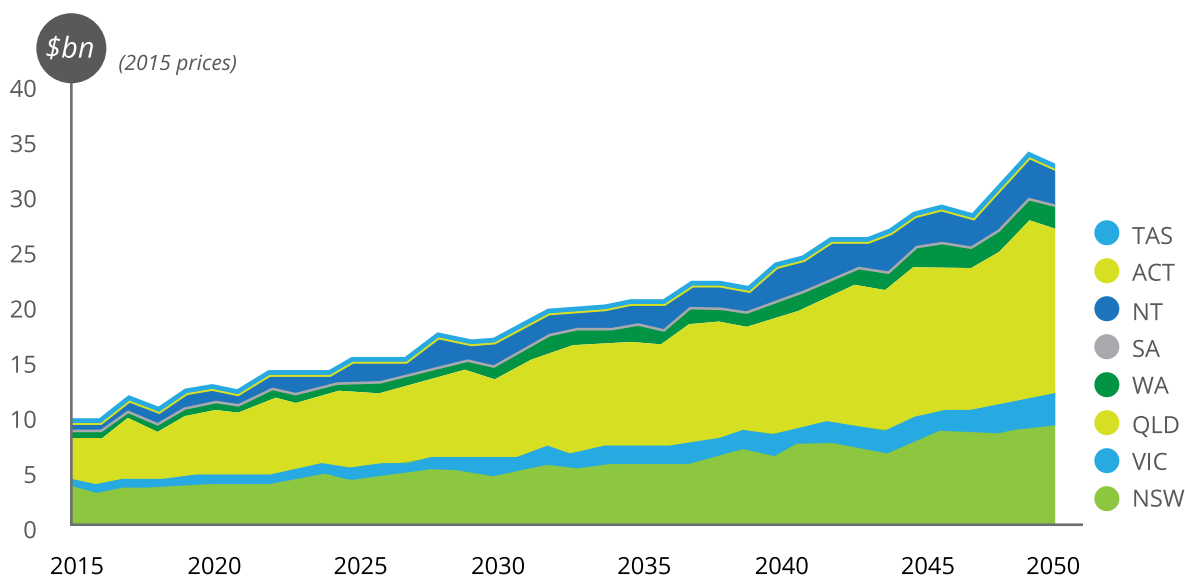
In the last fifteen years, the incidence of declared natural disasters has increased significantly.

This trend is forecast to continue, with the economic and social costs increasing accordingly.

A National Report on The Economic Costs of the Social Impact of Natural Disasters prepared by Deloitte Access Economics for the Australian Business Roundtable for Disaster Resilience and Safer Communities was released in March 2016<sup>1</sup>. It identifies and quantifies the social impacts of natural disasters, including those on health and wellbeing, education, employment and community networks.

The report found the total economic cost of natural disasters in Australia, including tangible and intangible costs, was an estimated \$9.6 billion in 2015. (In this context, the intangible costs capture direct and indirect damages that cannot be easily priced such as death and injury, impacts on health and wellbeing, and community connectedness.)

As the chart below shows, by 2050, the total economic cost of natural disasters in Australia is expected to be around \$33 billion in real terms without considering the potential impact of climate change.



Source: Deloitte Access Economics analysis

Data from other groups, including the Insurance Council of Australia, Australian Early Development Census, Phoenix Australia, Red Cross, Regional Australia Institute and Beyond Bushfires, all confirm the high costs of natural disaster recovery. They also highlight links to increased disadvantage in education and health, financial burden and the long-term economic impacts.



# Research supports a more proactive approach

Other research reinforces the need for significant investment in disaster preparedness and mitigation measures to build community resilience to disasters.

While preventative measures require up-front funding, they yield a return on investment by lessening the overall impact of a natural disaster on individuals, businesses, governments and communities<sup>1</sup>. Estimates from organised philanthropy in the US determined that for every \$1 spent on disaster preparedness, at least \$7 is saved in casualties, property damage, and the like<sup>4</sup>.

The current picture, as reported in Building our Nation's Resilience to Natural Disasters<sup>1</sup>, estimates that \$560 million is spent on post-disaster relief and recovery by the Australian Government each year, compared with an estimated consistent annual expenditure of \$50 million on pre-disaster resilience: a ratio of more than \$10 post-disaster for every \$1 spent pre-disaster.

## Increased collaboration is essential

The evidence also tells us that this situation requires both system level and local community level responses.

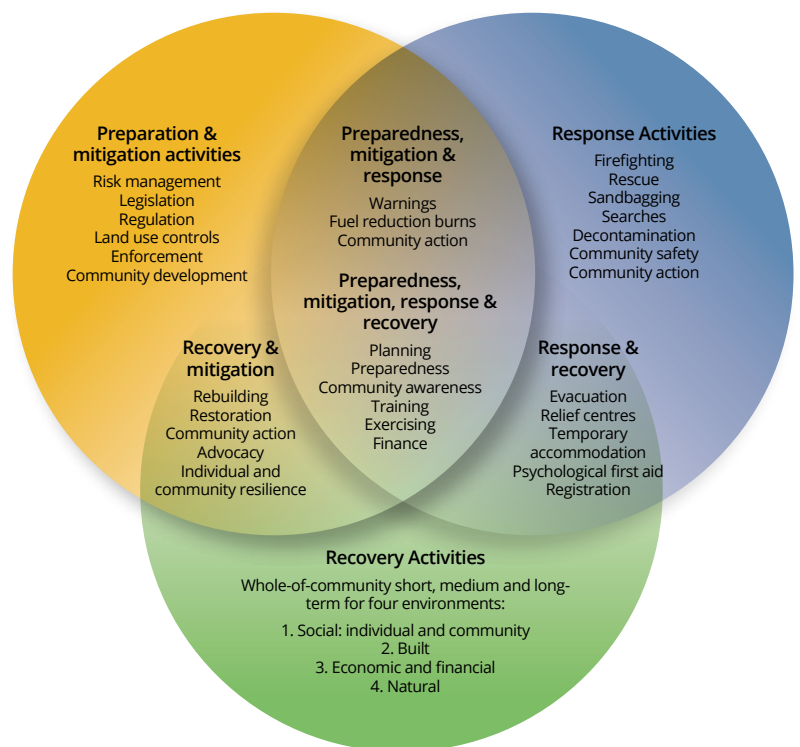
This framework<sup>5</sup> (right) highlights the interdependencies of the various activities undertaken throughout the disaster preparedness and recovery lifecycle.

As recognised in the National Strategy for Disaster Resilience (NSDR), the task of building more resilient communities is complex and requires greater collaboration between government, business and communities<sup>6</sup>.

In addition, a philosophy of shared responsibility will need an adaptive and empowered community.

The Strategy calls for more focus on action-based resilience planning, strengthening local capacity and capability, with a greater emphasis on community engagement, understanding the diversity, needs, strengths and vulnerabilities within communities.

Despite the very good work of many agencies and governments, there is as yet no tested approach that achieves improved outcomes in terms of sustainable preparedness processes in communities or with evaluation measures.



Research is required to identify the best ways to plan, deliver and evaluate community awareness, education and engagement programs to maximise community participation and encourage learning and modification of behaviour.

# Collaborate with us

Communities around Australia will continue to be impacted by natural disasters. There is much evidence, as shared in this document, to say that **stronger social capital and economic resilience leads to reduced social and economic impacts and better recovery**. However, there is yet to be a community preparedness model that establishes an evidence base for the types of preparedness and recovery initiatives that are effective, addresses the capability requirements of communities, and incorporates the contextual nature of disasters.

**Disaster Resilient: Future Ready** presents an opportunity to collaborate on an approach which delivers policy outcomes, capitalises on the existing knowledge, lived experience, and on-ground work, and creates tangible pathways for community-led processes.

We estimate that this project requires a minimum of \$1.5 million over the next three years, to deliver each of the stages. However, it is scalable. To achieve the full potential of this project and expand the pilot projects and extension activities would require up to \$5 million.

To explore partnering in this project, we invite you to speak with FRRR CEO, Natalie Egleton, or The Prince's Trust Australia CEO, Janine Kirk.

## Partnering for change

There is substantial research and lived experience in this field and it is important not to duplicate effort. Instead, the aim is to collate, condense and analyse the literature to better understand key learnings. We will actively engage those working in the field with specific areas of expertise and relevance throughout to ensure cross-sectoral collaboration, methodological rigour, and a whole-of-community perspective.

Some of the organisations that we anticipate drawing upon and partnering with include:

- **Phoenix Australia Centre for Posttraumatic Mental Health** – promotes recovery for the 15 million Australians affected by trauma. Affiliated with the University of Melbourne, they work with individuals, organisations and the community to understand, prevent, and recover from the potentially adverse effects of trauma.
- **The Regional Australia Institute (RAI)** – develops policy and advocates for change to build a stronger economy and a better quality of life in regional Australia. RAI's *From Disaster to Renewal Report*, which looks at natural disaster recovery five years on in four towns in Australia, revealed there is inadequate planning for many of the short and long-term disaster effects. RAI found that affected communities need to be adaptable, otherwise the impact of a disaster may be felt for up to 25 years.
- **The Australian Red Cross** – plays a major role in service delivery and policy development in relief and recovery in Australia. Some of their major initiatives include the development of the Emergency REDIPlan project, a four step household preparation program aimed at fostering individual and community resilience throughout Australia and the Communicating in Recovery resource.
- **Beyond Bushfires** – a five-year study (2012 – 2017) led by the University of Melbourne in partnership with a range of others, including community, government, emergency, and service agencies. This study is exploring the medium to long-term impacts of the 2009 Victorian bushfires on individuals and communities.
- **RMIT School of Media and Communication** – Dr Yoko Akama is an award-winning researcher, focussed on and experienced in designing with communities in disaster mitigation. She is committed to cultural sensitivity, diversity and participation to pursue a design practice that deeply engages with communities.
- **The Australian Business Roundtable** – a group of business leaders representing a cross-section of the Australian economy who believe in the national importance of making communities safer and more resilient to natural disasters. Each member is involved in community planning or disaster recovery and all have supported customers and communities affected by the devastating effects of floods, storms and bushfires.
- **Research funded by the Bushfire and Natural Hazards Co-operative Research Centre** – developing an Australian Natural Disaster Resilience Index, which measures the level of resilience in a community through a system of indicators based on the four NSDR characteristics. This index will facilitate assessment, evaluation, reporting and planning for natural hazard resilience under the NSDR.

# The Prince's Trust Australia

The Prince's Trust Australia (PTA) supports the development and delivery of innovative, high impact projects that align with the charitable interests of His Royal Highness The Prince of Wales. These support Australian communities he has connected with for over 50 years.

Established as an independent, not-for-profit organisation in Australia in 2013, The Prince's Trust Australia is a member of The Prince of Wales' global charity network, collectively operating in 38 countries across the globe. The Prince of Wales is President of The Prince's Trust Australia and is actively involved with its charitable program.

The initiatives supported by The Prince's Trust Australia nurture corporate social responsibility and business innovation, address youth disadvantage, promote the preservation and transmission of traditional skills, and encourage multicultural harmony and understanding. These efforts extend to supporting Defence members and their families, as well as the protection, enhancement and sustainability of the natural and built environment.

The organisation's work involves identifying or creating programs to address specific social challenges, brokering partner relationships, as well as providing financial support to our partnership programs.

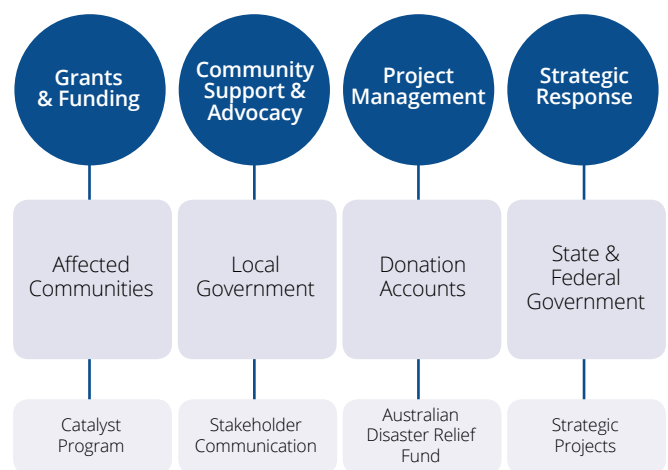
## Foundation for Rural & Regional Renewal: disaster recovery expertise

The Foundation for Rural & Regional Renewal (FRRR) is a not-for-profit organisation that harnesses the power of collective investment between government, business and philanthropy to improve the lives of those living in rural, regional and remote Australia.

FRRR has strong experience in community-led recovery. It played a leading role in the philanthropic sector's response to the 2009 Victorian bushfires, establishing a formal collaboration of businesses, trusts and foundations to fund locally-led, community recovery projects. Because of the success of this approach, it was implemented again in 2011 to support the communities impacted by the 2010/2011 floods, cyclones and storms across the east coast of Australia.

In 2011, FRRR articulated and formalised the many experiences and lessons gained from working in this space, developing a Natural Disaster Response Framework, which is now embedded into FRRR's organisational strategy and operations. There are dedicated resources to evolve and maintain the capacity to implement the Framework when required, and to build stronger resilience and preparedness aspects to non-disaster related funding programs.

The ways in which FRRR has engaged with communities have evolved and matured over time but FRRR has always taken a flexible, dynamic and community-led approach. They recognise that



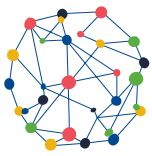
FRRR Natural Disaster Response Framework

communities are a living system, rather than simply a collection of facilities, structures and people<sup>3</sup>.

Unlike most philanthropic organisations, FRRR's unique tax status allows it to fund a broad range of entities, regardless of their tax status, as long as the funds are used for charitable purposes. FRRR has leveraged this to distribute more than \$11.5 million to support medium to long term natural disaster recovery, mostly to small communities of fewer than 10,000 people. These funds have come from a range of businesses, State governments, philanthropic entities and individuals.

This broad experience, together with its broad networks, means FRRR is a natural convenor and leader of this project.

“Community resilience is a process of linking adaptive capacities to adaptation”<sup>7</sup>.



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#### References and Notes

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