



Green Climate Fund

PROJECT BRIEFS

2015

Green Climate Fund

Songdo International Business District

175 Art Center-daero

Yeonsu-gu, Incheon 22004

Republic of Korea

+82.32.458.6059

info@gcfund.org

greenclimate.fund

Green Climate Fund

PROJECT BRIEFS

2015

FP001

Peru

FP002

Malawi

FP003

Senegal

FP004

Bangladesh

FP005

East Africa

FP006

Latin America and
the Caribbean

FP007

Maldives

FP008

Fiji

FP001

PROJECT BRIEF

greencimate.fund

Building the Resilience of Wetlands in the Province of Datem del Marañón, Peru

Country/Region

Peru

Responsible Bodies

Accredited Entity

The Peruvian Trust Fund for National Parks and Protected Areas (PROFONANPE)

Executing Entity

PROFONANPE

Snapshot

Enhancing the climate resilience and livelihoods of the indigenous wetlands communities of Datem del Marañón in the Amazon basin, while reducing greenhouse gas emissions from deforestation.

The swamps of Datem del Marañón hold a total carbon stock estimated at around 3.78 billion tonnes of carbon dioxide equivalent (CO₂ eq.). The project will avoid deforestation of an estimated 4,861 hectares of palm swamp and terra firma forests over a 10-year period.

Climate change will also have profound impacts on the region, with more frequent droughts, flooding, and heatwaves, and changes in primary productivity, affecting people and ecosystems.

The project will facilitate better land-use planning and management of the region's wetlands, while strengthening sustainable, commercial bio-businesses of non-timber forest products. It will entrust indigenous communities with the management of resources, improve their livelihoods, and empower women in the decision-making processes.

The funding will support government departments in developing the land-use plan, and provide support to community-based organizations for the participation of indigenous people. The largest share of funds will support bio-businesses, including for business plans, marketing and management, equipment and supplies, and the development of solar energy for operations. The nature-based products include salted fish, smoked meat, aguaje pulp (from palm trees), and "dragon's blood," a croton tree resin used as an anti-inflammatory and anti-viral.

Target

Cross-Cutting

Beneficiaries

20,413 Direct
(35% of Population)

Investment

USD 9.11M

GCF Funding

USD 6.24M Grant

Co-Financing

USD 2.87M

USD 1.07M PROFANANPE Grant,
USD 1.80M Korean Government Grant

Duration

5 Years

(March 2016 - February 2021)

Impacts

Lifetime CO₂ eq. mitigation of
2.63 million (over 10 years)

Increase in forests under
improved management, with
ecosystems protected and
strengthened

Benefits to indigenous people
from diversified, climate-resilient,
and sustainable economy



**GREEN
CLIMATE
FUND**

FP002

PROJECT BRIEF

greenclimate.fund

Scaling Up of Modernized Climate Information and Early Warning Systems in Malawi

Country/Region

Malawi

Responsible Bodies

Accredited Entity

United Nations Development Programme (UNDP)

Executing Entity

Department of Disaster Management Authority (DoDMA)

Snapshot

Protecting lives and livelihoods in Malawi from climate-related disasters by providing early warning weather and climate information systems and improving the resilience of vulnerable communities.

Malawi faces more intense and frequent climate-related disasters including floods, droughts, and extreme weather events that threaten loss of life, assets, and food security. Vulnerability to climate change impacts is high, with shifts in the rainfall season, longer dry seasons, and reductions in the growing season already occurring. 85% of the population lives in rural areas, with over half in poverty and most engaged in smallholder agriculture.

The project will expand the meteorological network, installing automatic weather stations, hydrological monitoring stations, and lake-based weather buoys, as well as increasing the capacity to identify risks and forecast impacts. Resulting information will be better disseminated through mobile, ICT, and radio channels targeting vulnerable farming communities, as well as fishing communities around Lake Malawi. Flood modelling for river systems will be improved, increasing warning times from 6 hours and under to 24-48 hours. The private sector, including telecoms and micro and small enterprises will be engaged.

People need to know what to do with this enhanced weather information, and the project will work with affected communities to undertake awareness raising and risk reduction in flood disaster prone areas. The capacity of local communities, district councils, and national agencies to respond to emergencies will be strengthened through training and improved emergency operations centres.

Target

Adaptation

Beneficiaries

1.4M Direct

0.7M Indirect

(12% of Population)

Investment

USD 16.27M

GCF Funding

USD 12.3M Grant

Co-Financing

USD 3.97M

USD 2.17M Malawian

Government Grant,

USD 1.80M UNDP Grant

Duration

6 Years

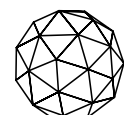
(April 2016 - March 2022)

Impacts

Increased resilience and enhanced livelihoods of vulnerable people, particularly women

18 lives saved per year, USD 5M assets protected, USD 3.8M enhanced agricultural productivity

Protected livelihoods of 160,000 women



**GREEN
CLIMATE
FUND**

FP003

PROJECT BRIEF

greenclimate.fund

Resilience Increase of Ecosystems and Communities through Restoration of the Productive Bases of Salinized Lands in Senegal

Country/Region

Senegal

Responsible Bodies

Accredited Entity

Centre de Suivi Ecologique (CSE)

Executing Entities

International Union for Conservation of Nature (IUCN), Institut National de Pédologie, National Soil Science Institute (INP), Réseau Africain pour le Développement Intégré (RADI)

Snapshot

Restoring salinized lands through improved knowledge and planning, and implementing measures such as hydraulic works, reforestation, anti-soil erosion systems, and use of adapted agriculture.

Causes of land salinization in Senegal linked to climate change include persistent drought; low infiltration of fresh water, leading to salt water intrusion; rising sea level, causing saltwater encroachment on land; and the combined effect of reduced rainfall and increasing temperatures, accelerating evaporation which contributes to the rise of salt water by capillary action.

The project will strengthen the capacity to develop desalinization and land management plans, raise awareness, and improve knowledge by creating maps and a real-time database of salinized land.

Mechanical responses to salinization will be undertaken including the construction of small dams and artificial basins, large ponds, anti-salt works, and use of drip irrigation. Biological measures will include reforestation, protection of soils against erosion, mangrove restoration, promotion of biosaline agriculture (cultivation of seed varieties that thrive in salty earth), and use of natural phosphate, manures, and composts to improve soil fertilization.

Food security will increase through improved production using adapted seeds, better food security stocks, improved processing units, salinization training, and organization of farming partnerships and cooperatives. Economic diversification will reduce communities' exposure to climate change impacts.

Target

Adaptation

Beneficiaries

129,804

Investment

USD 8.16M

GCF Funding

USD 7.61M Grant

Co-Financing

USD 0.55M

INP Grant

Duration

4 Years

(February 2016 – February 2020)

Impacts

Restored and managed salinized land and prevention of future risks due to climate change

Improved fertility of land, enhancing food security and economic productivity

Increased resilience of vulnerable groups (women and young people) to climate shocks through use of desalinized land for green jobs and diversified income



**GREEN
CLIMATE
FUND**

FP004

PROJECT BRIEF

greenclimate.fund

Climate-Resilient Infrastructure Mainstreaming in Bangladesh

Country/Region

Bangladesh

Responsible Bodies

Accredited Entity

KfW (Kreditanstalt für Wiederaufbau)

Executing Entity

Local Government Engineering Department of Bangladesh

Snapshot

Providing cyclone shelters and safeguarding critical road access to protect lives in a rural coastal region of Bangladesh. Developing urban infrastructure and safeguarding vulnerable city-dwellers from climate risk. Establishing a national centre of excellence for climate resilience infrastructure, to inform and guide future infrastructure development throughout the country.

Bangladesh is one of the world's most vulnerable countries to climate risk, notably to cyclones and floods. Coastal districts are particularly at risk from extreme weather, a risk which will be exacerbated by climate change impacts such as increased seasonal variation, higher precipitation levels, and rising sea levels. Three of the country's most vulnerable and poor coastal districts are targeted by the project: Bhola, Barguna, and Satkhira.

The project establishes a national centre of excellence to gather, develop, and share climate resilience infrastructure knowledge. Rural infrastructure development will be supported by constructing 45 new cyclone shelters/schools and renovating 20 existing shelters. The shelters built under this project will be used as primary schools in normal times, providing 45 additional shelters/schools and helping educate 18,590 children. The improvement of 80 km of critical access roads to the rural shelters (including bridges and culverts) will also be undertaken, to safeguard access during extreme weather and enhance the adaptive capacities of local communities.

Pilot climate-resilient urban infrastructure projects will also be undertaken in the city of Satkhira. Urban projects may include improvements to drainage, flood protection, sanitation, water supply, and transport, with priority given to the most vulnerable such as the inhabitants of city slums.

Target

Adaptation

Beneficiaries

134,350 Direct
10.4M Indirect

Investment

USD 80M

GCF Funding

USD 40M Grant

Co-Financing

USD 40M

USD 15M German
Government Grant via KfW,
USD 25M Bangladeshi
Government

Duration

6 Years

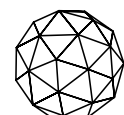
(April 2016 - March 2022)

Impacts

Increased resilience of
vulnerable communities

Strengthened infrastructure
to climate change threats

Increase in generation and use
of climate change information



**GREEN
CLIMATE
FUND**

FP005

PROJECT BRIEF

greencimate.fund

KawiSafi Ventures Fund in East Africa

Country/Region

East Africa (Initially Rwanda & Kenya)

Responsible Bodies

Accredited Entity

Acumen Fund

Executing Entities

Acumen Capital Partners LLC

Snapshot

Creating a new investment fund, KawiSafi, to drive off-grid solar power in East Africa. Investing in 10-15 clean energy companies, initially in Rwanda and Kenya, providing household solar technologies. Aiming to drive a low-carbon paradigm shift and leapfrog fossil fuel grids to clean energy, using equity capital from GCF to leverage investment, and grant capital to set up a Technical Assistance Facility.

Rwanda has 70% of its population living off-grid, and even a planned massive investment from the government will leave over 3.5 million without power. Energy costs are high, both for on- and off-grid customers, because of a heavy reliance on imported oil and kerosene. In Kenya, lighting costs in particular are very high for rural populations that spend around 26% of their income on kerosene, which is expensive, dangerous, and harmful to health. Rapid population growth is increasing demand for electricity and placing further demands on grid supply. The Fund will consider expansion to Uganda over time, which has even lower electrification levels and heavy reliance on fuel wood for cooking.

The KawiSafi fund is a private equity fund designed to finance early-stage small and medium sized enterprises with core business models that address the off-grid solar ecosystems in East Africa to provide universal access to energy to people located beyond the foreseeable grid connection and at the bottom of the economic pyramid. Lack of electricity and high kerosene use will be addressed through affordable clean household solar energy solutions such as solar lanterns, solar home system and solar mini-grids. The Technical Assistance Facility will include activities to train women to become solar technicians and to continue the servicing of products for end-users if suppliers go bankrupt.

Target

Cross-Cutting

Beneficiaries

15M Direct
(16% of Rwandan, Kenyan, and Ugandan Populations)

Investment

**USD 100M Equity Fund,
USD 10M Technical
Assistance Facility**

GCF Funding

USD 20M Equity Investment,
USD 5M Grant for a Technical
Assistance Facility

Co-Financing

Up to USD 7M Equity
Investment (Acumen)
Additional 75M
from other investors

Duration

12 Years
2 One-Year Extensions

Impacts

Bringing off-grid solar power to East Africa, leapfrogging fossil fuel grids

Saving 1.5 million tonnes of carbon dioxide emission by displacing kerosene at the household level

Leveraging GCF's investment capital on a roughly 4:1 basis to create a USD 100 million fund



**GREEN
CLIMATE
FUND**

FP006

PROJECT BRIEF

greenclimate.fund

Energy Efficiency Green Bonds in Latin America and the Caribbean

Country/Region

Latin America and the Caribbean

Responsible Bodies

Accredited Entity

Inter-American Development Bank (IDB)

Snapshot

Addressing demand-side energy efficiency in Latin America and the Caribbean through green bonds, by using the concept of aggregation to mobilize institutional funds at scale toward small and medium sized energy service companies

The Programme addresses demand-side energy efficiency (EE), an area identified by the Intergovernmental Panel on Climate Change as comprising the greatest component of climate finance shortfall for mitigation. EE is one of the most competitive and cost-efficient ways of responding to increasing energy demand, while reducing greenhouse gas emissions, lowering production costs and improving productivity. Lack of adequate financing is however a major barrier to private sector initiatives in energy efficiency

In each targeted country, the Programme uses a two-phased approach to bridge that gap. It will, at first, fund energy efficiency projects using loans. Once a sufficient amount of projects are aggregated, the Programme will “bundle” them such that they will be used to underpin the issuance of partly guaranteed green bonds. In its initial phase, the Programme targets four Latin America and Caribbean countries – Colombia, the Dominican Republic, Jamaica and Mexico (as pilot country) – of which two are Small Island Developing States.

The Programme targets minimum emission reduction of 13.2 million tCO₂e and 780 million dollars of private investments with potential for further upscaling and replication in other developing countries.

Target

Mitigation

Investment

USD 780M

(Targeted bonds amount)

GCF Funding

USD 215M loan or guarantee out of which USD 20M in guarantee approved for Mexico

USD 2M Programme development grant

Co-Financing

USD 306M loan or guarantee
IDB

Duration

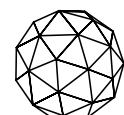
10 Years

Impacts

Minimum emission reduction of 13.2 million tCO₂e

Mobilize USD 780M of private sector investment towards energy efficiency projects

Scalable and replicable programme



**GREEN
CLIMATE
FUND**

FP007

PROJECT BRIEF

greencimate.fund

Support of Vulnerable Communities in Maldives
to Manage Climate Change-Induced Water Shortages

Country/Region

Maldives

Responsible Bodies

Accredited Entity

United Nations Development Programme (UNDP)

Executing Entities

Maldives Ministry of Environment and Energy

Snapshot

Providing safe and secure freshwater to 105,000 people on the outer islands of the Maldives, in response to climate change-induced water shortages. Introducing integrated water supply systems, decentralized dry season water supplies, and improvements to groundwater quality.

The Maldives consists of 1,190 small, low-lying coral islands spread over 90,000 square kilometres. There are high levels of poverty on the outer islands, which experience drinking water shortages during the dry season causing significant human, environmental, and social impacts. Groundwater becomes increasingly saline as a result of climate change-induced sea level rise (3.1 mm/year) and variable rainfall patterns. Responses are constrained by remoteness and limitations on land space.

The project will scale up an integrated water supply system based on rainwater, groundwater, and desalinated water into a low-cost delivery system for vulnerable households. This will provide uninterrupted supply to 49 islands that currently rely on emergency water deliveries for three months of each year. Decentralized and cost-effective dry season water supply systems will also be introduced. Water desalination production plants will be built on four larger islands that will contribute to this improved dry season water distribution network to outer atolls and local supply systems. Increased capacity of local and central government authorities will strengthen the management and efficiency of these systems. Groundwater quality will be improved for long-term resilience. Groundwater recharge systems and improved water resource management capacity will contribute to improved groundwater quality.

Target

Adaptation

Beneficiaries

105,000 Direct
(26% of population)

Investment

USD 28.23M

GCF Funding

USD 23.6M Grant

Co-Financing

4.59M
USD 4.49M Maldivian
Government,
USD 0.1M UNDP

Duration

5 Years
(February 2016 – February 2021)

Impacts

32,000 people in vulnerable
households with safe
water supplies

Benefits to 73,000 people from a
dry season water supply system

Improved groundwater quality
to secure freshwater reserves for
long-term resilience



**GREEN
CLIMATE
FUND**

FP008

PROJECT BRIEF

greenclimate.fund

Fiji Urban Water Supply and Wastewater Management Project

Country/Region

Fiji

Responsible Bodies

Accredited Entity

Asian Development Bank (ADB)

Executing Entity

Fiji Ministry of Finance

Snapshot

Building and renovating infrastructure to improve access to safe water and sewerage systems in the greater Suva area of Fiji. Creating a new river water intake station on the River Rewa and improving the Kinoya wastewater treatment plant and associated sewer coverage.

Over half of Fiji's population is urban with further growth expected, particularly around Suva City, the national capital. Urban infrastructures are vulnerable to extreme droughts and flooding as well as sea level rise, causing threats to the environment, health, and social and economic development. Urban water supply and sanitation are particularly under strain, with service interruptions common during both drought periods and heavy rainfall periods. Existing sewerage infrastructure covers only 36% of the Suva City area. Improving water supply and wastewater management is considered essential to Fiji's sustainable development, but its current debt levels constrain its ability to fund such vital adaptation measures.

The project will strengthen water supply through the design and construction of a new water intake by the River Rewa, with a pumping station, wastewater treatment (WWT) plant, clear water reservoir, and pipeline to increase water production by 30,000 m³ per day. This will improve climate resilience by taking water from further up the river system to avoid salinity. Wastage will be reduced through meter replacement and improved leak detection and repairs. Wastewater management will be strengthened by upgrading and increasing the capacity of the Kinoya WWT plant, improving sewer coverage, and adding new treatment facilities. The project will also strengthen water management and delivery capacity of the responsible institutions.

Target

Adaptation

Beneficiaries

290,854

(32% of Population)

Investment

USD 222M

GCF Funding

USD 31.04M Grant

Co-Financing

USD 190.96M

USD 67.7M ADB Loan,

USD 38M EIB Loan,

USD 85.26M Fijian Government

Duration

7 Years

(January 2016 - December 2022)

Impacts

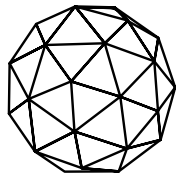
Access to safe, piped water for the Suva City area

Increased sewer coverage and improved WWT capacity at the Kinoya plant

Stronger, more sustainable water management capacity



**GREEN
CLIMATE
FUND**



**GREEN
CLIMATE
FUND**