



Climate Resilient Islands Programme

Disaster Preparedness in Tuvalu

Communities that participate in the Climate Resilient Islands Programme across Tuvalu 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 countries ND-GAIN resilience ranking – measuring Tuvalu’s exposure, sensitivity and ability to adapt to negative impacts of climate change – ranks Tuvalu as the 24th most ready country though lacks sufficient information to determine its specific vulnerability.

Common vulnerabilities

Tuvalu is generally considered highly vulnerable to the impacts of climate change, particularly tropical cyclones, sea level rise and drought. Natural hazards are costing the country large amounts of money, such as Cyclone Pam, which in 2015 cost the country 25% of their GDP and affected almost half of the country’s population of 11,000.

Climate change impacts are already being widely felt across Tuvalu with rising sea levels, increased occurrences of heavy rainfall and cyclones, coastal erosion/loss of land for agriculture and loss of mangroves. With a maximum elevation of only a few metres, Tuvalu is particularly exposed to many of these threats.

CRI communities across Tuvalu have indicated that the most frequent climate-related challenges to their resilience are:

- An increase in frequency and intensities of cyclones
- Coastal inundation/ sea level rise and saltwater intrusion
- Changing rainfall patterns
- Extended and more frequent dry periods/ droughts

Other common factors mentioned include damage to housing and agricultural systems, decreased food security, loss of water-related infrastructure and land erosion and inundation, often causing increased salinity levels and having a significant cultural impact through the destruction of sacred places such as cemeteries.

Current capacity to respond

Due to Tuvalu's exposure to hazards and a major risk of disaster, the country has mandates and laws related to disaster management. Tuvalu's Disaster Management Act, enforced in 2008, mandates the National Disaster Committee (NDC) to provide the coordination and strategic direction to strengthen Tuvalu's disaster risk management arrangements. Disaster resilience is a priority area for national planning and is being factored into various sector plans including agriculture, health, social development and more.

The National Disaster Management Office (NDMO) is a key agency responsible for coordinating disaster management, before, during and after a disaster, and the NDC is the multi-agency advisory and coordination body for mitigation, preparedness response and recovery post-disaster. There are working groups responsible for policy development, training and awareness programs on issues outlined by the NDC. Islands in Tuvalu are recommended to have island disaster committees to act as a bridge between the overarching NDC and the individual communities.

The CRI communities in Tuvalu are all at varying stages of development in relation to disaster management and disaster preparedness. Vaitupu has both an island disaster plan and an active island disaster committee. Some communities are in discussion with the government on developing preparations and plans. Those with no disaster committees or plans often have community understanding of the disaster response process despite not being formalised into a plan.



Challenges

One common challenge between communities in Tuvalu is infrastructure and proper planning. Many communities identified that in the case of disasters the evacuation plans and forms of disaster relief become complicated due to the location of the community and lack of transport options. Others identified that they had some form of evacuation plan in place which included plans on where to take the most vulnerable members of the population – like children, older people and those with disabilities – though disasters, particularly cyclones, are noted as having a rising impact on the ability of households to build resilience due to their effects on water supply, housing infrastructure and livelihoods.

This livelihood threat is often seen through threats to food resilience. Climate change is impacting the amount of land they have available for agriculture due to saltwater intrusion, while rising temperatures and increasing occurrence of droughts are impacting crop yields and lifespans. Fish stocks are also decreasing. As a country that relies on the agricultural and fishing sectors for food and income, climate change is providing an additional challenge by threatening not only their physical livelihoods, but also their monetary livelihoods.

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. The trend of resilience in Tuvalu is unclear – in some places, households are making progress towards greater resilience, though there is also a sense of greater vulnerability, so ensuring the work towards more resilience communities continues is a crucial goal and a major component of the CRI 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.

