Managing invasive species

The Toloa Rainforest is located at Tupou College in Toloa. It is one of four priority sites to be implemented under this programme. The other sites include, Mt. Talau and Late Island in Vava’u; and ‘Eua National Park in ‘Eua.

Students and teachers of Tupou College have worked in partnership with the Ministry of Meteorology, Energy, Information, Disaster Management, Environment, Climate Change and Communications (MEIDECC) and the Secretariat of the Pacific Regional Environment Programme (SPREP) to help protect flora and fauna, and to manage the invasive species in the rainforest.

Invasive species management activities at the Toloa Rainforest are part of the Global Environment Facility – Pacific Alliance for Sustainability project to address invasive species across the Pacific island region. Work in Tonga is led by MEIDECC through the Department of Environment in collaboration with national partners, UNEP, and SPREP.

Restoration efforts underway include a rat control program for the whole forest in order to save native birds and plant species. The bait stations are checked on a monthly basis for replacement.

Coastal revetment systems

The ‘Trialling of coastal protection measures in eastern Tongatapu’ focuses on designing, building and monitoring the success of ‘hard’ and ‘soft’ engineering measures working in combination along two coastal stretches.

One measure consists of the construction of permeable groynes coupled with beach replenishment and coastal planting.

The second measure involves constructing short offshore breakwaters combined with beach replenishment and coastal planting.

Several villages, stretching from Nukuleka to Kolonga in eastern Tongatapu, the main island of Tonga, were identified as needing priority action in Tonga’s Joint National Action Plan for Climate Change Adaptation and Disaster Risk Management (2010–2015).

The project is responding to the identified need by trialling different engineering methods to prograde the coastline seaward by accumulating sediment.

This will ‘buy time’ for the affected villages as planning for the projected impacts of climate change progresses.

The coastal environment is vulnerable to the effects of climate change.

Mangrove restoration & rehabilitation

Hoi is the latest mangrove re-planting site with the Tonga Ridge To Reef (R2R) project.

The site is on the bank of the Fanga’uta Lagoon, in an area that once was the breeding ground for fish and other marine life.

Spreading over a length of 600 metres, the mangrove re-planting programme is a partnership between the R2R Project and the Hoi village community.

The site also includes two old streams that once used to open up to the lagoon.

Villagers remembered how their parents and grandparents before them used to catch fish and fetch seafood from the area years ago.

It is their hope that by ensuring that mangroves are re-planted and grow in the area again that fish and marine life will return to the area.

The villagers hope that their decision now to re-plant mangroves will help secure their children’s future in years to come.

Villagers provided the labour and worked at providing the posts that were used for the fencing of the project site.

The Hoi site runs along the banks of the Fanga’uta Lagoon and is close to growing mangroves.

Special Management Areas (SMAs)

The Special Management Area programme on ‘Atata Island, off the coast of Nuku’alofa, aims to help in the direct conservation and management of the marine coastal (inshore) environment through community-based management efforts of the Atata community through their SMA and no-take zones (FHRs).

It also works towards further promoting sustainable utilisation of inshore resources through management measures of the SMA.

This could be assessed from underwater resource surveys to determine status of fish stock and habitat health as a result of conservation and management.

Overall, it would contribute to the global effort on conservation of marine biodiversity, through effective collaboration between local communities and relevant partners in Tonga.

The programme will provide the ‘Atata community with greater opportunities to further address their issues and needs. It seeks towards upgrading their management skills and technical capacity, as well as promoting awareness for various stakeholders to be more appreciative of their management activities in relation to their Special Management Area.
Learning Outcomes:
1. Participants will gain knowledge and understanding of the management tools used in Tonga to help conserve and manage resources, such as community-based marine management, known as Special Management Areas (SMAs), mangrove restoration and rehabilitation, managing invasive species in rainforests, and coastal revetment systems.
2. Participants will gain understanding of the benefits of community level capacity building, economic and social benefits.
3. Participants will gain an understanding of the need to be resilient and consistent in ensuring that the projects are a success and can be sustainable for a long period of time.
4. Participants will also gain knowledge of the importance of partnership between all stakeholders.

Activity Options:
1. Introduction and background of the different sites
2. Site visits
3. Questions and Answers
4. Number of Participants per site: 40

Proposed Itinerary:
9am  Depart Tanoa Hotel for the 4 site visits
     Bus 1: Depart for Hoi Mangrove site
     Bus 2: Depart for Toloa Rainforest
     Bus 3: Depart for coastal revetment system

Each bus will rotate amongst the different sites so all participants are able to observe some of the GEF funded project sites.

Buses will then depart for the wharf to go to ‘Atata Island - an SMA. The boat ride will take about 15-20min.

12.30-1.00pm  Depart for ‘Atata Island
1.30pm  Briefing on the SMA site
2:00pm  Lunch
2.30pm  Site visit of ‘Atata Island SMA (tour of the island, snorkel, etc.)
4:00pm  Depart ‘Atata Island for Nuku’alofa

Map of the 4 sites