

# Coping with Climate Change in the Pacific Island Region (CCCPIR)

## Climate Adaptation through Forestry Pele Island, Vanuatu

### Project facts CCCPIR

Funding sources: Federal Republic of Germany through the Federal Ministry for Economic Cooperation and Development (BMZ)

Regional partners: SPC, SPREP and USP

Countries: Federated States of Micronesia, Fiji Islands, Marshall Islands, Nauru, Kiribati, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu

Duration: January 2009-December 2015

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## Climate Change in the Pacific

Pacific Island Countries (PICs) are already experiencing the negative impacts of climate change, especially as these countries are of the most vulnerable to environmental hazards and often have insufficient adaptation resources. Sea-level rise, changes in precipitation patterns and rising temperatures are causing secondary impacts of coastal erosion, salt water intrusion, cyclone damage, pest and disease outbreaks, water insecurity and declining agricultural production.

The 'Coping with Climate Change in the Pacific Island Region (CCCPIR)' programme aims to strengthen the capacities of Pacific member countries and regional organisations to cope with the impacts of climate change. The programme is funded by the Government of the Federal Republic of Germany through the Federal Ministry for Economic Cooperation and Development (BMZ) and implemented through GIZ working in partnership with SPC and SPREP. The project aligns with the Pacific Island Framework for Action on Climate Change 2006-2015 (PIFACC) and at the national level with the Priority Action Agenda (PAA).



## Climate change and its impact on Vanuatu Communities

The Island of Pele, one of the SPC-GIZ CCCPIR pilot sites, is experiencing many climate change impacts such as: coastal erosion, slope erosion, leaching of soil nutrients and increasing temperatures.

SPC-GIZ is working with the people of Pele to identify how climate change impacts on their lives, and find innovative solutions and locally appropriate adaptation strategies. CCCPIR is working to strengthen the capacity of the Nguna-Pele Marine and Land Protected Area Network to deliver climate change education and awareness to island communities, and encourage families to proactively adapt to climate change.



## Forestry in Vanuatu

According to Vanuatu's National Adaptation Program for Action (NAPA), "forests have always been an integral part of lives of the people of Vanuatu. Within the household, the forests have always provided timber, posts, thatch, food, fuel-wood and traditional medicine. Environmentally, forests and trees act as soil and water protectors, and shelter from sun, rain and wind." Thus, sustainable forest management was selected as a primary adaptation focus for climate change at the national level.

Vanuatu's Priority Action Agenda highlights the importance of forestry for economic development and environmental sustainability, and emphasizes a priority to "Maintain and improve the regulatory and management framework for the sustainable development of the sector". The PAA outlines the importance of forestry for economic development and environmental sustainability, and highlights a priority to "Maintain and improve the regulatory and management framework for the sustainable development of the sector".

With SPC-GIZ support, Vanuatu was able to revise its National Forest Policy in 2011, to incorporate climate change considerations. Policy directives on climate change adaptation include:

- Develop forestry-related climate change adaptation demonstration projects including concerns for food security, soil stabilization, water management, and coastal erosion
- Introduce and promote climate change resilient tree species and varieties
- Undertake ground cover initiatives to prevent soil and coastal erosion
- Identify and seek financing for novel and promising forestry adaptation projects and programs



- Train all stakeholders on the opportunities for climate change adaptation and impact assessment
- Rehabilitate watershed and water catchment areas to secure water supplies
- Systematically assess and minimize wind damage to crops and infrastructure by trialling windbreak species and systems

The SPC-GIZ CCCPIR Pele Pilot Site activities in forestry aim to implement key aspects of the National Forest Policy.

The overall objective of the SPC-GIZ CCCPIR activities on Pele is to trial forest-related technologies that enable climate adaptation, especially those that have high potential for replication in other sites throughout Vanuatu.



A climate resilient nursery has been established on the island. The nursery cultivates native coastal plant species, high value timber, fruit and nut species and erosion control grasses in preparation for replanting.

A series of coastal revegetation plots to prevent erosion have been established focusing on emergency soil stabilization and enrichment vegetation.

In addition, rehabilitation plots on a degraded slope have been planted with erosion controlling plants and high value fruit species. Heal, drought and salt tolerant trees and grasses to control erosion now cover an area of 3 hectares.

Animal, plant and human composting trials have been started in many parts of the island, processing crown of thorns starfish, plant- and garden waste. A demonstration compost toilet has also been set up at the local Tangovauwia Primary School.



## Hands-on, sustainable projects

The climate change impacts addressed by the Pele Forestry pilot site activities include:

- Coastal erosion due to sea level rise, increased frequency/intensity of storms, and tidal fluctuations, also controlling non-climate factors such as poor land use planning and unsustainable development in the coastal zone.
- Slope erosion due to increased frequency/intensity of storms, extreme rainfall events, also controlling non climate factors such as poor land use planning and burning of sensitive areas.
- Leaching of soil nutrients due to increased frequency/intensity of storms, extreme rainfall events, also controlling non-climate factors such as soil overuse/decreased fallow periods.

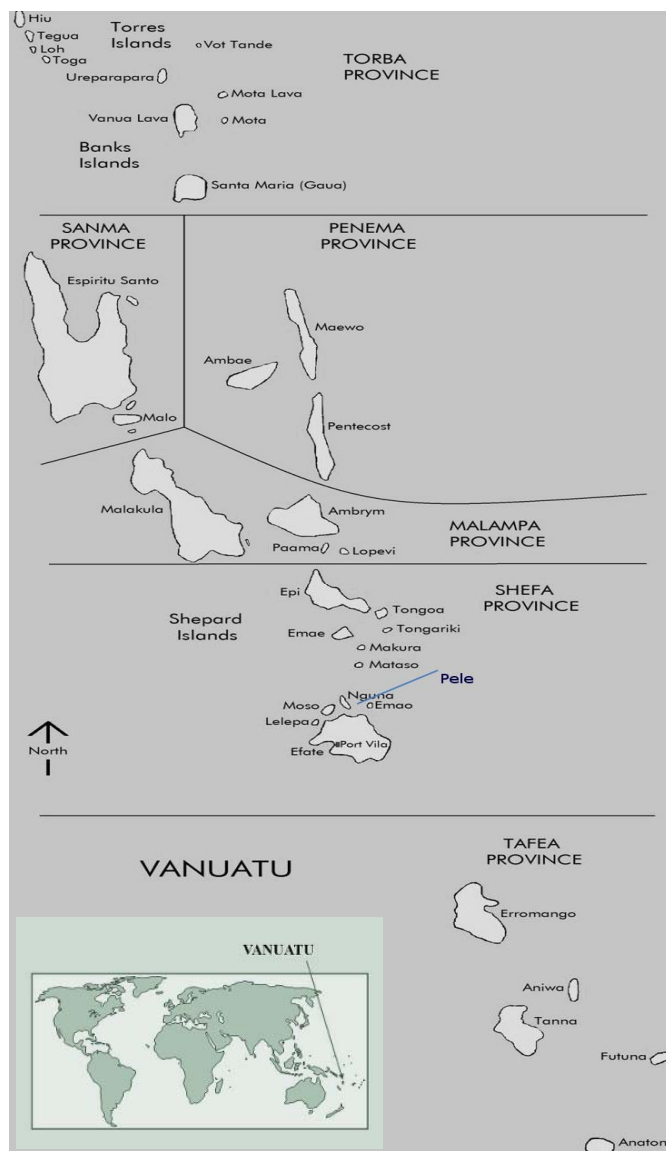


## A success story for Ni-Vanuatu people

Fairis and Joan from Worearu/Pele

*"The forestry project teaches us how to plant trees along our coastline to protect the land from washing away. This way we are not losing our island to the sea when there is a cyclone. We also sell plant seedlings at the market in Port Vila. There is no work here on the island and the money from the market sale is our only income."*





GIZ is a federally-owned enterprise that supports the German government in the field of international development cooperation. For more than 30 years, GIZ has been cooperating with Pacific Island partners in strengthening the capacity of people and institutions to improve the lives of communities for this generation and generations to come. GIZ is an implementing agency providing support through technical cooperation to balance economic, social and ecological interests through multi-stakeholder dialogue, participation and collaboration.

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