Identifying and Evaluating Factors Influencing Community Resilience in a Crisis

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QCSSI Research Stream

Building individual and community resilience and improving effective governance in
response to disasters

QCSSI

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Abstract

This project identifies and evaluates the local and institutional resources that contribute to community resilience after a crisis or disaster. Drawing on case studies of localities affected by 2011 flooding in South East and Central Queensland and a survey of Queensland households, this report considers formal and informal sources of crisis support central to community resilience. These resources are examined at the levels of individual and household; local associations and community leaders; as well as formal institutional resources provided by local, state and federal agencies, with a focus on community organisations and state funded community development workers. Through a household survey, in-depth interviews and focus groups, residents' own evaluations of the importance of various levels of assistance are contrasted with the assistance provided formally by various institutions and agencies. Existing theories of community resilience will be employed to identify the resources available to residents during and after a crisis that have the greatest subjective and objective efficacy for community resilience after a disaster. Insights developed in this research will be of use to policy makers with clear guidance for the appropriate allocation of resources in the future; the most effective communication strategies for ensuring that resources are taken up in a timely and useful manner; and improved resources for predicting community resilience.

Introduction

This report is based on a number of research projects that focus on the series of natural disasters that occurred in Queensland, beginning in December 2010. The Queensland Floods Commission of Inquiry (2012) reported that 33 people died in the 2010/2011 floods and three remain missing. More than 78 per cent of the state (an area bigger than France and Germany combined) was declared a disaster zone and over 2.5 million people were affected. Some 29,000 homes and businesses suffered some form of inundation. The Queensland Reconstruction Authority has estimated that the economic cost of these floods to be in excess of $5 billion (2011, p. 31). The floods were followed by Tropical Cyclone Yasi in north Queensland. By March 2011, 99 per cent of the state of Queensland was disaster-declared (Queensland Reconstruction Authority, 2011). Additional natural disasters occurred in other parts of Australia at this time including floods in NSW and Victoria and bushfires in Western Australia.

It has long been recognised that disasters have consequences for the collective as well as the individual, with local ties, collective identity and sense of community potentially strengthened or undermined by the shared experience of trauma (Fritz and Williams, 1957; Erikson, 1976; Norris et al., 1994; Johnes, 2000; Lerry and Lindell, 2003). Interest has been growing in the way that 'community', and its constitutive features of local networks, associations and citizen involvement, function as a resource to help residents better prepare for and recover from such events (Airriess et al, 2008; Chamlee-Wright and Stour, 2011; Frankenberg et al., 2012). In academic parlance, this capacity for disaster readiness and response is understood as 'community resilience', a term that has now gained currency among policymakers wanting individuals and communities to become 'more self-reliant and prepared to take responsibility for the risks they live with' (Council of Australian Governments, 2009: 10).

Disaster resilience, and particularly community resilience, is an idea that has gained significant momentum in the last decade as a way for policy makers and practitioners to identify the strengths and vulnerabilities of target populations experiencing disasters.   The focus in Australia, and Queensland, has been on natural disasters such as cyclones, floods and bushfires, however the concept may also have applicability for human induced disasters, such as terrorist attacks. Resilience as a social concept has its roots in biological and ecosystems scholarship, where resilience is seen as the ability of individual organisms and ecosystems to either 'bounce back' to their original form follow a major disruption or to successfully adapt to new conditions following a disruption.

This ecological allegory has been transferred into the social realm as researchers have investigated ways of measuring and explaining the necessary qualities that individuals and communities require to either recover or adapt successfully in the wake of the loss and disruption of disaster. The social form of resilience is still in its infancy and it faces significant challenges, not the least of which is identifying the nature of community in early

21st century society. Australia is an affluent nation with strong institutions and relatively high levels of trust in those institutions. At the same time, we are less bound by geographical place; our social and material support come from a wide variety of sources such as geographically disparate networks of family, friends and associates.

For this reason the idea of community resilience as a framework for disaster policy has been subject to criticism for its assumption that a geographical space corresponds with 'community' and that resilience is determined by the capacity of its members to generate shared resources and collectively mobilise them as needed (Kirschenbaum, 2004). These criticisms are seen as especially pertinent to urban contexts and echo well-established debates about the extent to which idealised communal bonds have been rendered meaningless for a more mobile, individualistic and outwardly-connected urban population.

However, community of place is not just an obsolete historical construct - people maintain and actively nurture local networks for instrumental and aesthetic reasons in both rural and urban settings. The onset of a disaster, such as the widespread floods that inundated much of southern Queensland during December 2010 and January 2011, puts three levels of potential support to the test: institutional, networked and local. The purpose of this study was to interrogate the ways in which these various levels of support act to foster resilience to the effects of disaster across a range of rural and urban settings.

It was in this context that project addressed the following four aims:

1) To identify individual households' disaster preparedness and assess the influence of the behaviour of fellow community members and community organisation on household resilience

2) To assess the allocation and effectiveness of formal and informal, local and extra-local resources across communities affected by a natural disaster and their relationship to community resilience.

3) To identify the most effective communication strategies for resource uptake during and immediately following a disaster and the impact of such strategies on community resilience

4) To examine the roles, responsibilities and efficacy of the newly funded state community development officers in building capacity for future resilience from subsequent disasters.

In the following three sections of this report, we will address these issues, using first a statistical overview of Queensland using data and findings from the 'Living in Queensland' survey, and then reports from qualitative case studies carried out in rural Queensland and in urban settings in Brisbane.

Overview of Queensland

In this first section we provide an overview of resilience measures in Queensland using the Living in Queensland survey. The Living in Queensland research was designed to identify how Queenslanders and their communities might contribute to preparedness, response and recovery and as a corollary of this, resilience. Wave five of the Living in Queensland survey, funded by QCSSI, statistically identifies and examines if, and how, after the summer of 2010/11, Queenslanders have changed their individual behaviours to plan for and recover from natural disasters. In addition, it gauged public perceptions of the role of government agencies in disaster preparedness and response. Lastly, included new measures of individual resilience amongst Queenslanders as well as perceptions of community resilience.

In the literature on social process and disaster consequences, there are mixed results on the latent consequences of natural disasters on individuals as well as communities. Some scholars point to community breakdown post disaster. Park, Burgess and McKenzie (1925) note that sudden environmental change can disrupt communities by causing a breakdown in community regulation or social control. This in turn may cause further community problems such as crime and disorder and may increase the potential for victimisation especially for vulnerable populations. Norris et al (2008) find in some communities, after a natural disaster, social networks and social ties are disrupted. This may be due to an influx of outsiders that come to aid the community in times of recovery, or a sudden flight of residents from disaster affected homes. Enduring social networks are an important aspect of resilience for communities as their benefits provide security and safety for residents.

Though much of the existing literature around community resilience has focused on cohesion and social ties, little is known about how perceptions and behaviours change over time, particularly after a disaster has occurred. In Queensland, rebuilding after the 2010/2011 disasters was led by community leaders yet we do not understand how these leaders were most helpful or how they emerge as leaders in their community. The focus of the Living in Queensland study is to better understand how Queenslanders perceive their community, particularly in how those perceptions may have changed in the 18 months after the summer of 2011, what they have learned about their community, and how they have coped after severe weather events that have affected Queensland in recent years.

Method

The Living in Queensland Survey is a longitudinal study initially designed to measure life satisfaction, health and wellbeing amongst Queensland residents. The more recent waves of the survey were administered to understand residents' perceptions of risk and collective efficacy both before and after the 2010/2011 disasters, seeking to benchmark attitudes on preparatory and response behaviors to natural emergencies. Comprising eight modules with an additional module in Waves four and five, the Living in Queensland Survey sought to measure individual and community resilience across Queensland.

Waves one and two of the Survey sought to provide a statistical measurement of health, wellbeing and social inequality with Wave one focusing on employment and satisfaction and

Wave two adding a Health module. A disaster preparedness module was added to Wave three to garner an understanding of people's experiences with natural disasters, its effect on them, and how people prepare for and respond to natural disaster events. Wave four served as a follow up survey six months after the Queensland Floods and Cyclone Yasi that occurred in January 2011, seeking to determine changes to respondents' preparedness and response behaviours.

The most recent wave of the Living in Queensland Survey (Wave five – the focus of this report) sought to understand respondents' experience with and exposure to natural disasters and their preparedness behaviour, with questions to measure their perceptions of risk both immediately after a natural disaster and in the potential for a natural disaster. The Survey measured respondents' collective action and social ties with others in their community and their perceptions of tiers of government and their confidence in them, the effectiveness of these institutions, and whether respondents believe government should take responsibility for protecting individuals from disaster in providing a response and contributing to the recovery from a natural disaster. The final sections of the survey measure individual and collective resilience, through assessments of economic wellbeing, collective efficacy, life satisfaction and access to resources.

Waves three to five of the Living in Queensland Survey were conducted over a three year period from 2010 to 2012 via mail out surveys and Computer Assisted Telephone Interviewing (CATI) of a representative sample of Queensland residents aged 18 years and over from six regions within the state. A total of 2360 Queenslanders participated in Wave three of the Survey, which was conducted in 2010 prior to the 2010/2011 disasters. 1403 people participated in Wave 4 of the Survey, and 1335 participated in Wave 5 of the Survey, which were six and eighteen month follow up surveys disseminated after the floods. The follow up surveys were conducted to measure perceptions of risk and preparedness behaviour for natural disasters, as well as the role of community and government when preparing for, responding to, and recovering from a natural disaster.

The main modules of interest in the final wave of the Survey were those that measured *volunteerism, institutional confidence, community resilience and individual resilience* in the aftermath of the 2010/2011 disasters and the factors that contributed to the recovery effort. Descriptions of these factors are below:

Experience

Measuring previous experience with natural disasters helped understand the proportion of respondents who were familiar with the resources and actions required in the aftermath of a disaster. We were particularly interested to examine differences in responses of risk and confidence in government based on previous experience.

Volunteerism

We were interested in whether respondents actively participated in community based recovery efforts in the aftermath of the 2010/2011 floods as a measure of collective action and social cohesion.

Institutional Confidence

Institutional confidence encompassed respondents' levels of trust, respect and confidence in all tiers of government and served as a comparative measure to gauging whether confidence in government had increased, decreased or remained stable before and after the Summer of Disasters.

Community Resilience

Collective Efficacy
Measuring neighbourhood cohesion, collective action, trust, safety, and whether respondents shared the same values as others in their community was an important gauge of collective efficacy.

Leadership
Understanding whether there was a leadership presence within the community that respondents were aware of and trusted to deliver accurate and timely information and provide support to make a difference within the community during crises was important to understanding the level of independence within a community and whether there was a strong reliance on government intervention or if the community had the capacity to act collectively during crises.

Individual Resilience

Quality of Life
Measuring respondents' life satisfaction and quality of life in this final Wave of the Living in Queensland Survey acted as a comparative variable to gauge whether people's wellbeing had changed over time and other factors that may have affected this.

Access to Resources
Understanding whether people had access to resources and what type of resources people accessed in the aftermath of the Summer of Disasters helped to measure whether these were a prominent feature of the recovery process.

Results

Disaster Experience

Although more than 90% of the state of Queensland was affected in one way or another by the disasters of 2010/2011 (Arnison, Gotterson & Apelt, 2011), when our survey was conducted in 2012, approximately 54% of survey respondents (n = 708) indicated that they had been present during a natural disaster in the past. Of these respondents, the majority (71%; n = 444) were affected in some way by the 2010/2011 disasters or additional severe weather patterns since February of 2011 (for example, rural flooding in the summer of 2012). Furthermore, 90% of those respondents who had been present during a natural disaster

indicated that their most recent experience of a natural disaster occurred in the community where they are currently living.
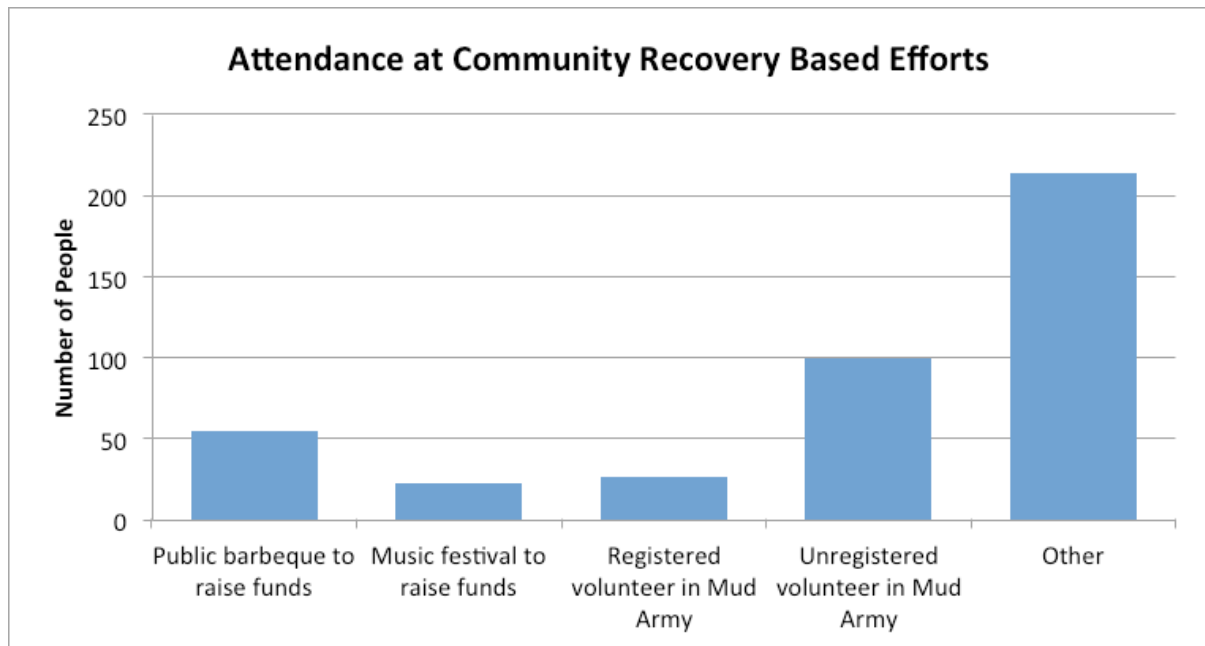
Disaster Relief

The damage from floodwaters to the South-East Queensland area alone, particularly in the cities of Brisbane and Ipswich, involved a massive volunteer effort for recovery. Property damage, loss of wages and other damage due to the flood required financial support. Though affected by flooding and severe weather in 2010/2011, 70% of these respondents (n = 948) did not access any support in the recovery effort. Of those respondents who did access support, the most common were from Centrelink (12% of all respondents) and support from an insurance agency (7% of all respondents). Overall, we find that very few respondents claimed assistance from local resources such as the Department of Communities (2%), Queensland Health (1%), charitable organisations (such as Red Cross, Lifeline, or Micah Projects; ~3%) or other local organisations. The majority of respondents who were affected by the disaster in 2011 did not claim relief from the Prime Ministers' disaster relief fund (89%)
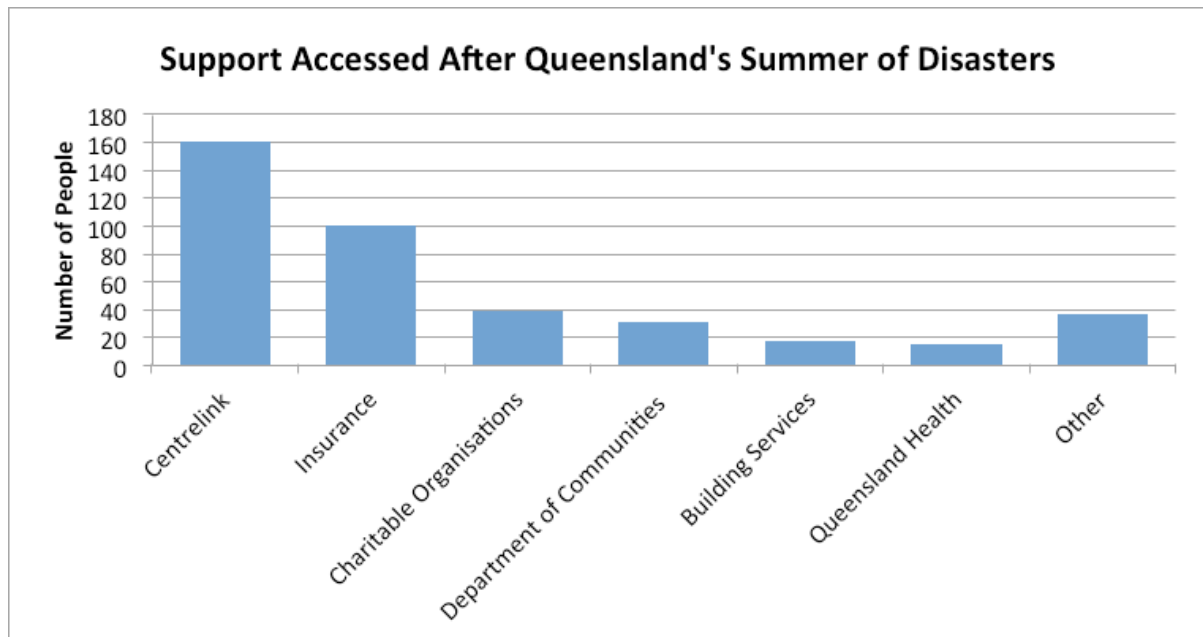
Following the flood damage to SEQ in January 2011, recovery efforts included fundraisers as well as organised volunteering for post disaster clean up. Those respondents who did participate in the post disaster recovery effort (33% of respondents) did so as largely as unregistered volunteers in the 'Mud Army' (8%, versus 2% who were registered volunteers), a locally organised event to distribute volunteers across the Brisbane area as a response to the damage caused by flooding.   Arnison, Gotterson and Apelt (2011) report that there were approximately 25,000 registered mud army volunteers. We find that many more Queensland residents are likely to have participated informally the clean-up effort immediately following the floods.
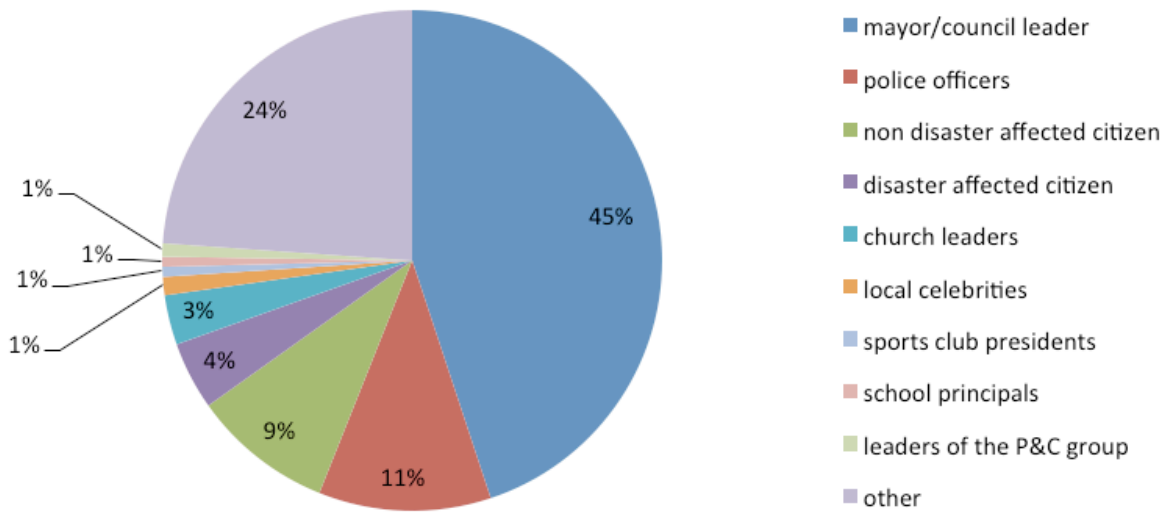
Attendance at Community Recovery Based Efforts

A bar chart titled "Attendance at Community Recovery Based Efforts" showing the number of people (y-axis, 0–250) for each category:
- Public barbeque to raise funds: approximately 55
- Music festival to raise funds: approximately 23
- Registered volunteer in Mud Army: approximately 27
- Unregistered volunteer in Mud Army: approximately 100
- Other: approximately 215

Community Resilience and Emerging Leadership

In the aftermath of a serious weather event, the process to restore a community back to functioning capacity involves an effective disaster management strategy. These strategies are crucial to boosting community resilience and capacity building (Härtel & Latemore, 2011) and are often conducted by members of the community who adopt a representative leadership role during the absence of government bodies in the immediate aftermath of an event (Skocpol, Ganz & Munson, 2000). Many such leaders have pre-existing organisational skills that can be effectively adapted and used in a post-disaster context (Patterson, Weil & Patel, 2010).

When asked to indicate who the most effective community leaders were in their community post disaster, survey respondents overwhelmingly nominated leadership from local governments and other institutional actors such as council members and police. Respondents also reported effective leadership from regular citizens, be they victims of the disaster or not. Interestingly, 24% of respondents indicated that effective leadership came from "other" sources about which they were not asked. This indicates that there is still more to learn about who effective leaders are in communities. Regardless of whom community leaders were, most respondents (83%) indicated that they saw this individual as a community leader prior to the disaster.

Most Effective Leader in Community Post Disaster (n = 933)

- mayor/council leader — 45%
- police officers — 11%
- non disaster affected citizen — 9%
- disaster affected citizen — 4%
- church leaders — 3%
- local celebrities — 1%
- sports club presidents — 1%
- school principals — 1%
- leaders of the P&C group — 1%
- other — 24%

Respondents indicate that where emerging leaders make the biggest impact is in the communication of vital informal in times of disaster (24% of respondents). However, respondents also indicated that leaders made positive impacts by leading organised recovery efforts, and providing information about post disaster assistance.

How did your chosen leader make a difference in your community?

These results suggest that in the wake of natural disasters, leaders play an important role in the recovery effort. Seeing directly the response, support and leadership in the wake of the disaster increases citizen awareness of leadership capacity, particularly for political leaders, within the community and therefore increases the perception of positive leadership. The importance of these political leaders in informing the community and leading the response

may have further implications for communities' ability to self-organise and promote leadership from within.

Changes Over time

Responses to life satisfaction and social cohesion survey items were tracked over time. In 2010, social cohesion and life satisfaction survey items provided a baseline measure for Queensland attitudes towards their own life circumstances as well as attitudes towards the community. These items were assessed again with the same respondents 6 months after the 2011 disaster and again 18 months after the disaster in Queensland.

We find that respondents' perceptions of social cohesion have decreased in the 18 month period following the 2010/2011 disaster period. Though this decrease is small, it may reflect the anticipated flux of residents in and out of flood affected communities after the disaster. However, decreased perceptions of social cohesion may indicate that some individuals and communities may not be as ready to prepare and respond to a future disaster. In contrast, scores on the life satisfaction scale have significantly increased over the same time period for respondents, indicating that the affect associated with the disaster has not adversely affected life satisfaction among Queenslanders as a direct result of the floods. These results highlight the difficulty in measuring and understanding resilience in the post disaster context. While social cohesion, one of the most salient and common measures of resilience, suggests that the capacity for community resilience has decreased; other indicators show that other potential sources of resilience are not experiencing the same negative trend. These results also indicate that further research is necessary in order to understanding why these changes are occurring overtime. For example, what elements of the disaster response and recovery period are responsible for the downtrend in social cohesion and uptrend in satisfaction? Understanding the antecedents for these changes will uncover aspects of disaster management policy and practice that are potentially harmful as well as a potential opportunity for building resilience in communities and individuals.
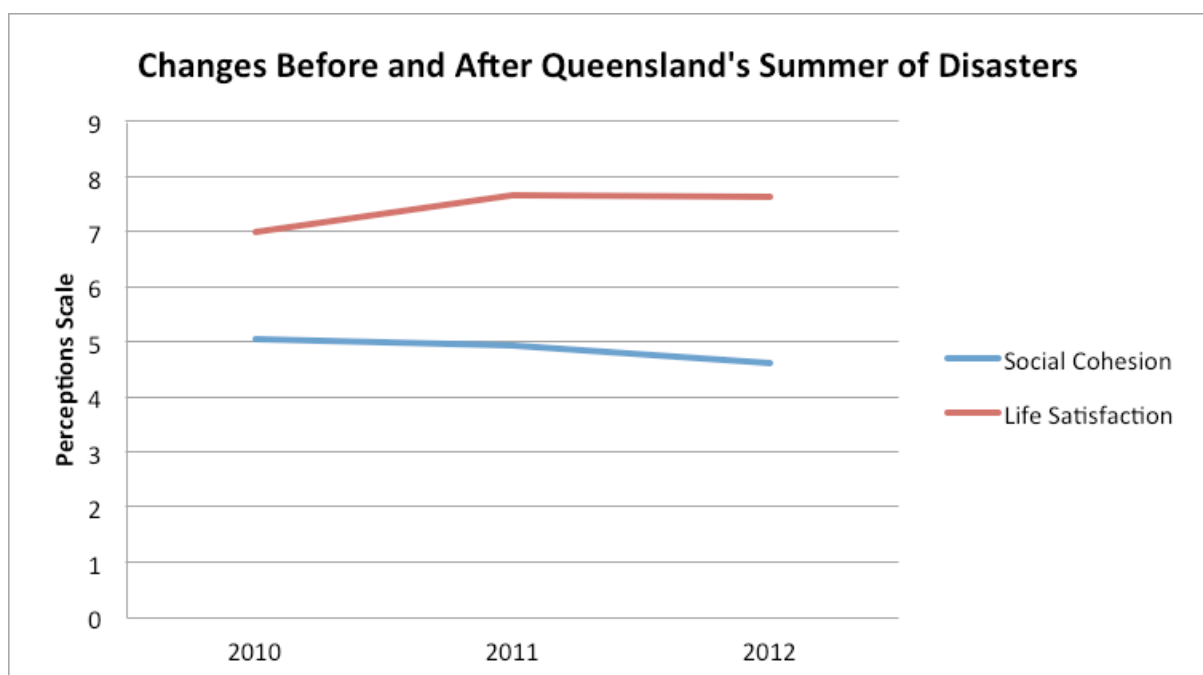
Conclusion

The natural disasters of 2010 and 2011 and the ways in which people responded to the disaster have implications for emergency management strategies. The impact of community leaders in assisting the response and recovery process highlights an area of further inquiry into the identification of effective leaders in natural disaster contexts. Natural disaster resources available to citizens in their preparatory, response and recovery actions are essential to their resilience and it is crucial to ensure accessibility to such resources at all stages of the disaster management process.

The next two sections of the report focus on case studies of three locations, one rural and two urban to use the experiences of various stakeholders to provide a number of lessons about the ways that communities and local and institutional players provide support during and after a disaster.

The Rural

Introduction

Academic literature on community cohesion, social capital, disaster resilience and other related concepts often uses rural contexts in which to develop and test explanations of these phenomena. The reason for this is that rural settings are more likely to behave in the ways we would expect of 'communities' in the popular imagination. Rural locations, particularly in Australia, are likely to be geographically isolated from other communities and have small populations with dense webs of social interaction, dependence and affect. A disaster of the types experienced in 2010/2011 in Queensland is likely to affect an entire community and so there will be a strong sense of common purpose, the essential feature in any definition of 'community'.   The rural case study for this report was carried out in Theodore, a small town (population 452) 250 km west of Bundaberg in central Queensland. Based on Theodore's small size and remoteness, it might be expected to demonstrate a range of qualities that are typically associated with rural communities and it is in that context that Theodore was selected as a case study to make qualitative comparisons with urban locations.

Figure 1: Theodore in flood, January 2011

The flood

Water is the reason Theodore was established, and being on a flood plain, Theodore has experienced a number of floods during its history. The town's Folk Museum contains photographs of floods in and around the town in 1928, 1932, 1954 and 1956. However, a graph demonstrating the annual rainfall from 1928 – 1993 indicates minor to major flooding probably occurred in 1948, 1972, 1974 and 1983 as well (Johnson 1994, p. 26). The graph also demonstrates that many years the region had lower than average rainfall and indeed, in the 1960s and 1990s, significant drought was experienced in the region.

This background to the history of Theodore is important to understanding the community resilience that is evident when the people of the area are faced with adversity. Although this case study is mostly concerned with exploring issues related to social capital and resilience, understanding the origins of Theodore helps to put into context the economic and environmental capitals against which the social capital exists. It is helpful, for example, to understand that from its very beginnings, only those who had a ready supply of money were allowed to take up the farming blocks and that these blocks had perpetual leasehold and no land tax, unlike many soldier settler schemes that were grounded in poverty from their very beginnings. This is not to say that there is an abundance of economic capital within the region, or that economic hardship is not experienced by some, perhaps all, at various points in time. However, the continuing domination of individual family-farms in the region does indicate there is likely to be a substantial economic base. It is also helpful to understand the regular flooding of the area replenishes alluvial soils and allows the land to be intensively cultivated; that these events actually sustain the economic capital of the region. However, the reduced diversity of crops currently being grown may be increasing the vulnerability within Theodore's environmental capital (Wilson 2012), and this can have significant implications for future economic and social capital within the region.

The study

Interviews were conducted between 23 July and 2 August, 2012 . The aim of the interviews was to explore the effectiveness and efficiency of services provided to Theodore immediately after the 2010/11 flood events and in the 18 months afterwards, and to explore the leadership that was shown by people during this time. All interviewees were intimately involved in providing services or leadership at various times in this period and included:

- The mayor of the Banana Shire at the time of the flood until April 2012;

- The Local Government member who located himself in Theodore for 6 weeks during the floods and played a pivotal role in coordinating services during the response and early recovery periods;

- A health district worker with a background in nursing and who had lived and worked in the area for over 20 years who was part of the local coordination team;

- A local business woman who is involved in the local Chamber of Commerce;

- The president of the local branch of Cotton Australia at the time of the events;

- A community development officer located in the Shire

- An economic and social development provider who has had many years of community development experience, including disaster response and recovery, and who is a business owner in Biloela, but has extensive connection with Theodore;

- The manager of a non-government service provider of counselling services to Theodore

- A local counsellor associated with a non-government service provider.

Results

Although the experiences of each of the participants were quite different, a number of common themes emerged from the analysis of the interviews, including:

1) Understanding the rural context of the events

2) The importance of prior relationships

3) The importance of local coordination

4) Meeting needs of the local community

5) Complications related to government funding

6) Stepping up to leadership roles during a crisis.

The rural context

The small size of Theodore and the definite boundaries of human settlement in a rural setting allows for a density of networked interaction and common familiarity which provides a strong basis for community. However, as described in the introduction, it is common purpose rather than simply familiarity which defines community and the research identified a strong sense of common purpose and identity based on the stoic, self-sufficient characteristics of rural people, although it was acknowledged this could also have negative consequences when that stoicism translates into a failure to acknowledge the need for services and so failing to access them.

> We had this enormous downpour of eight inches in one night or something and the water backed off the street and went back through the shop again. That business owner was struggling. That was very difficult for her and I know she was teetering but the community, bless them, knew that she was struggling and really went out of their way to support her. Whether you wanted another cup of coffee or not, or a loaf of bread or whatever, you went and bought it (Meredith)

The rural context illustrated in these comments demonstrates a peculiarity associated with how floods have been interpreted and how rural people respond to services on offer. First, it is evident financial services are paramount in rural communities, although not all residents

are able or willing to access financial assistance either because they are not aware of these services or because they fear there is a stigma associated with such access.

The second point to note is that the stoic and self-sufficient values subscribed to by many living in this rural area can prohibit them from accepting they may need to access counselling services to help deal with the financial and emotional stressors that they experience.

The importance of prior relationships

The second theme emerges out of the first in that it emphasises the importance of service providers having a prior relationship with the community. Rural communities tend to be suspicious of 'outsiders' (Collins et al 2009) and value relationships with others within their own communities (Maybery et al 2009). However, small rural communities do not have extensive services and in situations involving large scale physical and emotional damage, external services are a necessity. This is recognised within Theodore. What becomes clear in this theme is that those services that had prior connections to the community or who used local people as employees or brokers, tended to be more readily accepted by the community.

> Sometimes I was probably the only local person in the room, so they'd identify a point, or an issue, or someone that had identified that they'd had a problem and quite often I was able to just give some local knowledge to that, which made for – you fast tracked the fixing of it usually. Or someone could come up with an idea and I could say, 'Oh yes, that'll work', or I'd say, 'No, I don't think you'll get that to work in this community'. So we were able to – it was just that local linkage, I think, that worked really well (Meredith).

Importance of local coordination

During both the response and recovery phases a number of services came to Theodore to help with the clean-up or to provide more long-term support to residences. Response teams came from Red Cross, Lifeline, the Armed Forces, CentreLink, Department of Primary Industries, Anglicare, State Emergency Services, Queensland Rail workers and other government and non-government agencies. In addition, large numbers of donations were coming into the community even before the flood waters had subsided. Such a large influx of people arriving amidst the chaos of residents trying to clean up their homes and businesses required significant coordination. This was provided by a small group of local people brought together by the Local Government member (who had family ties to the area as far back as 1863) and consisted of a local doctor who had worked in the community for some 25 years, a Theodore District Health Council worker who was also a long term resident of the community, and a cotton grower whose family had been in the region for a number of generations. While the nature of this group and the leadership role they played will be explored in more detail in a later theme, this local group provided a pivotal point for the response and recovery efforts. In a small community with dense networks there is the capacity to provide and anticipate for people's needs that might not be available in circumstances where less organic support was the only type available:

> So that it was this person [local health staff member whose house was also flooded] here is out working who's cleaning their house? So let's get that house done. Let's go and

clean that house first. Let's make sure that when they go home from their coordination, that they can actually get into a bed with clean sheets. When we support those people who are supporting, the support becomes stronger (Trevor).

Waste and inefficiency through lack of coordination

It is ironic that a natural disaster can bring out the best in people wanting to help, but that such help can also be a hindrance to the work that needs to be done. In Theodore, it is evident many of the agencies did not provide prior notice of their arrival which would have been helpful in being able to better utilise these services immediately.

> In a lot of cases, these people just turned up and we were trying to do our best and suddenly, ah, this mob's here or that mob's there or the Salvo's here. You'll think, 'Oh God, what do we do with them? Who ordered them?' So yeah, that was a little bit – yeah not much local communication on that so, one of the things I battled with was what are these people doing here? Why are they here? Can we handle them?... So yeah there was a bit of an issue with the coordination and advice to me on the ground, so that I knew these people were coming and where I could house them when they got here… But they just all came with no coordination as such and me having no knowledge of what services they were providing to whom (Bill).

> But we had to try and coordinate how we did that, how we sent them out and even the army psychologists – as I said we ended up with seven of them, but no one was well lined up for them. So we had to think, 'Well we've got these seven people for a week, how are we going to utilise them?' So what we did, all the staff from the doctor's surgery and from the aged care hostel and centre, they were still on full pay even though they didn't really have any work to do, so we utilised a lot of those staff to be our community liaison people, I guess. So we'd put a local person with the psychologist or the social worker, whoever we had and send them off (Meredith).

Meeting needs of the local community

Although natural disasters cause significant physical damage to the landscape and communities who live within that landscape, the damage sustained by individuals and communities goes much deeper. This theme draws out the needs of the Theodore community that needed to be met during the response and recovery phases: infrastructure and material needs; economic needs; emotional needs; and educational needs. It also highlights whose needs were perhaps not being met within the community and thus identifies gaps in services.

Throughout the clean-up, a daily community barbeque was provided at the makeshift headquarters and this not only provided food for residents and workers, but provided a space for assessment of residents. This informal way of residents picking up on the needs of other residents and seeking out appropriate help is a strong feature of this theme and demonstrates the deep and extensive social networks that exist within the community.

> We were advertising [the barbecues] and they were a great place for me especially to work with because of the services that came in, we didn't have a referral process of anything formal set up. So to identify people quite often at those barbeques I'd just look

around and if I saw someone not mingling or hanging off by themselves I'd either go and speak to them or I'd take someone with me and we'd just go and strike up a conversation. I've got a nursing background, so we were pretty quick to realise which people were just tired and buggered and wanted to be by themselves, or people that were really in need of some help and needed someone to talk to. That's how we did a lot of the identification and we made that really, really clear at every meeting and at every function that if anybody was worried about someone else and didn't know what to do, to at least come and speak to myself about the person and we would then source services or whoever we could grab at the time and go to that person (Meredith).

This issue of who wins and who loses economically from disasters is one that needs to be addressed within a broader policy area because there are very real financial viability implications for small rural communities who do not have many businesses and whose businesses may not have sufficient reserves to navigate their way through the financial disturbance. In Theodore, for example, the electrical goods store went out of business within 18 months of the floods because most houses had been supplied with new electrical goods through insurance and donations schemes. In comparison, the bakery was able to survive through the support of local people buying bread and coffee, whether they needed it or not (see first theme).

The clean up certainly happened much quicker than they had anticipated, which I'm not sure is a good or a bad thing, because it sort of meant that people were in shock and they weren't given time to assess what they wanted to keep, what they wanted to throw out themselves. Someone just came in and had a big clean out for them and I think … that's causing a bit of grief even now still, because people have realised that that got thrown out and it probably could have been saved, but at the time they didn't make that decision and for some they couldn't make that decision (Meredith).

The need to have emotional support through counselling and other activities such as community events was raised by a number of participants, although it was also recognised that the funding that provided these services was due to run out in June 2013 and there was concern about what may happen after that time when services would be withdrawn.

When all the physical fixing uping [sic] is done and all that's left is the financial situation, the emotional stuff that afterwards too, where you realise, like I remember sitting there afterwards going I'm just not the person I used to be, I don't feel the same way in energy, in tolerance, in any of that sort of stuff. You notice that after a while because you think I should go back – you think I should be back to normal by now, maybe I'm changed forever. Those sorts of parts are actually a lot trickier and that's probably the times where you look for the Lifelines and the Anglicares and all that sort of stuff. When you're clearer about what the actual personal problem is. It's hard too because I know 12 months later it's really hard – you know that that's when a lot of people are needing to access the services. But trying to advertise or drum up any sort of interest in the F word after that long afterwards, people are just sick of it. They are sick of talking about it (Erin).

Complications related to government funding

The constraints in services provision were perceived in both the response and recovery phases, whereas the duplication of services was perceived primarily in relation to the recovery phase, although it should be noted that not all participants perceived any duplication. Indeed, as an earlier theme indicated, considerable efforts were made locally to coordinate services to minimise duplication or overlapping of services within the community.

The constraints in provision primarily related to established services at the time of the flood being able to 'stretch' their funding guidelines to enable them to provide immediate support to the community.

Furthermore, some of the government regulations associated with recovery counselling schemes, in particular, have created their own constraints and have likely contributed to the implementation of services that may not have been entirely warranted.

> But the government given them so many clients that they've got to see to match that money and the outputs. So it was; it's a real stress factor; trying to – they want to help these people but, you know like to get four, five, six clients a day every day is a big thing to do (Lorna).

It should be noted none of the participants denied the necessity of significant emotional support being provided to the residents of Theodore after the flood events, or that long-term support would be needed as the community slowly recovered and rebuilt. However, how such support was implemented as a direct result of some government guidelines associated with the financial support for these services was certainly questioned by a number of participants.

Stepping up to leadership roles during a crisis.

A comment that is made quite frequently in casual conversation in Theodore is, 'Theodore has a lot of leaders'. While some of these were people who were expected to take up a more prominent role because of their current paid or voluntary work, a number of others also stepped up. Some of these leaders were perhaps not prepared for the emotional, mental and physical strain such an intense role can involve during a crisis. It was often people who were playing a support role in the community who were in need of support themselves, but whose needs may not have been met as well as they could have been.

> I think those who rose to the occasion in leadership roles immediately were those that we would have expected to do that. I think they played their role very well… I often thought who was there to prop them up and it was the wives obviously (Brenda)

Although, as Brenda's comments suggest many of the leadership roles were undertaken by men, many were also picked up by women. As such, it is not gender that seems to have been a defining feature of the leadership shown in Theodore. Rather, characteristics that contributed to the leadership related to being known and trusted in the community, a track record of stepping up, and social and political connections.

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> I think with the expected things – like I think there's an attitude and expectation about CC and about his role and about his history with the community… He's been validated within the community (Jane).

> But I guess at the same time too being a woman in agriculture and being a mother of a young child, I play a different role to what those 50 year old men do… So while they were busy out on diggers fixing things and doing all that physical stuff, us women were left in the house and I was looking after my daughter, but we were sort of left there just thinking that the most we could do was have a hot cooked meal at night. I really hated that and I felt that if I could – it was my way to help out [taking on leadership role]… I took on that because that was where I could – felt I could be most useful (Erin).

The intensity of the role and the number of people who stepped up to a leadership role within the community suggests that some may not have been as well prepared for the role at the time. As such, a number of aspects were identified that are needed to develop leadership so they are better prepared to take on roles in a crisis.

> Yes, I think they could be, even just within personal development, communication type development, understanding of why people are angry, why people are sad. I guess we've had a lot of that since the flood, which has been really good. I guess if we're flooded again tomorrow we would do things a whole lot better (Meredith).

It appears a number of people within Theodore responded to the flood by taking on additional roles and mobilised their leadership potential. Their ability to be able to do this probably rests with a long and strong commitment to voluntary activities within the town, where many have worked in local committees together prior to the floods and had established firm relationships and networks as well as trust in the abilities of others. While the leadership roles they took on meant they became more visible within the community, their success in these roles depended on the relationships they had formed previously.

Conclusion

Taken together, the six themes that emerged in this case study to a large extent support Norris et al's (2007) model of community resilience as a set of networked adaptive capacities (figure 1). They highlight the importance of information and communication, of community competence, of social capital and of economic development as the community of Theodore learned to deal with the floods of 2010/2011 over time. Some aspects were strengthened as a result of the floods, for example, it is likely community competence and social capital have increased as the community has mobilised and become engaged in a number of community activities and reflected on the community as a whole as it perhaps did not do prior to the floods. The information and communication channels within the community have also likely been reinforced and the community have explored new ways of communicating with each

other through mobile phone and social media, an aspect that while not drawn out in the themes, was evident during the floods and which was mentioned by a number of participants. Economic development, however, is the one aspect of the model as it applies to Theodore that may not have benefited from the floods, although some people may have gained personally as a result of renovations to their houses and the replacement of household goods. Overall, the floods had a devastating impact on the rural properties and thus the income of farming families who together form the life-blood of the economy in Theodore. The floods also affected directly and indirectly on the viability of businesses within the township. These businesses are a vital part of the community as they provide everyday services to the people of the town and surrounding area, services that are not available otherwise (the nearest township to Theodore is 50km away).

This case study of Theodore and the way this community responded to the floods of 2010/2011 has demonstrated there were a number of factors that contributed to the township being able to respond and recover in a positive manner. Not everything worked perfectly, but the level of prior social capital within the town and surrounding district, forged over many years of facing a range of adverse events and learning how to work together to make the most of opportunities for the town, meant the residents of the area were able to pull together quickly and effectively when faced with the level of damage and destruction left behind by the floods. To a large extent they controlled the services that were deployed during the crisis and played a major role in directing services during the recovery phase and thus displayed a significant level of collective efficacy. These features are evident in the themes that emerged from this case study: understanding the rural context of events; importance of prior relationships; importance of local coordination; meeting needs of the community; complications related to government funding and services; stepping up to leadership roles during a crisis. These features also support the model of community resilience as a set of networked adaptive capacities put forward by Norris et al (2007). This report has explored this model and considered how the themes derived from the case study align with this model, suggesting on the whole this model works quite well in explaining why the people of Theodore have dealt with this particular crisis quite well. By no means have all issues been resolved in Theodore, and there will continue to be concern regarding the long term effects of the floods, particular concerning the financial impact of the events which are likely to have implications for the mental and emotional health of individuals and families. However, as a community, there are clearly signs the community has navigated its way through the last two years in a way that has probably resulted in a stronger community and one that is better prepared to face future adversities.

The Urban

Introduction

In many respects, the urban environment poses a different set of challenges to that of the rural. As we explained above, rural environments have distinct boundaries, a more readily identifiable membership, more grounds for common purpose and often more dense place-based webs of social connection than cities. In urban environments the boundaries of 'suburb' or 'neighbourhood' are drawn for instrumental or bureaucratic purposes and may or may not reflect the boundaries of an actual community. Geographical proximity and the assumption of community can mask the fact that in urban environments, people's networks are formed for social, economic, educational and cultural and recreational purposes and often do not coincide with the geographical environs of one's suburb. If we add to that the high day to day and residential mobility of Australian urban dwellers, the physical location of one's dwelling becomes a much less reliable indicator and source of potential social support than in it might in a rural or regional location.

Disasters, such as those that occurred in South East Queensland provide an opportunity to investigate the ways that people in cities organise for disaster and how they support each other, as well as the relative importance of institutional actors in disaster mitigation. The ways in which disaster resilience is understood is likely to both similarities and differences rural communities as a result of these differences in context.

In this section of the report we use qualitative case studies, conducted in Fairfield in Brisbane and North Booval in Ipswich, two quite different locations, to investigate the nature of recovery and resilience in the urban setting. Tierney (2007: 510) argues that, rather than fundamentally reshaping the existing social order, natural disasters function as 'breaching events' which reveal the structure of social order more clearly than do peaceful times when those structures are more implicit and assumed.

Fairfield

In June 2012, the State Library of Queensland opened its Floodlines exhibition that aimed to provide a social history of the state's 'Summer of Sorrow' (O'Brien & Howells, 2011). Celebration of community capacity was an important sub-theme of the exhibition installations. Under a heading entitled 'Resilience', an information panel celebrated the popular momentum which drove the recovery effort across the state in the first months of 2011, reminding exhibition visitors of the

> resilience, generosity and community spirit that was shared during and after the floods, in the acts of kindness and lines of volunteers that filled our streets and farming communities (Floodlines 2012)

Many of the photographs documented the enormous volunteer effort that was focussed on flood affected suburbs in Brisbane and which allowed houses and streets to be cleared of flood damaged goods and debris within a very short time. These words and images reminded exhibition viewers that ordinary people within the community had together, done something extraordinary, and exhibited enormous good will towards the flood-affected.

In a small brochure available from the exhibition, ideas about how to build resilience to future flood events were also discussed. Here, initiatives aiming to build a sense of community were prominent. One project included small stickers that urged neighbourhood members, 'Don't wait for a flood to say g'day'. In sum, the message from the exhibition was clear. A strong grass-roots community response will help us to be more resilient both as we seek to live more disaster ready lives, we experience disaster, and we recover from that experience.

Entitlement

Community organisations and individuals within informal community networks provided an enormous amount of assistance, practical and emotional to flood-affected residents in Fairfield in early 2011. Unknown volunteers filled the suburb as the flood waters receded, and so did more fortunate unflooded neighbours, work colleagues, members of school communities, church groups, and sporting associations. In later periods many were the recipients of economic and practical assistance from non-government welfare groups, community centres operating close to the suburb, and organic groups who sprang up in response to observed needs of flood affected residents. One example was a local Flood Recovery Centre, which operated, as a voluntary service, out of the local state school in the area for 12 months. (State government funding was later awarded to make this a fully-funded community centre). Another was a Garden Recovery Service, begun by two women in the neighbourhood, one of them a flooded resident, who rallied volunteers together to help flood affected households rebuild their gardens.

Often informants expressed surprise about the diverse sources of this support, and wondered that various groups of people coalesced and coordinated their efforts to provide them with particular forms of assistance. This prompted recipients to recognise their place within a range of community networks, even while they had not necessarily felt fully part of those networks prior in the flood. This evidence supports claims about redundancy and the importance of overlapping reciprocal social networks. It also suggests that we may be unaware of how deeply we are integrated into those networks until they come to our assistance.

Problems of reciprocity

 This created problems for some. For example, a number of informants talked about the extent to which their pride was at stake when offers of assistance came to them through the local community. Rather than accepting that they were entitled to draw on that assistance, some informants talked about the need to be seen to be coping before their peers [in a similar vein to informants described above]. This was particularly so in the early days of the flood-clean up when everyone was living off adrenalin and our streets were full of volunteers.

> For their part, the providers of help in my community rejected outright the idea that they needed to be repaid for their efforts. In this regard, my informants who had worked to provide assistance said that it made them feel good to help and that was enough: 'That they could do something in the community' ('Carol', interview June, 2012). Others called this 'a privilege' ('Megan', interview November, 2012).

Many of the recipients of local informal help felt overwhelmed by the idea that they were 'in debt' to their community. One informant argued she was so embarrassed by her inability to pay back the kindnesses shown to her that she was no longer able to talk to one particular person in the suburb and would avoid casual contact wherever possible ('Judith', interview November, 2011).

Within the disaster management literature there is very little discussion of the way recipients of community assistance understand and respond to that assistance. This research has, to date, tended to reinforce the idea that more sources of community assistance equate to more resilient communities. However, this equation fails to recognise the emotional strain felt by people who receive assistance from their community, but absorb that assistance as individuals. Even though they may be viewed by providers of this assistance as naturally part of a community upon whom they can make claims, recipients may rationalise that assistance in a more individualised sense, thinking about what they 'owe' the providers personally. Others found problems with accessing assistance from a faith-based organisation, which they had not previously supported. Informant responses suggested that people felt more entitled to government money than charity money and more comfortable with government procedures verifying their entitlement than the more personalised but personally intrusive 'charity' organisation approach.

Confusion about this form of response may arise forobservers who assume that we live in close webs of reciprocity. Images of community solidarity in the face of adversity helped promote the idea that the communities of Brisbane, flooded or unflooded, would face up to the challenges or disaster recovery together. Such messages seemed to hinge upon the Putnamesque principle of reciprocal obligation that informs analysis of community responses within the disaster management literature.Some even contend that reciprocal networks intensify as result of the disaster experience, and that this provides as an added momentum to the recovery effort (Ganapati, 2005).

On the other hand, research conducted in Fairfield shows that disaster-related assistance frequently brought neighbours into contact for the first (and possibly last) time. Given that there was no preceding relationship with that person and the helper may have acted on the basis of generalised norms of behaviour rather than neighbourly concern, the recipient was often left in a quandary in terms of how, and whether, to reciprocate.

The boundaries of a suburb are porous and so community is fragile. In addition to the routine mobility that is part of urban life, there were also added pressures on hard-won community that were caused by the flood and its aftermath. Some informants spoke of families living in rental accommodation in their street, and with whom they had made important friendships, leaving overnight (it was described as 'disappearing') without a farewell or a forwarding address ('Lara', interview September, 2011). Others described the neighbourhood households that broke up as marriages succumbed to long-term dissension, and stress. These developments were lamented when they also resulted in the disappearance of neighbourhood friends.

> I have witnessed rivalries emerge, fuelled by envy between neighbours over who has insurance coverage and who does not, who should access government money and who should not, and who might be able to take advantage of government property buy-back schemes and who could not. I have also seen lifelong friendships evaporate as neighbours conflict with each other over the design and appearance of newly rebuilt homes. One informant told me tearfully she was 'in mourning' for her community.

Since 2011, many of community events have been staged to assist the residents of Fairfield in the flood aftermath. While these events have generally been well-attended, there was a lack of demographic diversity at these events. To a large extent they appeal to white, middle-class, relatively affluent people; those with an established level of comfort, rudely disrupted by the disaster. Notably absent have been the migrant groups, the unemployed or those with disabilities; perhaps hampered by mobility challenges, social isolation and ensuing lack of access to information networks. The Fairfield Flood Recovery Centre provided a range of important supports for the elderly in our community. Lacking the types of networks that develop as a result of involvement in school communities or that evolve through work, this group was potentially at great risk.

For other groups within the population, however, this has not been the case. The predicament of Farifield's Somalian and Ethiopian populations has not been the focus of similar attention, even though many were living in highly precarious economic circumstances at the time of the flood and were also made homeless by the event. There have been some notable and important efforts made by individuals to support these families, particularly those whose circumstances became known through the local state school networks. But in general terms, this population of 'renters' rather than home-owners has been largely displaced to other parts of a city as a result of disaster. This scenario suggests that ethnicity and marginal economic status can function as barriers to inclusion in the community relief effort and can position people beyond the community networks which exhibit a sense of reciprocal obligation.

Examining community based flood recovery from a gendered perspective also indicates the selective nature of 'grass-roots' disaster relief work. In the earliest 'clean-up' stages of the event, the face of the volunteer effort was largely masculine. The work was heavy, dirty, intensely fatiguing. Men rose to the challenge and poured into the suburb, many seeming to relish the chance to "get their hands dirty"; some so zealous that their 'enthusiasm' needed careful management. If these men had children it seemed 'natural' that female partners remained at home with them, so that they would be safe from what we were told was the toxic flood aftermath. Often those women helped out in ways that were more 'feminised'. Sorting and washing mud sodden clothes, bedding or kitchen settings, cooking food to keep the manual labourers going. The gendered divisions of 'mud and friendship' seemed quite clearly established in these early days.

As time has passed, the gendered face of recovery has become more profoundly marked with women seemingly more comfortable about contributing to this effort than men. As needs have become more complex, and problems more difficult to solve, psychological strains in the community have become more evident. In this environment, women volunteers seem to have come to the fore, frequently looking to create opportunities for people to talk through their experiences. But these opportunities are also taken up, more usually, by women than men. This also raises questions about where, how and if, men have been willing or had the opportunity to access this psychological assistance into the long term.

Literature examining the gendered impacts of disaster indicates that it is quite typical for ongoing flood recovery work to assume a 'feminine face' particularly when the 'heavy lifting' stage of the recovery effort has passed. This work also suggests that it is commonly women who drive innovation in this area, building new organisations catering to observed social needs that go unmet (Yonder et al 2005, Enarson et al 2007). These claims are supported by observations of women's innovative responses to community need in Fairfield, and their ongoing willingness to reach out to vulnerable groups who have struggled to cope in the post-disaster context. But this effort has also had a price. One of the women who led the community recovery effort in Fairfield informed us that she experienced some difficulty in making her commitments outside the home understood by her primary-school age child who tended to resent these as an imposition on family life.

Even though these women did important work in the suburb, they could not reach all those in need. Certainly they rapidly identified the retired and elderly members of our suburb as potentially at risk and developed services which specifically assisted these groups. But r vulnerable groups such as Fairfield's migrant and refugee populations and the long term unemployed or disabled were harder to include. These gaps in community participation have also been noted in other studies of community response to disaster and indicate that importance of understanding how other social markers of inequality can create "lines that divide" (Enarson and Fordham 2001) or barriers to social inclusion that undermine the participatory nature of community disaster response (Peek and Stough 2010, Enarson et al 2007). The experience of disaster is patched onto a community canvas that is already coloured. Disaster itself does not necessarily mean communities will become more inclusive. While the limitations, exclusions and gendered pathways of engagement within the disaster-affected community under study are worth noting they should not be viewed as a failure. It would be unrealistic to imagine that an ideal community exhibiting a fully exclusive sense of reciprocal obligation would suddenly reveal itself in the post-disaster context.

North Booval

Central to the idea of community resilience is the local neighbourhood and the strength of local leadership, social ties, collective action and civic participation in helping residents prepare for, and recover from, disasters. Yet despite the attention afforded to the neighbourhood in these debates, there is a relative silence on the role of *neighbours* in community resilience, apart from general advice that residents should 'know their neighbours' so they can turn to them during emergencies. Drawing on qualitative data on residents' experiences of the 2011 floods this section examines the roles that neighbours played in the low-income suburb of North Booval in assisting one another prepare for, and recover from the flood. Findings show that existing relations with neighbours – both good and bad – influenced the nature and extent of support provided by neighbours during the flood, and that neighbours in general provided low levels of assistance compared with family, volunteers and community organisations. Nevertheless, given the seriousness of the flood risk, neighbours appeared aware of certain responsibilities to warn one another of the impending flood, even when relations were poor or absent.

Source: Courier Mail (2011)

In Ipswich, where there was little warning of the severity of the impending disaster, North Booval was one of the most badly affected suburbs, not only in terms of the extent of the damage, but also its effect on residential instability and the housing market as residents were slow to return (Solomons, 2011). Table 1 shows the extent to which tenure in North Booval changed between census dates, which included the flood.

Table 1. Residential Tenure for North Booval, Ipswich and Brisbane, 2006-2011 (ABS, 2012)

	North Booval (%)			Ipswich LGA (%)			Brisbane LGA (%)		
	2006	2011	Change	2006	2011	Change	2006	2011	Change
Owned outright	32.38	23.33	-27.95	27.52	23.04	-16.28	30.20	27.72	-8.2
Owned with a mortgage(b)	35.77	29.14	-18.54	38.76	37.43	-3.43	32.65	33.77	3.4
Rented:									
Real estate agent	15.18	26.67		16.25	22.91		18.69	21.12	
State or territory housing authority	1.22	1.73		4.60	4.03		3.81	3.89	
Person not in same household	9.21	9.88		6.78	6.48		9.03	8.38	
Housing co-operative/community /church group	0.68	1.36		0.6	0.64		0.51	0.58	
Other landlord type(d)	0.81	3.21		1.72	2.20		1.18	1.17	
Landlord type not stated	0	0.99		0.67	0.53		0.67	0.51	
Total	*27.1*	*43.83*	*61.73*	*30.63*	*36.84*	*20.27*	*33.89*	*35.65*	*5.19*
Other tenure type(e)	0.4	0.37		0.36	0.43		0.75	0.76	
Tenure type not stated	4.34	3.33		2.74	2.25		2.52	2.10	
Total	100	100		100	100		100	100	

Neighbours remain a salient feature of suburban life since their physical proximity renders them an important source of local support (Unger and Wandersman, 1985), including during disasters where they can act as unofficial warning systems (Kim and Kang, 2009; Nagarajan et al., 2012) and be the first responders once the emergency has passed (Smith and Dowel, 2000). Among disaster researchers and policymakers, there is explicit recognition of the importance of neighbourly ties in building resilient communities (Breton, 2001; Kirschenbaum, 2004).

 As previous research demonstrates, neighbours remain a salient feature of suburban life since their physical proximity renders them an important source of local support (Unger and Wandersman, 1985), including during disasters where they can act as unofficial warning systems (Kim and Kang, 2009; Nagarajan et al., 2012) and be the first responders once the emergency has passed (Smith and Dowel, 2000). Among disaster researchers and policymakers, there is explicit recognition of the importance of neighbourly ties in building resilient communities (Breton, 2001; Kirschenbaum, 2004).

Placing neighbours under the spotlight enables us to circumvent debate over the existence or absence of community in urban neighbourhoods and to say something more meaningful about the likelihood of neighbours being available as a form of support even where traditional conceptions of community are found to be absent.

Our findings suggest that while these patterns indicate different levels of neighbourly support reported by participants, the severity of the event was such that it also generated a more

'situated or occasioned' form of neighbouring (Laurier et al., 2002: 353) where certain rules and moral obligations among neighbours were enacted even where usual neighbourly interactions were minimal.

In a UK study on neighbouring Crow et al (2002) observed that, rather than there being some prevailing moral order of neighbourliness to which residents are compelled to conform, patterns of neighbouring were 'actively constructed and chosen' by individuals. This was evident among participants. While some appeared far more neighbourly than others, there was no obvious set of local norms in various neighbourhoods that determined levels of neighbourliness and neither did good relations with one set of neighbours necessarily transcend into a neighbourly place. Instead, participants appeared far more selective in determining which of their neighbours they became friendly with, based on various criteria such as similar stage of life-cycle, a sense of commonality; shared interests in other activities such as a Church.

Low income suburbs like Booval tend to group people together on the basis of cheap house prices and rent and perhaps little else. There was a high degree of suspicion toward neighbours and a desire to stay out of each other's lives.

This sentiment translated into a relatively low level of local community support during and after the flood. There are practical as well as ethical reasons for this more muted level of neighbourly support. The first is that such a high number of households were flooded that there was little capacity to provide assistance beyond one's own household and the second is that the high number of renters in Booval meant that once tenants had secured their own property, there was little incentive to return to a landlord's house or linger in the neighbourhood once alternative accommodation had been found.

When we asked participants who had been their greatest source of support both during and after the flood. All but two said family and friends. One participant, who had lived in the same house in North Booval for 28 years indicated that it was 'friends and neighbours' who had assisted him the most, however assistance tended to be from those neighbours who had also been residents for many years, rather as an outcome of any generalised norm of neighbourliness.

Basic obligations of neighbourliness were performed. Times when it is acceptable to approach neighbours and disaster would be one of them. Also, while participants received advice from friends and family, in many cases they also checked with neighbours because – as neighbours – they were potentially in the same situation and those who had lived there a long time also had local knowledge, including of the 1974 flood. Once participant, for example, explained that his neighbour knocked on his door because he had lived there a long time.

Obligations of neighbourliness seemed to play out even when relations were poor. Nagarajan et al (2012) suggest that the decision of which neighbours to warn can vary due to prior contact/hostilities with neighbours' yet it appears in this case that the risk of flood was

significant enough that people were willing to warn those who they did not like, even if they did not go out of their way to do so.

Also there were particular types of neighbours that they were most likely to forewarn, even if they did not interact with others. Official material encourages residents to look out for those who are vulnerable – the elderly, the disabled, those with young children, and several participants reported how they made an effort to alert a neighbour who they knew might be particularly vulnerable.

In most cases, assistance with cleaning homes and sorting through the wreckage did not come from neighbours, principally because – as one participant explained – in many cases 'they were all just so busy with their own houses'. However, there were some instances of neighbours helping taking it in turns to clean one another's homes, or assisting neighbours while their own homes remained flooded. In most cases, however, this occurred among neighbours who were already very close. Another participant spoke extensively about his neighbour who had not only warned him about the flood but also gone looking for him in the evacuation centre some days later to bring him back to his house so he could inspect the damage. He explained how he first assisted his neighbour with his own home while leaving his own place to a large cohort of volunteers he had never met before.

Unlike Baumgartner's findings (1988) there is generally no prevailing moral order to which residents must conform and that their willingness to engage with neighbours is entirely personal. Yet, we found evidence of such expectations emerging in the aftermath of the disaster when, in one street, neighbours made the collective decision to work as a team and to clean up each house in turn rather than work on their individual properties as was the case in most areas a long term resident for example, described how he and his neighbours divided into groups and each group tacked three houses in turn. This had implications for those residents who either chose to opt out of this team approach, or who were not present to participate. This was met with reproach for the couple who chose to go alone:

> There was a couple down the end here who chose to do their own thing. We were back up and functioning days before they were. Because they didn't really join in … we just said well bugger ya, do it yourself, which is not the right thing to do but they had a choice.

Conclusion

Sense of community is stronger and local social interaction increases in the aftermath of a disaster, even if only temporarily. The underlying basis of a community development approach to recovery is through the 'empowerment of individuals and communities to manage their own recovery'. A number of participants reported that their relations with their neighbours had improved as a result of the flooding. During the clean up, in particular, they met neighbours who they had not previously known and with whom they will now chat or acknowledge with a greeting. For others, existing relations had been strengthened as a result of shared experience. In a low income environment like North Booval the neighbour effect was short lived due to the challenges of the effect of the disaster and the high level of

residential mobility resulting from the flood. The challenge for resilience is how to harness this brief window.

The State - Community Development Officers

Introduction

In Australia and internationally, responding to natural disasters is one of the great challenges of the new millennium. Community development has been embraced as one of the useful ways of preparing for, responding to and recovering from natural disasters, but the exact nature of this role is not yet well articulated. By examining a specific community development program designed in response to the 2010-2011 Queensland natural disasters, this research aims to better understand the role of community development workers and the tensions within this emerging body of work.

This component of the QCSSI report takes as its focus the Community Development Engagement Initiative (CDEI) which was established to assist with the reconstruction and recovery of Queensland and examines the 'roles, responsibilities and efficacy' of the state funded community development officers (CDOs) in 'building capacity for future resilience from subsequent disasters'. The research employed a mixture of document analysis, participant observation and interviews with a range of stakeholders including 19 of the 24 community development officers.

This section discusses the structural component of the CDEI by examining the roles and responsibilities of the CDOs. The tensions within community development work when it is practiced in and against the state lead us to challenge state interpretations and demands upon the practice of community development and the evidence regimes that define it.

In response to the 2010-2011 weather events, the Community Recovery and Wellbeing Package ($35.82m) was announced in April 2011. The Package was jointly funded by the Australian Federal (75%) and Queensland State (25%) Governments through the Natural Disaster Relief and Recovery Arrangements (NDRRA). Part of this package included $20m in targeted funding for a Community Development and Recovery package over two years until June 2013, to enable the 'implementation of a community development approach to the reconstruction and recovery of Queensland' (Department of Communities,2011). The Community Development and Recovery funding was split into two streams, with $9.37m assigned to a state-wide Community Recovery Flexible Fund, and $10.45m released for the Community Development Engagement Initiative (CDEI). The CDEI funded 24 community development officers (CDOs) across Queensland to work in disaster response (Department of Communities, 2011).

This section reports on research focused on the work of community development officers (CDOs) employed as a response to such disasters within the state of Queensland, Australia. It explains the context of the research, and locates it within a body of literature. Following a discussion of the research methodology, we consider the three main findings through the lens of the 'dilemmatic space'. We conclude by examining the implications of these findings and the need for what we have called ecological or organic practice.

In Australia, the National Strategy for Disaster Resilience, adopted by the Council of Australian Governments (COAG) in 2011, marks a policy shift from a reactive, command and control model of emergency management to one that promotes a pro-active, bottom-up approach to disaster preparedness and recovery (Goode et al, 2013). Importantly, the Strategy articulates the notion of shared responsibility by advocating that disaster resilience is, 'not solely the domain of emergency management agencies; rather, it is a shared responsibility between governments, communities, businesses and individuals' (COAG, 2011).

A broad body of research and literature has also captured this shift towards community responses to disaster management and recovery, including analysis of: community capacity building (Kenny, 2005); community planning (Pearce, 2003); community participation (Chandrasekhar, 2012); community resilience (Nicholls, 2012; Norris et al, 2008; Shaw & Maythorne, 2013); and community development (Mulligan & Nadarajah, 2011). In this article we will focus upon community development responses in particular.

For example, where disaster management has traditionally relied on strong centralised top-down command and control structures and a concentration on logistics (Pandey & Okazaki, 2005), community development responses begin with a commitment to community control (Kenny, 2005). What this also suggests is that at the level of principle and broad strategy there has been strong agreement on the importance of community involvement (Coghlan, 2004; Moe & Pathranarakul, 2006), at the level of praxis, processes have been less clear and the results far more mixed (Kenny, 2005; Pandey & Okazaki, 2005).

Method

To examine the dilemmas facing newly funded state CDOs in building capacity for disaster resilience, this research employed a mixture of participant observation and semi-structured interviews. Participant observation occurred during four regional forums across Queensland. In addition to providing a space for introducing CDOs to our research project and recruiting participants, observation at these forums helped the researchers deepen their understandings of the CDEI and its employment of community development processes and thinking. Of the 24 CDOs, 19 agreed to be interviewed. Interviews occurred at a time and place of convenience to the participants. Interviews with CDOs occurred across seventeen different regions of Queensland. Nine stakeholders were also interviewed to provide a broader policy and practice context for the work. These stakeholders included line managers, state government representatives and professionals in the disaster management field. Documents from the Queensland State Government and from the Local Government Association of Queensland provided additional history and context.

Findings

The official language of the community development program included crucial terms such as 'recovery', 'resilience', and 'preparedness'. Our research indicated that for CDOs attempting to operationalise them, these words were often points of tension within everyday practice. CDOs were comfortable in an interview context to discuss their practice within a disaster preparedness, recovery, and resilience framework, as well as a community development

framework. However, they also revealed that words such as *recovery* and *resilience* were generally not used in everyday grassroots practice, or were re-interpreted when working within communities. The language of 'resilience' incurred some scepticism, seen as empty rhetoric by community members and CDOs.

> Resilience is a buzzword amongst the agencies and the government and the workers and everyone else. It's one of those words that people in the community either just blink at you or say 'What are those words?' We don't use it. [CDO3]

This created a tension for CDOs who were caught between being responsive to the accountability/audit culture of government and the longer-term relational and partnership needs of community work. This was articulated by one CDO as the difference between the longer-term processes of community work as opposed to quick service-delivery mode:

> …through the floods my experience is that I've always talked to other agencies about, 'You know what, you just can't go out there and provide a service, you have to build a relationship; and that relationship means having some CD skills about how to build a relationship with communities and that's when your work will start flowing for you once you start using that framework.' [CDO11]

Another finding in relation to language and discourse was that 'preparedness' was the most palatable word for most community members, and therefore easier to use for CDOs. CDOs reported how,

> Our focus has been much more on preparedness because being prepared gives you a way to help you recover. It gives you back some degree of power. We won't be using resilience as a main focus because it doesn't resonate with people but the 'be prepared' focus was okay. [CDO3]

Thus we see an ambiguous role, with heavy accountabilities in a complex, sensitive and evolving context. In trying to understand what could assist the navigation of this practice space we therefore return to the community development literature and consider two crucial themes:

1) a community development workers' need for responsive, flexible, or what we have called an organic or ecological practice – in relation to language, politics and engagement;

2) the need for a different approach to *in-situ* education and training of CDOs within government-led programs such as this.

The time sensitive and political nature of the program, involving three levels of government, highly sensitive issues of death, grief, loss and distress, economic fallout, media attention and the need by politicians at all levels to be seen to be responding, all placed enormous pressure on CDOs to be seen to be acting, and to have highly visible aspects to their work. The program had extremely tight accountability mechanisms (with fortnightly reporting by each CDO to state government) and tools that placed emphasis upon quantity (e.g. CDOs mentioned reporting on number of meetings and the numbers of participants). This

experience accords with a global shift in development practice, where practice is being strongly driven by what is being called "the results agenda" (Eyben, 2013). There was little recognition of the invisible and slow nature of much of community work. This created a tension for CDOs who were caught between being responsive to the accountability/audit culture of government and the longer-term relational and partnership needs of community work.

The issue of time was crucial, with the relational practices of community work seen as requiring more time than the program often allowed. While one CDO saw the time pressures imposed upon the role as a welcome guarantee of avoiding building dependency, for three of the CDOs there was explicit frustration about the two-year time limit of their role. This limit was perceived as a constraint in terms of their CD practice and for the communities they were placed in.

> CD is years, it's lifetimes, it's not, 'here's a bucket of money for two years', it doesn't make an ongoing, sustainable community; it makes a short-term fix. It's been great, it's been a benefit and we've been able to do a lot but in some ways it's gone against those communities too because they haven't had to sit back and think about it…two years isn't long enough, two years isn't anywhere near the time…[CDO5]

The third dilemma reported on in our findings is that of 'hard' versus 'soft' interventions. In many ways the dilemma is illustrative of perception of community needs and assets, and the clear demarcation within government of 'siloed' approaches to intervention (for example, with one department responsible for fixing roads and another for 'fixing' people's mental health). In contrast, CDOs employing a more holistic understanding of communities and their needs, engaged 'on their terms'. However, they were then left with dilemmas when communities' identified their needs in ways that the official community development program did not allow them to respond to.

There are tensions between community perceptions of what a CDO should be doing and what a CDO states they are mandated to do within their role description. The issue of chain-saw use provides an illustration of this tension. As one CDO explained,

> Every community consultation led to chain-saw needs being the number one issue. Without a chain-saw ticket you cannot use a chain-saw. After a disaster everyone buys chainsaws and /or an axe. We need to encourage this – our role is to make it safe. [CDO1]

Community members argued to the CDO that what they needed was help to get 'tickets' (that is, a formal qualification) enabling them to use their chain-saws in the aftermath of a disaster. Residents' analysis was that the crucial issue after a cyclone or flood is clearing fallen trees so that they could go and check on neighbours and then start clearing debris to quickly 'normalise' the surroundings. The CDO dilemma is created when the CDO hears such a

request but is not mandated within their job description or the program policy guidelines to support the residents in such an initiative. As the CDO explained,

> [The program management] had an issue with it because they don't see it as disaster preparedness and argued that it fell outside the CDEI guidelines. They didn't ever ring me; they didn't ever confer with me to say what the hell has chainsaw tickets got to do with storm preparation. They just said it fell outside the CDEI guidelines. [CDO 1]

The official program focus is on 'soft' or psycho-social recovery work. Our findings indicate that the CDOs are mandated to facilitate psycho-social recovery but local people's understanding of recovery is often more focused on the 'hard stuff' of clearing and fixing roads and bridges or acquiring necessary infrastructure

The 'soft' skills of community development were contrasted with the hard skills of physical infrastructure, hazard management and reconstruction. Community development was named as being "fluffy" and "woolly". The dilemma became acute as community members lost patience and many CDOs gave accounts of residents getting angry. However, as flagged in our introduction, it is difficult for residents to understand the roles of the CDOs when community development itself is an ambiguous space (Kenny, 1996, 2007).

Conclusion

This section has sought to understand the implications for community development workers located in the emerging field of survivor development, through the experience of the 2011-2012 Queensland flood recovery work. This research has shown the complex and often compromised space in which community development is being undertaken, and the way in which the results agenda, and the political imperative of a program is often over-riding community agendas and bottom up practices. Findings also indicate that community development practitioners, caught in this complex and compromised space struggled with the language and discourse of official disaster response (particularly 'recovery', 'resilience' and 'preparedness'). Our discussion – recognising that the complexity and compromised space of much community development practice will not become easier as the results agenda becomes more politically attractive and institutionally embedded – considers the way that community development practitioners could re-conceptualise their practice accordingly. We argue for a conscious organic or ecological approach to community practice where the community worker is aware that they are in a 'responsive dance' – in relation to a holistic understanding of the shifting policy, political and program context (official roles and program goals/objectives, indicators) – while also being responsive to the community's use of language and their understanding of the need at hand. This conscious organic or ecological approach enables a practitioner to hold 'their own centre' so to speak, as changes occur around them.

Furthermore, we argue for a re-think of the kinds of learning spaces, training and support required of community development workers to be effective in such large-scale community development programs. Underpinning this paper is awareness that community development is not simply a set of skills and techniques, but an ongoing process of learning and engaging

with context. This requires reflexive processes to engage consciously with the emerging environment. For the state this means that there needs to be a whole new way of imagining learning, education and training of community workers in contexts such as disaster response.

For CDOs, reflexive practice requires activating personal agency and engaging in supervision, peer learning, mentoring and ongoing learning and reflection. Reflexivity may also require the creation by CDOs themselves, of these supports where they do not currently exist. Finally, for the broader field of disaster management this paper suggests some additional thinking is still required to understand the role of community in disaster response. Community development programs clearly have potential to enrich the field. However the location of community development programs directly within the state simply subjects these initiatives to state command and control structures and regimes of accountability. Only by utilising a systemic understanding and a more organic approach to developmental work can the intended policy shift of genuine partnership with community be realised.

Summary of Findings and Deliverables

1.   The relative effectiveness, from a local perspective, of crisis assistance and interventions from government and non-government agencies in facilitating community resilience post disaster in urban and non-urban areas.

Institutional assistance from both government and non-government organisations played a vital role in the short term and long term recovery process.   While this assistance was evident in all of our studies and was for the most part very welcome, it was not always well coordinated or targeted.

In our rural case study in Theodore, it was particularly important that where possible, organisations had **some form of prior relationship with the community**. Rural communities are bounded both geographically and socially and tend to be less receptive to 'outsiders' than urban residents. Relationships within these communities are strong and involve a high degree of trust and should be utilised wherever possible. For small communities, where endogenous assistance is not sufficient to deal with the level of support required, local **leaders and liaisons** should be identified early to communicate with community members.

According to the Living in Queensland survey, few people in Queensland **claimed crisis financial assistance** from agencies such as the Department of Communities (2%), Queensland Health (1%), charitable organisations (such as Red Cross, Lifeline, or Micah Projects; ~3%) or other local organisations. The majority of respondents who were affected by the disaster in 2011 did not claim relief from the Prime Ministers disaster relief fund (89%)

Rural communities have particular needs - one of these is access to **financial assistance, particularly for farmers** (and other small businesses) whose financial losses are far greater than just their homes.

Government programs can often **over-emphasise economic recovery** objectives over other types of psychological, emotional or social forms of recovery. Disaster responses that originate from within the community make possible a more i**nclusive and socially sensitive** form of engagement with disaster affected populations than state-based top-down programs.

Many people, and particularly in urban settings, found it difficult **accepting charity from strangers and from non-government organisations.** While the helper is acting on the basis of generalised norms of behaviour, the recipient is left in a quandary in terms of how, and whether, to reciprocate. Informant responses suggested that people felt more entitled to government money than charity money and more comfortable with government procedures verifying their entitlement than the more personalised but personally intrusive 'charity' organisation approach. In these cases there may be a role for **government representatives to broker or mediate** these forms of assistance.

In rural and urban locations it was found that there was a **significant reduction in material assistance and affective support once the initial cleanup was completed.** This was when

the long terms losses and recovery started for victims and it was in the 12 months following the actual disaster that longer term recovery strategies such psychological support, financial support and other less 'emergency based' services need to remain in site.

The constraints in provision primarily related to established services at the time of the flood being able to **'stretch' their funding guidelines** to enable them to provide immediate support to the community. Government agencies should consider allowing more local autonomy in determining budget allocation decisions in the aftermath of a disaster.

Many low income renters become quickly displaced as the result of floods. This scenario suggests that **ethnicity and marginal economic status can function as barriers to inclusion** in the community relief effort and can position people beyond the community networks which exhibit a sense of reciprocal obligation.

2.The level of cooperation between community organisations, residents and key government agencies in responding to disaster and building resilience for future disasters

It was very **important that organisations were coordinated and communicated their presence**, their capabilities and their intentions to residents. In rural Theodore it was evident that many of the agencies did not provide prior notice of their arrival, which would have helped in able better utilising these services immediately. In the rural context, it was important to **identify a group of competent and well known local people** who job it was to coordinate activity, to prevent duplication and to identify idiosyncratic (often personality based) needs for residents.

In both the rural and urban case studies, the sheer number of organisations and volunteers arriving at these locations created a **problem of redundancy and waste of resources.** Such a large influx of people arriving amidst the chaos of residents trying to clean up their homes and businesses required significant coordination. Those respondents who did participate in the post disaster recovery effort (33% of respondents) did so as largely as **unregistered volunteers** in the 'Mud Army' (8%, versus 2% who were registered volunteers), a locally organised event to distribute volunteers across the Brisbane area as a response to the damage caused by flooding.

Literature examining the gendered impacts of disaster indicate that it is quite typical for ongoing flood recovery work to assume a 'feminine face' particularly when the 'heavy lifting' stage of the recovery effort has passed. As time has passed inFairfield, **the recovery has taken on a more gendered character** with women seemingly more comfortable about contributing to this effort than men.

Sense of community is stronger and local social interaction increases in the aftermath of a disaster, even if only temporarily. In a low income environment like North Booval the neighbour effect was short lived due to the challenges of the effect of the disaster and the high level of residential mobility resulting from the flood. The challenge for the longer term resilience of such neighbourhoods is how to harness this brief window to take better advantage of this **window of neighbourly behaviour,** where residents are prompted to recognise their place

within a range of community networks, even while they had not necessarily felt fully part of those networks prior in the flood.

3.Where and how community organisations can complement government responses to disaster recovery.

It should not be assumed that local resources should 'get out of the way' once institutional actors arrive on the scene. In many cases the ability to respond to local needs is **best assessed by competent local people**. This was particularly the case in the Theodore case study.

There **needs to be a central hub for coordination of local relief efforts** and for ongoing assessment of residents' material and emotional needs. This hub should be somewhere that **local leaders are highly visible** and where residents and relief workers are welcome to come and to linger and mix so that these objectives are met. Theodore and Fairfield both had these facilities and were highly valued by residents.

In Fairfield, the Flood **Recovery Centre** operated as a voluntary service, out of the local state school for 12 months. (State government funding was later awarded to make this a fully-funded community centre). Another was a **Garden Recovery Service**, begun by two women in the neighbourhood, one of them a flooded resident, who rallied volunteers together to help flood affected households rebuild their gardens.

Notably absent from these recovery centres were migrant **groups, the unemployed or those with disabilities**; perhaps hampered by mobility challenges, social isolation and ensuing lack of access to information networks. The local volunteer flood recovery centre provided a range of important supports for **the elderly** in the community. Lacking the types of networks that develop as a result of involvement in school communities or that evolve through work, this group was potentially at great risk.

4.The role and influence of organic local leaders during the recovery phase of the disaster and how these leaders can be better supported to respond to future crises.

When asked to indicate who the most effective community leaders were in their community post disaster, survey respondents overwhelmingly nominated **leadership from local governments and other institutional actors** such as council members and police. While the leadership roles they took on meant they became more visible within the community, their success in these roles depended on the relationships they had formed previously.

Regardless of who community leaders were, **most respondents (83%) indicated that they saw this individual as a community leader prior to the disaster.** Disaster itself does not necessarily mean communities will become more inclusive.

In Theodore it was not gender that seems to have been a defining feature of the leadership shown. Rather, characteristics that contributed to the **leadership related to being known and trusted in the community**, a track record of stepping up, and social and political connections.

In Theodore, the leadership was provided by a small group of local people brought together by the Local Government member (who had family ties to the area as far back as 1863) and consisted of a local doctor who had worked in the community for some 25 years, a Theodore District Health Council worker who was also a long term resident of the community.

While some of these were people who were expected to take up a more prominent role because of their current paid or voluntary work, a number of others also stepped up. S**ome leaders were perhaps not prepared for the emotional, mental and physical strain** such an intense role can involve during a crisis.

5.The role and influence of state funded community development workers (CDOs) in building community capacity to respond to future disasters.

The official CDO program focus is on **'soft' or psycho-social recovery** work. Our findings indicate that the CDOs are mandated to facilitate psycho-social recovery but local people's understanding of recovery is often more focused on the 'hard stuff' of clearing and fixing roads and bridges or acquiring necessary infrastructure **'soft' skills of community development were contrasted with the hard skills of physical infrastructure**, hazard management and reconstruction. Community development was named as being "fluffy" and "woolly", which could constrain the ways the CDOs could involve themselves.

The language of 'resilience' incurred some scepticism, seen as empty rhetoric by community members and CDOs. The CDO dilemma is created when the CDO hears a request but is not mandated within their job description or the program policy guidelines to support the residents in such an initiative.

CDOs were caught between being responsive to **the accountability/audit culture of government** and the longer-term relational and partnership needs of community work. The program had e**xtremely tight accountability mechanisms** (with fortnightly reporting by each CDO to state government) and tools that placed emphasis upon quantity (e.g. CDOs mentioned reporting on number of meetings and the numbers of participants).

Our discussion recognising that the **complexity and compromised space of much community development practice** will not become easier as the results agenda becomes more politically attractive and institutionally embedded, considers the way that community development practitioners could re-conceptualise their practice accordingly.

For CDOs, reflexive practice requires activating personal agency and engaging in supervision, peer learning, mentoring and ongoing learning and reflection. Reflexivity may also require **the creation by CDOs themselves, of these supports where they do not currently exist.**

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