



Climate Resilient Islands Programme

Case Study: Community Priority Values and Assets, Tonga

Climate Resilient Islands communities were asked to describe their most important values and assets, and their vulnerabilities and risks, to contribute to their Community Resilience Profiles. These ranged from material to natural, as well as spiritual or community focused. This case study provides an overview of the assets, values and concerns across the programme's communities, to explore trends and commonalities between them.

Assets

Tonga's most highly valued assets and values can be categorised into two main areas: community wellbeing and household livelihoods. Local ecosystems that are categorised as assets are either marine ecosystems or modified ecosystems such as plantations. Wild or untouched ecosystems (on land) tend to be rare in the Tongan context.

The highest priority asset was water supply. This was mentioned as the key asset by almost all communities, and in the rare cases (2) where it was not listed as a main priority, this is likely because it is not seen as under threat. Water supplies usually consist of two main sources: rainwater or piped groundwater. In some communities, there is access to both, though both are deemed as unreliable.

The next highest priority asset was roads. Roads are significant because they provide access to plantations, as well as to other sources of income, education and health facilities. Marine environments are a priority asset, largely because most communities access the ocean for livelihoods and food supply. Plantations/farmland are important for the community for food and income security. Livestock is mentioned as a priority by 9 of the 15 communities.

Equally prioritised are the community's buildings, such as hall, church and school. Churches were not mentioned as frequently as would be expected, but this may be because church buildings are more robust. A smaller number (5) of communities mentioned general tidiness of the community grounds as an asset, indicating that wellbeing is tied not only to material and income-generating assets. Although only a small

number of communities listed handicraft skills as priority values, the production of handicrafts (mostly by women) is clearly important for most communities, for providing income but also for maintaining traditional culture.

Vulnerabilities/threats

The most common threat to the assets listed by communities is their exposure to bad weather, including strong and cyclonic winds, flooding and erosion from heavy rain and tsunamis, hotter temperatures and lack of rainfall.

Storms damage water systems, contaminate water systems with saltwater, cause erosion of roads and plantation soils, create surges that erode coastal soil and vegetation and bring strong winds that damage houses and public buildings. The close proximity of the ocean to all of the communities means that they are exposed to cyclones and tsunamis.

The damage to buildings is compounded by the fact that houses and public buildings are often not of appropriate construction to withstand strong storms and cyclones. Income levels and lack of building materials contribute to this. There is generally a lack of alternatives if buildings are damaged.

Marine environments are threatened by overfishing – something addressed in some communities by protected marine areas (which are nevertheless sometimes difficult to patrol). Warmer sea temperatures also threaten fish stocks. Livestock are a valuable asset in most communities, but a lack of fencing threatens both the livestock themselves and other community assets, such as plantations. Warmer temperatures and rainfall anomalies also threaten upkeep of livestock.

Outside cultural pressures and migration of young people from communities threatens the maintenance of traditional knowledge, which covers many areas, from handicrafts to fishing.



Focus on livelihoods and infrastructure

The listings of community priority assets across communities indicate that assets that contribute directly to livelihoods and community infrastructure are the main focus. Ecosystems such as oceans, plantations and bushlands are valued for their contribution to livelihoods, while common listing of community buildings indicates a focus on wellbeing through community interactions.

Regarding livelihoods, communities have noticed the effects already of climate change, as indicated by the following comments in the Community Resilience Profiles.

There has been a reduction of sea species due to change in temperature (feke, ika, fingota).

The community has noticed that the weather is increasingly hotter in the summer, while it is getting colder in the winter. Rainfall is decreasing.

There is a general decline in the ocean's resources.

Comments such as the following indicate that community infrastructure is threatened by climate change, in particular the increasing intensity of storm effects.

The community's land next to the coast is valuable for housing and community buildings such as churches, but this coastal area is threatened by erosion as a result of storms and sea-level rise.

[H]ousing and public buildings are valued. Most assets are threatened by flooding due to proximity to coastline.

Resilience planning

Understanding priorities of community values and assets informs the next phase of the CRI programme – establishing community resilience plans, which involves noting assets most at risk, especially from the impacts of climate change, community capacity for making changes and strategies for increasing 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, Tonga, and Tuvalu. The project is a New Zealand Ministry of Foreign Affairs and Trade initiative implemented by Live & Learn Environmental Education.

