

A Pacific community resilience framework: Exploring a holistic perspective through a strengths-based approach and systems thinking

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Abstract: *The impacts of climate change in the Pacific and worldwide have prompted researchers and practitioners to find ways to define, assess and support community resilience. This paper presents a community resilience framework to help meet this challenge. While traditional framings of resilience in scholarship are often based on deficit models that focus on vulnerability and gaps, this framework draws on strengths-based principles and systems thinking approaches to support a holistic and integrated perspective of community resilience. Pacific community resilience literature underpins the framework, which values and prioritises diverse community insights to support locally defined pathways towards adaptation and resilience building. We offer examples of future application of the framework in a range of contexts such as research, programme design, strategic policy, programme implementation or evaluation.*

Keywords: *climate change, community resilience, disaster risk, Pacific, strengths-based*

Introduction

The climate is changing and the impacts are being felt worldwide, not least across the Pacific Islands, where exposure to climate hazards is high. Pacific islands are highly prone to disasters: Vanuatu has the world's highest rank of global disaster risk, with Tonga and Solomon Islands following in second and third places (Aleksandrova *et al.*, 2021). While the Pacific's diverse islands, cultures and peoples have evolved and adapted to natural climate variability over the millennia (Nunn, 2007), climate change is bringing unprecedented conditions that are outside the experience of existing traditional practices and indigenous knowledges. Communities across the Pacific are facing increasing levels of risk driven by climate change, for example, sea level rise and coastal erosion, warmer air and sea temperatures (Narayan *et al.*, 2020), changing rainfall patterns and increased risk of more frequent and intense tropical cyclones (Kossin *et al.*, 2020; Deo *et al.*, 2022). These changes threaten communities' ability to maintain livelihoods which are often closely linked to natural resources. Climate

change is also putting productive industries and critical infrastructure, such as energy systems, access to water and sanitation and housing at risk.

This disaster risk context makes responding to climate change a policy priority. The Pacific Islands Forum Boe Declaration acknowledges climate change as the single greatest threat to the livelihoods, security and well-being of peoples of the Pacific (Pacific Islands Forum Secretariat, 2018). The Framework for Resilient Development in the Pacific provides guidelines for Pacific regional and national stakeholders to integrate climate and disaster risk into sustainable development practices (Pacific Community *et al.*, 2016). The Pacific Resilience Partnership has also released Pacific Resilience Standards ('Integrate, Include, Inform, Sustain'; Pacific Islands Forum Secretariat, 2021). Governments across the Pacific are also taking steps to build climate and disaster resilience into policy, programmes and budgets. For example, in Fiji, the Ministry of Rural and Maritime Development and Disaster Management takes a risk-informed development approach, building

disaster and climate risks into planning and budgeting (UNDP, 2022).

Despite advances in national-level climate policies, it is difficult to tell whether these policies and strategies make meaningful impact to peoples' lives at the local community level where climate change and disasters often have large impacts. Furthermore, the commonly used narrative of Pacific local communities as needing to be 'saved' from climate change rapidly dismisses the agency communities have over their ability to transform their lives under climate change. As described by McNamara *et al.* (2020), traditional governance systems, coping strategies and indigenous knowledge have underpinned the resilience of Pacific communities for millennia. The diversity of climate impacts is combined with the heterogeneity of the communities in the region, requiring localised frameworks for understanding how communities adapt to disasters. While multiple frameworks exist for analysing the vulnerability of communities to climate change and disaster risk (e.g. SPC's Participatory Community-based Vulnerability Assessment Framework; the UNDP's Mapping Climate Change Vulnerability and Impact Scenarios; or UN Habitat's Vulnerability and Risk Assessments for communities), these frameworks often take a deficit approach that focuses on gaps and challenges.

To contrast this deficit-approach-driven lens on resilience, the framework presented in this paper differs from other resilience frameworks in three main ways. First, while based on a generic resilience framework, its modifications are based on Pacific literature and are therefore relevant to diverse Pacific communities. Second, the framework takes a holistic systems perspective of resilience that recognises varied insights across communities and prioritises the existing local knowledge. Third, the framework has been designed to be applied drawing on principles of a strengths-based approach. See Table 1 that compares several aspects of existing resilience frameworks, highlighting the key differences to the framework presented in this paper. Frameworks included in Table 1 represent a small selection of the diversity of resilience frameworks that exist – see Manyena *et al.* (2019) for a more comprehensive assessment of resilience frameworks.

Reframing the deficit-based approach to resilience

The dominant approach to understanding community resilience

The most common approach to defining and measuring community resilience is through the

Table 1. Comparison of resilience frameworks

Name of framework	Authors	Year of publication	Community resilience focus	Based on Pacific literature/context	Holistic systems perspectives of resilience	Strengths-based principles
Participatory community-based vulnerability assessment framework	The Pacific Community	2020	✓	✓	×	×
Mapping climate change vulnerability and impact scenarios	UNDP	2010	×	×	×	×
Vulnerability and risk assessments for communities	UN Habitat	2020	✓	×	✓	×
Pacific adaptive capacity analysis framework	Warrick <i>et al.</i>	2017	×*	✓	✓	✓
Framework for community resilience	IFRC	2018	✓	×	✓	×
Pacific community resilience framework (this paper)	Authors of this paper	2024	✓	✓	✓	✓

*Warrick *et al.* (2017) focus on adaptive capacity in Pacific communities, which differs from community resilience in subtle ways. See section 'Key terms within the Pacific community resilience framework' for further discussion, which notes how our framework views adaptive capacity as a building block of resilience.

concept of vulnerability. Vulnerability and resilience are inter-related concepts and have been described as being opposite ends of a spectrum; one a subset of the other; and being overlapping but separate (Kais and Islam, 2016). Vulnerability is often measured using vulnerability assessments. Such approaches focus on weaknesses, gaps and threats to communities (Gotham and Campanella, 2011), often using climate change scenarios and related impacts as an entry point to participatory discussions. This narrative of vulnerability and deficits, which dominates community resilience approaches, is problematic for three main reasons.

First, vulnerability is commonly and uncritically thought of as a ‘lack of capacity to cope and adapt’ (Barnett, 2020: 2), centring on concepts such as powerlessness and weakness. This narrative is overly simplistic (Klöck and Nunn, 2019) and overlooks existing capacity, resources, mutual solidarity and knowledge existing within Pacific populations – strengths that have enabled Pacific people to collectively adapt, migrate, travel and trade across Oceania (Hayward *et al.*, 2019). Basing assessments of community resilience upon the narrative of vulnerability, therefore, presents an inaccurate and incomplete picture of the Pacific.

Second, deficit-based approaches are the dominant means to support communities to adapt to climate change; however, such approaches have had variable success of community-based adaptation activities in the Pacific (McNamara *et al.*, 2020). Westoby *et al.* (2019) describe deficit discourse as focusing on negativity, deficiency and failure. Deficit discourse is readily present in the prevailing narrative and practice of community-based adaptation in the Pacific. For example, most community-based adaptation initiatives begin with vulnerability assessments which aim to capture a community’s exposure and sensitivity to climate and disaster risk, and their capacity to adapt. This deficit-based approach to building community resilience overlooks lessons from decolonising methodologies, and alternative approaches such as assets-based community development (Winterford *et al.*, 2023).

Third, assessments of vulnerability are often top-down, conducted by outside experts with little recognition of the socially and politically constructed nature of vulnerability.

Vulnerability assessments aim to understand how factors across domains such as social class, race/ethnicity, gender, dis/ability and age shape levels of vulnerability (Gotham and Campanella, 2011). Vulnerability assessments collect information across these domains; however, the significance of who is interpreting the data (i.e. outside experts who lack contextual understanding) is often overlooked (Gotham and Campanella, 2011; Eriksen *et al.*, 2021; Sánchez Rodríguez and Fernández Carril, 2024.). In the Pacific, vulnerability assessments being led by outsiders are common. Meki and Tarai (2023) write about the top-down, outsider-led approach to development in the Pacific, and the need for outsiders to yield and insiders to wield power. The Pacific community resilience framework is intended to shift the lead role and enable a locally led approach to resilience building.

Alternatives to the deficit-based approach to resilience

This section sets out three fields of literature that inform the resilience framework presented in the paper. Alternatives to a deficit-based approach to resilience are needed to shift the narrative of development in the Pacific to one that recognises the inherent strengths of the region. Key Pacific scholars have written about the need to shift this dominant deficit-based narrative over several decades. Tongan social anthropologist Eveli Hau’ofa (1993) famously wrote about the differences between considering the Pacific as ‘islands in a far sea’, a Eurocentric view that focuses on remote islands in a vast ocean, as compared to ‘a sea of islands’, Hau’ofa’s own view that focuses on the importance of the ocean, and how it connects people and forms part of Pacific people’s identity. Teaiwa (2019) notes that the ocean is a source of resilience, enabling kinship bonds, trade networks and the exchange of ideas. Shifting the narrative towards recognition of the strengths and common ocean identity of the region is also described through the concept of the ‘Blue Pacific’. The Blue Pacific has become a commonly used phrase in regional policy dialogue, describing the concept of Pacific regionalism and recognising the shared ocean identity,

geography and resources of the region (Diver, 2018).

Strong social cohesion, collective efficacy, reciprocity and the communal nature of resource ownership that is present across Pacific cultures also points to the irrelevance of a deficit-based approach to resilience (Beyer et al., 2018; Latai-Niusulu et al., 2020). In Samoa, for example, the communal approach to village life facilitates the sharing of information and traditional knowledge (Latai-Niusulu et al., 2020), including about environmental and ecological processes – which is a strength of many Pacific cultures. The Church in the Pacific is also recognised as a source of strength, including in relation to resilience building. Latai-Niusulu et al. (2020) describe how churches have played supportive roles in the development of resilience strategies. Additionally, Fletcher et al. (2013) note that faith-based systems are entrenched in the Pacific social systems, playing roles in community life, including use as disaster shelters; provision of post-disaster counselling; and providing welfare programmes for the poor.

Given the context described earlier, deficit-based resilience and adaptation studies overlook existing strengths and capacity and ignore the importance of context and place based understandings and experiences of vulnerability. Here, we provide alternate fields of literature that support framings of resilience that are appropriate for exploring community resilience in the Pacific. We discuss narratives from (i) Pacific literature and space for local knowledge; (ii) holistic framing of resilience using systems thinking approaches; and (iii) strengths-based principles as a lens to understand resilience.

Pacific literature and scholarship provide appropriate and contextualised narratives of what resilience means for Pacific communities. Our definition and framing of resilience embed aspects of diverse Pacific cultures, for example, recognising the impact climate change has on cultural heritage and indigenous knowledge (Teaiwa, 2019). Drawing on Pacific scholarship supports Pacific framings of environmental, social and political contexts, and how these intersect with resilience. For example, recognising the cultural-ecological connections present in Pacific communities and the

importance of recognising the importance of cultural frameworks that support diverse participation in community decision making (Latai-Niusulu et al., 2020) and the role of civil society (Ilati, 2008) which have strong connections to local resilience. Fidali and Larder (2022) explore culturally contextualised understandings of women's roles in conservation in Solomon Islands. Meki and Tarai (2023) explain the term 'decolonisation' which means to decolonise and localise the practice of aid and development in the Pacific. These diverse but connected concepts (cultural ecological connections, governance, women's roles, decolonisation and localisation) underpin the complexity of community resilience. The Pacific community resilience framework aims to provide space for these concepts when describing community resilience from Pacific Island perspectives.

The second field of alternative literature we have drawn on is from the human-ecological systems perspectives, which are based on myriad complex and non-linear relationships and connections. Understanding the resilience of Pacific communities is therefore grounded in these people-environment interactions. A systems thinking approach appreciates and provides space to explore these connections and their often interrelated and interdependent nature. The importance of systems thinking approaches was illustrated by McNamara et al. (2020), in a study of 32 Pacific community-based adaptation initiatives, which found that initiatives lacking systems thinking approaches overlooked contextual nuances and dynamics. Acknowledging both climatic and non-climatic livelihood pressures would have been revealed a more holistic and integrated approach.

Similarly, a systems thinking approach to community resilience to climate change and disaster enables a more holistic understanding of the interconnections and interdependencies. This involves considering components of culture, gender and social inclusion and social-ecological connections within our framework, given the importance of these as a means to support or detract from community resilience. Systems thinking perspectives supports a broad view of resilience, recognising the importance of the system (i.e. within a community) to support transformative change, and the multitude

of connections and interactions between elements of resilience within a community and also to other external actors.

The third field of alternative literature we drew on to inform the resilience framework was a strengths-based approach. A strengths-based approach originated from a wide variety of disciplines and while employed in the international development sector for decades (Winterford *et al.*, 2023), its remain on the fringe with deficit-based perspectives still dominating international development practice. ‘A strengths-based approach starts by revealing what is working within an individual, group, community or organization, then uses these strengths as a way to achieve change and preferred futures’ (Winterford *et al.*, 2023: 3). Strength-based practices developed independently of each other in a range of sectors including organisational management – Appreciative Inquiry (Cooperrider and Srivastva, 1987); community development – Assets-Based Community Development (Kretzmann and McKnight, 1993); health – Positive Deviance (Mackintosh *et al.*, 2002); psychology – Positive Psychology (Seligman and Csikszentmihalyi, 2000); and social work (Saleebey, 1996). Within international development practice, a strengths-based approach has been applied across a diverse set of country and institutional contexts including within community development in the Pacific, synthesised by Winterford *et al.* (2023).

While there is extensive experience of the application of strengths-based approaches in international development, it is not well documented in relation to climate change. The findings of Westoby *et al.*'s (2019) study examining 15 community-based adaptation interventions in Vanuatu found that ‘One of the most successful and sustainable projects utilised a strengths-based and asset-based approach’ (Westoby *et al.*, 2019: 1469). Joseph (2017) presents a study on social work models for climate adaptation in the Caribbean, noting that viewing communities from a position of strength supports more successful outcomes relating to social, economic and environmental well-being, aligning with notions of self-determination, empowerment and education. Strengths-based approaches were found to support the idea that communities themselves have

knowledge and capacity to solve problems, as opposed to outside ‘experts’ (Joseph, 2017).

Pacific epistemologies and research approaches have strong characteristics associated with strengths-based approaches. Latai-Niusulu *et al.* (2020) present a study of community resilience in Samoa, articulating the importance of the cultural framework that ensures participation of all related members (*faamatai*). *Faamatai* remains strong in communities and enables indigenous understandings of, and solutions to, climate change to be appreciated. Community resilience should be inclusive of social indicators such as ‘social connections, mental and spiritual strength, awareness and sensitivity, diversification and mobility’ (Latai-Niusulu *et al.*, 2020: 56).

A strengths-based approach within community resilience initiatives is therefore appropriate in Pacific contexts, as it complements existing Pacific epistemologies and ways of relating with people and environments, and provides an alternative to deficit models that undermine local capacity and autonomy. Strengths-based approaches prioritise local agency and knowledge, self- and collective efficacy and the social and cultural elements that can support locally appropriate solutions to climate change and disaster risk.

Introducing a Pacific community resilience framework

The community resilience framework was designed to define, assess and support changes in resilience within Pacific communities over time. The approach to developing the framework was based on a narrative review of Pacific-focused (where relevant and possible) literature. Academic and grey literature focusing on local responses to climate change was reviewed, paying particular attention to key (and often contested) terms such as resilience, vulnerability and adaptive capacity. Throughout the development of the framework, the aim was to ensure a practical and grounded output as opposed to a more theoretical framework needing further translation for practitioners.

This section provides definitions of key terms that form the basis of the framework before

presenting the framework itself. Commentary on how the framework can be applied is also provided.

Key terms within the Pacific community resilience framework

An overview of key terms is provided, noting how these terms have been defined within our community resilience framework.

Community. A core purpose of developing the community resilience framework is the intent to explore the lived experiences of climate change and disasters. This requires a focus on experiences at individual and community levels. Gusfield (1975) describes two major distinctions in how ‘community’ is conceived: the first is location (e.g. neighbourhood, village, town), while the second is relational, linked to the quality of connections and relationships between people. Both elements may be present in a named community.

Recognising the importance of shared experience in specific settings, and also the diversity of lived experiences of resilience, we draw on MacQueen *et al.*'s, 2001 definition of community: ‘A group of people with diverse characteristics who are linked by social ties, share common perspectives, and engage in joint action in geographical locations or settings’ (MacQueen *et al.*, 2001: 1929). Pacific notions of community refer to traditional forms of social organising for governance and decision making in a local area and are based on diverse cultural frameworks across the Pacific (Latai-Niusulu *et al.*, 2020).

Resilience. Resilience is a transdisciplinary concept that explores how systems respond to change and can be considered a process or outcome. Its popularity as a lens to understand complex change in recent times is exemplified by the wealth of literature on the topic, for example, Davidson *et al.* (2016) provide a thorough interrogation of the concept and its evolution over time, and describe various interpretations across disciplines, while Bec *et al.* (2016) present resilience typologies relevant to socio-ecological and community resilience. The Framework for Resilient Development in the Pacific (Pacific Community *et al.*, 2016)

provides strategic guidance on how development across all sectors needs to integrate responses to climate change and disaster risk, highlighting the prevalence and significance of the concept of resilience in the region.

Definitions of resilience have evolved to support particular contexts or disciplines. For example, engineering resilience relates to a system's speed of return to equilibrium following a shock (Holling, 1996). Ecological resilience is the magnitude of disturbance that a system can absorb before it shifts to an alternative steady state (Holling, 1996). Social-ecological resilience is the capacity to adapt or transform in the face of change in social-ecological systems, particularly unexpected change, in ways that continue to support human well-being (Chapin *et al.*, 2010).

Social-ecological conceptions of resilience best support the understanding of community experiences of, and responses to, climate change because they acknowledge the social components of social-ecological systems (Ross and Berkes, 2014), as well as the interdependencies of human and ecological systems and the importance of the biophysical environment to the culture, economy and livelihoods of the people of the Pacific. We, therefore, consider resilience as a process and draw primarily on the socio-ecological perspectives of resilience, whereby a resilient community is able to withstand shocks and trends and self-reorganise while retaining the same identity.

Community resilience. There is no one agreed definition for community resilience, as it is conceptualised and applied differently by different groups, according to the context in which it is used (Patel *et al.*, 2017). Magis (2010: 402) defines community resilience as ‘the existence, development, and engagement of community resources by community members to thrive in an environment characterized by change, uncertainty, unpredictability, and surprise’. This definition highlights the importance of individual proactivity and personal and communal capacities as a key part of community resilience. These features of community resilience were earlier described by Twigg (2009) in terms of self-reliance and capacity building as a means to reduce vulnerability.

Recent reviews have summarised conceptions of community resilience. For example, Patel *et al.* (2017) reviewed the literature to identify three common types of definitions for community resilience:

- 1 as a process of change and adaptation;
- 2 as representing the absence of adverse attributes; and
- 3 as having a range of response-related attributes.

Academic literature and practitioner framings of resilience note that building community resilience relies on understanding and developing community capacity (Twigger-Ross *et al.*, 2015). Our definition, therefore, acknowledges the importance of community resources and capacity, as well as core elements of the abovementioned definitions of social-ecological resilience such as the capacity to adapt and evolve to changing conditions to support human well-being and the avoidance of crossing thresholds and the importance of human-ecological interactions.

We also draw on Pacific literature in relation to communities, acknowledging the importance of social capital, in particular leadership and collective action – key aspects of Pacific traditional governance (Warrick *et al.*, 2017). Human capital and the blending of traditional and modern knowledge systems is also a key aspect of Pacific communities (Warrick *et al.*, 2017), and is incorporated in our definition.

Adaptive capacity. Adaptive capacity is another contested and context-specific concept that remains central to notions of resilience. Some authors equate adaptive capacity and resilience as synonymous (as described by Smit and Wandel, 2006), while others say adaptive capacity is a component of resilience (Carpenter *et al.*, 2001). Authors tend to define the terms in ways that support their context-specific conceptualisations for their research.

Across the literature, authors note that adaptive capacity relates to coping capacity, adaptability and resilience (Warrick *et al.*, 2017). Coping capacity is the ability of a system (natural or human) to respond to and recover from the effects of stress or perturbations that have

the potential to alter the structure or function of the system (Burkett, 2013). Adaptability relates to human actions that sustain, innovate and improve development on current pathways (Folke *et al.*, 2016). Transformation is shifting development practice into new pathways and even creating novel ones (Folke *et al.*, 2016).

In recent years, measuring adaptive capacity has predominantly been undertaken using asset-based approaches. Asset-based approaches draw on the sustainable livelihood framework (or similar, see Scoones, 2009) and define assets or ‘capitals’ – material assets and social opportunities that are assumed to underpin the capacity to adapt (Mortreux and Barnett, 2017; Warrick *et al.*, 2017). Additional capitals such as institutions, governance and access to knowledge have more recently been added to account for the context in which adaptation is undertaken (Mortreux and Barnett, 2017; Barnes *et al.*, 2020).

There are several criticisms of drawing solely on the asset-based approach to adaptive capacity. The lack of attention given to power and politics and the inability to incorporate future perspectives of livelihoods is one criticism (Scoones, 2009). Another important criticism is that there is an assumption that capacity (as a result of access to assets) translates into adaptation (Mortreux and Barnett, 2017; Clissold and McNamara, 2020). This assumption has proven to be false in a number of instances (e.g. Linnekamp *et al.*, 2011), thus more nuanced conceptualisations of adaptive capacity are required. Psycho-social or socio-cognitive drivers (e.g. perceptions of risk, perceived social norms and cognitive biases) have been found to better explain people’s intentions to adapt (Barnes *et al.*, 2020; Clissold and McNamara, 2020). Effective resilience building may therefore intentionally align with social norms and systems (UNDRR, 2022). Additional factors beyond the asset-based approaches are therefore needed to account for the drivers that mobilise such capacity (Wilson *et al.*, 2020) – this accounts for the difference between ‘latent’ capacity and ‘mobilising’ capacity (Pelling and High, 2005) and can be considered psycho-social or socio-cognitive determinants of adaptive capacity.

Our definition, and its application within the framework, of adaptive capacity draws on both

asset-based and psycho-social determinants of adaptive capacity. Framing resilience with a lens of adaptive capacity, rather than of vulnerability, also draws on a strengths-based approach which prioritises community actions for change informed by their inherent capacities as opposed to highlighting and focusing on their gaps as a way to inform and drive change (as described in section ‘Reframing the deficit-based approach to resilience’). Indicators of adaptive capacity are described in more detail in Box 1.

Describing the Pacific community resilience framework

Informed by the literature described earlier and the definition of key terms, we present our community resilience framework in Figure 1 and explain the contents from left to right (numbered from 1 to 5 at the top of Fig. 1). This framework is adapted from the Department of

International Development (DFID) (2011), which provides a simple and generic representation of elements to consider for resilience studies at various scales. Our framework builds on this established resilience framework used in the development space by further elaborating on adaptive capacity (our addition being the building blocks of adaptive capacity, given our strengths-based perspective), and defines, for Pacific community contexts, common elements of what a ‘resilient community’ looks like (our addition being the five elements of a resilient community – far right of Fig. 1 and separately presented in Fig. 2).

Context. This element of the framework helps to answer the question: ‘resilience of what?’ (DFID, 2011). The context of how the framework is to be considered and applied is at the *community* level.

Box 1. Adaptive capacity building blocks

Adaptive capacity is defined in terms of building blocks. Our framework uses these building blocks to explore how communities react to the disturbances of climate change and disaster. Our focus on adaptive capacity aims to reflect principles of a strengths-based approach (particularly for the asset-based determinants), as compared to a vulnerability analysis which focuses on gaps and needs in relation to climate change and disasters (as described in section ‘The dominant approach to understanding community resilience’). The building blocks aim to present a comprehensive picture of the determinants of resilience.

We developed a set of determinants of adaptive capacity that are grounded in Pacific community contexts, encompassing both asset-based and psycho-social determinants to assess adaptive capacity, as a proxy to understand changes in community resilience within Pacific communities. We allow space for bottom-up, community-defined indicators. This acknowledges the need for local understandings and experiences of climate change, and also the importance of cultural and political perceptions of risk (Granderson, 2014). It also acknowledges that indicators alone do not provide a comprehensive picture of resilience (Schipper and Langston, 2015). We drew on elements of Warrick *et al.*'s (2017) framework of adaptive capacity and Mortreux and Barnett's (2017) second-generation model of adaptive capacity.

Asset-based determinants of adaptive capacity:

- *Human and social capital:* Elements such as governance, leadership, traditional and modern skills, institutions, change agents, health, support services and networks
- *Access to resources:* Access to land, fisheries, supply chains and incomes, and also resilient infrastructure such as evacuation centres or climate resilient water and sanitation infrastructure.
- *Adaptation options:* Options for adaptation such as through the ability to grow or acquire food or money (e.g. through employment, selling goods or remittances).
- *Information and awareness:* Access to information regarding climate and disaster risks and the awareness and ability to analyse and act on this information.

Psycho-social determinants adaptive capacity:

- *Personal experience of past event/s:* Individual history of experiencing severe weather events influences adaptive capacity. Intense personal experiences result in higher levels of preparedness (Gow *et al.*, 2008); however, facing multiple and/or severe events can have negative impacts on mental health (Goldman and Galea, 2014).
- *Competing concerns:* Individuals or communities facing multiple stressors unrelated to climate change and disaster response may de-prioritise climate change given their focus on more immediate concerns (Mortreux and Barnett, 2017).

A Pacific community resilience framework

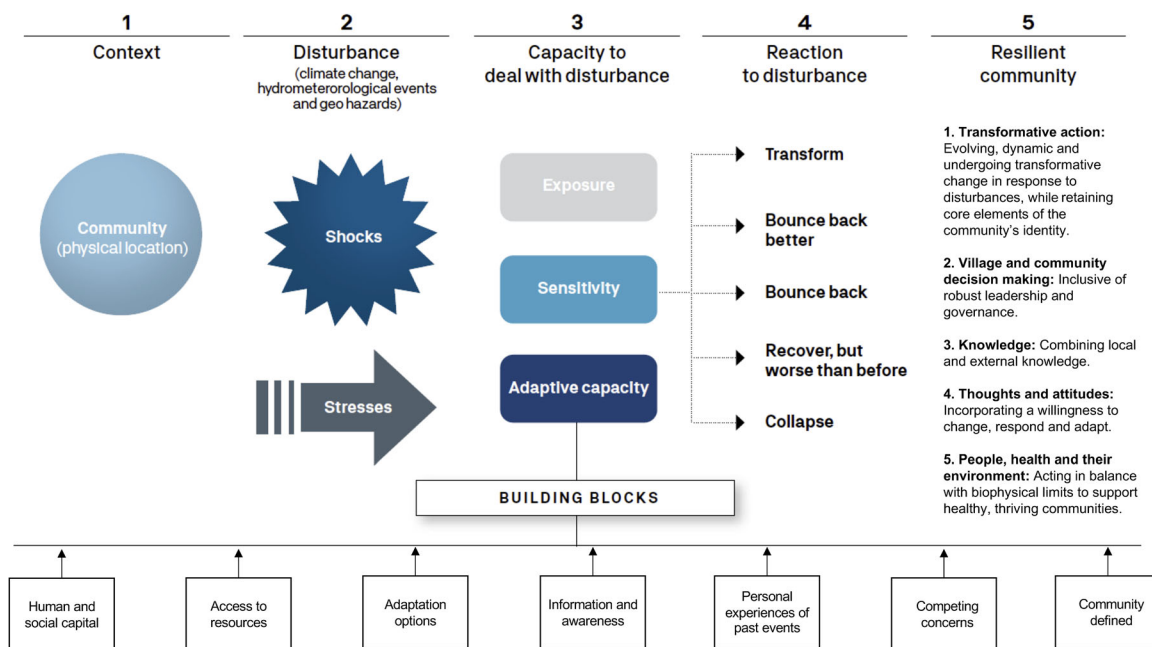


Figure 1. Community resilience framework [Colour figure can be viewed at [wileyonlinelibrary.com](https://onlinelibrary.wiley.com)]

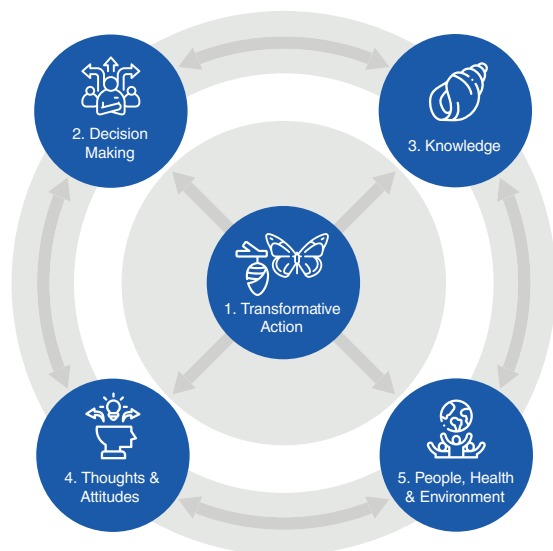


Figure 2. Five elements of a resilient community [Colour figure can be viewed at [wileyonlinelibrary.com](https://onlinelibrary.wiley.com)]

Disturbance. Our framework focuses on resilience within communities to disturbances with origins relating to climate, weather or geohazards. Disturbances may come in the form of shocks (e.g. sudden onset events such as tropical cyclones or flooding) or stressors (e.g. slow onset events such as drought, coastal erosion).

Capacity to deal with disturbance. The capacity to deal with the disturbance is defined in terms of exposure, sensitivity and adaptive capacity. *Exposure* relates to the degree, duration and/or extent in which the system is subject to the disturbance (Adger, 2006). For example, informal settlements in the Pacific (and elsewhere) are often hit harder by weather disturbances because they are located on marginal land near river banks and coastal estuaries (high exposure). *Sensitivity* is the extent to which a system (or elements of a system – such as individuals within a community) is changed or affected by an internal or external disturbance (Gallopín, 2006). Sensitivity is an attribute of the system. For example, evidence from past disasters in the Pacific and elsewhere highlights that disasters affect women, gender minorities and people with disabilities disproportionately (high sensitivity – Gaillard *et al.*, 2017).

Reactions to disturbance. This relates to a community’s response to the disturbance (climate change, hydrometeorological event or geohazards). As illustrated in Figure 1, a community might respond by collapsing, recovering (but worse off), bouncing back, bouncing back

better or transforming. As noted earlier, we define transforming as shifting development into new pathways and even creating novel ones (Folke et al., 2016).

Resilient community. We describe a resilient community in terms of the following elements (see Fig. 2):

- 1 Transformative action: Resilience involves evolving, dynamic and transformative actions in response to disturbances, while retaining core elements of the community's identity (Fedele et al., 2019). Aspects of change might be present in behaviours, actions, relationships, policies and practices within a community, and may reflect anticipatory actions in response to early warnings to reduce risk.
- 2 Village and community decision-making: Inclusive of robust leadership and governance. This includes culturally appropriate participation of diverse voices within communities (men, women, youth and young people, people living with disabilities, gender minorities and other marginalised groups) for the ongoing leadership and management of community life. Latai-Niusulu et al. (2020) provide Samoan examples of culturally appropriate participation in decision making and how this reflects individual roles and responsibilities. Talaloto, for example, is a Tongan deliberation process that enables lived experiences of individuals to inform decisions (Naufahu, 2018).
- 3 Knowledge: Combining local and external knowledge. A key aspect of the community resilience framework is recognition of local knowledge. This element demonstrates strengths-based principles by prioritising existing cultural knowledge and ways of knowing, local priorities and aspirations that support resilient livelihoods, and bring in external knowledge as needed, for example, climate change projections about sea level rise.
- 4 Thoughts and attitudes: Incorporating a willingness to accept change, and respond and adapt. A resilient community is able to accept new ways of doing things and willing to take on new knowledge about climate change (Warrick et al., 2017). Risk perception and attitudes and attachment to place, traditional

views and church value systems are important aspects of this element.

- 5 People, health and environment: Acting in balance within biophysical limits to support healthy, thriving communities. This element recognises the need to work within the limits of the environment, which may be changing as a result of climate and disaster risks (Díaz et al., 2015; Fischer et al., 2015).

Systems thinking and a strengths-based approach are demonstrated through the five elements of a resilient community, as these elements encapsulate intersecting and overlapping attributes of a community (the system) that support transformative change (Fedele et al., 2019). These elements intentionally extend beyond the direct reaction to the disturbance (e.g. this might involve establishing a Community Disaster Management Committee), and consider the importance of local attitudes towards climate change (which are affected by past experiences of severe weather events), and how these elements influence community resilience. Since climate change impacts are already pervasive across multiple aspects of individual and community life in the Pacific, building resilience to climate change necessitates thinking about the system (community) holistically. A strengths-based approach is evident in the framework through the premise of existing building blocks, through seeking to reveal elements of resilience and valuing the combination of building blocks and resilience elements. The presentation of the five elements in Figure 2 highlights the interacting and reinforcing nature of community resilience, such that elements of resilience can reinforce others. Transformative action at the centre of Figure 2 denotes a key influencing role to other elements of resilience.

Proposed future application of the Pacific community resilience framework

The Pacific is a crowded space when it comes to dialogue on resilient development. Whether driven directly by the impacts of climate change, leadership within the Pacific region, responses to Pacific geopolitics or other reasons entirely, numerous actors are implementing various interventions aiming to overcome the adverse effects of climate change and disaster

risk. The framework presented in the previous section proposes a way of understanding and assessing the effectiveness of these interventions at community level. Furthermore, the community resilience framework also aims to enable locally led development through its application that centres local voices, perspectives and priorities for adaptation and resilience building. As noted by Pacific scholars such as Meki and Tarai (2023), external Euro-centric knowledge remains dominant over local knowledge in development practice in the Pacific. While change towards decolonising development is slow, there is a growing body of scholarship that questions the effectiveness of externally led development in the Pacific (e.g. Westoby *et al.*, 2019; McNamara *et al.*, 2020; Craney, 2022; Fidali and Larder, 2022). Roche *et al.* (2022) call for *critical localism* that explores power, language and actors associated with ‘local’ – a contested term in itself. This framework provides development partners with a means to shift towards locally led development, and a practical way to listen to aspects of ‘community’ that matter for resilience building.

This section provides guidance across five major areas of development research and practice in the Pacific region that can use the proposed framework. Our examples offer initial guidance for different actors to critically reflect on their framing of Pacific community vulnerabilities and shift the narrative towards one that is more cognisant of the strengths and realities of Pacific communities’ resilience.

Research. The framework provides a strong basis for shifting the focus from community vulnerability to focusing on determinants of long-term resilience across diverse contexts. The framework can help define the questions that may be asked by and in communities to understand changes in resilience. The framework supports the formation of data collection methods and the specific processes to be carried out in community contexts. The building blocks of adaptive capacity and the five elements of resilient communities are intended to be focus areas for thematic analysis, which can be led by community members themselves with the support of researchers as facilitators. The framework also allows space for emerging meanings of resilience and context-specific understanding

(informed by community views) to be incorporated.

Programme design. The community resilience framework can help to establish boundaries for a context assessment to support programme design. It consolidates key terms and definitions and describes how they relate to each other. The five elements of a resilient community provide key areas where a programme might focus and develop locally identified activities to support the community’s capacity to adapt and transform to the impacts of climate change. Importantly, the framework can be used to facilitate community leadership of programme design, providing key aspects to consider as a holistic approach to strengthen community resilience.

Strategic policy. Understanding the environmental and cultural context is critical for developing strategic policy. The community resilience framework, particularly the five elements of a resilient community, provides a clear and simple structure to consider for strategic policy. The framework’s interconnected and holistic nature makes it inherently relevant to a range of actors and also encourages a systems perspective beyond sector specific siloed practice. The framework can be used at a high level, while also being able to instruct a deeper dive analysis into the range of issues within the five elements (e.g. gender and social inclusion, power dynamics, environmental thresholds within ecosystems, etc.) which could be of benefit to donors such as Australia’s Department of Foreign Affairs and Trade (DFAT), regional organisations such as the Pacific Community (SPC) or NGOs working with long-term engagement in the Pacific.

Programme implementation. Activities of a programme could be implemented based on the building blocks of adaptive capacity or the five elements of a resilient community. Doing so could provide a holistic approach to building the resilience of a community in such a way that considers the range of determinants of adaptive capacity (e.g. asset-based, psychosocial determinants) while also providing space for the community members to define what else

is important to them when considering what resilience means in the local context.

Evaluation. The community resilience framework could also be used as an evaluative tool to assess changes in community resilience, including using a bottom-up approach with community members driving the evaluative process with evaluators acting as facilitators. Given the growing number of programmes and projects that focus on building community resilience in the Pacific, the community resilience framework (particularly the five elements of a resilient community) could play a role in supporting a range of organisations (e.g. communities themselves, NGOs, Pacific consultants, development partners and donors) to track and evaluate programme progress in resilience building. Examples include specific community-based NGO projects or review of broader Pacific regional policies such as the Framework for Resilient Development in the Pacific.

Since 2019, the authors have used the Pacific community resilience framework with Pacific partners, as a guide for research and monitoring, evaluation and learning (MEL) for community resilience in Kiribati, Fiji, Vanuatu, Tonga and Timor-Leste. The framework has been applied in multiple programme and sector contexts including education, food security, livelihoods, water, sanitation and hygiene and infrastructure. Authors plan on documenting findings and publishing results in the near future.

Conclusion

Climate change impacts in the Pacific and worldwide have prompted researchers and practitioners to find ways to define and better understand what a resilient community looks like. A wealth of literature supports studies of resilience to climate change, and numerous frameworks through which to measure it. The dominant approach is grounded in deficit discourse, using measurements of vulnerability that often overlook existing capacity, local context and neglect the importance of interactions and relationships across sectors and scales. Our framework aims to integrate, where possible

and practical, elements of strengths-based and systems thinking approaches. By drawing on principles from these approaches, our framework acknowledges that communities have existing local capacity and autonomy to chart their own path towards resilient futures. The complex relationships and connections that underpin human-ecological systems are incorporated into the framework. This framework is therefore highly relevant to the Pacific context because of the strong self- and collective efficacy within Pacific communities, the strong connections between people and their environment, including the cultural ties to land and sea. The framework's application is described in its use in research, programme design, strategic policy, programme implementation and evaluation. The framework, therefore, provides a contribution to collective efforts for a range of actors working to support communities in the Pacific to adapt to the impacts of climate change.

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Conflict of interest

The authors have no conflicts of interest to disclose for this paper.

Data availability statement

Data sharing not applicable to this article as no datasets were generated or analysed during the current study.

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