

**A framework for exploring the role of business in
community recovery following disasters**

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ABSTRACT

Recovery is about regeneration, building back smarter and better following a disaster event, while providing opportunities to contribute to a more resilient and sustainable community for the future. Individuals and communities are connected through collective economic, emotional, physical, spiritual, environmental and cultural ties.

Successful recovery recognises that both communities and individuals have a range of complex and interrelated recovery needs that should be addressed within a holistic framework that includes these components – economic, psycho-social, cultural, built environment and natural environment.

KEYWORDS

Recovery, holistic regeneration, disaster, resilient, sustainable, economic, psycho-social, cultural, built environment, natural environment

1.0 INTRODUCTION

1.1 WHAT IS RECOVERY?

Recovery is about more than simply restoring physical assets or providing rehabilitation or welfare services following a disaster. It involves the coordinated efforts and processes used to bring about the holistic regeneration of a community following a disaster event.

Recovery is not about a return to normality, it is more about regeneration, building back smarter and better to create a 'new normal'. Recovery can provide opportunities to enhance social and natural environments, infrastructure and economies, and thereby contribute to a more resilient and sustainable community (Ministry of Health, 2015).

Successful recovery involves recognition that both communities and individuals have a wide range of complex, interrelated recovery needs. These can be addressed in a coordinated way within a holistic framework such as those used by New Zealand and Australian emergency authorities (AEMHI, 2011; MCDEM, 2005) and developed in the CERA strategy (CERA, 2012).

In line with these frameworks, recovery can be conceptualised as five interlinked components or dimensions with community at the heart (see Figure 1):

- **Economic** – investment, businesses, labour, and insurance liaison (individual, business and government)
- **Psycho-social** – health, welfare, safety and wellbeing, education and community support services
- **Cultural** – amenity value, the arts, culture, heritage buildings and places, and sports and recreation
- **Built environment** – land use, housing, buildings, transport, infrastructure, including lifeline utilities (across all sectors – residential, commercial/industrial, rural, state-owned)
- **Natural environment** – air quality, biodiversity and ecosystems, natural resources (coast, land, groundwater and surface water quality), waste and pollution and natural hazards.

The five components are primarily categories for the purpose of functional responsibilities within recovery—when working with communities in recovery each component should be coordinated with all others.

The focus on community recognises that people do not function in isolation but as interdependent social groups. Individuals are intrinsically connected to their community in conscious and subconscious ways through collective economic, emotional, physical, spiritual, environmental and cultural more (AEMHI, 2011).

So although the impact upon individuals and households needs to be understood and addressed, it is equally important to understand the impact and disruption to the social capital and connectedness of communities and the need to support the regeneration of communities (AEMHI, 2011).

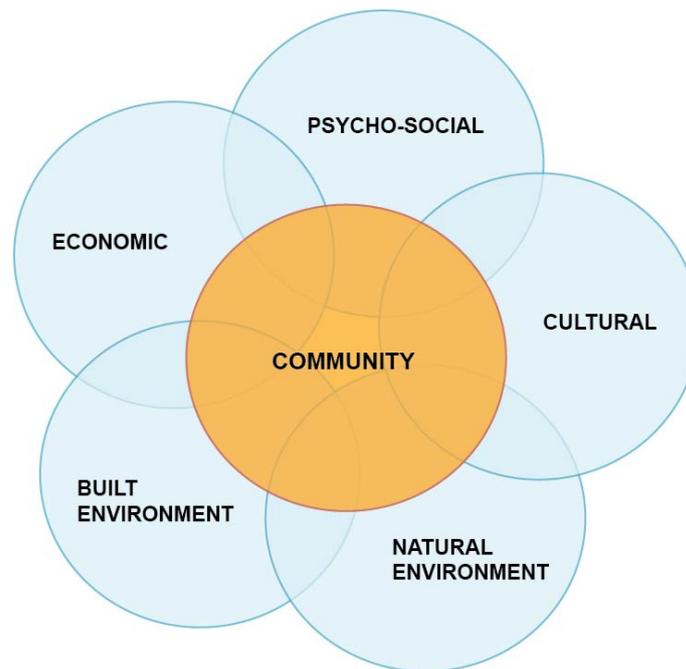


Figure 1 Interlinked components of recovery (adapted from MCDEM, 2005 & CERA, 2012).

Examples of the complex interrelationships between the components of recovery:

- The assessment and repair (**economic**) of peoples' homes (**built**) is a critical priority to help expedite people's **psycho-social** recovery
- The reinstatement of infrastructure, such as basic utilities, telecommunications, and access to transport (**built**) is essential to the reinstatement and continuation of business activities, which, in turn, are vital for the economic viability and sustainability of an affected area (**economic**).
- **Economic** recovery is both dependent upon and central to the needs of individuals. The individual is an important contributor to local **economic** recovery and sustainability through their purchasing behaviours and general consumption. In turn, **economic** recovery aids **psycho-social** recovery by allowing individuals and families to maintain livelihoods (employment security, payment of salaries and wages, debt servicing, access to bank accounts and insurance payouts). The **psycho-social** recovery of employees assists in **economic** recovery through their roles as productive, adaptive and resilient employees.
- Elements of the **built** environment that have social value, such as landmark sites and significant community sites, may be symbolically and functionally important to **cultural** recovery. Pre-identification of the importance of such amenities to peoples' social and emotional recovery, will help prioritise recovery activities.
- Natural disasters may alter the **natural** environment, infrastructure and transport routes (**built**) and restrict or destroy access to resources vital to an area's economic and social well-being. If, for example, large areas of previously productive land are rendered useless for farming or forestry, this may result in **economic** downturn and unemployment, which may lead to long-term **psycho-social** consequences.

1.2 RECOVERY OVER TIME

Recovery is a process rather than any specific activity, and one that extends over time as people deal with demands and challenges that differ depending on the stage of response and recovery they are at (Paton et al., 2014).

The recovery process can be described as "a sequence of interdependent and often concurrent activities that progressively advance a community toward a successful recovery" (FEMA, 2011, p. 7). These activities can be categorised into typical phases that indicate what occurs as the community moves from emergency response to short-term recovery and then medium-to longer-term recovery. Figure 2 illustrates how response and recovery activities vary across the phases.

The focus of this project is primarily the medium and long-term recovery phases. It is not concerned with the short-term response and relief activities such as measures intended to mitigate the immediate threat to life, environment and property. It is, however, important to recognise that pre-disaster preparedness and the decisions made and priorities set early in the response and recovery process will have a cascading effect on the nature and speed of recovery in the medium and longer term.

Figure 2 describes the recovery process from a formal societal/agency perspective and, with regard to what is required for the effective and sustained implementation of actions concerning community engagement. It does not identify the processes and competencies (individual and collective) that need to be in place within recovering populations/communities for recovery to occur in ways that respond to the diverse needs and expectations of affected populations.

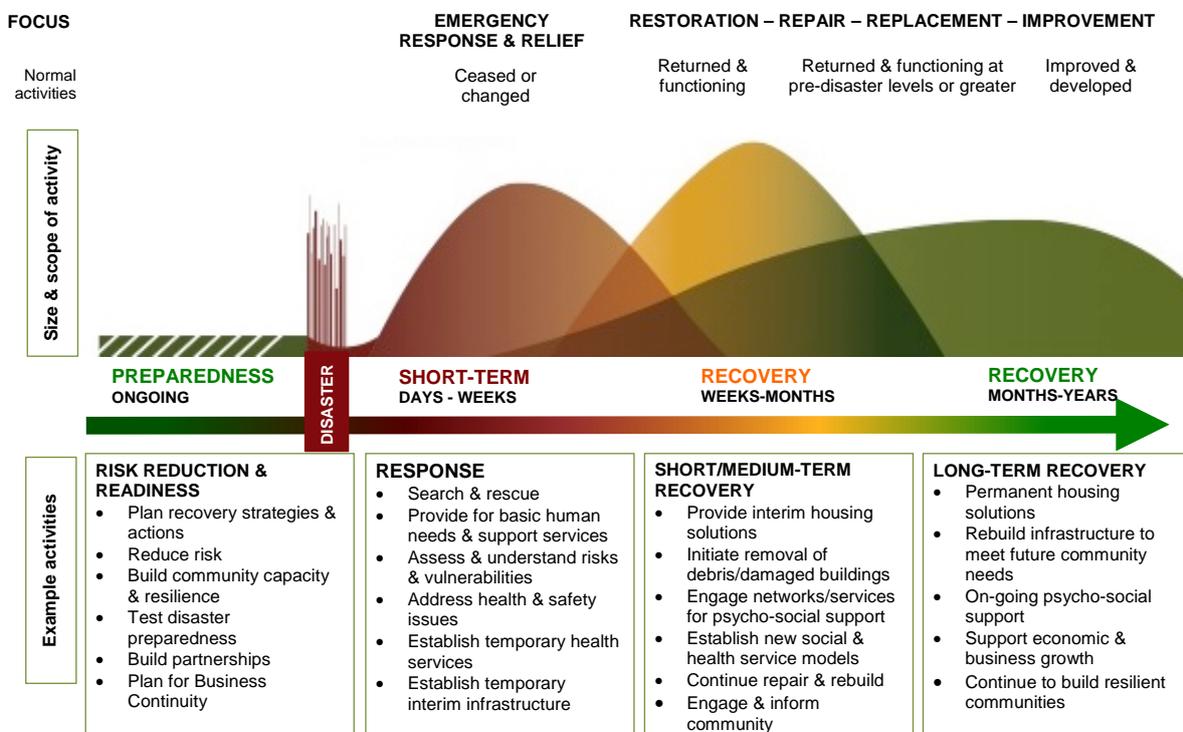


Figure 2 Recovery continuum – example activities by phase (adapted from CERA, 2102; FEMA, 2011 & Jacob et al., 2008).

2.0 ENABLING RECOVERY

The manner in which recovery processes and activities are planned and undertaken is critical to their success. It is also important that people/communities and formal recovery resources (agencies, government departments etc.) play complementary roles in this process. With regard to the former this means ensuring that appropriate community competencies (or enablers) are present to optimize the effectiveness of recovery intervention. This calls for the availability of mechanisms to assess community competencies (which can be developed based on community-based recovery research) and having programs in place to provide guidelines and support (and mentoring/advocacy if required) to develop community-based competencies and procedures if required.

Strategies developed to facilitate recovery tend to address psychological, social, economic and infrastructure issues separately. However, analyses of events such as the 2011 Christchurch earthquake have identified a need for a more comprehensive approach to conceptualizing disaster recovery (Johnston et al., 2015).

Models have been developed in an attempt to explain the complex interaction between the myriad of factors that influence recovery and resilience (e.g., Paton et al., 2014; Britt et al., 2012). They illustrate that how well people and communities deal with post-disaster demands and recover is a function of the degree to which several personal and community competencies are present. These include, for example, self-efficacy, active community participation, empowerment, trust, community leadership, and sense of community (Paton, et al., 2014), with specific clusters of enablers playing different roles in the ability of people and communities to respond to diverse recovery demands over time.

A rapid review of the literature indicates that competencies such as these and other factors (e.g., the importance of community-based leadership, how organizational culture and practices in recovery agencies can facilitate or marginalize community groups, the role of governance in recovery planning, organization and delivery) are central to effective recovery across all of the recovery environments. For this reason, the discussion is not structured by the environments in which recovery occurs, but by a thematic categorization of key factors that enable the recovery process. The key themes or enablers discussed include:

- Partnership and collaboration
- Community engagement and empowerment
- Needs assessment
- Strengths and vulnerabilities
- Fostering resilience
- Communication
- Leadership
- Planning and preparedness
- Resourcing

This brief summary is based on a rapid review of the literature. It is also important to note that these need to be operationalized and their implications for implementation must accommodate both community diversity and the fact that their application changes over time (and at different rates depending on household/community needs). An extensive review was

neither practical nor necessary for the purposes of this paper. The references included here should be regarded as indicative of relevant research; they are not intended to be comprehensive. Wherever possible, use has been made of international frameworks and models of recovery that are evidence based (e.g., AEMI, 2011, FEMA, 2011) and supported by recent local research.

The summary is provided as a framework for further discussion and prioritisation of issues to be considered in greater detail in the next phase of the project.

2.1 PARTNERSHIP AND COLLABORATION

The recovery process involves diverse disciplines, organisations and stakeholders who rarely, if ever, have to work or collaborate together outside of the recovery context. For a unity of effort and to ensure the effective realisation of sustainable outcomes, it is critical that activities are co-ordinated within and across organisational boundaries and within and across the different recovery environments. This does not happen by chance, and coordination needs to be planned for, developed and systems for effective action put in place and managed.

All levels of government, along with non-government, corporate and philanthropic agencies, ideally should work closely and collaboratively to provide a range of recovery activities, programs and services (AEMI, 2011). Pre-existing differences and politics make this a process that needs to be managed. Similar issues arise with regard to how government and commercial businesses interact.

The International Business Leaders Forum (IBLF) strongly believes that both local and international businesses have management, logistical and economic development skills that are vital for effective relief and recovery (IBLF, 2005). These include:

- **Logistical skills** – managing supply chains, procurement, storage, tracking, import/export, distribution, transport and security
- **Communications** – telecommunications, IT based networks, transport, setting up IT systems, digital records
- **Employee teams** – employees can operate as local recovery or assistance teams
- **Finance** – managing finance and accounting, administering loans, credit management, insurance issues
- **Business recovery** – re-establishing business networks and distribution including cold chains and subcontracting
- **Construction** – sourcing materials, heavy equipment, project management of construction, clearance, engineering
- **Specialist skills** – medical, forensic, tourism, boat-building etc. (IBLF, 2005).

However, there does appear to be a major hurdle to business engagement in recovery efforts – the lack of understanding by agencies, governments and NGOs of the business contribution, as well as lack of trust between sectors (IBLF, 2005).

Collaborative partnerships, ideally built on relationships formed before crises, are key to overcoming this hurdle. Organisations and communities that have strong day-to-day relationships generally function better during recovery decision-making processes and operations (IBLF, 2005; Thornley et al., 2014).

Collaborative partnerships are vital mechanisms for effective action regardless of when they are forged. Effective inter-agency collaboration and communication were shown to be vital to Canterbury tourism response and recovery (Orchiston & Higham, 2014).

During the initial period following the 2010/2011 Canterbury earthquakes many businesses appeared to reject the 'survival-of-the-fittest' business model in favour of one that emphasised collaboration and mutual benefit (Stevenson, et al., 2012). Within a CBD environment, organisations can work together to form economic clusters for co-promotion and support or to share resources. The Christchurch Enterprise Precinct and Innovation Campus (EPIC) is an example of several businesses from the information, communications, and hi-tech industry coming together to rebuild on the same campus within the CBD to promote collaboration and innovation (Stevenson et al., 2012).

Business recovery is important in its own right. This requires that businesses have business continuity plans in place that can be enacted and sustained over prolonged periods. Mechanisms for developing collaborative arrangements that can evolve and adapt over time are also required. However, it is also important to accommodate the fact that business recovery is a complex, multi-faceted process that encompasses relationships that include the community. While business and community issues are often dealt with separately (see above), comprehensive recovery calls for an understanding of the interrelationships between the components of recovery.

One such interrelationship is that between business and community. Business continuity is facilitated by the availability of its workforce and consumers. Businesses need to recognise this and include strategies that increase the likelihood that employees and consumers will be part of the recovery. That is, to include household and community-level preparedness as a component of business continuity planning (Paton, 2014). One aspect of this is how business and other agencies engage with and empower communities.

Collaborative recovery should:

- be guided by those with experience and expertise, using skilled and trusted leadership;
- reflect well-developed planning and information gathering;
- demonstrate an understanding of the roles, responsibilities and authority of other organisations and coordinate across agencies to ensure minimal service disruption;
- be part of an emergency management approach that integrates with response and contributes to future prevention and preparedness;
- be inclusive, using relationships created before and after the emergency;
- have clearly articulated and shared goals based on desired outcomes;
- have clear decision-making and reporting structures;
- be flexible, take into account changes in community needs or stakeholder expectations;
- incorporate the planned introduction to and transition from recovery-specific actions and services; and
- focus on all dimensions; seek to collaborate and reconcile different interests and time frames (AEMI, 2011; IBLF, 2005; Thornley et al., 2014).

3.0 COMMUNITY ENGAGEMENT AND EMPOWERMENT

A strong theme in the literature is that affected communities have a vital role to play in disaster recovery. Community involvement following disasters is seen as an important means of contributing to the overall empowerment of individuals and communities to manage their own recovery.

The term 'community-led' emphasises a community-driven approach that strives to achieve strong community participation in all levels of planning, implementation and evaluation of recovery processes (AEMI, 2011).

Community engagement and empowerment (e.g., self-determining actions, self-governance, greater involvement in official decisions) are seen as vital to building resilience (e.g., Mooney et al., 2011) and result in the identification of workable solutions to problems; cost-effectiveness; better delegation of duties; securing community 'buy-in' to the process; and building trust (Vallance, 2015). A sense of control and self-determination, instilled by becoming involved in community action and official decision-making, can enhance people's well-being, in turn meaning that they are able to contribute more, creating a 'virtuous circle' (Thornley et al., 2015).

A community-led approach should be based on community engagement, participation, empowerment and trust. It aims to support self-help and to strengthen the resources, capacity and resiliency already present (or, if required, develop) within individuals and communities and assist people to apply them in the challenging circumstances of the recovery environment (Alcántara-Ayala et al., 2015). The objective is to facilitate people's ability to make sense of their experience and reframe it in meaningful ways using a community-based approach (Johnston et al., 2015).

Research from Canterbury suggests that to achieve genuine and effective community engagement, a better understanding of the relationship between public participation in recovery activities (substantial issues) and public participation in decision-making for recovery (procedural issues) is also needed (Vallance, 2015).

The Christchurch experience also highlights the need for caution when making recovery decisions while a community is under stress. There are challenges in realizing authentic community participation in complex decision-making in times of stress immediately after a disaster event, as well as delaying such decisions during the recovery period (Paton et al., 2014). Ensuring that communities are participating in decision-making processes prior to an event, and including a cross-cultural perspective on earthquake recovery, can help alleviate some of these problems (Paton et al., 2014).

The work of Kenney and Phibbs (2015) has shown how lessons from the disaster risk management approach implemented by Māori can inform disaster risk reduction at the local, national and international levels.

Community engagement is more than Government agencies disseminating information, holding community meetings, or inviting public comment on proposed strategies or plans (Johnston et al., 2012). This traditional 'top-down' approach fails to recognise the importance of community diversity, or to accommodate the different ways affected community groups can experience a disaster and thus present with special needs (Mooney et al., 2011).

A case study of the impacts of the 1995–1996 Ruapehu eruptions highlighted that community diversity (e.g., demographics, experience, community characteristics) influences how communities confront recovery issues, their ability to use resources to meet their own needs and their ability to use their experience to develop future resilience (Paton, 2006). The importance of using a range of community empowerment strategies to meet the differing needs of different groups within affected communities was also highlighted by case studies of the 2006 Matata Debris Flow and 2010 Darfield Earthquake (Collins et al., 2011)

A community-led approach during recovery should:

- build strong, engaged communities that are sufficiently resourced;
- enable those affected by a disaster to actively participate in their own recovery;
- seek to address the needs of all affected communities;
- consider the values, culture and priorities of all affected communities;
- use and develop community knowledge, leadership and strengths;
- recognise that communities may choose different paths to recovery;
- ensure that the specific and changing needs of affected communities are met with flexible and adaptable policies, plans, and services;
- support and develop community infrastructure (such as: community organisations, marae, strong local leaders and shared communication channels);
- build strong partnerships between communities, businesses and authorities (AEMI, 2011; Thornley et al., 2014).

3.1 NEEDS ASSESSMENT

Ongoing recovery needs assessment is a critical component of effective recovery planning and practice. The type and level of need will be affected by a number of factors, such as the nature and impact of the disaster event, community demographics, the availability of local resources, and the health, wellbeing and psychological state within the community (AEMI, 2011).

An initial needs assessment will inform the provision of basic recovery services. This early assessment considers immediate effects, community demography, available resources within the community and the pre-existing health, wellbeing and psychological state of the community (AEMI, 2011). However, the rapidly and ever-changing nature of post-disaster environments requires the frequent and continuing assessment (monitoring) of community need. The many and varied sources of data used to determine community needs will also change over time.

The challenge is to determine how much of the community's need is due to the impact of the event and to estimate what level of resource is required to support an effective community recovery process (AEMI, 2011).

Detailed recovery needs assessment will be required across all recovery environments (psycho-social, cultural, built, natural and economic). Early in recovery, community tends to be locational. Infrastructure loss etc. means people are first concerned with their immediate circumstances, meeting their survival needs, and working with neighbours etc. Later, as

normal functions are regained, there can be a reemergence of relational communities and this requires changes in needs assessment, strengths assessment etc. over time in response to changing circumstances and social relationships.

Key questions to assist in determining the level of recovery services that may be needed in the initial stages and on-going:

1. What did each community look like prior to the emergency/disaster?
2. What has been the impact on each community? What does it need now?

Possible indicators of need:

- percentage of the community displaced;
- length of time people are displaced from the community;
- loss of infrastructure (physical/social);
- scale of the disaster;
- community identity tied to physical infrastructure;
- increase in requests for material aid and financial assistance;
- length of time to restore services.

3. What can each community provide for itself? What is the capacity of existing services to meet additional demands?

Indicators that additional service support is needed:

- usual information/communication lines are broken;
- community requests (for information, meetings etc.);
- increased requirement for information on health and safety issues;
- a sudden/unexpected/unusual event for the area;
- service disruption (AEMI, 2011).

3.2 STRENGTHS AND VULNERABILITIES

Understanding the strengths and vulnerabilities of communities is integral to managing risks and implementing effective recovery programs. The course and nature of community recovery is an outcome of the interaction between disaster consequences and the community's strengths and vulnerabilities.

Vulnerability refers to the degree to which an individual, organisation, community or system is unable to anticipate, cope with, resist or recover from the impact of hazards. It is influenced by demographic, cultural, social, economic, and historical contexts, and changes according to the interactions of the social determinants of health, an individual's functional limitations, and the nature of an adverse event (Plough, 2013). People at higher risk of health, behavioural health, economic, and social disruption before a disaster are at increased risk when these issues are exacerbated by disaster and its consequences, trauma, or disruption of vital services (Thornley et al., 2014; Wulf, et al., 2015).

Vulnerable populations, also referred to as "at risk" or "special needs" groups, include for example, populations with mental health problems, chronic medical conditions, developmental disabilities, or extreme poverty. In the Christchurch context, recovery has

been slower amongst those with pre-existing vulnerabilities (people with a physical health condition or disability, low income and Māori) and 'new vulnerable' populations (people in temporary accommodation and those aged 35–49 years old (Morgan et al., 2015). Identification of the most vulnerable is especially important during high impact disasters when the prioritising and rationing of services may be required to meet the urgent needs of large numbers of affected people (AEMI, 2011).

It is important to be aware of, and to challenge when necessary, the assumptions that are frequently made about 'vulnerable populations'. Members of these groups also have strengths, assets and capacities. They can be informed and empowered survivors, capable not only of supporting themselves during times of crisis and recovery, but also of supporting others (AEMI, 2011; Plough, 2013).

Successful recovery should recognise, support and build on the inherent strengths, assets and resources of individuals, communities and organisations. Focusing on strengths helps people deal with issues in ways that promote natural recovery, with social support being a pivotal component in this strategy. Social support provides a community-based resource to assist coping with emotional (e.g., grief, anxiety), practical (e.g., child care, financial help) and informational (e.g., about recovery, assistance programs) needs (Mooney, 2011; Johnston et al., 2015).

The emergence of a strength or function-based approach for emergency management, replacing the traditional vulnerable population-level approach, is particularly resonant with community resilience ideas of empowerment and inclusion (Wulf, 2015). Connected communities, with strong pre-existing community infrastructure, are better placed to initiate local responses, foster community involvement, and access timely external support. Conversely, communities with fewer community-based groups, local leaders or existing networks are less able to respond and adapt (Thornley et al., 2014).

Successful recovery recognises, supports and builds on community, individual and organisational capacity. Recovery should:

- assess gaps between existing and required capability and capacity;
- support the development of self-reliance in planning and action;
- quickly identify and mobilise community skills and resources and how they can map onto changing, evolving circumstances;
- acknowledge that existing resources will be stretched, and that additional resources may be required;
- recognise that resources can be provided by a range of stakeholders;
- understand that additional resources may only be available for a limited period, and that sustainability may need to be addressed;
- provide opportunities to share, transfer and develop knowledge, skills and training;
- understand when and how to disengage; and
- develop networks and partnerships (AEMI, 2011).

3.3 FOSTERING RESILIENCE

Resilience has been defined in many ways, and a definitive overview of these is outside the scope of this paper. Most authors, however, include the capacity of individuals to quickly cope, adapt and recommence adaptive functioning as an example of resilience (Mooney et al. 2011). At its core, resilience embodies a vision of healthy individuals and thriving communities, and a resilience-centered framework provides actions that people, organisations, and institutions can take to promote the sustainable and long-term well-being of communities in the face of adversity and disaster (Wulf, 2015).

Paton et al. (2014) define a resilient community as one that can cope with, adapt to, and recover from the loss and disruption encountered through the experience of a disaster. How effectively this is done, they argue, is a function of how well people, communities, and societies can work together and use their resources to deal with the problems encountered.

The effectiveness of initial earthquake recovery is influenced by people's capacity for self-reliance and their ability to deal with the immediate challenges of coping with earthquake consequences. The adaptive capacities that help explain differences in people's ability to do so are influenced by factors such as their earthquake knowledge, self-reliance, and family beliefs in preparedness (Paton et al., 2014).

Individual resilience can be seen as a key building block of overall community resilience, and resilient communities can buffer the effects of psychological distress (Wulf, 2015).

To build greater community resilience, recovery processes need to:

- address issues of resource inequities and socio-economic vulnerabilities;
- incorporate community resilience-building activities, including disaster risk reduction measures (emergency risk management and mitigation);
- empower communities;
- develop and support leadership;
- resource community-led strategies (AEMI, 2011).

3.4 COMMUNICATION

There is an increasing recognition that the processes used by government and other key recovery agencies to interact with communities are critical and can impact either positively or negatively on the capacity of individuals and groups to manage their own recovery process (AEMI, 2011).

Successful recovery is built on effective communication between affected communities and agencies that are involved in recovery. Research shows that good communications with those affected by disasters are fundamental to sustaining their resilience, building the opinions of the public about the legitimacy of the responders and the authorities and, therefore, their cooperation with advice provided by the authorities (Carter et al., 2014, cited in Williams, 2014). Effective communications are vital to delivering psychosocial and mental healthcare, and they are an important component of psychological first aid (WHO et al., 2011, cited in Williams, 2014).

Recovery communications should:

- ensure that all communication is relevant, timely, clear, accurate, targeted, credible and consistent;
- recognise that communication with a community should be two-way, and that input and feedback should be sought and considered over an extended time;
- ensure that information is accessible to a wide range of different social and community groups, addresses a variety of communication needs, and is provided through a range of media and trusted channels;
- establish mechanisms for coordinated and consistent communication with all organisations and individuals; and
- repeat key recovery messages because information is more likely to reach community members when they are receptive (AEMI, 2011; Britt et al., 2012, Williams et al., 2014).

3.5 LEADERSHIP

Leadership is the capacity to motivate self and mobilise others, including their resources, to achieve a common purpose or solve a shared problem through wise collective action. This capacity includes the ability to maintain a flow of effective communication, engender hope, and leverage a shared culture in accomplishing the common purpose (Britt et al., 2012).

The importance of appropriate leadership behaviour in the post-disaster context has been highlighted by the work of Nilakant and others in the wake of the Canterbury earthquakes (e.g., Nilakant et al., 2013).

The capability of a leader to dynamically sense and respond to changes in the environment with actions that are focused, fast and flexible has been called 'agile leadership'. It encompasses a leader's ability to prepare others for an environment that is characterized by volatility, uncertainty, complexity and ambiguity (VUCA) (Horney et al., 2010).

While the concept of leadership agility is common in the business environment, it has only recently been applied to disaster scenarios. Tint and colleagues (2015) argued that learning to be agile in a VUCA world is a necessary dimension of disaster preparedness, and identified the critical skills of agile leaders for disaster scenarios:

- awareness/noticing more;
- ability to think quickly/make agile decisions;
- adaptability/flexibility/openness to choices;
- support, collaboration, and creative solutions; and
- calm and focus in the midst of challenges, uncertainty and risk.

Proactive community leadership is a pivotal predictor of recovery; it is a crucial community resource and one that plays a critical role in empowering community recovery (Paton et al., 2014).

It is important to recognise that leaders already exist within communities. Effective leaders in families, social groups, or communities, as well as in organisations, agencies and businesses all have vital roles to play in recovery, and need to be supported to do so (Britt et al., 2012; IBLF, 2005).

Because community recovery is likely to require multiple leaders, and because many of those filling leadership roles will be volunteers, training and support for them is important (Paton et al., 2014).

Leaders in the recovery environment can be supported with strategies that:

- cultivate leadership agility by:
 - understanding what is required of leaders to survive and thrive in a VUCA world
 - identifying individual leadership agility strengths and development needs and
 - embedding leadership agility in management processes (Horney et al., 2010);
- create environments that encourage learning, provide mentoring and minimise fear of failure;
- link existing leaders to government and business leaders through formal and informal avenues;
- encourage existing leaders in community groups (clubs, churches, schools, etc.) to network; and
- encourage individuals to see themselves as leaders in their families, social groups and neighbourhoods (Britt et al., 2012).

3.6 PLANNING AND PREPAREDNESS

Planning for recovery is integral to preparing for emergencies, and is not simply a post-disaster consideration. Supporting individual, family and community recovery requires effective planning based on an understanding of community vulnerabilities, risks and strengths. Community participation in the post-event planning process is critical to identify the specific activities that are required by the community to re-establish community systems and ensure that the outcomes of the recovery process are community driven (AEMI, 2011).

The challenges posed by a post-disaster environment obviously necessitate a recovery planning process. However, communities that have up-to-date plans and strong planning institutions in place before disaster strikes are better placed to plan more efficiently and effectively in the post-disaster period (Johnson & Olshansky, 2011).

The importance of proactively encouraging community emergency preparedness derives from the impossibility of predicting when natural disasters will occur, and the need to facilitate preparedness prior to an event that may not occur until some indeterminate time in the future (Paton & Johnston, 2015). People's lack of experience of earthquakes, for example, makes it difficult for them to appreciate the range and implications of hazard consequences they may have to contend with and to convince them of the need for and benefit of preparedness (Paton & Johnston, 2015).

While household and community preparedness is often seen as independent of preparedness in business and other organizations, this view needs to change and they need to be conceptualized as being interdependent (Paton & Johnston, 2015). People who have prepared for disaster are better placed to assist local physical recovery and rebuilding efforts, and to support business and economic recovery (as employees and customers). Their ability to do so, however, is a function of business preparedness (Paton & Johnston, 2015).

In terms of business and infrastructure, pre-event recovery planning is essential for making systems resilient. A community's infrastructure provides essential services which are vulnerable to disruption and/or damage from a disaster event. As these systems are often large, complex, and interdependent, failure of one part of the system causes impacts in other parts, further increasing a community's vulnerability (Paton & Johnston, 2015). Businesses and services that sustain their activity or are able to recover quickly can assist employee (e.g., social support) and community recovery (e.g., provide cash donations or loans, donate technical expertise, equipment) (Paton & Johnston, 2015).

Business continuity management is a holistic management process that identifies potential threats to an organisation, and the impacts to business operations those threats, if realised, might cause. It provides a framework for building organisational resilience with the capability of an effective response that safeguards the interests of its key stakeholders, reputation, and value-creating activities.

Business continuity planning should be undertaken as part of continuing risk assessment and risk management within normal business processes, and in collaboration with personnel, suppliers, significant customers, and current and potential partner organisations. Plans should encompass avoiding, reducing or remedying the risks of business interruption in emergencies, including loss of interdependent services and operations.

However, a recent study of small business owners across New Zealand showed that that only a small proportion undertook formal business continuity planning (Battisti & Deakins, 2012). Within the Christchurch recovery context, it appears that experience and learning in dealing with the consequences of a crisis may be more important rather than the formality of the planning process (Battisti & Deakins, 2012). Organisations had to respond to the ongoing challenges through a process of adaptation and learning (Nilakant et al., 2013).

Planning for recovery should:

- recognise that individual, household, organisational and community preparedness is interdependent (Paton & Johnston, 2015);
- begin with an understanding of the pre-existing state of the community, and the consequences of a disaster upon that community;
- recognise and build on a community's capacity for social resilience while at the same time identifying and addressing vulnerabilities (AEMI, 2011).

3.7 RESOURCING

Resourcing for post-disaster reconstruction is a complex and dynamic process in which resource demand is unevenly distributed across different stages and different sectors of rebuild (Chang-Richards et al., 2014). It bears on a range of issues inherent in the post-disaster reconstruction context.

In many ways, the activities involved in recovering from an emergency are similar to normal daily life: people seeking accommodation and building homes, businesses meeting commercial challenges, and utilities and public services improving infrastructure and facilities. What is unique in the recovery period is that these activities occur simultaneously and in a compressed period of time. This phenomenon has been used to explain many of the key elements of recovery processes, including:

- pressure to restore a sense of normalcy conflicts with the use of speed and quality as measures of recovery success;
- mismatch between the flow of financial resources and the pace of recovery;
- exacerbation of pre-disaster inequities after pressure to restore a sense of normalcy conflicts with the use of speed and quality as measures of recovery success;
- opportunities for change, upgrade and improvement of land uses, facilities and infrastructure;
- need for fast decision-making not supported by the flow of information, knowledge, and planning;
- differential rates of recovery across the community with uneven and contrived processes of physical construction, supply resources, and restoration of community networks (Johnson & Olshansky, 2011).

Shortages in capital (machinery, trucks, diggers, etc.), materials (concrete, steel, timber, etc.), and skills (engineers, builders, plumbers, painters, etc.) (Chang-Richards et al., 2012) can result in resourcing bottlenecks. In turn, these can lead to price increases and inflows of large amounts of money, and new players in the construction market can also lead to increases in profiteering, corruption, and fraud (Seville et al., 2014).

Research has shown that by linking resourcing with broader plans for sustainable and equitable post-disaster reconstruction, more fundamental actions both pre- and post-disaster can be taken to reduce socially and physically produced resource shortages (Chang-Richards et al., 2014).

The process of resourcing, therefore, requires a systemic and dynamic support on recovery planning systems, industry capacity, regulatory framework, and economic issues at both project and organizational levels rebuild (Chang-Richards et al., 2014).

Transparency and accountability are vital. It is essential to inform and retain the confidence of donors, communities and the public that resources are being effectively applied and accounted for, and to manage expectations (IBLF, 2005).

4.0 INTEGRATING BUSINESS AND COMMUNITY RECOVERY

There is a significant body of research that describes the impacts of natural disasters on the business sector and/or attempts to identify the relationship between key organizational characteristics and the level of impact that organisations experience (Brown et al., 2015).

Other studies have attempted to identify the factors that hinder or support the recovery of individual businesses post-disaster. Factors that have been commonly associated with increased disaster vulnerability and poor recovery outcomes include the degree of disaster impact, organisation size and age, sector and property ownership, relocation, supply chain disruption, changes in consumer behaviour, and the impact of infrastructure disruption (Brown et al., 2015; Tierney, 1997 cited in Seville, Vargo, & Noy, 2014).

The results of such research have been inconsistent however (Brown et al., 2015; Dietch & Corey, 2011). A study of Canterbury businesses (Brown et al., 2015) reported that organizational size or age did not effectively indicate either level of impact or recovery. Rather, human/organisational issues, in particular 'Customer Issues' impacts were most disruptive for organisations and sector was found to be a predictor of both impact and recovery. Organisations that rented recovered slightly more effectively than those that owned their properties (Brown et al., 2015).

The findings from another Christchurch study (Nilakant et al., 2013) suggest that, in order to mitigate the harmful effects of disaster and to foster both individual and organizational recovery, the human resource function must be flexible and adaptive. In the altered context, the human resource function must reframe its practices and develop a specific focus on understanding and addressing changing employee needs, and monitoring the leadership behaviour of supervisors (Nilakant et al., 2013). To drive this adaptive change, the authors propose a set of core principles centered upon identifying and addressing changing employee needs and expectations.

Research investigating workforce policy following disasters suggests that the critical elements to enable effective labour market policies include:

- collaborative partnership either between public sectors or through a diversity of public and private partnerships;
- flexibility to redirect funding and develop additional initiatives;
- a greater level of local inputs and engagement;
- labour market intelligence; and
- institutional capacity to administer new programmes and/or increase the scope of existing programmes, using prevailing networks (Chang-Richards et al., 2013).

More recently there has been increased interest in examining the relationship between community recovery and recovery in the business or economic sector.

Business recovery following an earthquake is a crucial aspect for community recovery (Seville et al., 2014). When businesses cease trading or have significantly compromised function, the long-term sustainability of community life can be threatened or compromised. Conversely, when businesses develop the capacity to recover, they are able to provide employment and support the livelihoods of individuals and thus sustain the social and economic vitality of disaster affected communities (Paton & Johnston, 2015).

Thus the recovery actions of people and businesses can be complementary in ways that sustain employment, economic vitality and well-being. Social and business recovery, in turn, ensures the availability of the businesses and workforce necessary for essential services to function and to facilitate infrastructure repair and reconstruction (Paton & Johnston, 2015).

An appreciation of such interdependencies raises the question: ***How can business disaster preparedness, planning and recovery actions facilitate community disaster preparedness and recovery?***

A paper from the International Business Leaders Forum (IBLF) provides a rare exploration of this issue from the business perspective.

In August 2005 the IBLF formed the Tsunami Recovery Business Task Force to better understand the role that business played and the needs of recovery following the 2004 Tsunami. Their reported conclusions and recommendations were formed from observations of responses in Thailand, India and Sri Lanka. These were extensively debated with companies, agencies and partners, and informed further by early observations of responses to Central American mudslides, US Hurricane Katrina, and the devastating Pakistan earthquake (IBLF, 2005).

The Task Force's central conclusions focused on the:

- need for advance thought and planning for disaster responses;
- importance of understanding the complexity of disaster relief and the vital need of communities for sustainable economic recovery;
- importance of backing local effort and experience; and
- need to ensure that humanitarian partners can make a transition from relief to recovery through accountable local partnerships (IBLF, 2005).

The IBLF strongly recommend that businesses consider the issues relating to disaster response and recovery and offer a series of questions for CEOs and Board level executives as a starting point:

1. Are we prepared?

Are we ready to anticipate the demands and pressures and to evaluate effectively and rapidly the impact on our business?

2. Do we know enough to respond?

What information from reliable sources, including local managers, units and business partners on the ground, do we have to hand to evaluate the emergency?

3. How directly relevant is it to our business?

Do we have assets, employees, business activities in the area?

What are the likely expectations from employees, public and media?

4. How can we best contribute?

Direct local engagement through business units or arms-length support?

What scale is appropriate for our response?

What form of response is most effective – cash, in-kind, logistics, expertise?

5. Do we have effective partners?

Do the partners we may choose to work with or direct our support to have real local knowledge, local experience, and capacity on the ground to be effective partners in relief and recovery?

6. Will our contribution assist in the long-term?

Do these partners have experience and capacity to manage longer term support and recovery, or do they have local partners who do?

7. Can we ensure accountability?

Can these partners account and report for what contribution we may make to them, and how and when it is used? If in doubt, make conditional commitments.

8. How do we manage our own contribution?

Who manages the interface, who monitors it, how are local units or employees involved, are contributions phased, what happens if contributions cannot be used?

9. How do we manage publicity demands?

How are we communicating, how do we manage the public relations and media aspects from the start, and how do we manage media expectations at a time of high profile coverage?

10. Are we managing priorities in a rational way?

Are we sure that contributions and actions are not having detrimental effects on other priorities and flexibility for future action in the location of the emergency, the country, region and other pressing priorities now or in the future?

Business should:

- engage and maintain the momentum, committing business skills and resources;
- listen to local units with on–the-ground contacts and knowledge;
- build back the local economy and markets;
- support capacity building and project management for chambers of commerce and business recovery activity.;
- facilitate microfinance for local entrepreneurs, accompanied by mentoring;
- examine and facilitate local supplier infrastructure for the core business;
- involve young managers;
- offer business skills (finance, project management, logistics etc.) to NGOs, governments and agencies;
- focus donations on those NGOs that have demonstrable local knowledge, experience and resources, either directly or through partnerships with local NGOs that do;
- recognise the key role played by ‘social entrepreneurs’ within communities, businesses and organisations that can facilitate growth and change;
- encourage other companies to become involved;
- monitor and communicate results to ensure continued learning and improvement;
- ensure that the motivation for involvement and support is clearly articulated and transparent;
- develop a process and plan to enable the company to respond anywhere, quickly and effectively, in the future;
- recognise that anything built has to allow for the ‘soft infrastructure’ and has to be maintained and sustained – one-off donations need to be accompanied by a plan for the ‘soft infrastructure’, i.e. building or equipping a school should also include training for the teachers and supplying building materials should be accompanied by vocational training (IBLF, 2005).

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