Climate Resilient Islands Programme

Disaster Preparedness in Tonga

Climate Resilient Islands communities across Tonga are facing a range of disasters and challenges to their resilience. But many actions are being taken to prepare for disaster and strengthen their adaptation. The country's ND-GAIN Resilience Ranking – measuring Tonga's exposure, sensitivity and ability to adapt to negative impacts of climate change – ranks Tonga as the 6th most vulnerable country and the 93rd most ready, with an overall ranking of 140th.

Common vulnerabilities

Tonga is extremely vulnerable to the impacts of climate change. Particular risks include tropical cyclones, tsunamis and drought. Non-climate related disasters such as volcanic eruptions and earthquakes also pose a threat, both directly and by increasing vulnerability when climate-related disasters do occur.

Tonga's CRI communities have already reported a range of disaster-related risks in line with the above, which are often reported by most if not all communities. The most common – combining vulnerabilities, hazard exposure and current climate change impacts – include:

- Increase in frequency and intensity of cyclones
- Coastal inundation and saltwater intrusion
- Changed rainfall patterns
- Soil erosion
- Low-lying geography
- Poor infrastructure, including insufficient water storage and non-storm-proof homes

Other factors mentioned included lack of access roads, housing near coastlines, loss of forest trees and fish stocks, the threat of tsunamis and households that are still recovering from disasters.

Current capacity to respond

On a national scale, there are government initiatives and bodies such as the National Disaster Council and the Emergency Management Act, the latter of which includes discussion of district and village level emergency committees, while disaster management is often supported by the Red Cross. However, this formalised local-level organisation has not always been embedded in villages.

Though Tongan communities are accustomed to disasters such as storms and cyclones, formal plans and preparations vary between communities. Preparation is often centred at the household level with most communities using the 72-hour package system, which involves making a kit with food and medical supplies.

Apart from the creation of these disaster kits, only two communities have a documented disaster plan, and just four have a functioning disaster committee. Often the extent of formal disaster preparation is coordinated by the town officer, consisting mostly of warning about imminent cyclones.

Of the four communities with committees, their impact is unclear. In Ha'ano & Muitoa it is said to be effective, with town officers who have significant DRR workshop experience which has made them well prepared. Koloa has regularly updated plans incorporating national disaster policies and training, plus an early warning system with a siren. Tu'anekivale had a committee; it no longer meets, but it did leave a plan which is considered 'partially useful', while Lotofoa has a functioning committee but no formal plans beyond the 72-hour emergency kits, though some households use these before disaster hits.

The use of churches as evacuation centres is common across most communities though it is often noted that church members do not like to evacuate to halls of other denominations, and so often use their own homes instead.

Challenges

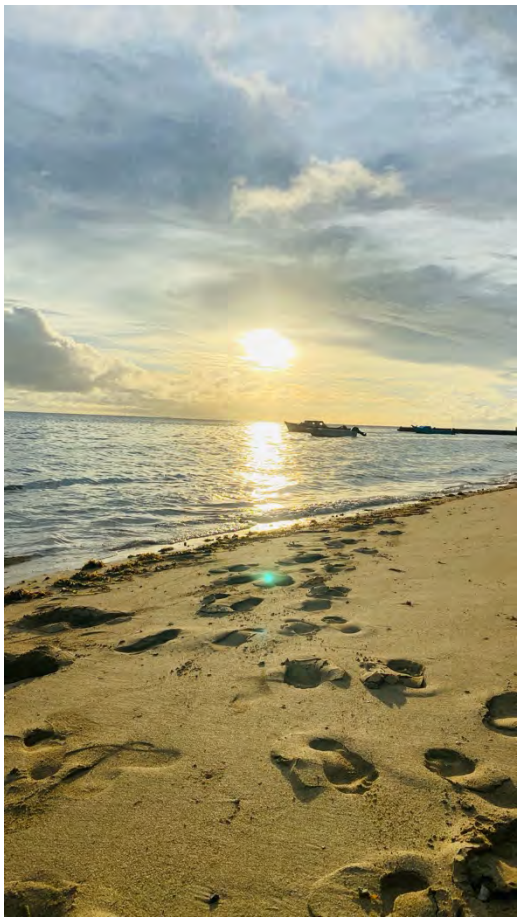
Limited infrastructure is one common challenge to improving disaster preparedness. It's common for villages to only have one access road and other backroads are often poorly maintained. Housing is also often in vulnerable locations near the coast and many households are still recovering from previous disasters, a significant barrier to any improvements that may boost resilience.

Another major barrier is finances, with high household costs and many households lacking stable or secondary sources of income. Income is often provided through remittances from overseas relatives, though some communities see this as an impediment to long-term resilience building.

Loss of traditional knowledge and ecosystem degradation are both also noted as increasing community vulnerability, as is food insecurity, with roughly one-third of households reporting severe food insecurity.

Resilience planning

The information collected in communities about their resilience and disaster preparedness informs the following phase of the Climate Resilient Islands programme, in which communities design a Resilience Plan and choose the subsequent pathways. Less than half of households in 12 of Tonga's 15 CRI communities currently consider themselves resilient – so improving disaster risk and resilience is a crucial goal and a major component of the programme's intended outcomes.



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

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