



Improving agroforestry systems to enhance food security and build resilience to climate change in Tuvalu



National agroforestry workshop for 60 farmers from all islands in Tuvalu, an activity organised by the GCCA: PSIS project to enhance food security.

Project amount

€ 0.5 million (approx. AUD 0.7 million) funded by the European Union

Project period

1 December 2013 to 30 June 2015

Implementing agencies

Department of Environment; Ministry of Foreign Affairs, Trade, Tourism, Environment and Labour
Department of Agriculture; Ministry of Natural Resources
Secretariat of the Pacific Community (SPC)

Partners

United Nations Development Programme
Taiwan International Cooperation and Development Fund

Project synopsis

The 'Improving agroforestry systems to enhance food security and build resilience to climate change in Tuvalu' project aims to increase domestic food security. Food security refers to the resilience of food supply systems and the sufficiency of access to nutritious food for the

population. It will promote integrated farming practices that combine crops (agriculture) with trees and shrubs (forestry). This method can provide greater diversification, reliability and sustainability of land-use and yields.

The project will employ 'climate-ready' crop varieties that are researched and made available by SPC's Centre for Pacific Crops and Trees and will diversify the crop varieties that are available in Tuvalu. It will also demonstrate the agricultural potential of land that is currently under-utilised.

How does this project assist climate change adaptation in Tuvalu?

Tuvalu is a small island developing state with nine islands that have limited land area. The maximum height above sea-level is 4.6 metres. Climate change is projected to have an adverse impact on the growth of crops and trees due to: (i) increased air temperature; (ii) rising sea levels and storm surges leading to salt-water inundation and additional coastal erosion; and (iii) the expected increase in flooding events from extreme rainfall.

High dependence on imported food also means that food security is affected by shipping conditions and economic shocks, e.g. global commodity prices.

Increasing the supply and diversity of agricultural yield and making it more resilient to the effects of climate change will benefit Tuvaluans.

Key highlights of the project

- Establish integrated agroforestry demonstration sites on two islands, Funafuti and Nukufetau, where unproductive trees (mainly coconut trees) are being thinned, and the soil will be enhanced with compost and replanted with crops and trees.
- Provide agroforestry training for community members, particularly farmers and women.
- Provide capacity development for Department of Agriculture staff, including international professional attachments for selected technical officers.
- Re-equip the Agricultural Research Station to hold stocks of national plant varieties.

The project's focus was determined by the Government of Tuvalu after widespread consultation. Tuvalu is responsible for the project's implementation.



The Global Climate Change Alliance: Pacific Small Island States project in Tuvalu



Implementing activities designed to build local capacity in technical agricultural skills in Tuvalu.

The Global Climate Change Alliance: Pacific Small Island States (GCCA: PSIS) project is a four-year, € 11.4 million initiative funded by the European Union. It is implemented regionally by the Secretariat of the Pacific Community and involves national climate change adaptation projects in nine Pacific Island countries - Cook Islands, Federated States of Micronesia, Kiribati, Marshall Islands, Nauru, Niue, Palau, Tonga and Tuvalu.

The overall objective of the GCCA: PSIS project is to support the governments of the nine Pacific small island states in their efforts to tackle the adverse effects of climate change.

The Government of Tuvalu is implementing a national climate change adaptation project (see reverse side for more information) with € 0.5 million provided by the European Union.

In addition to this project funding, Tuvalu can access specialised technical assistance and training provided through a pooled resource allocation under the regional GCCA: PSIS umbrella project. This mechanism is providing the following in Tuvalu.

Training

Training attachments are an excellent means of providing targeted, on-the-job training and skills development for selected individuals.

Attachments with SPC have been undertaken as follows.

- One government officer, from the Ministry of Home Affairs and Rural Development, completed a six-month attachment covering a wide variety of climate change policy and planning activity areas.
- Two officers from the Ministry of Foreign Affairs, Trade, Tourism, Environment and Labour and the Ministry of Natural Resources completed programmes focussed on gaining specialised agricultural experience through SPC's Centre for Pacific Crops and Trees.
- One attachment is with SPC's Land Resources Division.

Other training activities include:

- proposal preparation, project design and budgeting, monitoring and evaluation;
- national procurement procedures;
- media training, conveying information on climate change to the public using radio, television and print media;
- targeted training on agriculture and home gardening for the National Council of Women, which will link closely to the climate change adaptation project on agroforestry.

National climate change mainstreaming

Mainstreaming refers to the process of embedding climate change planning in the spectrum of

government ministries, sectoral plans and activities.

Relevant GCCA: PSIS activities are given below.

- A review of the extent of climate change mainstreaming in national strategic plans, policies and budgets in Tuvalu. This was conducted to inform an assessment of the country's readiness to receive international climate finance through budget support mechanisms.
- Preparation of an agricultural marketing plan 2015-2020 to strengthen food security in Tuvalu.

Documentary

- A 20-minute documentary, *Adapting to climate change in Tuvalu: the Freshwater Dimension*, has been prepared and distributed as part of a regional series. The film focuses on the water resource challenge faced in Tuvalu, and common in small low-lying islands. This issue will be compounded further as the climate continues to change.
- A short video on lessons learnt about climate change adaptation in Tuvalu will be available in 2015.
- A video presentation of agroforestry techniques will also be available in 2015.