CLIMATE CHANGE ADAPTATION BULLETIN

A Quarterly Update of Activities

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ENVIRONMENT AND ENERGY

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Empowered lives. Resilient nations.

This bulletin is produced by the UNDP-GEF Unit of UNDP's Environment and Energy Group. It 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 on-going projects, new project approvals, performance indicators, project impacts and results, and noteworthy announcements.

To contribute to future editions of the newsletter, please write to: adaptation@undp.org

Supporting Climate Change Adaptation in the Arab States

Building Resilience in Sudan's Agriculture and Water Sectors

Contributed by: Tom Twining-Ward, UNDP Bratislava Regional Centre

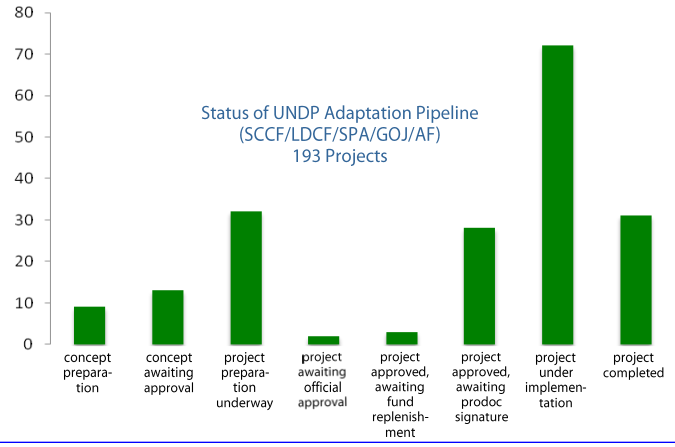
Sand dune encroach human habitats, Marzogah village, River Nile State, Sudan
Photo: Tom Twining-Ward/UNDP

Over 80% of the population in Sudan is directly dependent on agriculture or natural resources for their livelihood. This makes Sudan one of the most vulnerable countries in the world to climate change. Changing rainfall patterns and rising temperatures are negatively affecting ecosystems and increasing presence of pests and diseases brought by them, which are causing declining crop yields. This year the rainy season started late in Sudan, but when it finally arrived the rains came with a vengeance and rivers rose to record heights. Unfortunately, most farmers did not benefit from the excess water. (*continued on page 2*)

Note: Past Adaptation Bulletins have focused on the Pacific (Issue 13) Latin America (Issue 12) Europe (Issue 10), Asia (Issue 9), and Africa (Issue 8). In this issue we are pleased to share a collection of stories from adaptation initiatives in the Arab States region.

In this Issue

Quick Glance at UNDP's Adaptation Portfolio (Oct'13)



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One of the many irrigation pumps that have been distributed, River Atbara, River Nile State, Sudan Photo: Tom Twining-Ward/UNDP

On the contrary, flash floods have killed dozens and over 300,000 people were directly affected when 74,000 homes were damaged or destroyed.

Since the 1930s, the Sahara Desert has been shifting southward and coupled with increasingly severe droughts, this trend is likely to continue due to changing climate patterns. In a place where the majority of the population is dependent on rain-fed agriculture and livestock raising, continued negative impacts of climate change will lead to increased risk of food shortage, poverty, conflicts, and famine.

Poverty reduction, improved food security and adapting to a changing climate are among Sudan's primary development objectives. Together with UNDP, the Sudanese Government is working to develop targeted agricultural and water management practices to build resilience to climate change starting at the grass-roots level. In 2010, an LDCF-financed and UNDP-supported initiative was launched in Sudan to implement National Adaptation Programme of Action (NAPA) priorities in four agro-ecological zones. Some of the specific project achievements to date include: introduction of *in situ* water harvesting measures through terraces, development of earth bunds and deep ploughing techniques, and the introduction of drought resistant crop varieties which have increased yields up to 150% benefiting more than 1,000 households in Gedarif and South Darfur states. Introduction of water efficient irrigation systems for crops using diesel and solar pumps, and planting of shelter belts to halt the encroachment of the desert into village farmland, securing areas for agriculture and animal husbandry in River Nile and North Kordofan have helped reduce food shortage risks in those areas. Introduction of new cash crops has increased household incomes and use of butane gas has effectively helped reduce the numbers of trees cut down for fuel. Women are playing an essential role in this initiative; 800 women have benefited directly and are engaged in the adaptation measures in their communities. All these achievements have improved the well-being for all members of households in, both, the short- and long-term by providing immediate income generating activities and allowing for future activities to be sustained in a new drier climate.

Shelterbelts in Goz Elhalag village, River Nile State, Sudan Photo: Tom Twining-Ward/UNDP

Resources have now reached over 20,000 beneficiaries, increasing their food security and improving their livelihoods, making it possible to support the development and capacity building of Village Development Committees and regional Technical Committees who manage projects at their respective levels. These committees have received training in climate change adaptation and the importance of their roles in helping communities sustain a strong support structure of knowledge to address risks and negative impacts of climate change. To support the sustainable continuation of project activities, the Village Development Committees manage revolving micro-funds which help with micro-financing and seed funding for small and new initiatives aimed at tackling the adverse effects of new challenges presented by climate variability.

This initiative, which is introducing and testing simple and improved technologies for managing climate change risks for small-holder farmers. It is funded by the LDCF with a grant of USD 3.3 million and has recently received additional funding from the Foreign Affairs, Trade and Development Canada (FATDC) in the amount of USD 2.8 million that will continue this initiative into 2016.

For further information please contact: *Tom Twining-Ward* or visit *http://www.undp-alm.org/projects/ldcf-sudan*

Egypt Advances Coastal Adaptation Efforts in the Nile Delta

Contributed by: Keti Chachibaia, UNDP Asia Pacific Regional Centre and Mohamed Bayoumi, UNDP Egypt

Coastal area east of Rashid, Egypt Photo: Mohamed Seliem

The dominant feature of Egypt's Northern Coastal Zone is its low lying River Nile Delta studded by large cities, industry, agriculture, and tourism. The Delta and the narrow valley of the Nile comprise just a little over 5% of the total area of Egypt. However, over 95% of the population live in these low lying strips of land. Due to heavy concentration of Egypt's infrastructure and development along its low lying coast and heavy reliance on the Nile Delta for prime agricultural land, coastal inundation and saline intrusion, caused by seal-level rise stimulated by climate change, will have a direct and significant impact on Egypt's economy.

The Special Climate Change Fund (SCCF) has provided the needed grant funding to Egypt to advance its coastal protection efforts. The project, "Adaptation to Climate Change in the Nile Delta through Integrated Coastal Zone Management" aims to strengthen the regulatory and institutional frameworks for coastal management that is designed to assess the risks of sea-level rise and to implement innovative and environmentally friendly measures to facilitate adaptation in the Nile Delta.

Living with the Sea

This UNDP-supported initiative's main goal is to protect Egypt's coastal resources as well as promote and encourage a working partnership with the sea, rather than fighting nature's unstoppable response to global sea-level rise. "Living with the Sea" (LS) involves designing combined and integrated engineering techniques to achieve the desirable outcomes of coastal adaptation in the Nile Delta. This initiative is working to set up a shore management framework for Egypt based on this principle. Many coastal livelihoods are increasingly threatened by coastal flooding and erosion. The reality of rising sea levels and increased storm frequency will inevitably increase that risk. Despite concerted efforts of the Shore Protection Authority (SPA) under the Ministry of Water and Irrigation to address such problems, the approach has mostly been reactive. Coastal protection plans and measures developed earlier may have served the defense purpose, but lacked the robustness that climate change risks now demand.

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Coastal area east of Rashid, Egypt
Photo: Mohamed Seliem

Disasters may trigger positive actions

On 10 December 2010, a devastating low pressure weather system storm descended on the Eastern Mediterranean. This storm caused excessive damage to the Nile Delta region's shoreline as well as serious impacts to Alexandria, Damietta and Port Said. During the storm surge all Red Sea ports and the port of Alexandria and Dekheila on the Mediterranean Sea had to be shut down. Some 26 ships were barred from entering the Suez Canal and many more faced heavy delays. Homes were flooded in Alexandria, and the Alexandria Corniche suffered extensive damage caused by high waves that hit the coastal defense structures and fronting beach, damaging buildings overlooking the marine. The strength of the storm brought about awareness of the likelihood of its recurrence and prompted the SPA to embrace the LS approach to provide low-cost and rapid implementation options to coastal areas and their protection. Never before had the seawaters reached the International Road of Alexandria, bringing with it a clear manifestation of what climate change can bring about in the future.

This SCCF-financed project brought the LS approach to the shoreline management framework and the Integrated Coastal Zone Management (ICZM) plan in Egypt. The selected pilot locations focused on the three most affected areas of Rashid/Rosetta, East of Lake Burulus, and Eastern part of Lake Manzalla, which were selected to demonstrate the LS methods.

As the project was completing its first year of implementation the Arab Spring revolution descended upon the streets of Egypt, overthrowing the government and pressing for change and reform in the country. Despite unprecedented political unrest the project continued and has already delivered results.

Main achievements to date

The project has finalized its main feasibility studies providing innovative LS approaches to beach nourishment, rehabilitation and protection of the coastal sand dune systems and constructed wetlands.

- Dredged materials from the Approach Channel of Damietta Port were used to reinforce and feed the beaches near the port that are subject to serious erosion and exposure to risks of SLR.
- To protect sand dune systems surrounding Burulus Lagoon, the main recommendation of the study was to prepare a coastal dune management plan (including a sediment management plan) and endorsing it as a national nature protection law included into Egypt's ICZM plan.
- Integrated coastal protection through use of artificial beach nourishment combined with energy dissipating, low-cost dike structures will be implemented for this coastal segment.
- The consolidation of databases for SPA and the Coastal Research Institute (CORI) for all oceanographic parameters related to the coastal zone protection and sustainable land reform (SLR) risk management, will build critical datasets for the ICZM policies and plans that are to be fully cognizant of climate change risks to coastal areas.

Despite the political instability in Egypt the committed project team and the technical Ministry staff continue to work diligently to detail the LS post feasibility designs and bring this initiative to its final fruition.

For more information, please contact *Keti Chachibaia* or visit *http://www.undp-alm.org/projects/sccf-czm-egypt*

Addressing climate change vulnerabilities and risks in vulnerable coastal areas of Tunisia

Contributed by: Keti Chachibaia, UNDP Asia Pacific Regional Centre

The decline of the shoreline in Djerba (zone of Aghir)
Photo: UNDP Tunisia

Tunisia's beautiful and unique coastline not only comprises 100,000 hectares (ha) of lagoons, 55,000 ha of Sebkha (smooth, flat plains), 200 ha of estuaries, 31,000 ha of intertidal areas and 5,100 ha of coastal oasis, but it is also the backbone of Tunisia's economy supporting 79% of the nation's agricultural industry, and serving as the country's source of irrigation and tourism, and providing locations for ports that give access to external markets. The coastline is also considered an important water reserve, with coastal aquifers comprising more than 50 per cent of Tunisia's shallow groundwater resources. Impacts such as degradation and erosion of the coastline due to climate change carry serious implications to Tunisia's economy as well as to its sustainable human development.

With a grant from the Global Environment Facility-managed Special Climate Change Fund (SCCF) and support from UNDP, the Government of Tunisia is working to address challenges posed by sea level rise to its coastal regions. The project, "Addressing climate change vulnerabilities and risks in vulnerable coastal areas of Tunisia", is currently in its design stage and is aiming to address climate change risks to the vulnerable shoreline and ensure long term-resilience of the coast to climate driven vulnerabilities by:

1) revising Tunisia's national regulations on coastal zoning and developing local adaptation plans in the northern coast of the Gulf of Tunis and island of Djerba.

2) providing direct investments for innovative coastal protection measures taken by businesses, considering current and future coastal land use priorities, geo-morphological specificities of the coastline and a range of plausible scenarios of sustainable land reform (SLR) and its impacts.

3) introducing economic and financial instruments, such as taxes and insurance mechanisms to mobilize internal resources for coastal defense and adaptation investments and drive away development infrastructure from the highly sensitive and exposed coastal regions for long term coastal resilience.

The comprehensive climate risk management and adaptation plan will be developed for the tourism industry in Djerba with participation of key investors, local government, resorts, and banks. The plan will introduce mechanisms for private sector engagement into the

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Sebkha Sidi Bahroun in the northwest area of the Gulf of Tunis
Photo: UNDP Tunisia

adaptation planning and financing, by introducing a series of incentives as well as requirements, ensuring that the tourism sector investors adhere to climate compatibility (especially focusing on coastal floods and water stress) of infrastructure proposals, compliance with spatial plans and coastal zoning regulations, such as coastal dune rehabilitation, plantations of vegetative buffers and setback areas, wetland protection, geotextile tubes, beach nourishment, etc. Financial contribution from tourism and other coastal sectors will be sought by testing innovative financing mechanisms, such as voluntary visitor fees (airport, resorts and beaches).

The necessary legal provisions to support the above innovations will be drafted and included for relevant government enactment. The initiative will also assist the government to set up innovative fiscal regimes and mandatory insurance schemes targeting private properties as a means to catalyze additional finance for adaptation, and to incentivize risk adverse behaviors across vulnerable businesses and households.

For more information, please contact *Keti Chachibaia* or visit *http://www.undp-alm.org/projects/sccf-tunisia*

Developing Agro-pastoral Shade Gardens as an Adaptation Strategy for Poor Rural Communities in Djibouti

Contributed by Tom Twining-Ward, UNDP Bratislava Regional Centre

Djibouti has an arid and semi-desert climate, which makes it highly sensitive to drought and water scarcity. Unless adequate action is quickly taken to reduce Djibouti's vulnerability to increasing temperatures and decrease of rainfall, the country will fall victim to environmental socio-economic deterioration. As a result of changing climate patterns, the local pastoral and farming communities are growing poorer with every season, being unable to water their crops, cattle and provide adequate drinking water for themselves and their families. Severe drought can result in families losing their entire herd or crop. As a result, they have no choice but to migrate to cities in search of new livelihoods.

All rural areas of Djibouti feel the severe impacts of climate change, but the two largest, the flat and semi-desert plains of Petit Bara and Grand Bara, are particularly exposed to the damages caused by drought. Since these are important cross-roads for transport and communication, the Government of Djibouti has deemed these as areas requiring urgent adaptation interventions to secure water resources and conserve soil to better assist the local communities who depend on these for their sustenance and livelihoods.

To address these pressing issues, Djibouti is now implementing a project to improve the resilience of rural communities to recurrent climate change induced droughts and help the communities of Grand and Petit Bara to develop their adaptive capacity and embark on climate resilient economic development. This Adaptation Fund (AF)-financed project, under full implementation with support from UNDP, has established an office at the Ministry of Habitat, Urbanism and Environment.

Example of a successful community-managed agro-pastoral shade garden in the Petit Bara region
Photo: Tom Twining-Ward/UNDP

The objective of the project is to diversify and promote climate resilient agro-pastoral practices in rural Djibouti. Over its 5-year span the project aims to support sustainable access to secured water resources; to develop shade gardens to support diversified and climate-resilient agro-pastoral production systems; and to provide access to secured finance to farming and pastoral communities to build climate resilient development.

The main causes of climate change vulnerability in Petit Bara and Grand Bara are recurrent droughts, poor water conditions, high evapotranspiration rates, limited availability of water supply and unsustainable landscape and rangeland management. To best adapt to inevitable climate changes the communities are working to develop alternative agro-pastoral practices that would alleviate environmental pressures, help preserve land, and ensure and maximize on adequate water supplies.

Water availability is the main hindrance to agricultural productivity and livelihood security in Djibouti. This project will develop sustainable and climate resilient water management - combined with more

Featured Resources

Project Video: Improving the Resilience of the Agriculture Sector to Climate Change Impacts in Lao

Photo: YouTube

In order to promote resilience in the agricultural sector and enable informed decision-making, the existing knowledge base on climate change and impacts in Lao PDR is being strengthened, specifically as it relates to agricultural production, food security and vulnerability via the UNDP-supported and LDCF-financed initiative, "Improving the Resilience of the Agriculture Sector to Climate Change Impacts (IRAS)". Through this initiative, the capacities of sectoral planners at national, provincial, district kumban levels are being strengthened to understand and address climate change related risks to local food production. Community-based adaptive agricultural practices and off-farm income generating opportunities are being demonstrated to farmers and communities in 3 provinces and 5 districts. Adaptation monitoring and learning as a long-term process will assure that lessons learnt do benefit the local population, as well as national policies and international Climate Change adaptation efforts.

A short video on this initiative can be found via the following links: *English* , *English (with Laotian subtitles)*

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Picture 4: Example of earth dam to in the Petit Bara region, Djibouti
Photo: Tom Twining-Ward/UNDP

efficient use of surface and ground water - to support diversified and productive agro-pastoral systems. One of the project objectives is to provide local communities with the means to fulfill their drinking, livestock and cropping water needs and lay the foundation for the development of shade garden-based agro-pastoral systems. This will require water adaptation measures to better capture and manage erratic run-off water and resources from dry riverbeds (*wadis*) that contain water only during the short wet seasons, while improving the use of aquifers as natural water storage infrastructures to secure water supply during dry periods.

The additional water produced will be used to improve access to drinking water, to alleviate pressures from degraded pasturelands through the rehabilitation/creation of remote watering points in order to increase accessibility to rangelands currently not being exploited, as well as to support multi-purpose crop and fodder production under new integrated farming and livestock management systems.

This project also supports the development of microfinance products for adaptation, including the creation of women cooperatives; an innovative and novel adaptation approach which will hopefully ensure medium- to long-term financial sustainability.

For additional information, please contact *Tom Twining-Ward* or visit *http://www.undp-alm.org/projects/af-djibouti*

Supporting Rural Community Adaptation to Climate Change in Mountain Regions of Djibouti

Contributed by: Robert Kelly, UNDP Bratislava Regional Centre

Djibouti's economy is characterised by an extreme dualism: the commercial urban sector, modern and oriented towards exports, and the rural sector, characterized by subsistence economy based on pastoralism, with very limited access to infrastructure, services and markets. Pastoral activities consist of extensive nomadic herding (primarily sheep, goats and camels), which often represents the sole source of subsistence for pastoral communities. Some 90% of the country's territory can be classified as pastoral lands that are used for herding, and transhumance is still practiced extensively along grazing routes determined by the presence of water and pasture.

Djibouti's climatic context is one of high hydrological uncertainty, frequent dry spell and chronic water stress – features that are being worsened by climate change. Since 2007, Djibouti has been facing a prolonged drought event that has heavily impacted pastoral-agricultural production and rural livelihoods. Rainfall has been 75% below average. Climate pressures are especially notable in the mountain areas of Djibouti – the massifs of Arrey, Ounda Hemed, Arta, Bour, Ougoul, Moussa Ali, Goda and Mabla – characterised by steep terrain exacerbating flash floods and erosion, low rates of water retention, deterioration of tree and grass cover, and populations that

Nomadic herding often represents the sole source of subsistence for pastoral communities
Photo: Robert Kelly/UNDP

are already extremely vulnerable to weather events.

In conjunction with the Ministry of Habitat, Urbanism and Environment, UNDP is supporting a LDCF-financed initiative aimed at addressing the climate change adaptation challenges in two target mountainous areas of Djibouti – Adaillou and Assamo.

The project is based upon three foundations:

(1) that greater capacity and coordination at the national level will create an improved enabling environment for addressing climate change risks and vulnerabilities (as identified by the NAPA and other studies) 'on the ground' at the community level;

(2) that better water management, notably the interruption and storage of seasonal surface run-off, will benefit local communities and livestock and improve the sustainability of agro-pastoral systems; and

(3) that strengthening and diversification of income is critical to reducing the vulnerability of communities to ongoing and future climate change. The project has been designed in such a way as to support and complement existing and planned Government policies/strategies and a range of ongoing Government and donor initiatives.

The project is currently under preparation. Its implementation phase is expected to be 4 years, commencing in 2014. The LDCF grant is for US$5.4 million with a further US$28.1 million of co-financing.

For more information, please contact *Robert Kelly*, UNDP Bratislava Regional Service Centre.

Addressing Somalia's National Adaptation Programme of Action (NAPA) Priorities

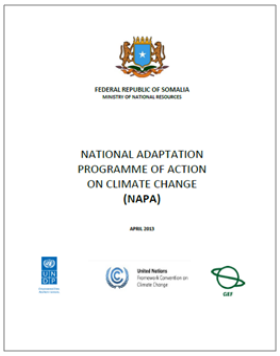

Photo: Federal Republic of Somalia

Earlier this year, Somalia submitted its NAPA to the UNFCCC. The NAPA was developed via extensive consultations throughout Somalia and focuses on the country's most immediate climate related risks. Recommendations of the LDCF-financed NAPA will be integrated in the on-going stabilization and peace building programmes in Somalia.

To view Somalia's NAPA, which includes an opening message from President Hassan Sheikh Mohamoud, please click *here*.

The Government of Somalia, with UNDP support, recently submitted a concept document to the Global Environment Facility (GEF) for the development of a NAPA follow-up initiative focusing on: (a) enhancing policies, institutional frameworks, and government capacities; and (b) piloting ecosystem-based adaptation strategies.

Events

Training on Integrating Climate Change Resilience into National Planning and Budgeting

Contributed by: Mariana Simoes, UNDP Asia Pacific Regional Centre

Photo: Mariana Simoes/UNDP

The 2nd regional training for the Capacity Building Programme on the Economics of Climate Change Adaptation (ECCA) was held in Bangkok, 30 September – 4 October 2013. Guided by experts from Yale University and the *Fondazione Eni Enrico Mattei* (FEEM), teams from the 11 participating countries were trained on theory and practical application of microeconomic analytic methods, such as cost-benefit analysis and hydro-economic modeling.

ECCA - a joint initiative by UNDP, USAID's ADAPT Asia-Pacific Project, and the Asian Development Bank (ADB), in collaboration with Yale University - is producing a cadre of practitioners able to prepare high-quality economic analyses for the appraisal of climate change adaptation alternatives. Ultimately, the programme seeks to institutionalize these important analytical skills into ministries and departments, enabling countries to formulate economically efficient and climate resilient development plans.

The programme is comprised of a series of trainings, interspersed with field work and application. Country teams are currently tasked with conducting an agriculture survey of 300-600 households, as well as collecting data related to a watershed in their country, data which will then be used for project level economic analysis and modeling. To support country teams with this work, the programme has engaged support from region-based centers of excellence (i.e. the Chinese Academy of Agricultural Sciences (China), the University of the Philippines at Los Baños (Philippines), the University of Peradeniya (Sri Lanka), Thammasat University (Thailand), and the University of Economics HCMC (Viet Nam)) - establishing a platform for south-south exchange.

The 3rd and 4th trainings next year will move from project analysis to sectoral analysis and will look into country-specific institutional development plans, within the context of ongoing and new initiatives. This analysis will be then presented to policy makers.

ECCA has been designed and implemented in a way that responds directly to a capacity need expressed by countries. This 2-year capacity building programme, however, is only part of a larger UNDP programme to strengthen governments' capacity to more fully integrate climate change adaptation into national, sub-national and sector planning and budgeting, including development of their National Adaptation Plans (NAPs) - a process established under the Cancun Adaptation Framework (CAF) to help countries identify their medium - and long-term adaptation needs. The broader programme also includes the ongoing climate change adaptation portfolio, the Climate Public Expenditure and Institutional Reviews (CPEIRs) and the NAPs-Global Support Programme. This package of services allows for a more tailored approach to support countries' specific adaptation planning needs.

For more information, please visit: *http://www.undp-alm.org/projects/cca-economics*

Launching of Economy-wide integration of Climate Change Adaptation and Disaster Risk Management/Disaster Risk Reduction to reduce climate vulnerability of communities in Samoa

Source: UNDP Press Release

Photo: Claudia Ortiz/UNDP

On Friday, the 4th of October, the Ministry of Natural Resources and Environment, together with the United Nations Development Programme in Samoa held a joint event to launch the new "Economy-wide integration of CC Adaptation and DRM/DRR to reduce climate vulnerability of communities in Samoa" project, funded by the Least Developed Countries Fund with a total of 13,500,000 US$.

The main objective of the project is to overcome these challenges to achieve a coordinated and efficient response to climate change that will increase the resilience of our communities. Implemented through the Ministry of Natural Resources and Environment and administered by the United Nations Development Programme Multi-Country Office of Samoa is the largest LDCF national project in the Pacific, and represents a unique opportunity to coordinate national and international efforts to respond to these challenges.

This important day of discussions joined together around fifty stakeholders from the most relevant government agencies, private institutions and NGOs and community based organizations to foster country ownership of the project at this very early stage of design of the proposal and to set the path for the development of the project

Please click *here* for the full press release on the UNDP website.

Announcements

Community-based Coastal Afforestation Project in Bangladesh Receives Award in Global Contest

Photo: Solution Search

The LDCF-financed project, "Community based Adaptation to Climate Change through Coastal Afforestation in Bangladesh" recently received an award from Solution Search's 'Adaptation to a Changing Climate' contest, sponsored by Rare and The Nature Conservancy.

For more information about this contest please click *here*.

Click *here* to view a short video about this project.

Further information on this project can be found on the *UNDP-Adaptation Learning Mechanism* platform.

Recent Concept/Project Approvals

Country & Project Title	Source of Funds & Grant (US$M)	Concept/Project & Approval Date
Benin: Strengthening climate information and early warning systems in Western and Central Africa for climate resilient development and adaptation to climate change	LDCF 4.00	Project Sep-13
Burkina Faso: Strengthening climate information and early warning systems in Western and Central Africa for climate resilient development and adaptation to climate	LDCF 4.00	Project Sep-13
Cambodia: Strengthening the resilience of Cambodian rural livelihoods and sub-national government system to climate risks and variability	LDCF 4.57	Concept Sep-13
Ethiopia: Strengthening climate information and early warning systems in Uganda to support climate resilient development	LDCF 4.90	Project Sep-13
Gambia: Enhancing Resilience of Vulnerable Coastal Areas and Communities to Climate Change in the Republic of Gambia	LDCF 8.90	Project Oct-13
Guatemala: Climate change resilient productive landscapes and socio-economic networks advanced in Guatemala	AF 5.00	Project Sep-13
Guinea: Strengthening capacities of local authorities, decentralized institutions, and rural communities of Guinea Prefectures of Gaoual, Kaundara and Mali to reinforce agriculture and livestock resilience against climate change	LDCF 3.72	Project Jul-13
Liberia: Strengthening Liberia's capability to provide climate information and services to enhance climate resilient development and adaptation to climate change.	LDCF 6.73	Project Sep-13
Malawi: Strengthening climate information and early warning systems in Eastern and Southern Africa for climate resilient development and adaptation to climate change	LDCF 4.00	Project Sep-13
Sao Tome & Principe: Strengthening climate information and early warning systems in Western and Central Africa for climate resilient development and adaptation to climate change	LDCF 4.00	Project Sep-13
Sierra Leone: Strengthening climate information and early warning systems in Western and Central Africa for climate resilient development and adaptation to climate change	LDCF 4.00	Project Sep-13
South Sudan: National Adaptation Programme of Action (NAPA)	LDCF 0.200	Project Aug-13
Sri Lanka: Strengthening the resilience of post-conflict recovery and development to climate change risks in Sri Lanka	SCCF 3.12	Project Jul-13
Tanzania: Strengthening climate information and early warning systems in Tanzania to support climate resilient development	LDCF 4.00	Project Sep-13
Timor Leste: Strengthening the Resilience of Small Scale Rural Infrastructure and local government systems to climate variability and risk	LDCF 4.60	Project Jul-13
Uganda: Strengthening climate information and early warning systems in Uganda to support climate resilient development	LDCF 4.00	Project Sep-13
Zambia: Strengthening climate information and early warning systems in Zambia to support climate resilient development	LDCF 4.00	Project Sep-13

Status of UNDP-supported Adaptation Initiatives

Region	Country	Source of Funds	Grant (US$M)
1.Concept Preparation *(by Country with UNDP support)*			
Africa	Burundi	LDCF	5.00
	Central African Republic	LDCF	3.04
	Eritrea	LDCF	5.00
	Guinea Bissau	LDCF	12.50
	Madagascar	LDCF	5.88
	Mali	LDCF	TBD
Asia	Iran	AF	TBD
LAC	Costa Rica	AF	TBD
	Uruguay	SCCF	TBD
2. Concept Awaiting Approval *(by GEFSEC or AFBSEC)*			
Africa	Angola	LDCF	1.00
	Benin	LDCF	8.00
	Senegal	LDCF	4.31
	Zambia	LDCF	3.89
Arab States	Somalia	LDCF	8.00
Asia	Sri Lanka	AF	7.43
Europe & Central Asia	Bosnia & Herzegovina	SCCF	5.00
	Regional	SCCF	5.50
Global	Global	ICI	4.49
	Global	LDCF	0.95
LAC	Costa Rica	SCCF	5.00
	Suriname	SCCF	4.51
Regional	Asia Pacific	LDCF	0.95
3. Project Preparation Underway *(by Country with UNDP support)*			
Africa	Angola	LDCF	9.20
	Burkina Faso	LDCF	7.00
	Burundi	LDCF	8.72
	Comoros	LDCF	8.99
	DRC (2)	LDCF	10.08
	Gambia	LDCF	3.00
	Guinea	LDCF	8.00
	Lesotho	LDCF	8.40
	Malawi (2)	LDCF	9.82
	Mali (2)	BMU/LDCF	9.41
	Namibia	SCCF	3.05
	Niger	LDCF	3.75
	Sao Tome and Principe	LDCF	4.00
	Zimbabwe	SCCF	3.98
Arab States	Djibouti	LDCF	5.38
	Sudan	LDCF	5.70
	Tunisia	SCCF	5.50
	Yemen	LDCF	4.92

Region	Country	Source of Funds	Grant (US$M)
3. Project Preparation Underway - *conttinued* *(by Country with UNDP support)*			
Asia	Afghanistan	LDCF	9.00
	Bhutan	LDCF	11.49
	Cambodia (2)	LDCF	9.48
	Philippines	SCCF	4.05
	Timor Leste	LDCF	5.25
LAC	Haiti	LDCF	5.38
Pacific	Kiribati	LDCF	4.45
	Samoa	LDCF	12.32
	Solomon Islands	LDCF	6.85
	Vanuatu	LDCF	8.03
4.Project Awaiting Approval *(by GEFSEC or AFBSEC)*			
Africa	Sierra Leone	LDCF	2.94
Asia	Bangladesh	LDCF	5.65
5.Project Approved; Awaiting Fund Replenishment *(by AFBSEC)*			
Africa	Seychelles	AF	5.95
Asia	Myanmar	AF	7.29
LAC	Cuba	AF	5.59
6. Project Approved; Awaiting ProDoc Signature *(by GEFSEC or AFBSEC)*			
Africa	Benin	LDCF	4.00
	Burkina Faso	LDCF	4.00
	Cape Verde	Canada	1.80
	Central African Republic	LDCF	2.78
	Comoros	GOF	0.14
	Ethiopia	LDCF	4.90
	Gambia	LDCF	8.90
	Guinea	LDCF	3.72
	Liberia	LDCF	6.73
	Malawi	LDCF	4.00
	Mali	Canada	1.95
	Namibia	BSF	0.30
	Niger	Canada	2.40
	Sao Tome and Principe	LDCF	4.00
	Sierra Leone	LDCF	4.00
	South Sudan	LDCF	0.20
	Tanzania	LDCF	4.00
	Uganda	LDCF	4.00
	Zambia	LDCF	4.00

Status of UNDP-supported Adaptation Initiatives *(continued from page 8)*

Region	Country	Source of Funds	Grant (US$M)
6. Project Approved; Awaiting ProDoc Signature- *conttinued (by GEFSEC or AFBSEC)*			
Arab States	Sudan	Canada	2.8
Asia	Cambodia	Canada	2.24
	Sri Lanka	SCCF	3.12
	Timor Leste	LDCF	4.60
LAC	Grenada	BMU	2.90
	Guatemala	AF	5.00
	Haiti	Canada	2.70
Pacific	Samoa	LDCF	1.95
	Tuvalu	LDCF	4.2
7. Under implementation *(by country, with UNDP support)*			
Africa	Benin	LDCF	3.40
	Burkina Faso	LDCF	2.90
	Cape Verde	LDCF	3.00
	Comoros	LDCF	2.62
	DRC	LDCF	3.00
	Equatorial Guinea	LDCF	0.20
	Eritrea	AF	6.01
	Ethiopia (2)	LDCF, SCCF	6.31
	Ghana	SCCF	1.72
	Guinea	LDCF	2.97
	Guinea Bissau	LDCF	4.00
	Kenya (2)	GOF, SCCF	1.14
	Liberia (2)	LDCF	5.28
	Mali	LDCF	2.34
	Mauritius	AF	8.40
	Mozambique (2)	LDCF, SCCF	5.39
	Namibia	SPA	0.96
	Niger	LDCF	3.50
	Regional	SPA	3.30
	Rwanda	LDCF	3.49
	South Africa	SCCF	3.54
	Swaziland	SCCF	1.67
	Zambia	LDCF	3.80
	Zimbabwe	SCCF	0.98
Arab States	Djibouti	AF	4.29
	Egypt	SCCF	4.00
	Somalia	LDCF	0.20
	Sudan	LDCF	3.30

Region	Country	Source of Funds	Grant (US$M)
7. Under implementation- *conttinued (by country, with UNDP support)*			
Asia	Bangladesh	LDCF	3.30
	Bhutan	LDCF	3.45
	Cambodia	LDCF	1.85
	India	SPA	5.76
	Indonesia	SCCF	5.00
	Lao (2)	LDCF	9.15
	Maldives (3)	AF, LDCF	18.91
	Mongolia	AF	5.07
	Nepal	LDCF	6.30
	Pakistan	AF	3.60
	Thailand	SCCF	0.87
	Vietnam	SCCF	1.40
Europe & CIS	Albania	SPA	0.98
	Armenia	SPA	0.90
	Azerbaijan	SCCF	2.70
	Georgia	AF	4.90
	Tajikistan	SPA	1.90
	Turkmenistan	AF	2.70
Global	Global	Canada	1.06
	Global - CC & Health (7 countries)	SCCF	4.50
	Global - NAP support	LDCF	1.00
Latin America and Caribbean	Colombia	AF	7.85
	Ecuador	SCCF	3.00
	Haiti	LDCF	3.50
	Honduras	AF	5.18
	Nicaragua	AF	5.70
	Uruguay	SPA	0.98
Pacific	Cook Islands	AF	4.96
	Papua New Guinea	AF	6.02
	Regional	Aus-Aid	7.86
	Regional	SCCF	13.13
	Samoa (3)	AF, LDCF	12.45
	Solomon Islands	AF	5.10
	Tuvalu (2)	AusAid, LDCF	4.37

Status of UNDP-supported Adaptation Initiatives *(continued from page 9)*

Region	Country	Source of Funds	Grant (US$M)
8. Completed			
Africa	Benin	LDCF	0.78
	Burkina Faso (2)	GOJ, LDCF	3.11
	Burundi	LDCF	0.20
	Cameroon	GOJ	3.00
	Cape Verde	LDCF	0.20
	Chad	LDCF	0.20
	Congo	GOJ	2.98
	Ethiopia	GOJ	2.97
	Gabon	GOJ	2.47
	Ghana	GOJ	2.71
	Kenya	GOJ	5.47
	Lesotho	GOJ	2.98
	Malawi	GOJ	3.88
	Mauritius	GOJ	2.99
	Mozambique	GOJ	2.99
	Namibia	GOJ	2.98
	Niger	GOJ	3.00
	Nigeria	GOJ	5.48
	Rwanda	GOJ	1.40
	Sao Tome and Principe	GOJ	2.75
	Senegal	GOJ	3.00
	Tanzania (2)	GOJ, SCCF	3.91
Arab States	Morocco	GOJ	2.98
	Tunisia	GOJ	2.98
Asia	Bangladesh	LDCF	0.20
	Bhutan	LDCF	0.20
	Cambodia	LDCF	0.20
Europe & CIS	Hungary	SPA	0.99
Global	Adaptation Learning Mechanism	SPA	0.72
	Community-based Adaptation (10 countries)	SPA	0.72

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Acronyms

ADB	Asian Development Bank
AF	Adaptation Fund
AFB SEC	Adaptation Fund Board Secretariat
AusAID	Australian Agency for International Development
BMU	Germany's Federal Ministry for the Environment, Nature Conservation, and Nuclear Safety
CAF	Cancun Adaptation Framework
CBA	Community-Based Adaptation
CPEIR	Climate Public Expenditure and Institutional Review
DFATD	Foreign Affairs, Trade and Development Canada
DRM	Disaster Risk Management
DRR	Disaster Risk Reduction
ECCA	Economics of Climate Change Adaptation
FAO	Food and Agriculture Organization of the UN
GEF	Global Environment Facility
GEF SEC	Global Environment Facility Secretariat
GOF	Government of Flanders
GOJ	Government of Japan
ICZM	Integrated Coastal Zone Management
LAC	Latin America and Caribbean
LDC	Least Developed Country
LDCF	Least Developed Countries Fund
LS	Living with the Sea
NAP	National Adaptation Plan
NAPA	National Adaptation Programme of Action
SCCF	Special Climate Change Fund
SIDS	Small Island Developing States
SLR	Sustainable Land Reform
SPA	GEF Trust Fund's Strategic Priority on Adaptation
UNDP	United Nations Development Programme
UNFCCC	United Nations Framework Convention on Climate Change
USAID	United States Agency for International Development