

CLIMATE CHANGE ADAPTATION BULLETIN

A Quarterly Update of Activities

United Nations Development Programme



ISSUE No. 17
SEPTEMBER 2014

Empowered lives.
Resilient nations.

This bulletin is produced by the UNDP-GEF Unit and provides an overview of UNDP-GEF's support to countries to affect policy and institutional change for climate change adaptation at the national, sub-national and community levels. It includes updates on a range of topics including the status of ongoing projects, new project approvals, performance indicators, project impacts and results, and noteworthy announcements. To contribute to future issues, please write to: adaptation@undp.org

Helping Save Samoa's Forests: UNDP Administrator and GEF Chief Executive meet a community on the frontline



Local leaders took Ms Clark and Ms Ishii through the model their community had created several months ago and explained how it is now used to make local forestry management decisions. Photo: UNDP/Abril Esquivel

With Samoa's forests under increasing threat from climate change, unsustainable land use practices and the advance of invasive species, the government is working with the United Nations Development Programme (UNDP), the Global Environment Facility (GEF) and 26 communities across the country to save three critical forest areas.

In a break from the Third International Small Island Developing States (SIDS) conference being held in Apia, Helen Clark the UNDP Administrator and Naoko Ishii the GEF Chief Executive Officer today met with people of Luatuanu'u. This is one of the 26 communities participating in the Integration of Climate Change Risks and Resilience into Forestry Management in Samoa (ICCRIFS) project.

[Read the full press release](#)

In this Issue

Featured Stories

- Helping Save Samoa's Forests: UNDP Administrator and GEF Chief Executive meet a community on the frontline 1
- Supporting Climate Change Adaptation in Small Island Developing States (SIDS)
 - Photo essays and stories from: Comoros, Fiji, Haiti, Maldives, Samoa, São Tomé and Príncipe, Solomon Islands, Tuvalu, Vanuatu 2

Featured Resources

- New Project Video — Vital Harbour: Pacific Adaptation to Climate Change in the Cook Islands 4
- New Publication — Island Innovations— UNDP and GEF: Leveraging the Environment for the Sustainable Development of Small Island Developing States ... 4

Events

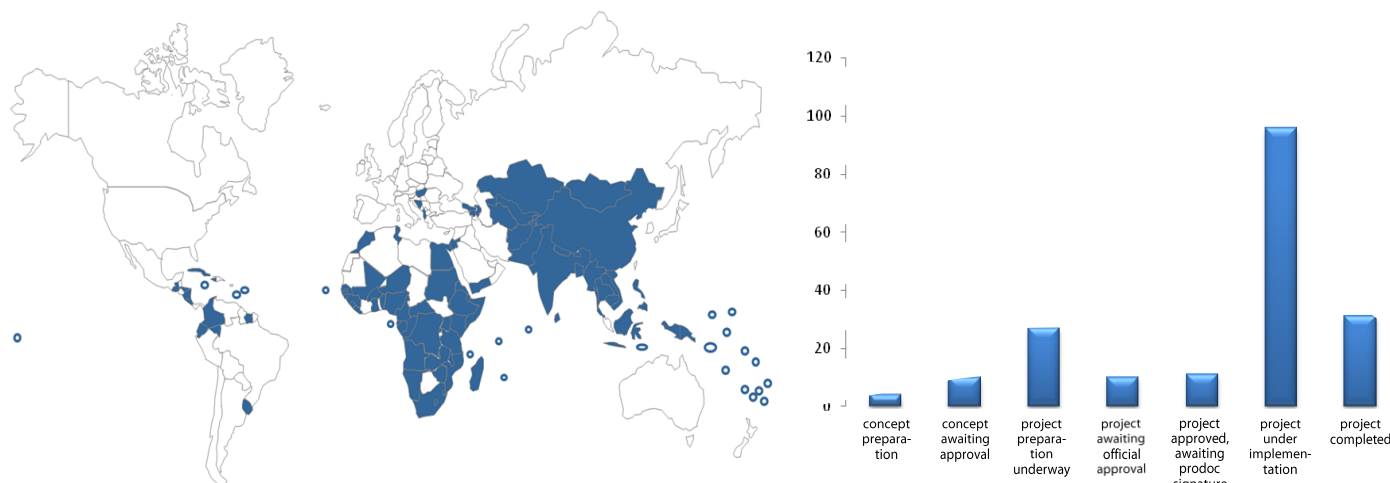
- Analysing the Economic Impact of Climate Change—Upcoming Regional Training for Asia..... 4

Portfolio Information

- Quick Glance at UNDP's Adaptation Portfolio 1
- Recent Concept and Project Approvals 4

Quick Glance at UNDP's Adaptation Portfolio

(as of September 2014)



Supporting Climate Change Adaptation in Small Island Developing States (SIDS)

COMOROS

Irrigation Kits, Wheelbarrows, and Machetes: New Irrigation Methods Revive Farming in a Comorian Village



With better access to water, and the implementation of climate-resilient technologies, Bandasamlini community farmers have regained hope for a better future. Photo: Zafer Kizilkaya

For a long time, being a farmer in the village of Bandasamlini meant fighting a daily, uphill battle to reach and to work on local fields. More recently, climate-induced drought and water scarcity had farmers struggling to keep their livelihoods. With the installation of water retention tanks and the distribution of drip irrigation kits, farmers should soon see higher crop yields and an overall improvement of their food security.

View the photo essay in [English](#), [French](#), and [Spanish](#)

FIJI

From the Fields to the Table: Investing in Climate Resilient Infrastructure and Crops



Adapting to climate change also goes beyond the built environment. New crop varieties that are better suited to the changing conditions have also been introduced. Saltwater- and waterlogging-tolerant crops for example, are less vulnerable to a lack of freshwater. Photo: Luke McPake

Sea level rise and flash floods are putting enormous pressure on the outdated drainage systems in Fiji. As a result, these cannot hold water back to prevent flooding. The spillover has a direct impact on food and cash crops, threatening food security and damaging the economy. The [Pacific Adaptation to Climate Change \(PACC\)](#) programme is a source of renewal for coastal communities and low-lying farmers in Fiji. It is investing

in stronger, more resilient infrastructure to replace the existing clogged water ways and broken flood gates. At the same time the programme will safeguard against the rise in sea level and increase in rainfall intensity that Fiji expects to confront over the next 30 to 50 years.

[View the photo essay](#)

HAITI

Watershed projects build climate change resilience



Wilidine Panoze uses a local drinking water kiosk in Cyvadier. Photo: UNDP

Many Haitians depend on rainwater and groundwater for their daily use. During periods of drought, some walk several kilometers in search of water. Often what they do find is of poor quality, leading to waterborne illnesses. Climate change has added to the problem by reducing groundwater recharge, leading to the loss of many local

sources of drinking water. UNDP in partnership with Haiti's Ministry of Environment and the regional office for drinking water and sanitation, has launched several pilot projects in the southeast of Haiti to improve both the availability and quality of water, in an effort to reduce vulnerability to the effects of climate change.

[View the full story](#)

MALDIVES

Collecting Rain to Address Maldives' Water Shortage



Drinking water can be gathered from rainwater or from desalinating sea water, which the Maldives has in abundance. Photo: UNDP

The Maldives Government started a "pilot integrated water management system" on the densely populated island of Ihavandhoo, with similar projects in the works on Mahibadhoo and Gadhdhoo islands. The plan will include a reverse osmosis plant for desalination and networks of connected rainwater tanks to safely store and treat water for use during the dry season. Since land for

rainwater catchments is scarce, the project takes a more innovative approach: using buildings as catchment areas. The idea is to create a network of public and private buildings that collect excess rainwater into interconnected water harvesting tanks. The rainwater is then piped to a central water supply plant where it is treated and eventually pumped into people's homes.

[View the full story](#)

SAMOA

Coast to Coast: Community based Coastal Protection



Part of PACC's strategy is to help communities adapt to, and make informed decisions about, climate risks and responses. Photo: Joe Hitchcock & Luke McPake

As part of the [Pacific Adaptation to Climate Change \(PACC\) project in Samoa](#), indigenous plants have been used to bolster rock wall defences along coastal and lowland river areas. Working from the ridge to the reef, PACC Samoa activities have provided lessons on integrated coastal zone management and watershed protection, including lessons from extreme events such as Cyclone

Evan. Building on these experiences, the project is currently developing the 'Living with Rivers and the Sea' manual.

[View the full photo essay](#)

SÃO TOMÉ AND PRÍNCIPE

Early Warning Systems Protect Farmers and Fisherman

In São Tomé and Príncipe, climate change brings severe and dangerous weather conditions. Storm surges, torrential rains, flash floods, and increasing fog and wind have created hazardous conditions for fishermen and farmers alike. Part of what makes these conditions so dangerous is the fact that they can come without warning. An [ongoing UNDP supported project](#), in partnership with the Ministry of Pub-

(continued from page 2 - Featured Stories: Supporting Climate Change Adaptation in SIDS)



Increased fog, wind, and storms are particularly dangerous for Sao Tomé and Príncipe fishermen, who traditionally fish in small, open sail boats and navigate by sight. Photo: UNDP

lic Works and the National Meteorological Institute, aims to help develop more reliable early warning systems to monitor these increasingly severe hydro-meteorological conditions (i.e. water-based weather patterns, such as rainfall, floods and storms).

[View the full story](#)

SOLOMON ISLANDS

Sea Level Rise Mapping: An Eye-Opener for a Solomon Islands Community



Climate resilient crop varieties and enhanced farming systems have been introduced in the Solomon Islands as well as climate-resilient land-use planning, climate early-warning and information systems, agriculture food banks, national assessment of soil types and their vulnerability to degradation, and enhanced food processing and storage techniques. Photo: Dana MacLean

When it comes to understanding climate change, a map can speak a thousand words. For one village in the Solomon Islands, a recent training on sea level rise mapping clearly showed community members some of the changes they can expect to see on their small farms. Using lasers and a detector to measure the height of the village setting above the rising high water mark, some attendees described the training as an “eye-opener.”

[View the photo essay](#)

TUVALU

Water is Life: Offering Hope in Times of Drought



The Lofeagai community installed a water cistern: the first storage capacity for this community. Now, 90% of the Lofeagai population has access to the necessary minimum water supply of 40 liters per day, even during periods of extreme drought. Photo: Joe Hitchcock & Luke McPake

Because Tuvalu relies on rainfall for its water supply, droughts threaten the livelihoods of communities across the country and bring significant social and economic costs that weigh heavily on human lives. Families go without water and productive time is lost waiting in lines at government offices to procure this essential element. Water resource management is therefore a national priority. It is also critical to building community resilience and reducing vulnerability. In response to these issues and this vulnerability, the [Pacific Adaptation to Climate Change \(PACC\) project in Tuvalu](#) is developing climate proof water management plans for the Lofeagai community.

[View the photo essay](#)

TUVALU

Homegrown Success: Fighting Climate Change from Tuvalu's backyard



Photo: UNDP

Climate change can cause food insecurity, but the people of Tuvalu are fighting back: by growing vegetables and other products right in their backyard. The women in Tuvalu have shown an active interest in addressing climate change by growing their own food. Women's groups in turn ensure that the necessary equip-

ment reaches the women, including younger ones. Targeted training further helps to ensure that women receive the necessary expertise on home gardening techniques and climate change impacts on agriculture. Community members are learning new home gardening techniques, for composting and planting, that improve the quality of garden soil and produce better crops. After learning, participants take their new skills back home to teach them to their fellow community members.

[View the photo essay](#)

VANUATU

Mobility Matters: Building Climate Resilient Infrastructure



The PACC project in Vanuatu has developed solutions for climate change related challenges, in cooperation with local communities on Epi island. For the island, this has resulted in relocation of parts of roads to higher, safer ground. Photo: Joe Hitchcock

Rising sea levels have brought increased storm surges and coastal flooding to Vanuatu's shores, taking a toll on the country's islands. The impacts are attacking the islands' critical infrastructure including roads, airway strips and harbours which are essential to the country's mobility and economy. In the recent past, flooding and coastal erosion on Epi island have damaged roads and rendered key sections unsuitable for use, particularly in wet seasons. The [Pacific Adaptation to Climate Change \(PACC\) initiative in Vanuatu](#) has developed solutions for these climate change related challenges, in cooperation with local Epi communities. For the Epi, this has resulted in relocation of parts of roads and the entire Lamén Bay airstrip to higher, safer ground.

[View the photo essay](#)

Previous Issues of the UNDP Adaptation Bulletin

[Issue 16](#)

[Issue 11](#)

[Issue 6](#)

[Issue 15](#)

[Issue 10](#)

[Issue 5](#)

[Issue 14](#)

[Issue 9](#)

[Issue 4](#)

[Issue 13](#)

[Issue 8](#)

[Issue 3](#)

[Issue 12](#)

[Issue 7](#)

Featured Resources

Vital Harbour: Pacific Adaptation to Climate Change (PACC) in the Cook Islands



The PACC project in the Cook Islands is climate proofing Mangaia Harbour, and protecting the island's coastline. The badly damaged Mangaia harbour – the transportation hub and entry point for all supplies to the island – was destroyed by tropical cyclones in early 2005. Project activities involve developing a stronger and safer harbour that could withstand current and future climate-related threats.

project activities involve developing a stronger and safer harbour that could withstand current and future climate-related threats.

[View the full video](#)

Island Innovations - UNDP and GEF: Leveraging the Environment for the Sustainable Development of Small Island Developing States



This publication was produced jointly with the Global Environment Facility (GEF) and was launched at a high-level side event at the SIDS conference in Apia on 1 September 2014, with Ms. Helen Clark, UNDP Administrator, and Ms. Naoko Ishii, CEO of the GEF.

Full of compelling stories, this publication showcases outstanding results of key environment, energy and sustainable development related projects from SIDS. Seventeen case studies from across the three SIDS regions

(Pacific, AIMS and Caribbean) feature a wide variety of projects. Results of these projects are complemented with earnest and insightful thoughts from stakeholders consulted in the development of the publication.

[View/Download the publication](#)

Recent Concept and Project Approvals

Country & Project Title	Source of Funds & Grant (US\$M)	Concept/Project & Approval Date
Djibouti		
Supporting rural community adaptation to climate change in mountain regions of Djibouti	LDCF 5.48	Project Aug-14
Timor Leste		
Strengthening Community Resilience to Climate Induced Natural Disasters in the Dili to Ainaro Road Development Corridor	LDCF 5.25	Project Aug-14

Events

Analysing the Economic Impacts of Climate Change

A regional training focused on analyzing the economic impacts of climate change, and identifying cost-efficient and sustainable adaptation options, is taking place 17-20 September 2014, organized by the Capacity Building Programme on the Economics of Climate Change Adaptation.



Photo: UNDP

In Asia, climate change is resulting in shifts in seasonal cycles, as well as increases in the frequency and intensity of extreme weather events. Related impacts, such as reduced agricultural productivity and changes in water access, can put pressure on national resources and affect a country's ability to achieve its development goals. Applying economic analysis to adaptation planning enables policy makers to make optimal decisions in the face of scarcity of financial resources for adaptation.

Applying economic analysis to adaptation planning enables policy makers to make optimal decisions in the face of scarcity of financial resources for adaptation.

The Capacity Building Programme on the Economics of Climate Change Adaptation (ECCA) provides technical officers with training on the economics of adaptation. This 2-year programme is comprised of a series of technical training interspersed with in-country applied work to enable trainees to master key economic concepts and tools for adaptation planning and decision making. This is a key area of technical assistance required by countries as per the UNFCCC's guidelines for countries on the National Adaptation Plan process. The NAP process, established under the Cancun Adaptation Framework (CAF), enables Parties to formulate and implement NAPs as a means of identifying medium- and long-term adaptation needs and developing and implementing strategies and programmes to address those needs

[More Information on this event](#)

[More information on the ECCA programme](#)

Acronyms

AF	Adaptation Fund	PACC	Pacific Adaptation to Climate Change
CAF	Cancun Adaptation Framework	SCCF	Special Climate Change Fund
ECCA	Economics of Climate Change Adaptation	SIDS	Small Island Developing States
GEF	Global Environment Facility	UNDP	UN Development Programme
LDCF	Least Developed Countries Fund		

For additional information, please contact:

Nik Sekhran
Officer-In-Charge
Environment & Energy Group
nik.sekhran@undp.org

Adriana Dinu
Executive Coordinator and Director, a.i.
UNDP-Global Environment Facility
adriana.dinu@undp.org

www.undp-alm.org



Empowered lives.
Resilient nations.