



Community-Based Adaptation FAST FACTS

SAMOA

Reduce the impact of erosion in Fasitootai village's mangroves and coral reefs

Grantee: Fasitootai Community

Type of organization: CBO

Number of participants: 2,134

Location: Aana Alofi III District, Samoa

CBA Contribution: 50,000 USD

Project Partners: AusAID, Ministry of Natural Resources and Environment, Samoa Tourism Agency

Co-financing: AusAid (50,000 USD), Community contribution (40,000 USD)

Project Dates: August 2009 – August 2011

BACKGROUND

The Community-Based Adaptation Programme (CBA) is a five-year United Nations Development Programme (UNDP) global initiative funded by the Global Environmental Facility (GEF) within the Small Grants Programme (SGP) delivery mechanism. The UN Volunteers partners with UNDP and GEF/SGP to enhance community mobilization, recognize volunteers' contribution and ensure inclusive participation around the project, as well as to facilitate capacity building of partner NGOs and CBOs. In addition, funding is provided by the Government of Japan, the Government of Switzerland and the Government of Australia. The CBA's goal is to strengthen the resiliency of communities addressing climate change impacts.

This CBA project focuses on reducing the adverse impacts of climate change-driven erosion on mangrove and coral reef ecosystems in the Samoan village of Fasitootai. Samoa is an archipelago situated in the South Pacific, consisting of two large mountainous islands. Upolu and Savai'i, and seven other small ones. The economy is dependent on remittances, tourism, development aid and agricultural exports. The site of the project is Fasitootai village situated on the leeward north coast of Upolu. The climate is typical of Samoa, marked by a distinct wet and warm season from November to April, and a less wet and cooler season from May to October. The project area encompasses two threatened ecosystems of global significance. The mangrove ecosystem is estimated to cover 2 hectares and houses numerous fauna and flora. It also includes fresh water pools used for drinking, bathing and recreation. The coral reef ecosystem includes a lagoon and coral, fish and marine life habitats. A large percentage of the community depends on subsistence or semi-subsistence farming and fishing. Accordingly, residents rely heavily on these ecosystems for food, medicine and to generate income. The ecosystems also serve as natural barrier to storm surges during cyclones. Notwithstanding, they are subject to numerous climate change-induced threats. The village has reported that mangroves are dying, coral bleaching events are becoming more common, and land is receding approximately 4 meters per year as a result of both climate hazards and baseline human development issues.



Working together as a community on the CBA project

CLIMATE CHANGE RISKS

Climate change projections for Samoa suggest an increase in average temperatures, a decrease in precipitation with higher occurrences of high intensity rainfall events, a rise in sea level, and an increase in the intensity of tropical cyclones. These projected climate change events will significantly impact communities and ecosystems across Samoa. A recent study noted that extreme wind gusts are expected to increase by about 7%. Extreme winds combined with other climate change impacts will contribute to biodiversity loss, coastal erosion and the degradation of mangroves. The local change in sea level is projected to about 3.8 mm per year. This will result in flooding and substantial coastal erosion resulting in the degradation of the coastal ecosystems and the loss of flora and fauna and their habitats. In addition to

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sea level rise, flooding from more intense rainfall events will increase both the runoff of nutrients from plantations and agriculture sites near the shore and sedimentation from unsealed dirt roads.

PROJECT DESCRIPTION AND ADAPTATION MEASURES

This CBA project seeks to improve the adaptive capacity and to reduce the vulnerability of Fasitootai's mangrove and coral reef ecosystems to climate change risks associated with storm surges, sea level rise, tropical cyclones and flooding. It was formulated after recognition by the community of the severe impacts of climate change on local livelihoods and welfare. The scope of the work to be carried out is as follows:

- Designing and constructing shoreline protection to stabilize the coastline
- Reclaiming 5,000 square meters that have been eroded away by the ocean through the planting of mangroves
- Renovating the three pools which are used for drinking, bathing and recreation
- Setting up a Special Management Area to protect mangroves and coral reefs



The community documenting their CBA project activities as a means of sharing experiences and lessons learnt

The project also includes an education component that will help raise awareness and build residents capacity on climate change. The knowledge acquired will empower the community with the skills needed to better understand and anticipate climate change impacts and to protect their valuable and irreplaceable ecosystems. All together, these activities will improve the resilience of Fasitootai's ecosystems to climate change and will reduce the vulnerability of the community to climate variability.

FOCUS ON...

Global environmental benefits

The project will contribute to the creation of a Special Protected Management Area. By 2011, it will protect ten species of birds of significant global importance and will put two hectares of mangrove and 75% of coral reef protected areas into its management. In addition, it will adopt three management plans and will put in reserve 50% of protected fish and marine life. Furthermore, the project will restore 0.5 hectare of degraded land and will sustainably manage four other hectares of land.

Community ownership and sustainability

The successful implementation of the project relies on the community of Fasitootai taking ownership of the different activities identified. From the Council of Chiefs down to the women committee members and untitled men, the residents will make an important contribution to the implementation and the monitoring of the project by volunteering their time, knowledge, labour and materials. On December 15th, 2009, the whole community mobilized to clean up the mangrove area. The day is illustrated in the pictures above.

Policy influence

Four important policies (Climate Change Resilient Coastal Natural Resource Management, Coastal Infrastructure Management Plan, Memorandum of Understanding to Declare Mangrove and Coral Reef Ecosystems as Special Protected Area, Anti Litter and Waste Disposal Management Plan) will be developed by the community with integration of climate change projections and adaptation practices.

For more information about CBA or CBA projects visit: www.undp-adaptation.org/project/cba

Further information, lessons learned, and experiences gathered from climate change adaptation activities globally can be found at the Adaptation Learning Mechanism: www.adaptationlearning.net

