

1. Name: 'Trialling coastal protection measures in eastern Tongatapu' project as part of the European Union funded and Secretariat of the Pacific Community implemented Global Climate Change Alliance: Pacific Small Island States project

Project period:

13 August 2013 to 31st December 2015

Implementing agency in Tonga:

Department of Climate Change

Ministry of Meteorology, Energy, Information, Disaster Management, Environment, Climate Change and Communication (MEIDECCC)

Government of Tonga

2. Development partners using a similar approach:

Asian Development Bank- Strategic Program for Climate Resilience

EU-GIZ Adapting to Climate Change and Sustainable Energy (ACSE) programme

3. Objective:

The overall objective of the project is to increase resilience to climate change impacts in Tonga.

4. Processes/ methodology used:

The project 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.

5. Outputs:

- Design and construct coastal protection measures that will benefit the nearly 4,000 people living in the coastal area.
- Community consultations for each phase of project development including in the assessment and identification of sites; a feasibility study; an environmental impact assessment; determination of the final design; construction; and monitoring.
- The entire process is providing a model for addressing similar problems in other vulnerable coastal areas in Tonga.
- Preparations for a coastal management plan for Tongatapu Island that will provide an overall, integrated approach to coastal management, replacing the existing piecemeal approach.
- Collaboration with donor partners provides an opportunity to expand trialling of coastal protection systems to more coastal sites in Tongatapu.

6. Lessons learnt:

- Proper community engagement and planning from the beginning is extremely important.
- Explaining climate change science and the reasoning behind the the project is key to community understanding
- It is important to link key developments with national documents such as the JNAP
- Following a proper process for coastal management is key to success
- Partnerships and coordination between donors can increase the benefits for countries
- Promoting climate change and country priorities through policies, donor roundtables, and a programmatic approach can be very useful tools.

7. Recommendations:

- Other coastal protection projects take up the process followed in this project which involves:
 1. The assessment and identification of sites
 2. A feasibility study
 3. An environmental impact assessment
 4. Determination of the final design by a coastal engineer
 5. Construction
 6. Monitoring
 7. Community consultation throughout