Introduction

Uniquely diverse and fragile, Pacific Island Countries and Territories (PICT) are aware that adapting to current and anticipated climate changes is crucial to achieving sustainable development. Cognizant of this need, the objective of the PACC project is to enhance the capacity of participating countries to adapt to climate change in key development sectors: food production and food security, coastal management and water resource management. Supporting improvements in these sectors the PACC project is working to build resilience to climate change in PICT. Adaptation projects are now being implemented nationally, after an intensive consultative process with the implementing agencies and government counterparts.

Under the project, Fiji, Palau, Papua New Guinea and the Solomon Islands are focussing on food production and food security. The Cook Islands, Federated States of Micronesia, Samoa, Tokelau and Vanuatu are developing coastal management capacity and Nauru, Niue, Republic of Marshall Islands, Tonga and Tuvalu are working to strengthen their water resource management.

More specifically, the project is working to deliver outcomes and outputs that include improved technical capacity to formulate and implement national and sub-national policies, legislation, and costing/assessment exercises. Climate change risks will be incorporated into relevant governance policies and strategies for achieving food security, water management, and coastal development.

At the sub-national level, pilot demonstration activities will deliver adaptation benefits in the form of practical experiences in the planning and implementation of response measures that reduce vulnerability. These benefits will be integral for future replication and up-scaling, and also to identify larger-scale investment opportunities from multilateral banks supporting countries with climate change adaptation. The project will also foster regional collaboration on adaptation.

Concrete adaptation measures being pursued through PACC

Climate induced disturbances in water supplied is being reduced by increasing the availability and quality of freshwater through integrated measures involving:

- capturing and storage of rain and groundwater resources (individual household and community storage capacities) – Tuvalu, Tonga, Nauru, PNG, RMI, Tokelau
- reducing leakage of reticulated systems and water storage facilities – Tonga, Tuvalu, RMI, Tokelau
- water saving (e.g. introducing compost toilets, demand management through awareness raising) – Tuvalu, Tonga
- water purifiers (using solar heat) - Nauru

Climate-induced disturbances in food supply and security is being reduced through:

- Inducation of climate resilient crop species and varieties (resilient to drought, water clogging, salt water intrusion, pests), including techniques for their consistent supply (germ-plasm collections, nurseries) – Solomon Islands, Palau, Fiji, PNG
- Enhanced farming and land use techniques facilitating soil and water conservation (e.g. mulching, organic farming, mixed cropping, drainage), – Solomon Islands, Palau, Fiji
- Enhanced food storage and processing techniques – Solomon Islands, Palau
- Enhanced aquaculture techniques - Palau

Climate-induced degradation and erosion of coastal areas and infrastructure is being reduced through a combination of hard and soft measures:

- Protective coastal structures – Samoa, Vanuatu
- Coastal vegetation – Samoa, Vanuatu
- Reinforcing existing coastal infrastructure (climate proofing of roads and harbours) – Federated States of Micronesia, Vanuatu, Cook Islands
- Relocating coastal infrastructure to less-exposed areas (Vanuatu – landing strip, road sections)
- Coastal resource use changes (e.g. reducing sand-mining by local communities, conserving reefs and coastal wetlands and forests as natural protection barrier) - Samoa