



TUVALU

Increasing Resilience of Coastal Areas and Community Settlements to Climate Change

LEAST DEVELOPED COUNTRIES FUND	
LDCF grant	\$3,000,000
Cofinancing	\$3,080,000
NAPA completion	May 2007
Inclusion in LDCF Work Program	August 2008
CEO endorsement	October 2009
Implementation start and completion	October 2009–October 2013
GEF Agency	United Nations Development Programme (UNDP)
Other executing partner	Ministry of Natural Resources and Environment

Tuvalu is composed of four reef islands and five atolls, and is located in the South Pacific. Because of its location, Tuvalu is on the front lines of adaptation as it is already experiencing the impacts of climate change. Tuvalu is already experiencing a notable increase in the frequency and intensity of extreme hydrometeorological events as well as the climate change–related accelerated rise of sea level. These events have an adverse impact on the low-lying islands of Tuvalu. With a coastline that is less than 1 meter above sea level, these events erode the country's very scarce land resources and increase the salinity of groundwater lenses. The consequence is that freshwater availability and agricultural yields are decreasing.

Project Activities and Expected Impacts

The project implements effective community-based adaptation measures in coastal areas that reduce vulnerability and improve adaptive capacity to climate change and sea-level rise. The project uses demonstration measures aligned with local conditions, which encompass community-based systems for the management of protective ecosystems, sustainable use of climate-sensitive natural resources, and diversification of vulnerable livelihoods. Envisaged demonstration projects focus on opportunities for community-based afforestation, mangrove regeneration and plantation management, erosion prevention and participative protection of coastal sediment barriers, reduction of manmade stresses on coral reefs and protective



ecosystems, diversification of crops and agricultural practices, optimization of freshwater and irrigation management, and improved information flows on climate and early-warning systems.

The project also enables a strategic revision of national and subnational policies and programs to incorporate climate change risk considerations and adaptation strategies into financial decision processes, and to develop coordination and harmonization among different sectoral interventions. The project enhances the adaptive capacity of local communities to anticipate dynamic climate-related threats and protect their livelihoods, as well as improve individual, institutional, and systemic capacity at all levels of public administration to plan for and respond to climate change risks in coastal areas.

Synergies and Coordination

The project is part of the proposed *GEF-Pacific Alliance for Sustainability (G-PAS)*, which is led by the World Bank on behalf of all GEF Agencies. It complements the activities proposed by the UNDP-GEF *Pacific Adaptation to Climate Change (PACC)* and the *Integrated Water Resources Management (IWRM)* projects, and ensures that the alignment of these projects in a programmatic manner maximizes the degree of learning and replication of high-impact adaptation solutions. The PACC, through its pursuit of enhancing the long-term resilience of key economic sectors, is a holistic framework for a regionally coordinated and nationally executed strategic program on addressing climate change adaptation. The key focus on PACC interventions in Tuvalu is on the expansion of rainwater storage capacity, which is an

adaptation option complementary to the bundle of community-based adaptation (CBA) activities selected and demonstrated through the proposed project. While the G-PAS technically seeks to increase the efficiency and effectiveness of GEF Trust Fund support to Pacific Island Countries (PICs), this project provides a complementary operational mechanism for a regional partnership with national-level activities that are anchored in and led by a Pacific Island Country. Through this programmatic setup, LDCF, SCCF, and funding by the GEF Trust Fund play a catalytic role in leveraging national-level investments to meet the additional costs of climate change adaptation in Tuvalu.

UNDP also ensures exchange of knowledge with other CBA projects, most notably the GEF Strategic Priority on Adaptation (SPA)-funded CBA Programme and the LDCF-funded project *Community-Based Adaptation through Coastal Afforestation in Bangladesh*. CBA demonstrates a range of community-based adaptation options at the interface between ecosystem management and livelihood protection in 10 different pilot countries, whereas the LDCF project in Bangladesh focuses on livelihood diversification and participatory greenbelt management in low-lying, flood-prone communities. Together with the proposed project, these experiences deliver a critical mass of knowledge about CBA in coastal zones, which enables documentation of livelihood-based and low-cost alternatives to large-scale infrastructure projects that have limited chance for short-term replication. Channeling of this knowledge through the Adaptation Learning Mechanism (ALM) platform enables exchange of project experiences with governments around the globe.

For More Information

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