# **CLIMATE CHANGE ADAPTATION BULLETIN**

A Quarterly Update of Activities

**United Nations Development Programme** 



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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

# **Supporting Climate Change Adaptation**

#### **AFRICA**

# Quenching the Thirst—Irrigating **Farmlands of Zambia**



In recent years, unreliable rainfall has caused frequent, intensive floods or droughts, which strike hard on Zambia's rain-fed farmland. Extreme weather threatens millions of hectares of rain-fed farms and the livelihoods of many pastoral nomadic groups. Through a Least Developed Countries Fund Lodo is now equipped with new (LDCF) financed initiative, UNDP is agricultural techniques improved seeds and new supporting Zambia to improve the types of crops. Okras tornatoes and cowpeas supporting Zambia to improve the help to pay for a university education for Ms. lives of people in eight vulnerable two daughters. Photo: Benjamin regions in the country. Villages in these eight regions use a range of

different types of agriculture - diverse crops, water harvesting technologies as well as alternative activities to generate income.

#### View the photo essay

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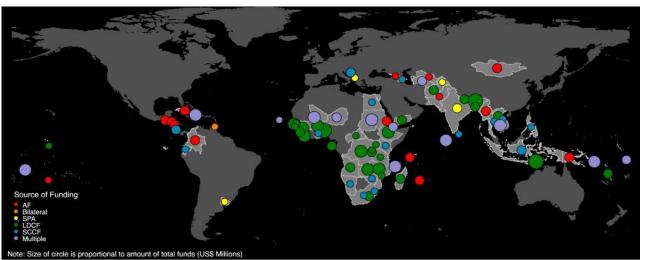
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#### **Quick Glance at UNDP's Adaptation Portfolio**

(as of December 2014)

























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#### **ARAB STATES**

# Against All Odds—Egypt's Fight Against Climate Change



Residents of Alexandria enjoy the seaside i Egypt. Photo: Dylan Lowthian/UNIDP

The Nile delta is the richest farmland in Egypt. But this beautiful area dotted with tourist sights and industries faces a harsh reality: Coastal erosion caused by sea-level rise threatens low lying lands and has a direct and critical impact on the country's entire economy. In 2010, the Government of Egypt and UNDP, with a grant from the Spe-

cial Climate Change Fund (SCCF), began work to promote the idea of working with the sea rather than trying to fight nature. The aim was to strike a balance between protective, hard, infrastructure such as seawalls, and reinforcing the protection services of natural coastal systems, such as coastal dunes.

Read the blog

## **Enhancing Climate Resilience of the Vulnerable Communities and Ecosystems in Somalia**



Photo: UNDP

The Government of Somalia, in partnership with UNDP, is set to begin an innovative project enhancing climate resilience of vulnerable communities and ecosystems through a US\$8 million initiative. The financing will be used to support ministries, districts, non-for-profit organizations and community based organizations to integrate climate change risks in Natural Resource Management and

disaster preparedness. Climate risk management will be institutionalized from national to local levels and community based organizations are expected to take the lead on implementing community-based Ecosystem-based flood preparedness and other adaptation measures.

Read the press release

# **ASIA**

# **Bhutan Continues to Face Risk of Glacial Flooding**

In Bhutan, about 5,000 meters above sea level, meltwater trickles down from glaciers to form some of the greatest rivers in the world



There are more than 20 glacial lakes in Bhutan alone that are considered at risk of outburst, and many more in other nations of the Himalayas. Photo: UNIDP

and provide freshwater and energy to nearly 1.3 billion people throughout the Himalayas. But with the effect of climate change, glaciers are melting too fast, jeopardizing an economy mostly based on hydropower production, but also endangering lives. Water can accumulate in unstable lakes on the glaciers, and when these lakes become too heavy, their natural barriers burst, setting loose a massive volume of water, boulders and

mud, causing significant damages in the valleys below. Between 2008 and 2013, the Government – with UNDP support and financial assistance from the LDCF, the Government of Austria and the World Wildlife Fund – successfully lowered the water level of Lake Thorthormi, a glacial lake that ranked as one of the most dangerous in the country.

Read the blog

# Lao PDR: Climate Change Adaptation & Gender Equality—A Powerful Pair



Women in Lao PDR are key players in agriculture. Eighty one percent contribute to agricultural export and women traditionally manage marketing of agricultural products and livestock production. Photo: Luke McPake With financing from the Least Developed Country Countries Fund (LDCF) and support from UNDP, Lao PDR, is reducing vulnerabilities to climate change impacts relating to agricultural production and food security. This project serves as a demonstration of community-based adaptive agricultural practices and off-farm income generation, and improves the lives of women. Three provinces, five districts and over 30,000 households are learn-

ing new practices to reduce the gender gap and increase resilience to climate change.

View the photo essay

# Climate Change Hits Peaks of the World – Dealing with Glacial Catastrophe in Bagrote Valley in Pakistan



The snow-capped Karakoram mountains are home to more than 5,000 glaciers. Photo: Claudia Ortiz & Niina Kylliainen

The Government of Pakistan and UNDP, with financing from the Kyoto Protocol's Adaptation Fund are providing communities in Bagrote Valley with assistance to implement measures to reduce their risks to glacial lake outburst floods and other climate-induced disasters. Since 2012, the assistance provided has focused on three main fronts: (1) implementation of early warning measures to warn communities of impending

(continued from page 2 - Featured Stories)

flooding as a result of rapidly melting glaciers and risk-reduction adaptation infrastructure; (2) raise awareness and inform the public about the risks posed by rapidly melting glaciers; and (3) develop policy recommendations and strengthen public sector institutional capacity to manage climate change induced GLOFs if/when they do occur.

View the photo essay

# **Europe & Central Asia**

#### Managing **Droughts Floods** and **Azerbaijan**



Many communities of the Greater Caucasus region especially those in mountainous areas, are at risk

Improving community resilience to flood and water stress requires proactive adaptation to the impacts of climate change. But Azerbaijan's current water management policies are not flexible enough and institutional capacity is insufficient to address increasing climate-related damages and hazards. On the other hand, local comdimate-induced flooding and water stress. munities have not been able to actively participate in water and

flood management decision making. With support from the GEFmanaged Special Climate Change Fund (SCCF), UNDP core funds, and the Ministry of Emergency Situations, the Government embarked on a project to include climate change adaptation at the legislative and policy level while addressing the risks of flash floods, mudflows and landslides which affect the already vulnerable mountain communi-

Read the story

## **Latin American & Caribbean**

## Saving Every Drop: Fighting Drought in **Honduras**



In Tegucigalpa, Honduras' capital, residents of the Campo Cielo district have one more line of defense against climate change and the severe drought putting over half a million people at risk of food shortage. With UNDP support, a 63000litre storage tank has been installed, along with a rooftop harvesting system for rainwater, providing water for nearly two thou-The project is helping to acquire, calibrate and sand local residents. The installainstall automatic weather stations to identify and tion of water storage tanks in Teprepare for future extreme weather events. Photo: gucigalpa is a part of a 5-year, US\$5.18 million project financed by the Adaptation Fund to help Honduras address climate risks in water resource management.

Read the story - English, Spanish

## **Pacific**

## Samoa Starts Cross-Sectoral Response to **Climate Change Adaptation**



Country to take critical steps to incorporate planning and budgeting processes of key economic sectors. Photo: SPREP & UNDP

Samoa is set to adopt a whole-ofgovernment approach to climate change adaptation through a US\$12.3 million initiative, in partnership with UNDP. With financing from the Least Developed Country Countries Fund (LDCF), the Government will take critical steps to incorporate medium and medium and long-term climate change and long-term climate change and disaster-risk management priorities into the disaster-risk management priorities into the planning and budgeting processes of key economic

sectors. It is expected that this will enable Samoa to better manage fast changing climate conditions that are eroding development gains achieved in the past decade

Read the press release

## Healthy Tokelau-Improving Water Security at the Household and Community Level



The Government of Tokelau, with financing from the Government of Australia and technical assistance from UNDP in partnership with the Secretariat for the Pacific Regional Environment Programme (SPREP) is working to bolster the resiliency of islands' water infrastructure. Increasing water harvest efficiency, The support that Tokelau has received through the improving storage facilities, and UNDP-SPREP Pacific Adaptation to Climate enhancing water quality by install-Change Plus Project (PACC+) has helped in a first flush divertors forms part households improve their collection and storage of ing first flush diverters, forms part rainwater, giving them a reliable source of water of a National Water Management during the drier months. Photo: Luke McPake Strategy formulated by the Gov-

ernment. The Strategy has been developed with broad community consultations and through technical experts provided through Pacific Adaptation to Climate Change (PACC) initiative. These efforts are working to ensure that people have uninterrupted access to clean drinking water across all three atolls.

View the photo essay

#### **Featured Resources**

#### **Pakistan - A Journey Through the Glaciers**



The Himalayan Karakorum Hindu-Kush Mountain region contains the second largest glacier in the world and acts as the main source for river systems in the area. However, it is also prone to climaterelated hazards such as floods, avalanches and landslides, which

occur annually and can cause significant human and material losses.

Rapid glacial melt due to climate change is causing increased water flow into glacier lakes, threatening the prospect of Glacier Lake Outburst Floods (GLOFs). Water flows into the V-shaped canyons during GLOFs, unleashing a torrent that can destroy livelihoods, eco-systems and infrastructure in its path. Pakistan, through a UNDP-supported and LDCF-financed initiative, seeks to create an institution that addresses GLOF risks affecting communities and livelihoods in Pakistan and provide communities in the north with the knowledge needed to respond to GLOF risks. The primary goal is to create institutions that can teach people about the affects of climate change, and how to manage the associated risks.

Watch this video on dealing with glacier catastrophe in the remote Himalayan, Hindu-Kush & Karakoram ranges.

View the video

# Pacific Adaptation to Climate Change (PACC) in Tokelau: Vital Health



The Pacific Adaptation to Climate Change (PACC) project is working in Tokelau to improve access to clean water at the household and community level. These efforts are working to help communities adapt to their changing climate, and to improve the health of the

people in Tokelau, PACC has installed First Flush Diverters on 99% of households in all three of Tokelau's atolls. This ensures that contaminants from the roofs do not enter the drinking water tanks.

View the video

#### **Previous Issues of the UNDP Adaptation Bulletin**

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Issue 16	Issue 11	Issue 6
<u>Issue 15</u>	<u>Issue 10</u>	Issue 5
Issue 14	Issue 9	Issue 4
Issue 13	<u>Issue 8</u>	Issue 3

#### **Events**

# National Adaptation Planning - Preparing least developed countries to address climate risk



The Government of Niger, Clean Energy Nepal and the Permanent Inter-State Committee for Drought Control in the Sahel (CILSS), in association with the joint UNDP/UNEP NAP-GSP team and partners, supported a side event at COP20 Lima, entitled: 'NATIONAL ADAPTATION PLANS: Preparing least developed countries to address climate risk'. The side event took place on Thursday 4 December 2014.

other African and Asian countries, civil society representatives, and regional and international experts will discuss challenges and opportunities for mainstreaming adaptation into planning and budgeting through capacity building in LDCs. Key themes include: getting ready.

through capacity building in LDCs. Key themes include; getting ready for climate finance, preparing the institutional set-up for adaptation planning, and acquiring the skills necessary for supporting the process

More Information on this event

More information on the NAP Global support Programme-GSP

# **Recent Concept and Project Approvals**

	-	-
Country & Project Title	Source of Funds & Grant (US\$M)	Concept/Project & Approval Date
Afghanistan: Adapting Afghan Communities to Climate-Induced Disaster Risks	LDCF 5.60	Concept Oct-14
Angola: Promoting Climate- resilient Development and En- hanced Adaptive Capacity to Withstand Disaster Risks in An- gola's Cuvelai River Basin	LDCF 8.2.0	Project Dec-14
Cambodia: Strengthening Climate Information and Early Warning Systems in Cambodia to Support Climate Resilient Development and Adaptation to Climate Change	LDCF 4.91	Project Oct-14
Costa Rica: Strengthening Capacities of Rural Aqueduct Associations' (ASADAS) Adaptation to Climate Change in Northern Costa Rica	SCCF 5.00	Concept Sep-14

Country & Project Title	Source of Funds & Grant (US\$M)	Concept/Project & Approval Date
Djibouti: Supporting rural commu- nity adaptation to climate change in mountain regions of Djibouti	LDCF 5.38	Project Aug-14
Global: Building capacity for nego- tiators from Africa and Caribbean Least Developed Countries to par- ticipate effectively in intergovern- mental climate change processes	LDCF 2.00	Project Aug-14
Global: Expanding the Ongoing Support to Least Developed Coun- tries (LDC) with Country-driven Processes to Advance National Adaptation Plans (NAPs)	LDCF 3.80	Project Dec-14
Malawi: Implementing urgent adaptation priorities through strengthened decentralized and national development plans	LDCF 4.50	Project Oct-14
Mali: Flood Hazard and Climate Risk Management to Secure Lives and Assets in Mali	LDCF 8.925	Concept Dec-14
Samoa: Economy-wide integration of CC Adaptation and DRM/DRR to reduce climate vulnerability of communities in Samoa	LDCF 12.32	Project Oct-14
Timor Leste: Strengthening Community Resilience to Climate Induced Natural Disasters in the Dilito Ainaro Road Development Corridor, Timor Leste	LDCF 5.25	Project Aug-14
Turkmenistan: Supporting climate resilient livelihoods in agricultural communities in drought-prone areas of Turkmenistan	SCCF 3.05	Concept Sep-14
Vanuatu: Adaptation to Climate Change in the Coastal Zone in Vanuatu	LDCF 8.03	Project Sep-14
Zimbabwe: Building Climate Resil- ient Rural Communities	SCCF 3.98	Project Sep-14

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AF	Adaptation Fund
COP20	20th Session of the Conference of Parties to the UNFCCC
GLOF	Glacial Lake Outburst Flood
GEF	Global Environment Facility
LDC	Least Developed Country
LDCF	Least Developed Countries Fund
LEG	Least Developed Countries Expert Group
NAP	National Adaptation Plan
NAP-GSP	National Adaptation Plan Global Support Programme
PACC	Pacific Adaptation to Climate Change
PACC+	Pacific Adaptation to Climate Change Plus
SCCF	Special Climate Change Fund
SPREP	Secretariat of the Pacific Regional Environment Programme
UNDP	United Nations Development Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNITAR	United Nations Institute for Training and Research

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