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Relief, Recovery & Resilience Learning from Disasters

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Research Summary

Why was the research done?

Community organisations, especially the charity sector, play a crucial role in disaster recovery by providing immediate financial support, direct services such as urgent medical or health support, housing support and financial counselling. Frequently, the government and private sector work in collaboration with community organisations to support recovery efforts. This leads us to ask: How can the community sector support disaster recovery more efficiently? To answer this question, we review the growing literature on disaster recovery from the perspective of community organisations in Australia to discover good practices.

What were the key findings?

Our review of the literature shows that research often tends to focus on engagement and not outcomes when it comes to understanding the role of community organisations in disaster recovery. Nonetheless, we found that there are a number of best and emerging practices to help communities understand recovery, prepare for recovery and manage recovery in the aftermath of a disaster. We also found that there are untapped opportunities for horizontal learning for community organisations because of an absence of a community of practice that focuses on developing, validating and disseminating best practices.

What does this mean for policy and practice?

Policymakers and community leaders often talk about the need to focus on building more resilient infrastructure and communities in disaster recovery efforts. We found that community organisations also have an important role to play in fostering a culture of education on disaster risk, building more resilient communities and assisting socioeconomic groups that face distinct and disproportionate challenges when a disaster strikes. Our review highlights a number of good practices that help community organisations think about ways in which they can establish or improve their disaster response and recovery efforts.



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RELIEF, RECOVERY & RESILIENCE: LEARNING FROM DISASTERS

Hazards – natural, humanmade or a combination of the two – are not disasters by themselves. A disaster occurs when a society is unable or incapable of coping with a hazard. According to Winkworth (2007), a disaster exceeds a community's ability to respond and recover and the scale and extent of recovery efforts depend on the disaster type and scale. Traditional risk assessments rely on asset losses as the main metric to gauge the severity of a disaster, reflecting a historical emphasis on the assessment of asset losses and restoration of the built environment. However, recent efforts increasingly prioritise community restoration alongside infrastructure rehabilitation.

A growing body of research has shown that disasters can have both direct and indirect impacts (De & Thamarapani, 2022; Finucane et al., 2023; Hallegatte et al., 2017). Direct costs include damage to physical infrastructure and assets, loss of human life, injury and illnesses, and damage to the natural environment. In contrast, indirect costs encompass multifaceted impacts such as loss of livelihood, business interruptions, increase in food and housing costs, broken supply chains, cascading health-related costs, loss of learning for children, severed social connections and decline in wellbeing (Global Facility for Disaster Reduction and Recovery The World Bank, 2014b; Hickson & Marshan, 2022; Shi & Jin, 2022; United Nations Office for Disaster Risk Reduction, 2022).

Nonetheless, the primary aim in the aftermath of a disaster is to reduce losses – human, physical, social, economic and environmental. An important step to meet this aim is understanding, planning and managing the response and recovery process. While government agencies often lead the way, a variety of organisations are involved in disaster recovery, including private firms and community organisations. These organisations typically undertake a lot of relief and recovery work (Islam & Walkerden, 2015). Community organisations, especially the charity sector, play a crucial role in disaster recovery by providing immediate financial support, direct services such as urgent medical or health support, housing support and financial counselling. Frequently, the government and private sector work in collaboration with community organisations to support recovery efforts.

The role of community organisations in disaster response and recovery deserves more attention for a number of reasons. For one, community organisations generally work with low-resourced or disadvantaged individuals and households. These groups are likely to have higher vulnerability to hazards (Fothergill & Peek, 2004). Secondly, community organisations play a key role in protecting individuals, livelihoods, health and cultural heritage in the aftermath of a disaster. This is because the community sector comprises a diverse set of actors who are more immersed in the lived realities of the affected population compared to the public and private sectors. Lastly, the community sector contributes via the speed, timing and flexibility of funding (free of administrative hurdles) as there could be delays in the public sector funds to be available and spent.

This leads us to ask: How can the community sector support disaster recovery more efficiently? To answer this question, we review the growing literature on disaster recovery from the perspective of community organisations in Australia to discover good practices.

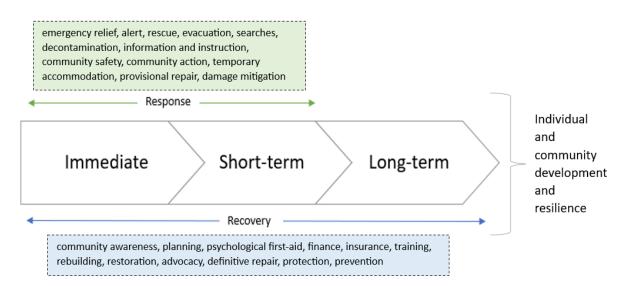
This literature review is divided into four sections: the first focuses on defining and understanding disaster recovery, the next reviews the literature on preparing for recovery, the third section looks at the literature on managing disaster recovery and the fourth section concludes with a discussion of what can community organisations learn from these good and emerging practices. Since there are specific mechanisms for funding emergency relief and disaster recovery in Australia, disaster recovery financing is outside the scope of this literature review.

UNDERSTANDING RECOVERY

Figure 1 below shows a theoretical model of disaster recovery with enablers, processes and end outcomes. In theory, disaster recovery has three mutually non-exclusive stages – immediate, short-term and long-term. While response appears to be an immediate or short-term activity after an emergency, recovery efforts start with response activities and continue over the long run. As the figure shows, disaster response and recovery usually involve different priorities and authorities but occur simultaneously for weeks or months. More importantly, response activities carried out immediately after a disaster impact the recovery process and timespan in the long run. For the same reason, we do not distinguish between response and recovery activities in our review.

Immediate and short-term recovery comprises emergency relief provision, alert, rescue, evacuation and search activities, disseminating information and instructions, focusing on provisional repair, community safety and action and providing temporary accommodation and damage mitigation. These actions and activities are referred to as disaster response. The key disaster recovery activities focus on community awareness, psychological first-aid and wellbeing, rebuilding, restoration, protection, prevention and definitive repair in contrast to provisional repair. More often than not, the transition from response to recovery is seamless with many response activities concurrent with recovery functions.

Figure 1: Enablers, processes, and outcomes in disaster recovery



To understand disaster recovery, we attempt to gain insights into the multifaceted and temporal nature of disaster impacts. While early literature on disaster recovery mostly focussed on the short-run and long-term economic effects, often measured in material damage and loss of Gross Domestic Product (GDP), research attention has recently been directed towards public health, environmental, social and cultural effects. ¹ Therefore, economic losses do not provide a complete picture of the total impact of any disaster. It particularly does not reflect the socioeconomic impact at the local or even household level. Arguably, aggregate post-disaster damage and recovery costs significantly mask the distributional effects of a disaster in Australia, particularly socioeconomic inequalities across groups and regions (Kerblat et al., 2021).

According to Chinn et al. (2022), a successful outcome of disaster recovery is not a return to normal but a more equitable and resilient community. Consequently, in theory, the expected outcome of the response and recovery efforts is individual and community development and resilience. According to the United Nations Office for Disaster Risk Reduction, resilience is defined as the "ability of a system, community or society exposed to hazards

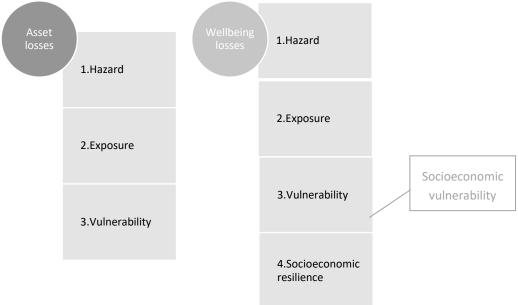
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¹ Researchers argue that this shift to expand efforts to study non-economic forms of the impact of disasters occurred after the Indian Ocean tsunami in 2004 (Régnier et al., 2008).

to resist, absorb, accommodate to and recover from the effects of a hazard in a timely and efficient manner, including through the preservation and restoration of its essential basic structures and functions" (United Nations Office for Disaster Risk Reduction, 2015, p. 9). A cursory search shows that policymakers and community leaders often talk about the need to focus on building more resilient infrastructure and communities in disaster recovery efforts. We, therefore, focus on community resilience and other related concepts in the disaster literature in the remainder of this section.

According to Hallegatte et al. (2017), asset losses are an incomplete metric of disaster impact because asset losses not only underestimate the impact on individuals and families, especially those who suffer disproportionately but also fail to take into account the multidimensional indirect impacts of disasters that we discussed earlier. In contrast, wellbeing losses take into account the various dimensions of non-economic losses caused by disasters. According to the authors' *unbreakable model*, wellbeing losses account for socioeconomic inequality and the capacity of people to cope with disasters. The focus of the unbreakable model is to improve people's ability to cope with disasters. Figure 2 below shows how Hallegatte and his co-authors' conceptualised wellbeing losses after a disaster. In comparison to asset losses, wellbeing losses depend on the vulnerability of a population to a disaster based on their socioeconomic condition and access to risk management tools.

Figure 2: Hallegatte's unbreakable model's asset losses vs wellbeing losses



As shown in Figure 2, discussing resilience is challenging without talking about people's vulnerability. Since disadvantaged people are less likely to be able to cope with hazards, for example due to not having the resources to adequately prepare for or respond to them, they are more vulnerable and exposed to disasters. Such vulnerability stems from poverty and housing inequality. For instance, housing inequality is the driving force behind the disproportionate impact of climate change in the European Union since people in hazardous areas or ill-maintained or poorly constructed houses or some combination of these are less able to absorb spikes or drops in temperature, or cope with sudden heatwave, drought or flash floods (Kerblat et al., 2021).

In theory, the type, location, scale and severity of the hazard should define the disadvantaged groups at risk of facing a disaster. However, those in poverty are one of the most disadvantaged groups and vulnerable to any hazard. Due to their financial positions, their ability to cope with hazards is generally lower than those in richer households. For example, savings can smooth consumption shocks of households after a disaster, but poor households may not have access to adequate savings to offset such consumption shocks. Erman et al. (2020)

showed that while poorer households lost less than richer households in absolute terms in the face of a disaster, they suffered larger relative losses than richer households. The authors also found that the ability of individuals and households to recover depended on, among other resources, access to coping mechanisms. Therefore, poorer individuals and households have to overcome disasters with constrained resources, including limited access to formal insurance and remittances, a lack of or lower-quality assets and lower wealth and/or savings (Kerblat et al., 2021). The availability of these resources is often the deciding factor between "a speedy, smooth recovery and a long-term poverty trap" (Kerblat et al., 2021, p. 28). Hence, identifying available support systems including support from community organisations is a common coping strategy for such groups when affected by disasters.

Kerblat et al. (2021) also revealed that deep-rooted income inequality and persistent poverty are barriers to building resilience. In other words, income has a positive impact on socioeconomic resilience i.e., socioeconomic resilience is higher for those with higher levels of income (Hallegatte et al., 2017). Additionally, the risk of wellbeing losses decreases with an increase in income. This signifies that poor individuals and families are more likely to be affected by wellbeing losses. Within poor communities, children, older people, ethnic or cultural minorities, those with disabilities and those with physical or mental ill-health are especially vulnerable (United Nations Economic and Social Commission for Asia and the Pacific, 2013). Those with precarious working conditions are also highly vulnerable as Erman et al. (2020) established that households that relied on casual labour income had difficulty in recovering from disasters in Ghana.

The next part of this section delves deeper into the emerging practices in disaster recovery. To do this, we discuss some key concepts that have emerged in the policy literature on disaster recovery such as Build Back Better (BBB) and risk reduction among others. These concepts are interconnected as we explain below.

A related and much-anticipated outcome of aiming to build more resilient societies after disasters is the reduced risk of losses from hazards in the future. In 2015, the United Nations Office for Disaster Risk Reduction adopted the Sendai Framework for Disaster Risk Reduction 2015-2030 which succeeded and built on the work done under the Hyogo Framework for Action 2005-2015. This framework outlines seven targets and four priorities to reduce disaster risk and losses (see Sendai Framework for Disaster Risk Reduction 2015-2030).

We exclude indigenous constructs related to disaster risk reduction from our review although researchers in this field have called for better integration of scientific and local and indigenous knowledge (Hadlos et al., 2022; United Nations Office for Disaster Risk Reduction, 2015). While we are cognizant of the need to ensure the use of traditional, indigenous and local knowledge and practices, as appropriate, to complement scientific knowledge in disaster risk assessment, including early warning, the nexus of community organisations, disaster recovery and indigenous knowledge and practices in Australia has not been fully explored in the current literature. Additionally, some highly valued constructs such as indigenous expertise on risk-informed land use planning while relevant and an emerging theme in public and political discourse, remain at the periphery of activities of many community organisations. Nonetheless, there is a need for a review of indigenous knowledge and inherited practices on disaster risk reduction, preparation and recovery arrangements that is broader in scope than this current review.

According to the Global Facility for Disaster Reduction and Recovery at the World Bank, BBB is a conceptual approach to recovery efforts that reduces the risks of future disasters and fosters community resilience. We found that BBB is a broad aspirational concept that is often vaguely defined in the literature. Despite it being open to interpretation, BBB is often used as a tool to determine best practices in disaster recovery (Fernandez & Ahmed, 2019).²

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² Kennedy et al. (2008) preferred building back safer over building back better as a clearer concept to guide recovery activities. Building back safer refers to reconstructed facilities and infrastructure that can withstand a hazard and minimise damage and loss of life.

In their efforts to understand BBB, the Asian Development Bank (ADB) proposed a criterion to measure BBB in economic terms: build back safe, build back fast, build back fair and build back potential (Noy et al., 2019). In contrast, the World Bank divided BBB into three components: faster, stronger and more inclusive (Hallegatte et al., 2018). According to the World Bank, build back more inclusive (in line with build back fair and build back potential goals of the ADB) refers to fair and inclusive recovery efforts that take into account the needs of the most vulnerable and disadvantaged groups of the population. Building back fair, while straightforward, can often be in conflict with building back stronger and more inclusive.

When it comes to best practices, our review of the academic and grey literature on understanding recovery efforts tells us that organisations should aim to foster "a culture of prevention and education on disaster risk; and advocate for resilient communities and an inclusive and all-of-society disaster risk management that strengthen synergies across groups, as appropriate" (United Nations Office for Disaster Risk Reduction, 2015, p. 23). Provision of information on disaster preparedness and recovery efforts are examples of outreach and capacity-building activities since the community lies at the centre of the community organisation-disaster recovery framework.

It is also important to develop guidance and provide training and outreach to increase awareness of and familiarity with the national recovery framework (United Nations Office for Disaster Risk Reduction, 2017). In alignment with this aim, community organisations should also focus on making our understanding of disaster risk reduction more people-centric rather than asset or infrastructure-centric (Hutton, 2019; Mathias et al., 2022).

Another key avenue through which community organisations could help in understanding disaster recovery and risk reduction, as well as sustainable development, is establishing meaningful partnerships and collaborations. For instance, community organisations in collaboration/partnerships with the private sector, professional associations and scientific organisations could promote the development of quality standards through certifications and awards.

Research shows that women and children often face distinct and disproportionate challenges after disasters as families not only experience grief, financial stress, loss of livelihood and loss of social network but are also likely to experience separation, family violence and substance abuse (Finucane et al., 2021; Hickson & Marshan, 2022; Islam & Walkerden, 2015; Parkinson, 2017). Gender-inclusive recovery entails that women have both equal access to voice and decision-making responsibilities. In its absence, recovery efforts and investment of time and funding do not accurately reflect community needs. Community organisations could also leverage the recovery phase as an opportunity to bridge the gender-resilience gap (Global Facility for Disaster Reduction and Recovery The World Bank, 2014a). Our review also reveals that some groups of disaster-affected individuals and families such as those with a disability or humanitarian migrants could face compounded disadvantage due to higher socioeconomic vulnerability and deserve more attention during response and recovery activities.

PREPARING FOR RECOVERY

We found that a limited body of literature has focused on the nexus between preparing for recovery and community organisations. Arguably, community organisations invest more resources towards managing recovery rather than preparing for recovery. In essence, the concepts we reviewed in the previous section including disaster risk reduction, building back better and fostering community resilience also help prepare for future disaster recovery. Islam and Walkerden (2015) showed that community organisations generally concentrate on relief-centric activities but should expand their focus on disaster risk reduction activities. Not only does it improve community preparedness, but it also enhances households' resilience and empowerment.

In their recent work, Oloruntoba and his coauthors (2017) developed a framework that focuses on preparedness and recovery. While preparedness mitigates disaster impacts and losses, recovery efforts centre around

rebuilding better and enabling resilience (Baroudi & R. Rapp, 2014). In line with this, we focus on activities and processes that help reduce disaster impact and losses for communities.

Disaster preparedness activities look different for different societies. In addition, disaster preparedness processes look different for different groups within a society. While preparing for recovery, it is important to identify groups with specific needs: women, children and young people, people on low income, people with disability, people with diverse gender and sexualities, business owners and primary producers among others.

In the US, the Department of Homeland Security and the Federal Emergency Management Agency (FEMA) adopted a *Whole Community* approach to reduce the unequal impacts of disasters by race, colour or national origin. The *Whole Community* approach has six strategic themes: 1) understanding community complexity; 2) recognising community capability and needs; 3) fostering relationships with community leaders; 4) building and maintaining partnerships; 5) empowering local action and 6) leveraging and strengthening social infrastructure, network and assets. This approach mainly suggests that organisations involved in disaster recovery should identify and partner with a broad base of stakeholders (sports clubs, faith-based and other community organisations, etc.), design and offer educational programs centred around individual, family or community preparedness to youth and children and understand the demographics of the community to realign disaster preparedness and management efforts with community needs.

Similar to the *Whole Community* approach in the US, the Australian Red Cross Society delivers *EmergencyRedi* workshops that are designed to support people prepare for emergencies while building their resilience. *EmergencyRedi* workshops are flexible, interactive, focused on real-world examples, practical and tailored to meet the needs of the group. These workshops rely on the *RediPlan* to discuss specific activities and actions that help individuals and families prepare for disasters. Awarded the Australian Safer Community Awards in 2010, the *RediPlan* comprises four steps – get in the know, get connected, get organised and finally, get packing.

Research evidence highlights that financial instruments also help individuals and families prepare for disaster recovery. These instruments include personal savings, assets, insurance, grants, financial aid, etc. A lack of self-insurance or precautionary savings against such adverse shocks implies that the possible solution to fund recovery efforts for individuals and families is access to credit and financial assistance. In other words, poor individuals and families become more vulnerable to disasters due to their inability to prepare and lower adaptive capacities.

An important part of preparing for disasters is access to accurate information. While data from government sources such as census, surveys and administrative records provide crucial data to prepare for and manage disaster impacts, innovative data sources such as social media activity, geolocation data from mobile phone usage and remote sensing technologies have helped in many recent emergencies (Fu, 2023). World Bank Chief Statistician and Director of the Development Data Group Haishan Fu highlights the need for data readiness to collect and disseminate key information before a disaster strikes. Through her work, Fu argues for greater investment and collective partnerships to meet our need for timely, cost-effective and highly granular data to increase disaster preparedness and mitigate its impact.

We find that sociocultural fabric and social institutions also matter. Research shows that one of the most crucial determinants of communities' ability to recover is social capital (Aldrich, 2012). Friends, family and neighbourhood ties that comprise social networks were significantly more efficient in sharing important information and providing financial or physical assistance, thereby positively impacting recovery efforts. In essence, social networks often provide informal social protection through job referrals, food relief, small loans, and emotional support among other forms of support (United Nations Economic and Social Commission for Asia and the Pacific, 2013).

Importantly, FEMA (2016) asserts that disaster recovery begins and ends at the grassroots level. This underlines the need for community organisations to work towards enhancing local governance and investing in capacity-building efforts. Furthermore, continued partnerships with communities as well as other community organisations following a disaster have the potential to enhance community resilience in the event of another catastrophe (Mathias et al., 2022).

According to the OECD (n.d.), another good practice is applying the notion of resilience to both natural and climate-related hazards. There is likely to be an increase in or intensification of disaster activities due to climate change (Climate Council of Australia, 2022; Hallegatte & Walsh, 2021). Hence, there is a need to integrate preparedness activities for climate change adaptation and disasters (Mathias et al., 2022). Researchers argue that preparedness for disaster is compatible with climate change adaptation and there is a need for organisations engaged in disaster response and recovery to integrate disaster preparedness into their day-to-day support service.

To prepare for recovery, it is important to understand the various forms of impact of a disaster. As outlined earlier, the compounding impacts of a disaster often exceed economic and financial damage and have a long-running impact on communities. The latter are sometimes termed intangible costs and include the impact on health (injury, mental health, diseases, etc.) and social and community impacts (family violence, crime, education disruption, etc.). As discussed in the previous section, research shows that many individuals and families while engaging in relief and recovery activities, face additional challenges such as family violence, psychological or mental health concerns and loss of learning among others. Community organisations could help individuals and households manage such intangible costs. A plausible strategy to reduce such costs is a community needs analysis to understand the resources needed to support the diverse needs of the local community. Community engagement would help foster local preparedness and also highlight the recovery strategy that best meets the needs of the local community (Saum-Manning, 2021).

According to the Royal Commission into National Natural Disaster Arrangements (2020), "recovery is not a linear or staged process". For instance, preparing and managing recovery often go hand in hand rather than in succession. In light of this, the Australia and New Zealand School of Government (2018) argued that developing a program logic for recovery is considered best practice. This emerging practice has also been adopted by Australian state governments including the Queensland Reconstruction Authority (2023).

International perspectives could also help. The disasters and weather trends observed in Queensland (QLD) or Australia are not unique to the state or country. The OECD (n.d.) highlights that the Netherlands' disaster preparedness activities emphasise the benefits of strengthening local community organisations, notably of local Red Cross and Red Crescent Societies (see OECD's <u>Approach towards Disaster Risk Reduction and Resilience</u>). To conclude this section, we emphasise Australia's and specifically, Queensland's vulnerability to natural hazards and draw attention to specific acclaimed practices.

IN FOCUS: QLD'S DISASTER RISK PROFILE

The Australian continent is vulnerable to a variety of hazards, including droughts, floods, earthquakes, cyclones, bushfires and landslides among others. Research also shows that floods and droughts are found to have the largest residual aftereffects and are common in Australia (Arklay, 2015; World Bank, 2021). Additionally, the ongoing impact of climate change further exacerbates these hazards risks. Less than halfway into this decade, Australia has already faced several extreme weather events – cyclones, heatwaves, bushfires, floods, flash floods and droughts.

Among Australian states and territories, QLD has the highest risk profile and reports a higher incidence of damage from disasters and extreme weather events than other Australian states and territories (Risk Frontiers, 2011). In the last 50 years, QLD's total economic loss from extreme weather events has been 50% greater than NSW and about three times those of Victoria (Climate Council of Australia, 2022). In the last couple of years, the

majority of Queensland state has experienced multiple disasters ranging from tropical cyclones to severe thunderstorms and from heatwaves to flooding. Therefore, disaster recovery programs in Queensland warrant greater attention.

According to the World Bank and Queensland Reconstruction Authority (2011), the QLD 2011 flood response was an example of best practice. There were many specific examples of good practices – strong institutional framework such as the launch of an outreach campaign called the Join Forces Program in February 2011, post-disaster cleanup, livelihood support, schemes, early and then medium to long-term recovery assessments, etc. In recent years, structural reforms have been underway to manage disasters in Queensland (Arklay, 2015). One such development was the Queensland Government's 'Get Ready Queensland' initiative to "provide information on storms, floods and cyclones, and made a number of improvements to flood mapping, early-warning systems, dam management and floodplain management" (Productivity Commission, 2012, p. 250).

MANAGING RECOVERY

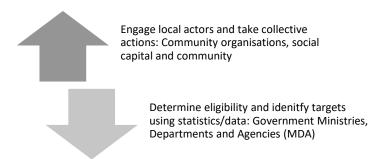
Our review of the literature shows that research often tends to focus on engagement and not outcomes when it comes to understanding the role of community organisations in disaster recovery. We argue that there are many potential explanations for this – lack of evaluation data, challenges in understanding the scope and scale of funding of community organisations and the fragmentation of the sector that results from project-based thinking among other reasons (Chandra et al., 2016; Zencirci & Herrold, 2021).

Yet, community organisations play a significant role in both immediate and short-term response and long-term recovery as they help households cope with economic losses and shocks. The community sector has the potential to reduce the human, social and economic costs of disaster and shorten the recovery period. The existing platforms and mechanisms for response and recovery do not always take into account the heterogeneous needs of the affected population in relation to age, gender, ethnocultural group, education level, ability and socioeconomic status but the sector is well placed to help disadvantaged individuals and families who are disproportionately affected by disasters. Additionally, the sector has immense potential to assist households with less financial capacity after having used savings and current income to cover costs associated with disaster impact. Scholars argue that it is relatively easier for organisations to trade off fiscal and non-fiscal contributions than government agencies and departments (Chandra et al., 2016).

Recent initiatives in disaster recovery have shown that measurable goals and quantifiable objectives should be at the centre of a recovery plan (Australia and New Zealand School of Government, 2018; PricewaterhouseCoopers Australia, 2010). A corresponding recommendation emphasises that organisations, whether public, private or community-based, should maintain complete transparency with affected communities about recovery decisions (Neeraj, 2022). It also ensures the public's trust as it is gained through transparency and openness in communication over time with stakeholders and other organisations. An emerging practice in this field is the use of participatory and peer-led design for recovery.

As Figure 3 shows, community organisations are involved in supporting locally-led and implemented initiatives that rely on participatory and peer-led designs. For example, the Australian Red Cross partners with communities to run *RediCommunities* workshops. These workshops use interactive activities and drive community-driven discussions on disasters, their consequences and community resilience. Their *RediCommunities* Resilience Assessment Tool is useful in understanding current community resilience and areas for improvement.

Figure 3: Top-down vs. bottom-up approaches in disaster recovery



As we learned earlier in this review, disasters pose a threat to poverty reduction efforts and strategies. Indeed, disasters tend to catapult into catastrophes when they push more people into poverty and entrench the already existing poverty and vulnerability. Therefore, socioeconomic inequalities not only affect the severity of the disaster but also the recovery efforts and length (Kerblat et al., 2021). In light of this, Hallegatte et al. (2020) argued that poverty reduction is an effective disaster preparation and management strategy. Their study calls for integrating poverty reduction strategies and disaster recovery activities. Thus, the role of community organisations in integrating these strategies warrants further investigation through renewed research efforts.

Community organisations can also help recovery activities extend beyond financial assistance. Extensive research on cash transfers highlights the positive benefits it has on recipients (Richterman et al., 2023). Incorporating robust emergency cash transfers as part of the disaster recovery response helps vulnerable households overcome the loss of labour income and also avoid evictions and foreclosures due to rental or mortgage arrears (Global Facility for Disaster Reduction and Recovery The World Bank, 2019). Moreover, evidence shows that individuals turn to low-skilled jobs or low-paid work in the event of loss of livelihoods after a disaster with farmers, small business owners and smaller communities more adversely impacted (Erman et al, 2020; Finucane et al., 2021; Hallegatte et. al., 2020). This is a negative coping strategy that exacerbates any existing debt burden of individuals or families and has long-run consequences. In such instances, in case of slow onset of recovery efforts and even in case of recurring hazards, community members may constantly turn to temporary relief or transfers.

Another increasingly common practice is conducting a needs assessment and categorising affected people and groups based on the extent of damages, losses and resilience. To carry out a need assessment, it is crucial to gather detailed information on the socioeconomic and cultural characteristics of affected people. The main benefits of carrying out a need assessment are that it helps organisations establish a baseline for developing the recovery plan; and define the objectives and goals of the recovery program, complete with measurable indicators (World Bank and Queensland Reconstruction Authority, 2011).

Disasters can have a more lasting impact on children. The international literature highlights how the plight of children in poverty is exacerbated by disasters through acute impact on physical and mental health, loss of learning due to school damage or closures, higher risk of infectious diseases, reduced quality of nutrition, a lower propensity to invest in education in the future, etc (Hallegatte & Walsh, 2021). Recent Australian literature argued that it is imperative to support the mental health of children in the event of a disaster through practice-based evidence and lived experience perspectives (Australian Institute of Family Studies, 2023).

In practice, the conclusion of recovery activities receives insufficient attention. According to the World Bank and Queensland Reconstruction Authority (2011), for all organisations engaged in disaster recovery, establishing an exit strategy that helps organisations return to business as usual is imperative. Indeed, designing an exit strategy is crucial for community-centred interventions, and when it comes to disaster recovery, requires foresight in determining enduring recovery activities. Community organisations should, therefore, proactively discern which activities and services are permanent or recurrent and which are temporary.

MAKING BEST AND EMERGING PRACTICES THE EASIEST CHOICE

There are some broad takeaways from our review of the literature. For instance, early response should focus more on urgent needs, including evacuation if needed. Additionally, organisational decision-making must be responsive and flexible throughout response and recovery efforts. However, the activities and priorities of organisations should evolve as the affected communities and impacted areas move from response to recovery. We also learned that streamlined collaboration with government departments and agencies at local, state and federal levels, community stakeholders and other partner organisations are at the heart of successful recovery efforts both in Australia and overseas.

A key question emerges from this review of best and emerging practices in disaster recovery: How do we make the best practice the easiest choice for community organisations? In response, we propose a series of recommendations that could assist organisations involved in disaster recovery. These recommendations are by no means exhaustive but are intended to help community organisations think about ways in which they can establish or improve their disaster response and recovery efforts.

First, we recommend setting up monitoring and evaluation structures, including designing a program logic. This is a practice that has been lauded by researchers and multilateral organisations. Both the program logic and the monitoring and evaluation framework should be set up during the recovery planning process. The Australian Disaster Resilience Knowledge Hub offers valuable resources, including a monitoring and evaluation plan and provides a nationally agreed-upon list of recovery outcomes that will help build an organisation's recovery plan or evaluation plan (see the <u>National Monitoring and Evaluation Framework</u>). A related recommendation is facilitating informed decision-making by incorporating data-driven approaches to support robust monitoring and evaluation systems over recovery planning and management.

Another key recommendation involves the establishment of support to manage recovery activities and processes. It requires an in-depth understanding of organisational constraints and existing procedures. Another way community organisations could help in recovery efforts is by introducing business continuity systems for employment and livelihoods, enabling not only large but also small and medium enterprises to quickly resume operations post-disaster (Global Facility for Disaster Reduction and Recovery The World Bank, 2014a). Furthermore, insights from the Black Saturday bushfires in Victoria in 2009 underscore the significance of creating management office support personnel dedicated to monitoring, managing and reporting progress which proves critical for both recovery management and budget oversight (PricewaterhouseCoopers Australia, 2010). However, establishing personnel support might pose challenges considering that disaster recovery activities of community organisations are often funded through direct-to-project funds and grants.

Importantly, it is essential to design a general exit strategy that can be adjusted based on the severity and type of disaster. Beyond facilitating the transfer of responsibilities and ensuring a seamless transition to business-as-usual activities, an exit strategy serves as a valuable tool for transferring knowledge and learnings to local authorities, contributing to enhanced disaster preparedness for future events (Ali et al., 2020; Mannakkara et al., 2019; Neeraj, 2022).

A closer look at the literature also helped us identify a major gap: Although our research efforts revealed some lessons learned and specific examples of best practices, this problem remains insufficiently explored because of the absence of a community of practice that focuses on developing, validating and disseminating best practices. Therefore, we find that there are invaluable but untapped opportunities for horizontal learning for community organisations.

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