Climate Resilient Islands

LINKING FIJI PROFILES TO RESILIENCE PLANNING

As part of the Climate Resilient Islands programme, communities in Fiji participated in information gathering on community assets, values, livelihoods and challenges. This data was used to produce each community's Community Resilience Profile. These profiles in turn are the basis for Community Resilience Plans, which contain practical resilience strategies based on an 'absorb, adapt, transform' framework (as outlined below).

Based on the information communities provide in the profiles, communities envision in workshops what their 'best futures' look like and establish priorities, initiating a process of applying targeted strategies for resilience building of local resources and skills. This process is unique to each community, responding to their unique challenges and strengths, and driven by the community. These strategies are linked to grant funding and are also intended to provide a basis for the community to seek other partnerships and other forms of funding. The process is monitored, and adjustments made to the plans as the process of building resilience continues.

Absorb, Adapt, Transform framework

The CRI programme operates on the understanding that community resilience can be conceptualized as a three-level structure, incorporating the community's ability to absorb, adapt, or transform. Absorption utilizes community skills and structures to bounce back after negative events. Adaptation requires adjustments to a community's ways of living, sometimes

with external help. Transformation almost always requires varying levels of external help to significantly change societal structures and habits in order to remain resilient.

Within the programme, in order to help communities understand these capacities, we symbolize them with the coconut palm, the crab and the butterfly.



Most CRI communities cannot simply absorb the majority of pressures on livelihoods, food security and infrastructure. Overfishing threatens marine environments and fish stocks. Continued, long-term agriculture has depleted soils. External pressures such as logging, while providing income for some, affect local ecosystems, including forests and community farmland, degrading soils and polluting and silting waterways. Pollution is also encountered in waterways from mining activities upstream.

Considerable threats also come from the effects of climate change, the focus of the CRI programme. These include:

- sea level rise and saltwater intrusion
- storm surges and coastal erosion
- erosion of soil and riverbanks from increased storms
- cyclone damage to forests, plantations and community infrastructure
- temperature rises and longer dry periods, affecting yields, forest plants and marine ecosystems.

Modernisation provides some benefits, but it has also entailed loss of community knowledge around management of local ecosystems, traditional farming techniques and traditional handicrafts that provide subsistence and livelihoods. Loss of traditional knowledge also leads to disconnection between community members.

Pathway thematic areas

Planning pathways are aligned with three outcome areas: nature-based solutions (NbS), food security and disaster risk reduction (DRR). These are at the core of the programme and align to grant seeking activities.

Nature-based Solutions include forest, river and marine restoration and the use of sustainable land management (SLM) techniques. These involve tree and grass planting for soil stabilization and water quality improvement, sustainable farming methods, agroforestry that preserves native forest, and restoration of mangroves for fish stock conservation.

Food security involves sustainable farming techniques, diversity of crops, prioritization of local foods, conservation of forest and marine resources, training on farm business, and the creation of community cooperatives.

Disaster risk reduction involves strengthening local housing, securing evacuation centres, training on disaster planning and procedures, including assessment and reduction of flood and cyclone risks.

These three pathways are not isolated but are often integrated in resilience planning. For example, the upkeep of good soils is essential for crop health and therefore food security, while the stabilization healthy soils provide mitigates the risks of flooding, especially in tropical areas. Food security can mean the cultivation of crops, such as root crops, that preserve well to provide supply after disasters. The planting of mangroves as a disaster risk reduction strategy can restore local ecosystems that provide natural resources contributing to food security and general resilience.

Examples of pathways

The process of profiling communities provides opportunities to identify absorption capacity within communities. Communities generally grow a variety of crops, and this variety enhances resilience. The inclusion of sustainable land management techniques in community plans will enhance this capacity. But the majority of plans focus on opportunities for adaptation or transformation.

RESILIENT FARMING METHODS

All nine participating Fijian communities identified resilient farming as a necessary adaptation. The two main aspects of this pathway are SLM techniques and training on farming as a business. Training will be conducted on SLM techniques, especially in relation to soil conservation and adaptation to climate variations. In many of the communities training will be given on forming cooperatives to maximise exposure to markets. This will be augmented by the creation of community business hubs and training on the finance side of farming operations.

In one rice-growing community, work will be done on reorganizing the local cooperative in order to integrate livestock management. As well as the ecological benefits of integrating crop and livestock farming, this will also increase potential income streams. Grants will encompass materials to address erosion of agricultural soils, composting, fencing and farm equipment.

RIVER RESTORATION

River restoration is a key pathway for five communities. Aspects of this will include training on sources of pollution and the effects of agricultural and logging activities upstream, fishing management and effective waste disposal. Grants will be applied for the replanting of trees and grasses for riverbank stabilization and waste management. River restoration is also tied to effective SLM practices, as river degradation has occurred from agricultural runoff and soil erosion.

FISHERIES CONSERVATION

Four communities have identified fisheries conservation as a pathway. This is linked to sustainable fishing business activities. Training will be sought from the ministry on sustainable fishing methods, conservation strategies, and business practices. Grants will be applied for the purchase of fishing equipment.

FOREST AND WATERSHED CONSERVATION

Forest and watershed conservation will be undertaken in three communities. Grants will be linked with creating nurseries and purchasing seeds or seedlings. These restoration activities link closely with other aspects of the programme: conservation reduces flood risk

and affects soils and microclimates for agriculture. Forest resources can be used for traditional crafts, safeguarding both indigenous knowledge and livelihoods.

Part of this pathway is the assessment and set-up of an agroforestry business for one community. In a number of communities, there are local forestry businesses, but these tend to be monocultural enterprises, whereas establishing resilient agroforestry will include the prioritization of local species, intercropping, soil restoration and equitable distribution amongst local community members. This pathway subsequently ties in with the pathways of resilient farming businesses and river restoration (by safeguarding local soils). Grants will target the establishment of nurseries, purchase of seeds and seedlings, and equipment.

DISASTER RISK REDUCTION

River restoration, forest restoration and SLM techniques all contribute to disaster risk reduction by reducing the risks and the extent of flooding. In one community, assistance on housing renovation, as part of the government's Build Back Safer scheme, will be part of DRR strengthening. In another community this will be done through renovation of the local evacuation centre. In still another community, work on bridge replacement will ensure that community access is not restricted during times of flood or storms, or during normal times after damage to road infrastructure.

INDIGENOUS KNOWLEDGE

A cross-cutting issue within resilience planning is the maintenance of traditional community knowledge. As part of the profiling process, communities are asked about Indigenous knowledge and the extent to which traditional practices are passed on. This is particularly relevant for land management, livelihoods through craft and agriculture, assessment of changes to ecosystems and traditional methods of DRR. One community will participate in the programme's **Indigenous Leadership** training, which aims to strengthen traditional knowledge and community ties. The Ministry of iTaukei Affairs will be involved in these activities.

As part of the strengthening of **traditional knowledge and livelihoods** one community will be assisted in setting up a business hub centred on the production of handicrafts using the traditional, local reed, kuta. As ecosystem pressures have reduced availability of this resource, grants and training will also be tied to waterway replanting and restoration activities.

Live & Learn Fiji will coordinate training with a number of government ministries including Agriculture, Forestry, Fisheries and the Ministry of iTaukei Affairs.

Climate Resilient Islands aims to strengthen community resilience and adaptive capacity to the impacts of climate change through nature-based solutions working with rural communities in Vanuatu, Fiji, PNG, Tonga, and Tuvalu. The project is a New Zealand Ministry of Foreign Affairs and Trade initiative implemented by Live & Learn Environmental Education.