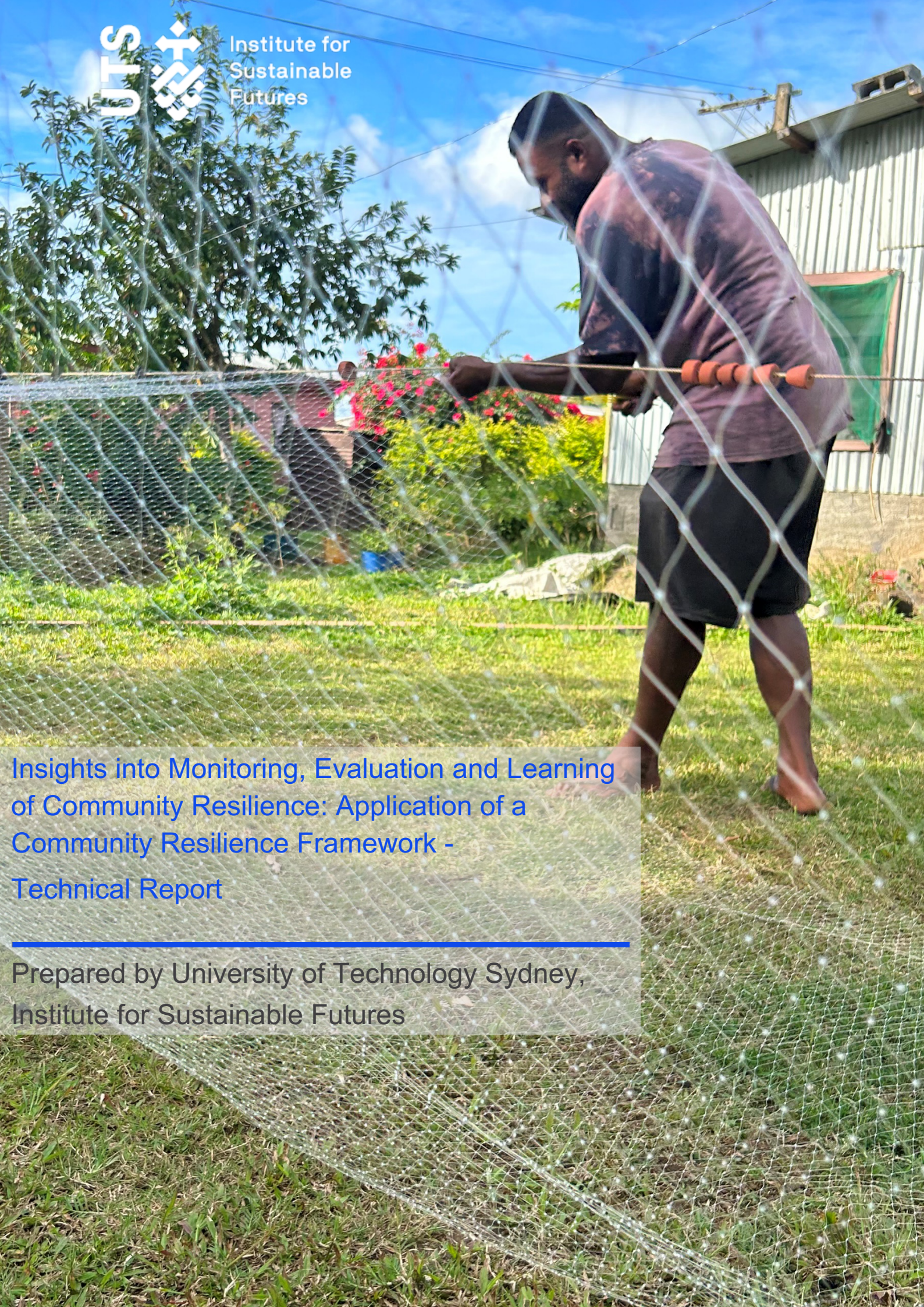

Insights into Monitoring, Evaluation and Learning of Community Resilience: Application of a Community Resilience Framework - Technical Report

Prepared by University of Technology Sydney, Institute for Sustainable Futures

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Citation

Gero, A., Chowdhury, T., Winterford, K., Lemau, C., Kaiyanuyanu, I., Vakacegu, P. (2024) Insights into monitoring, evaluation learning of community resilience: Application of a Community Resilience Framework – Technical Report, by University of Technology Sydney, Institute for Sustainable Futures.

About the authors

The Institute for Sustainable Futures (ISF) is an interdisciplinary research and consulting organisation at the University of Technology Sydney. UTS-ISF has been setting global benchmarks since 1997 in helping governments, organisations, businesses and communities achieve change towards sustainable futures.

We utilise a unique combination of skills and perspectives to offer long-term sustainable solutions that protect and enhance the environment, human wellbeing and social equity.

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Cover image: Naviyago village, Fiji

Photo credit: Tazrina Chowdhury (2023)

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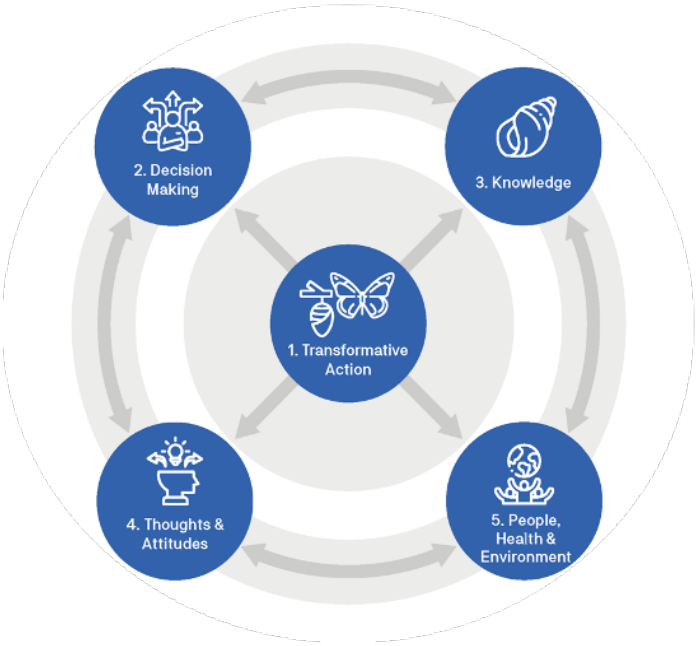
Executive Summary

Introduction and background

Climate change is an immediate and existential threat for countries across the Pacific region and continues to cause significant adverse impacts on communities. Diverse investments are being made that aim to build resilience to climate change impacts at community level. However, defining and evaluating the success of community resilience consistently remains a challenge among communities, civil society organisations (CSOs), governments and development partners.



The aim of this research was to learn about monitoring and evaluating the success of community resilience investments through the application of a Community Resilience Framework. Research was undertaken by the University of Technology Sydney, Institute for Sustainable Futures (UTS-ISF) in partnership with the Adventist Development and Relief Agency (ADRA) Fiji, in 2023. The research used ADRA Fiji's Pro-Resilience Project and the Community Resilience Framework (see left) as an entry point to learn about community resilience in Naviyago village, Vitogo, Ba Province in Western Division, Fiji. UTS-ISF and ADRA Fiji researchers co-designed appropriate processes for learning about community resilience, which revealed valuable insights through the research process and from engagement with the community.

Key research questions

The research was guided by five main research questions:

1. What are appropriate processes to learn about resilience?
2. What indicators enable the monitoring and evaluation of changes in resilience at community level?
3. What evidence suggests that the Community Resilience Framework reflects aspects of resilience that are important to the selected community?
4. a) How might the Community Resilience framework be refined, informed by lessons of applying in ADRA projects in Fiji?

   b) To what extent are refinements (of the Framework) relevant beyond the focus on ADRA projects in Fiji?
5. What lessons can be learned about monitoring and evaluating resilience through the use of the Community Resilience Framework?

Research approach

The research was co-designed and collaborative, with UTS-ISF and ADRA Fiji working closely across research co-design, data collection and analysis, and framing of research findings. Research with the community included focus group discussions, interviews, transect walks, and a whole-of-community workshop. The research team worked to ensure diverse participation in the research, engaging men, women, people of diverse genders, youth and people with disabilities. As a core approach, cultural sensitivities and protocols were observed throughout the community set up and engagement.

Key findings

Synthesis of Learning for Research Question 1: What are appropriate processes to learn about resilience?

The researchers identified six practices that support learning about community resilience:

Practice 1: Define the scope and framing of resilience within the project context.

Practice 2: Encourage community participation in project learning activities.

Practice 3: Establish a clear baseline information, verification and validation of progress/change, through diverse data sources. This forms a foundation for tracking progress and change through a project and learn about resilience outcomes.

Practice 4: Allow time to build relationships and trust, and for changes in community resilience to take place.

Practice 5: Listen to diverse voices. This helps external stakeholders to understand different experiences of resilience and can enrich the dialogue between communities and relevant stakeholders, leading to a deeper understanding of resilience.

Practice 6: Respect local governance and leadership when engaging with communities to maintain ongoing relationships and trust.

Synthesis of Learning for Research Question 2: What indicators enable the monitoring and evaluation of changes in resilience at community level?

The meaning of community resilience varies among individuals, locations and contexts. Designing indicators to monitor and evaluate changes in community resilience requires a bottom-up process, based on the local definitions and perceptions of resilience. Community members need to be involved in designing indicators to measure changes in their definitions of resilience. This research identified five principles to guide indicators (specific to context and project) that measure changes in community resilience:

Principle 1: Community resilience indicators should be developed on a case-by-case basis, depending on the context, purpose, and theory of change of the intervention.

Principle 2: Tracking change, progress, outcomes and impact requires good baseline data.

Principle 3: Indicators for monitoring and evaluating community resilience should be informed by local definitions and future visions of what resilience means through participatory processes.

Principle 4: Different types of indicators are required to monitor and evaluate changes in community resilience.

Principle 5: Community resilience indicators need to measure evolving and dynamic contexts and transformational change, rather than static measures of outcomes, and blend local and external knowledge.

Examples of how to put these principles into practice are provided in the report, along with examples of indicators across the five elements of community resilience – specific to the Pro-Resilience Project implementation in Naviyago village.

Synthesis of Learning for Research Question 3: What evidence suggests that the Community Resilience Framework reflects aspects of resilience that are important to the selected community?

Evidence from the research highlights that in Naviyago village, community's definitions of resilience reflects elements of the Community Resilience Framework. For example, ten themes of 'being resilient' were identified from the perspective of the community, and these could be easily mapped to the five elements of the Community Resilience Framework. Moreover, the resilience outcomes of the Pro-Resilience Project align with the Community Resilience Framework.

Synthesis of Learning for Research Questions 4a. How might the Community Resilience framework be refined informed by lessons of applying in ADRA projects in Fiji? And 4b. To what extent are refinements relevant beyond focus on ADRA projects in Fiji?

Significant refinements to the Community Resilience Framework were not needed, and the application in Naviyago village demonstrated its usefulness as a guide to explore elements and a holistic perspective of a resilient community. While more work on operationalising the building blocks of adaptive capacity is needed, research showed that the asset-based determinant 'Access to resources' needed to be updated to include resilient infrastructure. This refinement will make the Community Resilience Framework more relevant across the Pacific, given the need for resilient infrastructure to support communities maintain healthy and productive livelihoods.

Synthesis of Learning for Research Question 5: What lessons can be learned about monitoring and evaluating resilience through the use of the Community Resilience Framework?

This collaborative research distilled seven key lessons about monitoring and evaluating community resilience:

Lesson 1: Monitoring, evaluating & learning (MEL) frameworks for community resilience need to value the core elements of community identity.

Lesson 2: Co-designing is important to allow for more effective MEL processes for community resilience.

Lesson 3: Genuine inclusion of diverse community members is essential for gaining insights into the resilience outcomes and impacts of a project.

Lesson 4: MEL approaches should be designed to align with existing community governance structures and leverage their strengths.

Lesson 5: Integrating a decolonising approach can enrich a MEL process and contribute to effective learning on resilience outcomes of a project.

Lesson 6: The concept of resilience is evolving and not consistent; therefore, MEL of resilience should be nuanced and adaptable for various contexts.

Lesson 7: MEL of community resilience activities or investments need to acknowledge that the concept of resilience is holistic and overlaps with other community development indicators.

Conclusion

This research has identified useful insights for the practice of monitoring and evaluating community resilience investments. Firstly, the Community Resilience Framework is relevant to Pacific community perspectives of resilience. The Framework provides a valuable structure to practically define and assess changes to resilience at community level. This research found that indicators of community resilience can be defined and aligned with the elements of the Framework, to identify changes to community resilience and provide practical guidance to those engaged in community resilience building. Importantly, the *process* of applying the Community Resilience Framework as a MEL instrument is critical and needs to be undertaken using bottom-up processes. These research insights are relevant for international non-government organisations (INGOs), CSOs, governments, donors in the Pacific and development partners involved in community resilience projects in the Pacific.

Acronyms

ADRA	Adventist Development and Relief Agency
CDC	Community Disaster Committee
CSO	Civil Society Organisation
CVM	Community Volunteer Mobiliser
FGD	Focus Group Discussion
HH	Household
INGO	International non-government organisation
MEL	Monitoring, Evaluation and Learning
NGO	Non-government organisation
UTS-ISF	University of Technology Sydney, Institute for Sustainable Futures
WASH	Water, Sanitation and Hygiene

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1. Introduction

In 2023, the University of Technology Sydney, Institute for Sustainable Futures (UTS-ISF) undertook a research project in partnership with Adventist Development and Relief Agency (ADRA) Fiji, to learn about monitoring and evaluating community resilience through the application of a Community Resilience Framework. The research involved participatory activities with a community in Naviyago village, located in the province of Ba in Western Division of Fiji.

This report presents the synthesised findings and lessons from the research. The report aims to inform civil society organisations (CSOs), governments, development partners and donors in designing monitoring, evaluation and learning (MEL) approaches for community resilience investments, enabling effective learning about projects' resilience outcomes and strengthening development effectiveness.

The report is tailored for an audience experienced in conducting MEL approaches, designing and implementing MEL tools or analysing MEL reports.

2. Background

Community resilience refers to a community's capacity to adapt and thrive in changing and uncertain environments. In the Pacific region, elements of resilience include social capital, local leadership and collective capacity, which are deeply rooted in traditional governance. Defining and evaluating community resilience remains a constant challenge among communities, CSOs, governments and development partners. Therefore, this research sought to address the gap in assessing community resilience by exploring the community resilience outcomes resulting from ADRA Fiji's Pro-Resilience Project.

The research used ADRA Fiji's Pro-Resilience Project and UTS-ISF's Community Resilience Framework as an entry point to learn about community resilience. UTS-ISF and ADRA Fiji researchers co-designed appropriate processes for learning about community resilience, which revealed valuable insights through the research process and from engagement with the community.

The three terms frequently used in the report – community, resilience and community resilience – are being used differently in different contexts. To ensure consistent interpretation, these terms are defined in Box 1.

Box 1: Terms used in this report

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, p. 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, 2020).

Resilience: The capacity of interconnected social, economic and ecological systems to cope with a hazardous event, trend or disturbance, responding or reorganising in ways that maintain their essential function, identity and structure; resilience is a positive attribute when it maintains capacity for adaptation, learning and/or transformation (Intergovernmental Panel on Climate Change [IPCC], 2021).

Community Resilience: The existence, development, and engagement of community resources by community members to thrive in an environment characterised by change, uncertainty, unpredictability, and surprise (Magis, 2010, p. 402).

Pacific literature about communities that acknowledges the importance of social capital, in particular leadership and collective action, are 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). These are also important to include in community resilience when considering Pacific communities.

2.1 The Community Resilience Framework

In 2019, UTS-ISF developed a Community Resilience Framework[1] through research funded by the Australia Pacific Climate Partnership, as a contribution to strengthening climate and disaster resilience in the Pacific.

[1] See Gero et al. (2024) for details. https://onlinelibrary.wiley.com/doi/full/10.1111/apv.12411

The Community Resilience Framework (Figure 1) was developed to help define, assess, and support community resilience building in the Pacific. This Framework draws heavily on Pacific literature (Annex 1) and conceptualisations of resilience. The Framework offers a holistic view of resilience that emphasises strengths-based principles and systems thinking, serving as a practical tool for policy making, program design, MEL and research.

In 2019, the framework was applied as part of research focused on exploring community resilience in the Pacific. Case studies carried out in Fiji, Kiribati, Tonga and Vanuatu demonstrated the relevance and usefulness of the framework to identify factors of community resilience in the Pacific communities.

The Framework sets out five elements of resilience and building blocks of adaptive capacity sit alongside the five elements, describing foundational elements that support a resilient community.

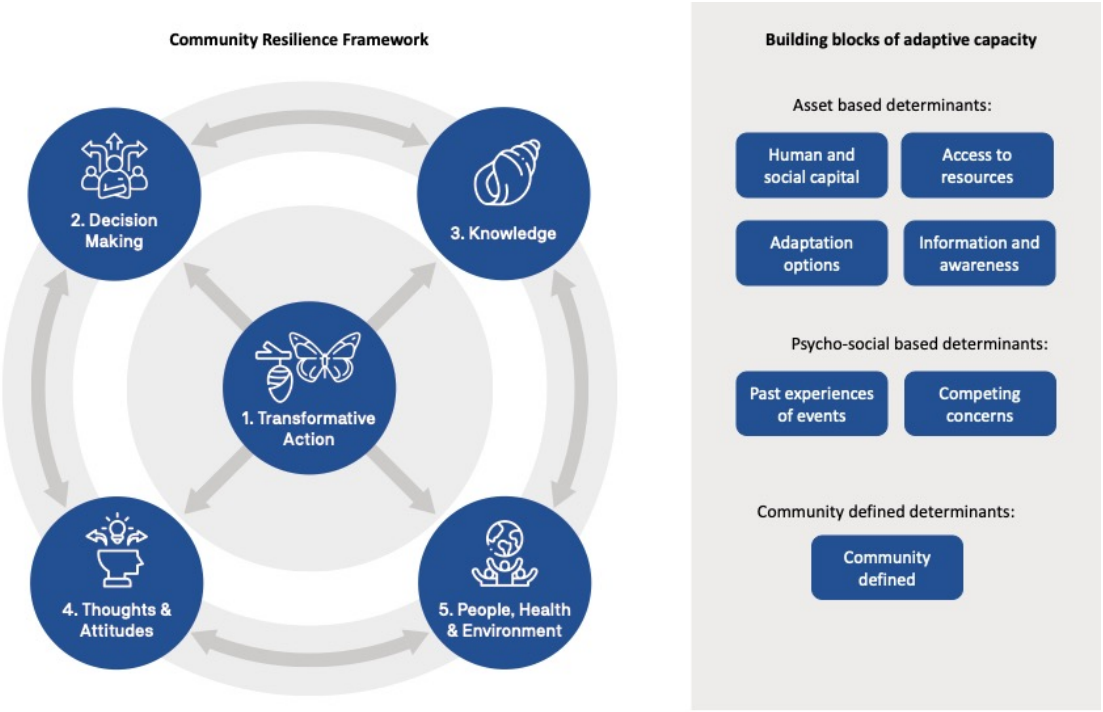

Figure 1: Community Resilience Framework

The five elements of the Community Resilience Framework (Figure 1) and building blocks of adaptive capacity are described in Box 2.

Box 2: Description of Community Resilience Framework

Five elements of a resilient community	Building blocks of adaptive capacity
1. Transformative Action: Evolving, dynamic and undergoing transformative change in response to disturbances, whilst retaining core elements of the community's identity. 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. Decision Making:** Inclusive of robust leadership and governance. This includes 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.	**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, as well as 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:**

3. Knowledge: Combining local and external knowledge. This element demonstrates strengths-based principles by prioritising existing cultural knowledge and ways of knowing, bringing in external knowledge as needed e.g. climate change projections about sea level rise. **4. Thoughts and Attitudes:** Incorporating a willingness to accept change, 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. **5. People, Health and Environment:** Acting in balance within biophysical limits to support 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.	**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; however, facing multiple and/or severe events can have negative impacts on mental health. **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. **Community defined determinants:** **Community defined building blocks** acknowledge the need for local understandings and experiences of climate change and the importance of cultural and political perceptions of risk.

2.2 ADRA Fiji's Pro-Resilience Project

ADRA Fiji's Pro-Resilience Project, funded by the European Union with a budget of AUD 3.54M (FJD 5.2M), aimed to enhance the resilience and adaptive capacity of vulnerable communities and subsistence farmers in drought-prone areas of Fiji. The project was active from 2018 to 2021 in Macuata and Ba provinces, and targeted 150 communities. The project engaged 10,000 subsistence farmers (with at least 30% being women) and involved 150 Community Volunteer Mobilisers (CVM). The focus of the project was to strengthen community resilience through drought resistant agriculture, which ensures i. food and nutrition security, and ii. conduct community awareness activities. The project impact reached about 35,000 households, benefiting government officers, CSOs, private sector entities and the wider community[2].

One of the locations where the Pro-Resilience Project was implemented was Naviyago village in Ba Province, which is a village in Western Division. Naviyago was chosen as the location for this research because it provided a source of rich learning about resilience, given the community had undertaken a range of food security, nutrition and backyard gardening activities as part of Pro-Resilience. Naviyago is also highly exposed to multiple hazards and risks including drought, flood (it is located next to a river) and tropical cyclones.

3. Objectives of the research

The overall aim of this research was to learn how to assess community resilience, and to explore what success looks like in terms of a 'resilient community'. An entry point to this aim was the use of an applied Community Resilience Framework which offers a Pacific informed perspective of resilience. The findings and insights from this work will help progress thinking and practice on how to assess community resilience in the Pacific.

Under the broad aim, the four key research objectives were:

Objective 1: To develop practices and processes to learn about resilience in the context of program/project MEL. This may include the development of indicators of resilience, and approaches to assess community resilience.

Objective 2: To apply a Community Resilience Framework, and the process and practices of MEL (e.g. indicators). A strong partnership between UTS-ISF and ADRA Fiji will support the application of the framework and enable useful lessons to be learned and documented.

Objective 3: To refine the Community Resilience Framework and the concept of community resilience based on lessons from its application in partnership with ADRA Fiji.

[2] Source: Final Evaluation Report: VAKARAU WAI – Fiji Pro Resilience Project.

Objective 4: To document the lessons learned from the research, to share with Pacific and Australian practitioners and academics working in the area of climate change action and community resilience.

4. Approach and methodology

The research was guided by five main research questions, each with sub-questions that were answered through a range of methods described in this section. Table 1 outlines the five research questions and their data sources. Each research question has multiple sub-questions, all of which are linked to the Community Resilience Framework.

Table 1: Research questions and data sources

Research question	Data source
1. What are appropriate processes to learn about resilience?	Co-designing phase (Pro-Resilience documents and shared information from ADRA Fiji)
	Community research
	Synthesised findings & researchers' reflections
2. What indicators enable the monitoring and evaluation of changes in resilience at community level?	Co-designing phase (Pro-Resilience documents and shared information from ADRA Fiji)
	Community research
	Synthesised findings & researchers' reflections
3. What evidence suggests that the Community Resilience Framework reflects aspects of resilience that are important to the selected community?	Community research
	Synthesised findings & researchers' reflections
4a. How might the Community Resilience framework be refined informed by lessons of applying in ADRA projects in Fiji?	Community research
	Synthesised findings & researchers' reflections
4b. To what extent are refinements relevant beyond focus on ADRA projects in Fiji?	Synthesised findings & researchers' reflections
5. What lessons can be learned about monitoring and evaluating resilience through the use of the Community Resilience Framework?	Synthesised findings & researchers' reflections

This study included three primary research approaches. Firstly, a co-design research process was undertaken by UTS-ISF and ADRA Fiji through a collaborative team-based approach. Secondly, the community research phase, which involved multiple participatory data collection methods within selected community such as Focus Group Discussions (FGDs), interviews, and workshops. Lastly, researchers' reflection sessions were also an important phase to ensure accurate interpretation and analysis of community research data. The insights and observations shared by the researchers during these reflection sessions served as significant data sources, adding depth and evidence to the research findings. The three approaches of this research are described below.

4.1 Co-designing and collaborating on the research

Co-design is a collaborative approach to designing *with*, not *for* people with diverse voices and lived experience (Blakemore, 2022). UTS-ISF and ADRA Fiji collaboratively designed the research, leveraging their collective expertise and experiences in resilience programs and research within Pacific communities. UTS-ISF brought insights on the Community Resilience Framework, its five elements, building blocks of adaptive capacity and previous Framework applications. ADRA Fiji shared their applied knowledge from the Pro-Resilience Project, past ADRA Fiji programs and experience in MEL for various projects.

The co-design and collaborative approach began early in research process and extended until the finalisation of the research. A research team was formed with three researchers from UTS-ISF and three

practitioners from ADRA Fiji. Online meetings were held with the research team prior to in-country data collection to build a shared understanding of the purpose of the research, including what 'community resilience' means from different perspectives. The research team spent two days together, face-to-face, prior to data collection to further solidify and refine the research approach. During these days together, the research team designed data collection methods and developed tools for interviews and FGDs. The team also undertook a stakeholder mapping exercise, recognising the need to engage diverse community members to explore experiences of resilience. The stakeholders identified were then mapped to appropriate data collection methods.

Another important aspect of the co-design phase was gaining the appropriate permissions to undertake the research in Naviyago village. The UTS-ISF and ADRA Fiji team recognised and valued the need to ensure government and local approvals were also appropriately sought. ADRA Fiji's strong relationships with subnational government and within the Naviyago community meant that there was existing trust, and this supported the appropriate approvals to be granted. Alongside these local permissions, UTS-ISF's internal research ethics process was also approved, and relevant documentation (e.g. consent forms, information sheets) were prepared by UTS-ISF and translated by ADRA Fiji.

Throughout this co-designing phase, UTS-ISF researchers aimed to complement ADRA Fiji's strengths, building on their strong community engagement experience and deep understanding of local culture and context. This approach also aligned with decolonising research principles, which encourage exploring alternative perspectives, actions, and coexistence (Megaw & Willets, 2022).

4.2 Community research

Through the co-designing process, the research team developed four data collection activities to undertake with the stakeholders identified from the Naviyago community. These activities aligned with research objectives and were tailored to the participants' context. Data collection activities were led by ADRA Fiji and conducted in the local language, with UTS-ISF providing supporting roles. The primary aim of these activities was to collect qualitative data, complemented by a limited amount of quantitative data, addressing specific research questions. Table 2 presents the number of participants involved in four community research activities.

Qualitative research activities:

Focus Group Discussion (FGDs): Three FGDs were conducted separately with youth, men and women in the Naviyago community. These discussions explored the community's collective and individual perception of resilience.

Transect walk: As an extension of FGD with the youth group, the researchers took a transect walk in the village to have a better understanding of the community. The transect walk enabled researchers to observe the household gardens that youth had been active in building and maintaining.

Interviews: During the stakeholder mapping exercise, the research team identified key individuals to interview. These individuals included the *Turaga ni Koro* (community leader), a female Community Health Worker, a Community Volunteer Mobiliser (CVM), a Women Leader, and a Person with a Disability. They were asked qualitative questions to explore their views of resilience, to assess the outcomes and impact of the Pro-Resilience Project on their community, and to uncover their perspectives on how the project outcomes contribute to the five elements of the Community Resilience Framework.

Community workshop: This participatory session extended and validated primary data gathered from FGDs, transect walk and interviews. Participatory activities, such as role play and mapping exercises, helped to further reveal community members' perceptions of resilience.

Quantitative research activity:

Community voting: Participants voted on resilience aspects identified in FGDs and interviews that most resonated with them and their community.

Table 2: Number of participants involved in community research activities

Type of data	Activity	Number of participants
Qualitative Data	FGDs	12 youth
		21 men
		20 women
	Interview	5
	Transect walk	12 youth
	Community workshop	22
Quantitative data	Community voting	20

4.3 Researchers' reflections and analysis

After completing the data collection, the research team engaged in reflective sessions to analyse their experience in conducting community research and interpreting the collected data within the context of the Community Resilience Framework. These reflections involved documenting individual observations and insights gained from the interviews, transect walk, FGDs, community workshop and voting activities. The researchers' reflections were essential in linking the information shared by the community with the research objectives, serving as a key data source that bridged community's input with the research questions.

The analysis of findings from the data involved a collaborative and consultative approach between UTS-ISF and ADRA Fiji. The researchers convened both in-person and via Zoom© to interpret and make sense of the findings. Moreover, the team utilised the qualitative data analysis tool, Dedoose©, to systematically analyse the data.

5. Key learnings from the research

This section presents the findings of the research. The research findings provide important insights into the process of learning about resilience (Section 5.1) and explicitly discuss the indicators that enable effective MEL of community resilience (Section 5.2). The discussion (Sections 5.3 and 5.4) highlights significant lessons regarding the appropriateness of the Community Resilience Framework for MEL purposes. Finally, the lessons learned about MEL of community resilience using the Community Resilience Framework are summarised in Section 5.5.

5.1 Appropriate processes to learn about resilience

Synthesis of Learning for Research Question 1: What are appropriate processes to learn about resilience?

The researchers identified six practices that support learning about community resilience. Practices include important processes such as defining the scope and framing of resilience within the project context, and encouraging community participation in project learning activities. Clear baseline information, verification and validation of progress/change, through diverse data sources forms a foundation for tracking progress and change resulting from a project and enables learning about resilience outcomes. The researchers found that it takes time to build relationships and trust, and for changes in community resilience to take place. The practice of listening to diverse voices helps external stakeholders to understand different experiences of resilience and can enrich the dialogue, leading to a deeper understanding of resilience. Respecting local governance and leadership was important when engaging with communities and also helps maintain ongoing relationships and trust. These practices are described in detail below.

Practice 1. Define the scope and framing of resilience within project context.

Typically, scoping and framing of resilience should occur in the design phase of the project. Scoping outlines what resilience aspects to include in the project and sets boundaries, whereas framing helps to identify overarching vision of resilience within the project. Defining the scope and framing of resilience in a project enables effective learning about resilience and can be considered in three dimensions:

i. Scope resilience in a project through community consultation. This provides a bottom-up perspective of how, and to what extent, the project can contribute to community resilience.

ii. Describe resilience in a project context that recognises how the project's actions affect the broader 'ecosystem' of resilience (e.g. connections or linkages to other local activities such as education, health, governance activities). This can include identifying how the project plans, initiatives, policies and stakeholder efforts play roles in strengthening resilience, while also acknowledging areas where project's influence on resilience is limited or absent.

iii. Learn about resilience, acknowledging that its meaning can change as the project advances. This may involve different perceptions of various stakeholders, especially when defining resilience as an outcome of the project. Therefore, framing of resilience should include flexibility, and the ability to adapt as the project progresses. Some ways of ensuring that the framing of resilience is updated and aligned with the project's outcomes involves meetings with stakeholders and beneficiaries of the project at the end of project or on a quarterly or annual basis to explore and redefine perspectives on resilience.

Practice 2. Encourage community participation in project learning activities.

Listening to stories of change related to specific project activities from community members can support learning about resilience – valuable both for the project, and for community learning. Interpreting stories, anecdotes and narratives of community experiences can help to understand the connection between community actions, climate change, and efforts in building resilience. Effective community participation to learn about resilience can be enabled in two ways:

i. Project staff spending time in a village or community can help them to build mutual trust and relationships between community members and project staff. This can encourage community members to participate in different activities as part of MEL processes to learn about community resilience. The importance of allowing time to build relationships and trust with community members has been further discussed in Point D.

ii. Locally appropriate, innovative, participatory approaches to explore community resilience perceptions can help project staff to capture diverse stakeholder experiences and document evidence of community resilience.

As outlined in Section 4: Approach and Methodology, this research undertook different innovative and participatory approaches to effectively engage with communities during the community research phase. These approaches have resulted in gaining valuable insights into community resilience and learning from communities. Some of the approaches are described below:

Role play: A role play can be a useful tool for learning about a complex topic such as resilience from a MEL perspective. Role play encourages people to actively participate, think creatively, and apply their knowledge in the present. This brings out various perspectives of the participants and develops deeper shared understanding of resilience through exploring different viewpoints. For example, during FGDs and interviews, community members of Naviyago village were asked 'what does being resilient mean to you?'. Ten key themes were identified from their answers. The answers were then presented back to the community during the validation workshop and the community members were requested to consider how a theme associated with 'being resilient' could be demonstrated through a role play. The role plays performed at the workshop validated the ten key themes of 'being resilient' and helped the researchers to better understand how the key themes contribute to the community's resilience.

Transect walk: A transect walk is an effective tool for gathering information, understanding the context, and gaining insights into the factors that contribute to community resilience. A transect walk provides an opportunity to physically move through a community or area, observing and documenting various aspects including land use, infrastructure, human activities, gender roles, accessibility for people with disabilities, and environmental conditions. This facilitates contextualise understanding and enable community engagement, helping to identify community's resilience perspectives.

For example, during the community research phase in Naviyago village, researchers accompanied local youth on a transect walk. This allowed researchers to directly observe the impact of ADRA Fiji's Pro-Resilience Project, particularly the success of backyard gardening. The researchers validated resilience

factors such as access to water through rainwater harvesting and raised homes as a disaster preparedness measure.

Mapping/drawing exercises: Mapping exercises allow participants to visually represent the interconnectedness of different aspects of community resilience, and helps communities to think about their knowledge, strengths and challenges. If these are depicted on a map, it also connects perceptions of risks and knowledge of hazards to specific locations in the village.

For example, as part of the community workshop activities, a group in Naviyago village created a drawing outlining crop that can withstand cyclones and crops that cannot. Researchers were able to gain insight into the community's use of its existing knowledge and activities to increase community resilience through the drawing exercise.

Practice 3. Develop clear baseline information, verification and validation of progress/change through diverse data sources.

Having a clear baseline through observation, field visits and existing sources of information forms a foundation for tracking progress and change through a project and learning about resilience outcomes. Listening to impact stories from individuals provides tangible evidence of progress and offers valuable lessons on effective strategies for enhancing resilience. To develop clear baseline information and verify progress or change for learning about resilience, it's essential to involve diverse data sources. This can be achieved through the following methods:

Triangulating evidence: Triangulating evidence of change in community resilience involves leveraging multiple data sources such as diverse community members, leaders, technical experts, and district officers. The process includes collecting qualitative and quantitative data, increasing the credibility of findings and validating the data from different perspectives.

Stakeholder engagement: Engaging different project stakeholders and beneficiaries throughout project implementation (monitoring phases), at the end of a project and on an annual basis for long-term projects can allow comprehensive review of progress, identification of challenges, and the exchange of knowledge and insights.

Quarterly Project Manager Meetings: Conducting quarterly meetings with project managers across various projects serves as a platform for sharing learnings, addressing challenges, and identifying overarching themes related to resilience.

Practice 4. Allow time for building relationships and trust, and allow time for changes in community resilience to take place.

The research highlighted the significance of allocating time before, during, and after a project to capture genuine community resilience outcomes. Stakeholders involved in the implementation require time before and during the project to develop and nurture relationships, building mutual trust with community members. Moreover, time is essential post-project completion to facilitate effective and sustainable changes. This need for time is further explained below:

i. Allowing time for building relationships and trust: The process of understanding resilience requires an investment of time to build relationships and establish trust. Building rapport with community through investing time in meaningful interactions, active listening and collaborative efforts helps to understand the context, strengths, challenges and community's priorities. This supports resilience learning as well as enables a sense of ownership within the community.

For example, in Naviyago village men do not work collectively but have a strong communal feeling towards the community,

> *We (men) like to do our things in our way, but we have a communal feeling …* - Male farmer, Naviyago Village.

In the Pro-Resilience Project, ADRA Fiji recognised the characteristics of the community's men and how the community's dynamics play roles in resilience building within communities. Men listen to the community leader (*Turaga ni Koro*) and then worked independently. Instead of asking men to support each other or

direct instructions through project officers, ADRA Fiji provided support to the *Turaga ni Koro*. Men listened to the village leader, took information and advice from him and then worked independently.

Working with the same community across different projects and developing ongoing relationships can foster mutual trust, facilitate effective partnerships and enable resilience building.

ii. Allowing time for changes in community resilience to take place: Processes for learning about resilience need to consider the necessary time for meaningful changes to take place. A realistic understanding that changes in resilience may take a long period of time enables achievable goals setting and prompts identification of indicators of future change within the community. Learning about resilience is a long-term endeavour. Projects may therefore consider MEL processes that help to identify 'markers of change' instead of specific changes and think of repeated MEL after a certain period of time after the project ends.

> *It takes time for changes to happen, for people to be okay to change…* - Community Health Worker, Naviyago Village.

Additionally, a robust resilience learning approach involves a strong theory of change that tracks multiple pathways of change and impact. This means going beyond the immediate scope of the project, such as a food initiative leading to a better diet. It requires measuring these changes using diverse indicators that might take longer periods to become fully evident, acknowledging the complex relationships between different aspects of resilience.

For example, the Pro-Resilience Project, which ended in 2021, brought about a change in the food items provided in school lunchboxes for young kids. This change is expected to improve their nutrition and, over time, make them healthier and more resilient. However, becoming healthier and more resilient will take longer compared to programs that raise awareness or build skills. Still, this change is significant and needs to be observed and measured as time goes on.

Practice 5. Listen to diverse voices to understand different experiences of resilience.

Discussion with a wide range of stakeholders, including individuals from different genders, (dis)abilities, backgrounds, professions, ages and roles within the community and outside stakeholders of communities can enrich the dialogue of resilience, leading to a deeper understanding of resilience. Listening to diverse voices to learn about resilience is important for following reasons:

i. Identifying key community leaders, influencers, and stakeholders who can offer valuable insights into community dynamics ensures a comprehensive understanding of the community structure. This knowledge facilitates consultations with a diverse range of community members ensuring a more inclusive perspective on resilience experiences. People with diverse backgrounds bring different lenses through which resilience can be understood. Their unique experiences contribute to capture a holistic picture of resilience, enabling a deeper exploration of the various factors driving community resilience.

For example. within the community, the Pro-Resilience Project caused various positive resilience outcomes. However, a person with a disability held different views due to her lack of involvement in the project activities. As part of the project, community members participated in-person awareness raising workshops which increased their knowledge and awareness of backyard gardening and nutrition, but due tof accessibility issues people with disability could not attend the workshops.

ii. Learning from various members of the community, such as leaders, and those outside the community but with connections to local activities such as government staff at subnational or national level, can add credibility to the findings and verify the observed changes in resilience.

Practice 6. Respecting local governance and leadership is important when engaging with communities.

Appropriate processes to learn about resilience involve community engagement in a way that aligns with established government and community norms and leadership structures. Entering and exiting the community should be undertaken in a manner that respects local leadership, both government and village authorities. For example, ADRA Fiji maintained the entry protocols of the community, sought permission from the District Officer of Lautoka/Yasawa, who explained the purpose of the community engagement to the

Turaga ni Koro. The *Turaga ni Koro* then introduced the research team to the community through a kava ceremony and prayer. Engaging appropriately with local leaders built the community's trust in ADRA Fiji and facilitated learning about their diverse perspectives of climate change and resilience.

To learn about resilience, it is important to consider two types of culturally appropriate engagements:

i. A strong focus on cultural protocols when engaging with the community can ensure that the interactions are conducted respectfully and in line with local customs, enhancing the community's willingness to participate and share valuable insights.

ii. Approaching a community to learn about resilience by working with the existing community leadership structure can enable coordinated and inclusive community engagement, leading to a deeper understanding of resilience from community's perspective. Working with established community leadership and local committees (e.g. Community Disaster Committee, Women's Groups, Youth Groups) can enhance the willingness of the community engagement.

5.2 Indicators that enable the monitoring and evaluation of changes in community resilience

Synthesis of Learning for Research Question 2: What indicators enable the monitoring and evaluation of changes in resilience at community level?

Community resilience means different things to different people in different places. Designing indicators to monitor and evaluate changes in community resilience requires a bottom-up process, based on the local definitions and perceptions of resilience. Community members themselves need to be involved in designing indicators to measure changes in their own resilience. This research identified five principles to guide context and project specific indicators that measure changes in community resilience. Examples of how to put these principles into practice are provided, along with examples of indicators across the five elements of community resilience – specific to the Pro-Resilience Project implementation in Naviyao village. Example indicators are provided for activity / output level (monitoring indicator) and outcome / impact level (evaluation indicator). Building blocks of adaptive capacity help to present a picture of what determines resilience at community level, complementing the five elements of resilience. Further research is needed to support the development of example indicators for the building blocks.

5.2.1 Background to indicator development

There is no one agreed definition for 'community resilience', as it is framed and applied differently by different groups, according to the context in which it is used. In the Pacific, research (e.g. Warrick et al., 2017; Latai-Niusulu et al., 2019) suggests that community resilience usually incorporates cultural heritage, Indigenous knowledge and the importance of social capital, particularly leadership and collective action which are key to Pacific traditional governance.

Since community resilience means different things to different people in different places, designing indicators to monitor and evaluate changes in community resilience requires a bottom-up process, based on the local definitions and perceptions of resilience. Community members themselves need to be involved in designing indicators to measure changes in their own resilience.

The purpose of this section is to provide a 'thinking person's guide' to designing indicators for community resilience. As described below, it is not possible nor helpful to provide a comprehensive list of indicators of community resilience. This section aims to provide a guide for those responsible for designing monitoring and evaluation frameworks with principles to embed in the process, and examples of indicators in a particular context (in this case, from research with ADRA Fiji).

This section is comprised of two parts. Firstly, reflections on key principles that can support the designing of community resilience indicators. Secondly, illustrative examples of selected indicators across the five elements of community resilience are provided based on the research with ADRA Fiji in Naviyago, Fiji. While not designed to be a comprehensive list, these examples are intended to inspire reflection and consideration for other Pacific contexts where investments in community resilience are being implemented.

5.2.2 Key principles for indicators to support monitoring and evaluation of changes in resilience at community level

Principle 1: Community resilience indicators should be developed on a case-by-case basis, depending on the context and purpose, and theory of change of the intervention.

Since 'community resilience' can be interpreted in many ways and building resilience can include a multitude of activities, indicators need to be project and context specific, developed for a particular intervention to contain indicators to a manageable scope – and to align with the project's theory of change. 'Off the shelf' indicators may be useful if they are adapted or augmented for the local context and socialised with target population.

Principle 2: Tracking change, progress, outcomes and impact requires good baseline data.

Building a data gathering phase into an intervention supports the development of baseline data as well as contextual understandings of what resilience means for local communities and diverse stakeholders within these communities. Depending on the scope of the intervention, some baseline data may measure commonly measured development indicators such as economic, environmental, health and poverty related indicators.

Principle 3: Indicators for monitoring and evaluating community resilience should be informed by local definitions and future visions of what resilience means through participatory processes.

Diverse perspectives of 'what resilience means' (e.g. views of women, men, youth, people with disabilities and other marginalised groups) should be included in indicator design. Designing indicators requires a clear understanding of local context and should reflect and be connect to community perspectives of, and aspirations for, resilience through a range of participatory activities.

Principle 4: Different types of indicators are required to monitor and evaluate changes in community resilience.

Uncertainty to climate change requires an adaptive and responsive approach to project design and implementation. Ongoing monitoring is essential to inform adaptive management for projects implemented in dynamic climatic conditions. Activity or output level indicators measure progress in resilience for monitoring purposes. Regular collection of activity indicators supports data collection on intended and unintended outcomes, as well as possible maladaptation. Outcome and impact indicators focus more on longer term changes in resilience over time – at the end of an intervention or beyond, possibly years later.

Principle 5: Community resilience indicators need to measure evolving and dynamic contexts and transformational change, rather than static measures of outcomes, and blend local and external knowledge.

In practice, this means measuring baselines, progress, outcomes and impact at the end of the investment, or even years later. Diverse stakeholder narratives support the documentation of evolving and dynamic contexts and transformational change, and this can be enabled by triangulating with other evidence such as quantitative activities or outcome level indicators. Reviewing and refining indicators over time, in collaboration with local community members, will ensure the measures continue to be relevant in dynamic contexts.

5.2.3 From principles to practice

The table 3 below demonstrates how these principles can inform practice, i.e. how to action the principles. The table also includes examples of when (in the project cycle) the principle could be actioned.

Table 3: Principles for indicators informing practice

Principle	Prompting question/s	Example of when to action
Principle 1: Community resilience indicators should be developed on a case-by-case basis, depending on the context and purpose, and theory of change of the intervention.	• What is the overarching vision or change objectives of the project? • What aspect/s of resilience does the project focus on? • What are the community's aspirations for resilience? • What does resilience mean to different social groups in the community?	Design phase, development of theory of change Early consultation with community
Principle 2: Tracking change, progress, outcomes and impact requires good baseline data.	• How do different social groups conceptualise resilience? • How can local knowledge play a role in developing baseline indicators? • How can the indicators blend local and external knowledge?	Baseline assessment Midterm review Final evaluation
Principle 3: Indicators for monitoring and evaluating community resilience should be informed by local definitions and future visions of what resilience means through participatory processes.	• What does resilience mean to different social groups in the community? • How could the community's aspirations for resilience inform the development of indicators? • What activities and processes do the community want to use to learn about changes in resilience? • What participatory activities would be locally appropriate (for different social groups) and useful to learn about resilience?	Design phase, development of theory of change Early consultation with community
Principle 4: Different types of indicators are required to monitor and evaluate changes in community resilience.	• What activity or output level indicators best capture incremental change? • What outcome or impact level indicators best capture transformational change?	During monitoring activities Midterm assessment Final evaluation
Principle 5: Community resilience indicators need to measure evolving and dynamic contexts and transformational change, rather than static measures of outcomes.	• Has the project tracked according to plan? If not, how can the indicators be modified to represent the reality of the project/community? • Has the community's perspectives of resilience changed over the course of the project?	During monitoring activities Midterm assessment Final evaluation

5.2.4 Examples of resilience indicators

This section provides examples of indicators across the five elements of resilience in the Community Resilience Framework that were relevant for ADRA Fiji's Pro-Resilience Project. As mentioned above, the intention is to provide a short list of examples of activity/output level indicators, and outcome/impact level indicators. These Pro-Resilience examples can be used as a guide for the development of resilience indicators for other projects.

The table under each element of resilience includes two sub-themes that were relevant to the Pro-Resilience Project. Detailed tables with a number of sub-themes and multiple example indicators are provided in Annex 2. For each sub-theme, example indicators are provided for activity/output level, as well as outcome/impact level indicators. Suggested means of verification are provided in brackets after the example indicators.

Transformative Action – example indicators

Sub theme	Indicator type	Example indicator
Climate resilient agriculture and inclusive food security	Activity / output level (monitoring indicator)	Number of households (HHs) within the community with backyard gardens (# HHs)
	Outcome / impact indicator (evaluation indicator)	Adapting agricultural practices according to be more climate resilient (# of examples)
Diverse livelihood options	Activity / output level	Number of household income sources (# income sources)
	Outcome / impact indicator	Proportion of household food grown at home, compared to purchased at market / in town (% of food)

Decision Making – example indicators

Sub theme	Indicator type	Example indicator
Traditional and inclusive community governance structures	Activity / output level (monitoring indicator)	Proportion of the community who are aware of community leadership structure/s and assigned roles of leaders (% of adult population)
	Outcome / impact indicator (evaluation indicator)	Existence of shared male-female leadership (examples/stories of joint male-female decision making)
External relationships with government and non-government organisations	Activity / output level (monitoring indicator)	Number of visits from government representatives to community per year (# visits)
	Outcome / impact indicator (evaluation indicator)	Change in the strength of community leaders' relationships with sub-national government (examples/stories describing community leader's relationships with government)

Knowledge – example indicators

Sub theme	Indicator type	Example indicator
Local knowledge brokers	Activity / output level (monitoring indicator)	Number of local leaders sharing knowledge about climate and weather risks in the community (# male local leaders/# female local leaders)
	Outcome / impact indicator (evaluation indicator)	Extent of change in local leaders' traditional knowledge about community's risks and hazards (increase or decrease in degree of traditional knowledge)
Strength and sharing of traditional knowledge	Activity / output level (monitoring indicator)	Proportion of community who eat traditional foods and live off the land and the sea, as compared to those who eat imported / bought food (% eating traditional foods vs % eating imported foods)
	Outcome / impact indicator (evaluation indicator)	Extent of change within communities to switch to traditional food (increase or decrease in consumption of traditional foods)

Thoughts and Attitudes – example indicators

Sub theme	Indicator type	Example indicator
Gender dynamics and role changes	Activity / output level (monitoring indicator)	Number of men and women shifting from their traditional roles (# men / # women)
	Outcome / impact indicator (evaluation indicator)	Extent of change in the traditional roles of men and women (examples/stories of men, women and youth playing non-traditional gender roles in the community)

Collective change in community's thoughts and attitudes	Activity / output level (monitoring indicator)	Extent of *solesolevaki* communal approach (examples/stories of community working together)
	Outcome / impact indicator (evaluation indicator)	Change in community resilience through *solesolevaki* approach

People, Health and Environment – example indicators

Sub theme	Indicator type	Example indicator
Diversified food production and source of nutrients for better health outcomes	Activity / output level (monitoring indicator)	Number of households applying diverse approaches in backyard gardening (# HHs)
	Outcome / impact indicator (evaluation indicator)	Extent of change in community's dietary habits and improved lifestyle (examples/stories of positively changed dietary habits)
Protecting and conserving the environment as an enabler of livelihood options	Activity / output level (monitoring indicator)	Number of households composting and using organic fertilisers (# HHs)
	Outcome / impact indicator (evaluation indicator)	Extent of change within community to support long-term environmental restoration (examples/stories describing actions to promote environmental restoration)

5.2.5 Building blocks of adaptive capacity

Adaptive capacity relates to a community's ability to cope, adapt and be resilient to climate and disaster risks. Like resilience, adaptive capacity is often defined according to the context in which it is used. In this research, adaptive capacity is defined in terms of building blocks. The Community Resilience Framework uses these building blocks to explore how communities react to the disturbances of climate change and disaster risks. The focus on adaptive capacity aims to reflect principles of a strengths-based approach, as compared to a vulnerability analysis which focuses on gaps and needs in relation to climate change and disaster risk. The building blocks of adaptive capacity aim to present a picture of what determines resilience at community level, complementing the five elements of resilience.

A set of determinants of adaptive capacity that are grounded in Pacific community contexts was developed, drawing on elements of Warrick et al.'s (2017) framework of adaptive capacity and Mortreux and Barnett's (2017) second generation model of adaptive capacity. The building blocks include asset-based determinants and psycho-social determinants to assess adaptive capacity. Importantly, the building blocks allow space for bottom-up, community defined building blocks, which acknowledges the need for local understandings and experiences of climate change, and also the importance of cultural and political perceptions of risk. It also acknowledges that pre-defined building blocks alone do not provide a comprehensive picture of resilience.

This research did not draw heavily on the building blocks of adaptive capacity; rather, the focus was more on the five elements of community resilience. However, working with ADRA Fiji and the Naviyago community revealed the usefulness of the building blocks in the following ways:

- **Asset based determinants**: Community members described built infrastructure (e.g. church hall, school, evacuation centre) as supporting their resilience and adaptive capacity. In Naviyago village, the community use strong buildings as evacuation centres in times of disaster (e.g. tropical cyclone), which is common practice in the Pacific. For this reason, the 'Access to resources' building block has been extended to incorporate resilient infrastructure.

- **Adaptation options**: The Pro-Resilience Project encouraged households in Naviyago village to build and maintain backyard gardens to diversify their food sources and to grow healthy fresh food for their families. These actions also demonstrate adaptation options, hence the importance of this building block.

- **Past experiences of events**: At the time of the research (July 2023), Naviyago village had not been exposed to a severe weather event in the recent past. If they had, their responses to questions about resilience would likely have been different. This demonstrates the dynamic nature of people's perceptions of resilience and highlights the need to have ongoing dialogue with communities over the course of long-running projects.

It is recommended that indicators that sit under each of the building blocks of adaptive capacity are similarly developed (as for the five elements of resilience), given their importance to the overall picture of resilience in a community. Further research would support the development of example indicators for the building blocks of adaptive capacity.

5.3 A Framework that reflects aspects of community resilience

Synthesis of Learning for Research Question 3: What evidence suggests that the Community Resilience Framework reflects aspects of resilience that are important to the selected community?

Evidence from the research highlights that in Naviyago village, community's definitions of resilience reflect elements of the Community Resilience Framework. For example, ten themes of 'being resilient' were identified from the perspective of the community, and these could be easily mapped to the five elements of the Community Resilience Framework. Moreover, the resilience outcomes of the Pro-Resilience Project align with the Community Resilience Framework.

This section explores evidence that the Community Resilience Framework reflects key aspects of resilience in the Naviyago village. Data collected from the community was analysed to assess alignment between the elements and building blocks of the Community Resilience Framework and Naviyago community's concept of resilience. This process validated the Community Resilience Framework's credibility and identified potential areas of improvement, which is discussed below.

Community's definitions of resilience reflect elements of the Community Resilience Framework.

To ensure unbiased feedback, community members were asked an open question about what being resilient means to them, without reference to the Community Resilience Framework, during the FGDs of community research phase. A total of 53 community members provided 40 responses to define resilience. Even without prior familiarity with the Community Resilience Framework, the majority of these 40 responses could be classified within the scope of at least one of the five elements of the Framework.

For example, one response from the community's definition of 'being resilient' involved the utilisation of local and natural resources, which is linked to two elements: People, Health and Environment, as well as Knowledge. Similarly, community members identified government support as a resilience aspect, which relates to the Framework's Decision Making element. Some of the community's responses focused on

practical implementation of equality, such as women taking up leadership roles in the community, which corresponds to Thoughts and Attitudes. Responses such as improved livelihood of women through backyard gardening are connected to Knowledge and Transformative Action element.

Following data collection, the research team participated in an analysis exercise to make sense of the data. The researchers used analysis methods to identify themes, patterns, and insights from the data. This process led to the identification of ten major themes of 'being resilient' from the perspective of the community. The researchers were then able to connect these ten themes to the elements of the Community Resilience Framework (Table 4).

Table 4: Connections between the elements of the Community Resilience Framework and major themes of 'being resilient' from community's definition of resilience

Definition of resilience provided by community members	Major themes of 'being resilient' from community members	Element of the Community Resilience Framework
Taking action – making change after training	Turning knowledge into action	Transformative Action
Using new knowledge in practice		Knowledge
Skills in first aid + first aid kit		
Knowledge from ADRA on Noncommunicable diseases		
Demonstration of cooking and it's practical application		
Having a strong house	Taking disaster preparedness actions	Transformative Action
Surviving after disasters		
Food security in times of disasters		
Securing animals on higher grounds		
Early actions to secure houses		
Access to food, water, fuel for disaster preparedness		
Average livelihood income and stable livelihood	Diverse and sufficient livelihood sources	Transformative Action
Having financial diversity (within houses and community)		
Improved livelihood of women with backyard farming		
Having strong women leader	Strong leaders – men and women	Decision-making
Equality in practice – women taking leadership roles in community		
Empowering youth through elder leaders as role models		
Being supported by the government	Access to government	Decision-making
Being able to effectively voice community's needs to government		
Using existing traditional systems when Community Disaster Management Committee is not functional	Clear understanding of roles of different community stakeholders	Decision-making
All the men and head households know their roles		
Land management	Caring for land	Knowledge
Utilising local & natural resources		People, health and environment
Doing agriculture at the right time		
Planting trees or mangroves to stop erosion		
Community support	Community *solesolevaki* (coming together- greater good)	Thoughts & attitudes
Solesolevaki – people working together		
Conflict resolution within communities		
Supporting youth		
Child protection		
Addressing behavioural issues in children		
People with disability – confident about their safety, needs and welfare are met now and during disasters		
Prayer/religion is a source of strength	String religious faith	Thoughts & attitudes
A healthy diet – less meat, more vegetables, fish	Access to health food	People, health and environment
Improved health from health diet and reduced noncommunicable diseases		
Improved health outcomes among men and women		

At community level all households with proper WASH facilitation	Access to water & sanitation	People, health and environment
Having/identifying a clean and safe water source		
Access to clean water		
Access to alternative ways of water sources, such as rainwater harvesting		

The data from community research phase were further analysed through researchers' reflection exercises and systematic qualitative data analysis, to strengthen the evidence of connection between community perspectives and Framework elements. The analysis process further ensured that community's definitions of resilience are in alignment with the Framework.

For example, when asked about what does 'being resilient' look like, one of the youth of the community noted,

> *During the cyclone we help each other– we look at the houses within community–see if they are okay. We all help to prepare houses and take people to the evacuation centre … - Youth, Naviago village.*

The community volunteer mobiliser (CVM) of the Pro-Resilience Project reflected how knowledge and resources from the project helped the community to take preparedness action,

> *During Covid they (community) were able to survive by planting food. No one could go out [for grocery] because of lockdown … [people ate what they grew in the backyard] … - Community Volunteer Mobiliser, Naviyago village.*

These two examples link to 'taking disaster preparedness action' which is one of the major themes identified in collective coding and connects to Transformative Action element within the Framework.

The resilience outcomes of the Pro-Resilience Project align with the Community Resilience Framework.

During the FGDs and interviews in the community research phase, community members were asked about examples of resilience that occurred through ADRA Fiji's Pro-Resilience Project to explore if community's resilience aspects are in alignment with the Framework's elements.

In total, 53 community members collectively provided 64 examples of resilience and majority of the examples could be easily connected to the Framework elements. For example, community participants raised various examples of resilience such as backyard gardening, household composting and collaborative farming practices through a 'buddy system'. These examples were aligned to the activities delivered through the Pro-Resilience Project and are closely linked to the Transformative Action element of the Framework. Additionally, some new aspects of resilience not included in the framework emerged through this process. For example, importance of the built environment including resilient houses, roads and evacuation centres were highlighted by the community for strengthened community resilience. This evidence influenced researchers to consider inclusion of 'built environment' within the adaptive capacity building blocks of the Community Resilience Framework. This is discussed in section 5.2.

Researchers undertook a deductive approach and mapped the examples of resilience provided by the community against the five elements of the Community Resilience Framework. All examples of resilience provided by the community were easily categorised under each of the five elements in the framework. Table 5 demonstrates how all 64 examples of resilience fall under one of the Framework elements and spread (relatively evenly) across the five elements, showing that all elements are of relevance to the Naviyago community.

Table 5: Mapping 64 examples of resilience to the elements of Community Resilience Framework

Element of Community Resilience Framework	Examples of resilience provided by community members	Proportion of examples aligning with the elements of the Community Resilience Framework
Transformative Action	16	25%

Decision making	12	19%
Knowledge	14	22%
Thoughts & attitudes	10	16%
People, health & environment	12	19%

Researchers then selected five examples from each of the elements that were most commonly described for a community voting activity. Participants were given three voting opportunities to express their preferences for resilience examples that held particular significance to them, or that best reflected what resilience means from an individual perspective. A total of 20 community members, including men, women, and individuals identifying as non-binary, participated in the voting process. The results of the voting are presented in Figure 2 and indicate that all the elements of the Framework hold significance in reflecting aspects of resilience that matter to the community.

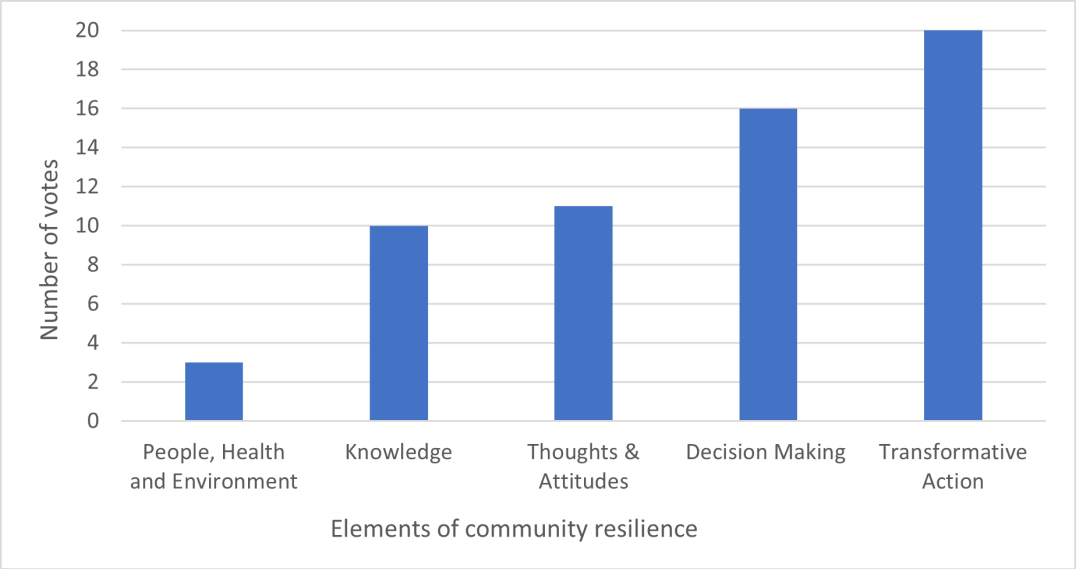

Figure 2: Number of votes cast by community members for their most preferred examples of resilience

Figure 2 depicts the distribution of votes across the five elements of the Community Resilience Framework. Out of 60 votes, 20 were in favour of various examples of resilience falling under the Transformative Action element, while 16 votes were allocated to the Decision Making element. Both Knowledge and Thoughts and Attitudes received nearly equal votes, approximately 10 and 11 respectively, whereas the People, Health, and Environment aspect got three votes.

5.4 Refining and further applying the Community Resilience Framework

Synthesis of Learning for Research Questions 4a. How might the Community Resilience framework be refined informed by lessons of applying in ADRA projects in Fiji? and 4b. To what extent are refinements relevant beyond focus on ADRA projects in Fiji?

Major refinements to the Community Resilience Framework were not needed, and the application in Naviyago village demonstrated its usefulness as a guide for the key elements of a resilient community. While more work on operationalising the building blocks of adaptive capacity is needed, research showed that the asset-based determinant ‘Access to resources’ needed to be updated to include resilient infrastructure. This refinement will make the Community Resilience Framework more relevant across the Pacific, given the need for resilient infrastructure to support communities maintain healthy and productive livelihoods.

The Community Resilience Framework provided a useful guide for learning about resilience within the Naviyago village context. Major refinements were unnecessary, and the five elements aligned with community perceptions of resilience, as described in Section 5.3.

The building blocks of adaptative capacity did not form a significant aspect of either the data collection or analysis. However, community members did describe some aspects of resilience that better aligned with the building blocks, as compared to the five elements. Built infrastructure was described as supporting a resilient community, and this best fits under the asset based determinant building block of 'Access to resources'. The research team has since updated the definition of this building block to read: *Access to land, fisheries, supply chains and incomes, and also resilient infrastructure such as evacuation centres or climate resilient water and sanitation infrastructure.* This refinement will make the Community Resilience Framework more relevant across the Pacific, given the need for resilient infrastructure to support communities maintain healthy and productive livelihoods.

The research team recommend indicators for the building blocks of adaptive capacity are developed, drawing on the same principles and approach as those described in Sections 5.2.2, 5.2.3 and 5.2.4. By working closely with community members, indicators for the building blocks will be defined in locally appropriate ways so as to measure aspects of resilience that reflect community aspirations.

5.5 Lessons learned about monitoring and evaluating resilience

Synthesis of Learning for Research Question 5: What lessons can be learned about monitoring and evaluating resilience through the use of the Community Resilience Framework?

Seven key lessons have been distilled after undertaking this collaborative research. Lessons point to the importance of recognising the locally defined nature of resilience, and the corresponding need to co-design community relevant indicators of progress. The ongoing inclusion of diverse community members enables external stakeholders to gain insights into resilience outcomes. The research team and the Community Resilience Framework embedded a decolonising approach, which prioritised local perceptions of resilience and enabled a bottom-up process of learning. This research also found that the concept of resilience is holistic and overlaps with other community development indicators. By working collaboratively with communities, existing approaches to assessing progress in community development can be extended and adapted to further learn about resilience to climate change and disaster risks.

Lesson 1: MEL Frameworks for community resilience need to value the core elements of community identity.

Working with ADRA Fiji in this research provided critical insights into the value of cultural identity and faith as fundamental pillars that define community resilience. During the researcher reflection exercise, the ADRA Fiji researchers stressed the need to recognise cultural and faith-based aspects as integral components when monitoring and evaluating resilience.

This aligns with the findings from 'Appropriate processes to learn about resilience' (Section 5.1) which discusses the importance of respecting and adequately addressing community protocols and traditional leadership structures to ensure effective community engagement in the MEL process. If MEL activities do not acknowledge community's values, the outcomes of the process may not capture the real project outcomes experienced within the community.

This finding also resonates with the Transformative Action element within the Community Resilience Framework, which emphasises and enables preserving and valuing core elements of community identity. Enacting this may mean engaging with traditional governance structures and the Church when designing indicators and building indicators around local and traditional knowledge for agriculture and food production.

The ADRA Fiji researchers also reflected that understanding the nuances of community's unique traditions and entry protocols require time and resources for effective community engagement, which should be factored into project budget and timeline.

Lesson 2: Co-design is important to allow for more effective MEL processes for community resilience.

Co-designing MEL processes with communities should be operationalised at the project onset. Involving community members and local stakeholders in designing MEL processes helps to gain a nuanced perspective of contexts and tailors community resilience MEL approaches to be appropriate and meaningful for communities.

This research also revealed the significance of involving local NGOs in research and learning about MEL. In this research, UTS-ISF and ADRA Fiji co-designed the methods for data collection. UTS-ISF's knowledge on the Community Resilience Framework and experience of applied research combined with ADRA Fiji's knowledge and expertise of the Pro-Resilience Project, the community and context supported effective research process. This collaboration allowed the integration of local insights and knowledge with an established framework, fostering a more contextual understanding of community resilience.

Lesson 3: Genuine inclusion of diverse community members is essential for gaining insights into the resilience outcomes of a project.

As discussed in Section 5.1, community resilience is context specific, and experiences of resilience can be different for diverse community members. Therefore, the design of MEL activities should ensure inclusivity among different social groups and community members to design MEL mechanisms that reflect this diversity. Inclusion of diverse voices in MEL processes can be achieved through designing MEL approaches in alignment of community's tradition, local culture and with a keen awareness of cultural nuances such as community norms and informal governance. This requires co-designing efforts, which reinforces the previous lesson learned – *Co-design is important to allow for more effective MEL processes for community resilience*.

Lesson 4: MEL approaches should be designed to align with existing community governance structures and leverage their existing strengths.

When designing MEL processes, it is critical to acknowledge community's existing social structures and strengths – for example, traditional knowledge. By integrating these elements into MEL indicators for evaluating project outcomes, communities, as well as project stakeholders, can identify what is working well and identify ways of empowering communities through their inherent capacities.

The Community Resilience Framework has been designed to align with the existing decision making (Element 2: Decision Making) structures within communities, harnessing their local strengths, including traditional knowledge (Element 3: Knowledge), and reinforcing strengths-based approach to community resilience.

Lesson 5: Integrating a decolonising approach can enrich a MEL process and contribute to effective learning on resilience outcomes of a project.

This research embedded decolonisation principles by leveraging ADRA Fiji's expertise on localised contexts, as well as intentionally listening and prioritising local voices in learning about community resilience. One distinctive feature of the decolonisation agenda is the use of local language, a practice demonstrated by ADRA Fiji during the community research phase. Communicating in local language with community members enabled them to express their thoughts freely and engendered an environment conducive to effective learning.

A decolonising approach was also enabled through the use of the Framework, which supports and prioritises local perspective and strengths over outside knowledge and views of climate and disaster. While using the Community Resilience Framework in this research, the MEL approach identified community resilience aspects from community's perspective and delved into community's understanding of resilience. This in turn informed the indicators to assess change in resilience within the community.

This twin track approach of having an intentional decolonisation approach to MEL process and having a tool that prioritises local strengths can contribute to effective learning about community resilience.

Lesson 6: The concept of resilience is evolving and not consistent, and therefore, MEL of resilience should be nuanced and adaptable for various contexts.

Resilience is a multi-dimensional concept; it can evolve over time and differ significantly across communities depending on social, cultural and environmental factors. Having no universal definition of resilience makes it challenging to assess resilience resulting from a project and make standardised assessment of resilience less effective. Therefore, a definition of resilience needs to be determined locally, depending on the focus of the project and nature of the community. Additionally, it is important to acknowledge that the concept of resilience may vary from person to person, and this variability should be taken into consideration to genuinely assess resilience as an outcome of a project. Principles 1, 3 and 5 in Section 5.2.2 help to illustrate how to put this lesson into practice.

Lesson 7: MEL of resilience needs to acknowledge that the concept of resilience is holistic and overlaps with other community development indicators.

Resilience is a holistic concept and often overlaps with various other community development indicators. Resilience can extend its influence across diverse domains and bring about positive changes in communities' social, economic, environmental, and health-related aspects. For example, through the Pro-resilience Project the community of Naviyago village ensured their food security, improved their health and wellbeing and strengthened community resilience. These overlaps are indicative of the intersections of various development goals and highlight the need for a comprehensive MEL approach that considers multifaceted nature of resilience. Resilience extends its influence across a wide range of domains, including economic, social, environmental, and health-related aspects.

The five elements of Community Resilience Framework recognise the overlaps and allows for a more integrated and nuanced understanding of how one activity or effort connects to multiple elements of the Framework and contribute to building resilience within communities.

6. Conclusion

This research focused on practices and processes to learn about community resilience. The research team, comprised of UTS-ISF and ADRA Fiji, applied a Community Resilience Framework in Naviyago village, Fiji, to learn about community perceptions and experiences of resilience, particularly through the lens of a recently completed ADRA Fiji project. Through a collaborative approach with strong co-design practices, the research team synthesised findings into insights that will be useful for INGOs, CSOs, governments, donors and development partners working in community resilience projects in the Pacific.

Across all research questions and related findings, it was evident that including diverse community participation – from design phase, to implementation, to monitoring and evaluation – is needed for external stakeholders (e.g. CSOs, governments, development partners) to gain an understanding of what resilience means and what progress in resilience building looks like. Designing MEL frameworks, including indicators of progress, requires community inputs and needs to be undertaken on a case-by-case basis to be appropriate for the project and community. The Community Resilience Framework was a useful guide to underpin discussions with the Naviyago community about resilience and served as an appropriate tool for analysis. No major refinements were needed to be appropriate to the Fiji context.

Further research is recommended to explore useful ways to integrate the building blocks of adaptive capacity, including designing indicators for the building blocks drawing on the principles for the indicators of the five elements of a resilient community.

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Annexes

Annex 1

List of literature that underpinned the Community Resilience Framework:

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Annex 2

Detailed tables of five elements of resilience (from the UTS-ISF Community Resilience Framework) with a number of sub-themes and example indicators relevant to ADRA Fiji's Pro-Resilience Project.

Transformative Action – example indicators

Sub theme	Indicator type	Example indicator
Climate resilient agriculture and inclusive food security	Activity / output level (monitoring indicator)	Number of households (HHs) within the community with backyard gardens (# HHs)
		Number of different households working together in backyard gardens (# HHs)
	Outcome / impact indicator (evaluation indicator)	Adapting agricultural practices according to be more climate resilient (# of examples)
		Extent of changes in diversity in backyard gardens (increase or decrease in number of types of plants grown)
		Changes in participation of youth in backyard gardening (increase or decrease in number of youth participating)
Diverse livelihood options	Activity / output level	Number of household income sources (# income sources)
		Proportion of school aged children regularly attending school (% children)
		Proportion of community taking up training opportunities (% adult population)
	Outcome / impact indicator	Proportion of household food grown at home, compared to purchase at market / in town (% of food)
		Change in sources of livelihood options (increase or decrease in livelihood options)
Water security and climate resilient Water, sanitation and hygiene (WASH)	Activity / output level	Proportion of households with access to safe, clean drinking water (% of households)
		Proportion of households with access to safe, inclusive and climate resilient sanitation (% HHs)
	Outcome / impact indicator	Number of innovations adopted to support access to safe, inclusive and climate resilient WASH services (# examples of innovations)
		Changes in number of drinking water source options (increase or decrease in # drinking source options)
Anticipatory disaster preparedness and inclusive disaster response	Activity / output level	Proportion of the community who receive early warning messages directly from radio or text message (% adult population)
		Proportion of the community who receive early warning messages indirectly from village leaders or another community member (% adult population)
	Outcome / impact indicator	Changes in number of households taking disaster preparedness actions in readiness for disasters (e.g. food preparation, emergency baskets/kits prepared) (increase or decrease in # HHs)
		Changes in extent of reliance on externally provided food in post-disaster settings, as compared to locally grown/preserved in the community (increase or decrease in reliance on external vs locally grown food)

Decision Making – example indicators

Sub theme	Indicator type	Example indicator
Traditional and inclusive community governance structures	Activity / output level (monitoring indicator)	Proportion of the community who are aware of community leadership structure/s and assigned roles of leaders (% of adult population)
		Number of women and youth in leadership and decision-making roles (# women; # youth)

		Community perceptions of the effectiveness of traditional governance system (examples/stories describing effective decision making and leadership)
	Outcome / impact indicator (evaluation indicator)	Existence of shared male-female leadership (examples/stories of joint male-female decision making)
		Community members' increased confidence in raising issues of concern with community leaders (examples/stories of issues raised by community members)
		Extent of change in participation of youth in community governance and activities (increase or decrease in youth participation)
External relationships with government and non-government organisations	Activity / output level (monitoring indicator)	Number of visits from government representatives to community per year (# visits)
		Number of community members aware of lines of communication between community leaders and government (# community members able to describe lines of communication)
	Outcome / impact indicator (evaluation indicator)	Change in the strength of community leaders' relationships with sub-national government (examples/stories describing community leader's relationships with government)
		Change in the Extent to which community members are aware of lines of communication between local leaders and the government (examples/stories describing community leader's relationships with government)
Community disaster preparedness and response	Activity / output level (monitoring indicator)	Existence of Community Disaster Committee (CDC) with assigned roles and responsibilities (CDC in place / or not)
		Number of times the committee has met in the last 12 months (# times)
		Number of male and female local disaster / climate change champions in leadership roles (# males/# females)
		Number of youth engaged with CDC (# youth)
		Proportion of CDC who have been trained on disaster preparedness and response (# males/# females / # youth (male/female))
		Existence of community disaster plan and year of development (CDC plan in place / or not + year)
	Outcome / impact indicator (evaluation indicator)	Sustained and operational CDC (# years the CDC has been in place)
		Extent of change in sub-national government engagement with CDC (# times the CDC and sub-national government have met)
		Extent of change in shared male-female leadership within CDC (increase/decrease in # females on CDC in leadership roles)
		Extent of change in youth engagement within CDC (increase/decrease in # youth on CDC in leadership roles)
		Extent of change in community members' awareness of the CDC and its roles (examples/stories from community members of the role of CDC)

Knowledge – example indicators

Sub theme	Indicator type	Example indicator
Local knowledge brokers	Activity / output level (monitoring indicator)	Number of local leaders sharing knowledge about climate and weather risks in the community (# male local leaders/# female local leaders)
		Proportion of local leaders with comprehensive traditional knowledge of community risks and hazards (% leaders)
		Proportion of local leaders with comprehensive external knowledge of community risks and hazards (% leaders)
	Outcome / impact indicator (evaluation indicator)	Extent of change in local leaders' traditional knowledge about community's risks and hazards (increase or decrease in degree of traditional knowledge)
		Extent of change in local leaders' external knowledge about community's risks and hazards (increase or decrease in degree of external knowledge)
		Change in strength of relationships between local leaders / knowledge brokers and members of the community (examples/stories describing occasions when knowledge broker shared information with community members)
		Change in strength of relationships between local leaders / knowledge brokers and sub-national government, NGOs and other external stakeholders (examples/stories describing occasions when knowledge broker met/engaged with sub-national government, NGOs and other external stakeholders)
Strength and sharing of traditional knowledge	Activity / output level (monitoring indicator)	Proportion of community who eat traditional foods and live off the land and the sea, as compared to those who eat imported / bought food (% eating traditional foods vs % eating imported foods)
		Proportion of youth who follow traditional practices in the community (% youth)
		Extent to which traditional knowledge (including local language) and practices are preserved in a community (examples/stories describing local knowledge and practices)
	Outcome / impact indicator (evaluation indicator)	Extent of change within communities to switch to traditional food (increase or decrease in consumption of traditional foods)
		Extent of change in youth involvement in traditional practices in the community (increase or decrease in youth involvement)
Blending and drawing on local and external knowledge	Activity / output level (monitoring indicator)	Proportion of people able to describe traditional knowledge about climate and weather risks in the community (% men / % women)
		Proportion of community able to describe external knowledge about climate change projected for the community (% men / % women)
		Proportion of people who have knowledge on healthy food and balanced diet (% men / % women)
	Outcome / impact indicator (evaluation indicator)	Change in the ability of people to critically assess change information from credible sources (increase / decrease in # people who identify credible information sources)
		Change in the ability of people to describe alternative, innovative and climate resilient livelihood options (examples/stories describing innovative and climate resilient livelihood options)
		Extent of change in the ability of people to describe healthy and alternative food options (examples/stories describing describe healthy and alternative food options)
Building knowledge through	Activity / output level (monitoring indicator)	Number of people attending the full set of training sessions offered locally (# people)

demonstration and peer learning		Proportion men and women working with other men and women and sharing knowledge in practice (% men / % women)
		Proportion of older men and women sharing knowledge with younger men and women within communities (% men / % women)
	Outcome / impact indicator (evaluation indicator)	Extent to which information from training sessions is applied in practice (examples/stories describing application of lessons from training)
		Extent to which people (youth / men / women) who did not participate in training can describe and apply new approaches (examples/stories describing application of lessons from training)

Thoughts and Attitudes – example indicators

Sub theme	Indicator type	Example indicator
Gender dynamics and role changes	Activity / output level (monitoring indicator)	Number of men and women shifting from their traditional roles (# men / # women)
		Proportion men willing to encourage new and diverse roles for women (% men)
		Number of women and youth groups influencing thoughts and attitudes of the communities (examples/stories of women and youth influencing community attitudes)
	Outcome / impact indicator (evaluation indicator)	Extent of change in the traditional roles of men and women (examples/stories of men, women and youth playing non-traditional gender roles in the community)
		Extent of change in community's thoughts and attitudes through the influence of women and youth groups (examples/stories of women and youth influencing community attitudes)
Collective change in community's thoughts and attitudes	Activity / output level (monitoring indicator)	Extent of *solesolevaki* communal approach (examples/stories of community working together)
		Proportion of community members willing to accept changes and adapt new knowledge (% adult population)
	Outcome / impact indicator (evaluation indicator)	
		Change in community resilience through *solesolevaki* approach
		Extent to which the community is integrating new knowledge into existing practices (examples/stories of community integrating new knowledge)
Religious faith in action to strengthen community resilience	Activity / output level (monitoring indicator)	Extent to which church leaders talk to communities about climate change and the need to take action (examples/stories of church leaders discussing climate change action)
		Proportion of community members who actively engage in church activities (% community population)
	Outcome / impact indicator (evaluation indicator)	Extent of church leadership on climate action (examples/stories of church leaders discussing climate change action)
		Extent to which community seek church leadership on climate change action (examples/stories of church leaders discussing climate change action)

People, Health and Environment – example indicators

Sub theme	Indicator type	Example indicator
Diversified food production and source of nutrients for better health outcomes	Activity / output level (monitoring indicator)	Number of households applying diverse approaches in backyard gardening (# HHs)
		Number of households growing vegetables for household consumptions (# HHs)
		Proportion of households positively changing their dietary habits (% HHs)
	Outcome / impact indicator (evaluation indicator)	Extent of change in community's dietary habits and improved lifestyle (examples/stories of positively changed dietary habits)
		Improved health outcomes (# examples of improved health outcomes related to non-communicable diseases (NCDs))
Protecting and conserving the environment as an enabler of livelihood options	Activity / output level (monitoring indicator)	Number of households composting and using organic fertilisers (# HHs)
		Proportion of households with an understanding of sustainable irrigation practices (% HHs)
		Proportion of households responding to the challenges of food and water challenges and insecurity (% HHs; examples/stories of actions to respond to food/water insecurity)
	Outcome / impact indicator (evaluation indicator)	Extent of change within community to support long-term environmental restoration (examples/stories describing actions to promote environmental restoration)
		Extent of change in quality of the local environment (examples/stories describing changes in the quality of the local environment)


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