

Climate Resilient Islands Programme

Case Study: From resilience vision to action - Nukufetau, Tuvalu

The Climate Resilient Islands approach rests on interlinked activities where communities identify their resilience vision and picture, and then make plans and implement resilience activity pathways related to that vision. These activities all incorporate traditional and Indigenous knowledge, as well as being inclusive of all. This case study is part of a series identifying threads of interconnection throughout the process in each community, documenting the value of the process and sharing stories with other partners. Each case study shows how the community resilience vision and picture guides learning from the resilience profile to identify the most important resilience actions.

Community Environment

Nukufetau consists of at least 33 islets and is one of the atolls in Tuvalu to be blessed with natural groundwater. Depending mostly on the land and sea for food, people on Nukufetau are mostly involved in home gardening, pig farming, fishing and collection of fruits. They sell some of their produce. Men go out to sea to fish and grow pulaka in their pulaka pits as a staple food. There are many breadfruit trees on the island, and people grow banana and pandanus trees for food and crafts. Use of expensive imported foods is increasing, with traditional food only supplementing the imported food, rather than being the main source.

Nukufetau has a marine conservation area that is around four to six kilometres long and about a kilometre wide. The conservation area includes two islets. The conservation area is not protected by legislation, but under the traditional protection arrangement.

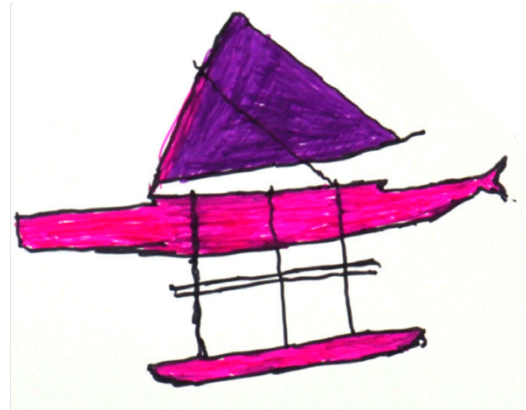
The community is noticing the effects of climate change through the disappearance of small and low islets, due to sea level rise. They are also noticing coral bleaching. Because of overharvesting and overfishing, tree and fish species are disappearing. Population pressures mean trees are being cut down for development, though there is increasing inequality amongst Tuvaluans.

Key community resilience indicators include having a healthy lagoon and ocean, having safe locations for houses (and cyclone-proof construction), having improved farming systems for increased food security, and retaining traditions for livelihoods and governance.



Community Resilience Picture and Vision

The canoe gives life to the people of Nukufetau, bringing food from the sea and the outer islands. The canoe can take the community where they want to go and is environmentally friendly. It does not need expensive fuel and is easily repaired. The canoe is strong, unique and useful, and all its parts contribute to its resilience. But if one part is weakened, its effectiveness decreases. Working together as a community helps strengthen resilience, but if some within the community are disadvantaged, the whole community resilience will be affected.



Based on this picture, the community's resilience vision centres on four key ideas:

1. Strengthened community food security
2. Strengthen the marine environment through restoration of coral areas
3. New income sources from hosting tourists
4. Conservation of coastal areas to reduce erosion of coast, possibly through mangrove planting

Resilience Plan and Actions

The resilience picture has been important for the community, as it reminds them that they all have a role in implementing the resilience actions. The different parts of the canoe – the outrigger, the float, the strings that are tied to put the canoe together – are like the unity and strength in the community. If the canoe outrigger breaks away, the canoe will capsize and not reach its destination. The strings that bind all the parts of the canoe can also be seen as values of the community to keep them working together to reach a common goal. Nukufetau's values are trust, respect, understanding, helping each other, sharing, and having faith in God.

The different parts of the canoe are also a metaphor for the ecosystems in the island that the community is dependent on for life. All these ecosystems are interconnected. In their community resilience plan Nukufetau identified their highest priority restoration of the coastline ecosystem and the adjacent coconut woodland ecosystem, with integrated food security approaches. Now the community is working together to plan and implement an agroforestry approach on the degraded coastline on Nukufetau island.

Unproductive or unhealthy coconut palms will be thinned out and replaced by coastline tree species such as calophyllum, casuarina, kafutu, kanava and other local tree species to stabilise the coastline. They are also planting new coconut palms, breadfruit trees, pandanus, figs, bananas and root crops. These crops will improve biodiversity and soil, as well as providing access to healthy food. Working together with these ecosystems the community on Nukufetau island are travelling in their canoe towards a destination of greater resilience.



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, Solomon Islands, Tonga, and Tuvalu. The project is a New Zealand Ministry of Foreign Affairs and Trade initiative implemented by Live & Learn Environmental Education.