
ACP-EU

NATURAL DISASTER RISK REDUCTION PROGRAM

2014-2015 Activity Report



GFDRR
Global Facility for Disaster Reduction and Recovery



Arid soils in Mauritania. Photo credit: Pablo Tosco/Oxfam International

© Global Facility for Disaster Reduction and Recovery

The World Bank - 1818 H Street, N.W., Washington, D.C., 20433, U.S.A.

All rights reserved. This report was produced for the African Caribbean Pacific (ACP) – European Union (EU) Natural Disaster Risk Reduction Program, an initiative of the ACP Group of States, funded by the EU and managed by the World Bank-led Global Facility for Disaster Reduction and Recovery (GFDRR). While all reasonable effort has been taken to present accurate information in this report, the findings, interpretations, and conclusions expressed herein do not necessarily reflect the views of the ACP, EU or GFDRR/World Bank; nor do they guarantee the accuracy of the data. The boundaries, colors, denominations, and other information shown on any map in this work do not imply any judgment on the part of the ACP, EU or GFDRR/World Bank concerning the legal status of any territory or the endorsement or acceptance of such boundaries.

The text in this publication may be reproduced in whole or in part and in any form for educational or nonprofit uses, without special permission, provided acknowledgement of the source is made. The GFDRR Secretariat would appreciate receiving a copy of any publication that uses this report as a source. Copies may be sent to the GFDRR Secretariat at the address on the back cover. No use of this publication may be made for resale or other commercial purpose without prior written consent of the GFDRR Secretariat. All images remain the sole property of the source and may not be used for any purpose without written permission from the source.

Notes: The financial contributions and expenditures reported are reflected up to June 30, 2015; all dollar amounts are in US dollars (\$) unless otherwise indicated.

Design: Miki Fernández/ULTRAdesigns, Inc.



ACP-EU

NATURAL DISASTER RISK REDUCTION PROGRAM

2014-2015 Activity Report



GFDRR
Global Facility for Disaster Reduction and Recovery



Credit: Huntstock | Thinkstock.com

THIS REPORT:

- (i) summarizes activities under the ACP-EU Natural Disaster Risk Reduction (NDRR) Program for the period under review (November 2013 – June 2015)¹ and
- (ii) provides an overview of achievements.

¹ The reporting period has been set to end on June 30, 2015, in order to align with the GFDRR/World Bank fiscal year, which spans from July 1 of a given year to June 30 of the following year.

Acronyms and Abbreviations

AA	Administration Agreement
ACMAD	African Center of Meteorological Application for Development
ACP	Africa, Caribbean and the Pacific
ADB	Asian Development Bank
AfDB	African Development Bank
AFR	Africa region
AfRP	Africa Regional Platform for Disaster Risk Reduction
AGRHYMET	Agro-meteorology, hydrology, meteorology (Regional Centre)
AUC	African Union Commission
	Australian Aid
BCRIP	Belize Climate Resilience Infrastructure Project
C4P	Call for Proposals
CAP	Conservancy Adaptation Project
CAT-DDO	Catastrophe Deferred Drawdown Option
CDB	Caribbean Development Bank
CCA	Climate Change Adaptation
CDEMA	Caribbean Disaster Emergency Management Agency
CDM	Comprehensive Disaster Management
CHaRIM	Caribbean Handbook for Risk Information Management
CIF	Climate Investment Fund
CILSS	Comité permanent Inter-Etats de Lutte contre la Sécheresse dans le Sahel (<i>Permanent Interstates Committee for Drought Control in the Sahel</i>)
COSEP	Centre des opérations de secours et de la protection civile (<i>Rescue and Civil Protection Operations Center</i>)
CPGU	Cellule de Prévention et Gestion des Urgences (<i>Prevention and Emergency management unit</i>)
CRISP	Community Resilience to Climate and Disaster Risk Project (in Solomon Islands)
DaLA	Damage and Loss Assessment
DFID	Department for International Development (UK)
DIMSUR	Disaster Mitigation and Sustainable Recovery Center
Dominode	Dominica Open Data Portal
DRFI	Disaster Risk Financing and Insurance
DRM	Disaster Risk Management
DRR	Disaster Risk Reduction
DVRP	Disaster Vulnerability Reduction Project
EAP	East Asia and Pacific region
EC	European Commission

Acronyms and Abbreviations

ECCAS	Economic Community of Central African States
ECOWAS	Economic Community of West African States
EDF	European Development Fund
EU	European Union
FAO	United Nations Food and Agriculture Organization
GDP	Gross Domestic Product
GEM	Global Earthquake Model
GFDRR	Global Facility for Disaster Reduction and Recovery
GFR	Grant Funding Request
GIS	Geographical Information System
GoB	Government of Belize / Government of Burundi
GoF	Government of Fiji
GoG	Government of Guyana
GoL	Government of Liberia
GoN	Government of Niger
GoS	Government of Seychelles
HFA	Hyogo Framework for Action
HQ	Headquarters
ICPAC	(IGAD) Climate Prediction and Applications Center
ICRC	International Committee of the Red Cross
IDA	International Development Association
IDLIM	(Togo) Integrated Disaster and Land Management Project
IGAD	Inter-Governmental Authority on Development
INGOs	International Non-Governmental Organization
IOC	Indian Ocean Commission
IOIs	Indian Ocean Islands
IOM	International Organization for Migration
LCR	Latin America and Caribbean region
MCE	Multi-Criteria Evaluation
M&E	Monitoring and Evaluation
MNA	Middle East and North Africa region
MoF	Ministry of Finance
MoSSaiC	Management of Slope Stability in Communities
NCRIP	(Belize) National Climate Resilience Investment Plan
NSC	National Stakeholder Consultation

Acronyms and Abbreviations

NDMA	(The Gambia) National Disaster Management Agency
NDRR	Natural Disaster Risk Reduction (ACP-EU NDRR Program)
NEMA	(Nigeria) National Emergency Management Agency
NGO	Non-Governmental Organization
OCHA	United Nations Office for the Coordination of Humanitarian Affairs
OECS	Organization of Eastern Caribbean States
PACRIS	Pacific Catastrophe Risk Information System
PCRAFI	Pacific Catastrophe Risk Assessment and Financing Initiative
PDNA	Post-Disaster Needs Assessment
PPCR	Pilot Programme for Climate Resilience
RBMS	Result-Based Monitoring System
RCMRD	Regional Center for Mapping of Resources for Development
RECs	Regional Economic Communities
RHoK	Random Hacks of Kindness
SAP	System Application Products
SADC	Southern African Development Community
SC	Steering Committee
SDTF	Single Donor Trust Fund
SPC-SOPAC	Secretariat of the Pacific Community - Geoscience and Applied Technology Division
SPREP	Secretariat of the Pacific Regional Environmental Program
SSDF	Saint Lucia Social Development Fund
SSO	Sahara and Sahel Observatory
SVG	Saint Vincent and the Grenadines
SWIO RAFI	Southwest Indian Ocean Risk Assessment and Financing Initiative
TCI	Tropical Cyclone Ian
TF	Trust Fund
UN	United Nations
UNDP	United Nations Development Programme
UN-HABITAT	United Nations Human Settlements Programme
UNICEF	United Nations Children Fund
UNISDR	UN Office for Disaster Risk Reduction
UR	Understanding Risk
UWI	University of the West Indies
WBG	World Bank Group
WFP	United Nations World Food Programme



Seychelles Becomes First African Country to Use Contingent Credit for Disasters

The program, known as the ACP-EU Natural Disaster Risk Reduction (NDRR) Program, has been active in vulnerable countries and regions with the aim of reducing impacts from disasters of all scales and magnitudes.

73

projects worth \$43 million

Table of Contents

Introduction p8

About the ACP-EU NDRR Program p10

Highlights p11

1. Overview of Activities p15

1.1 Program Governance p16

1.2 Operational Portfolio Analysis p17

2. Progress by Region p19

2.1 ACP-EU NDRR Program in Africa p21

2.2 ACP-EU NDRR Program in the Caribbean p29

2.3 ACP-EU NDRR Program in the Pacific p34

3. Post-Disaster Response p39

4. Strengthening DRM Regional Coordination in Africa p47

5. Annexes

Annex 1 Communication and Visibility Outputs p50

Annex 2 List of Projects Portfolio p56

Introduction

Major catastrophes immediately capture the headlines. However, natural disasters do not have to be on a grand scale or have high casualty rates to disrupt lives, destroy livelihoods, and damage economies.

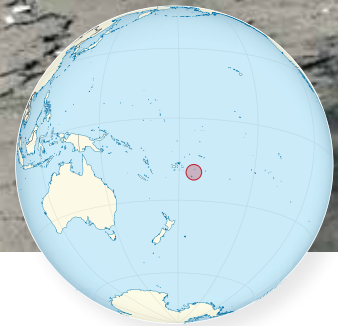
In the Caribbean, for example, heavy rainfall over the 2013 Christmas holidays caused flooding, landslides and tremendous damage in St. Lucia and St. Vincent and the Grenadines. Not a month later, Cyclone Ian leveled homes, disrupted water supply and damaged almost all electrical lines in the Pacific nation of Tonga. And later in 2015, the eruption of the Pico do Fogo volcano in Cabo Verde damaged a total of 260 houses as well as public infrastructure including 5.7 km of roads and the visitor center of Fogo Natural Park.

Not all of these events captured international attention, but in each case local communities and economies suffered, and accumulated costs were staggering. Issues relating to persistent poverty, environmental degradation, and unplanned urbanization, among other factors, increase exposure and vulnerability. Climate change threatens to compound these risks, increasing the risk of extreme weather events and potentially pushing millions in poverty.

Strengthening the capacity to respond to such catastrophes is only part of the answer. Experience has shown that prevention, mitigation, and preparedness can do much to reduce the impact of natural disasters of any magnitude. Mainstreaming disaster risk management in development takes this one step further: it ensures that communities are empowered to prepare for catastrophic events and manage the risks to their lives and livelihoods. But building such resilience takes planning, resources and a willingness to learn from the experience of others.

To address these issues, the Africa, Caribbean, Pacific (ACP) Group of States, the European Union (EU) and the World Bank established a program launched in 2011 to reduce disaster risk in Africa, Caribbean and the Pacific under a Single-Donor Trust Fund managed by the Global Facility for Disaster Reduction and Recovery (GFDRR). The program, known as the ACP-EU Natural Disaster Risk Reduction (NDRR) Program, has been active in vulnerable countries and regions with the aim of reducing impacts from disasters of all scales and magnitudes. The program supports national and local governments in integrating disaster risk management with their development efforts, in close collaboration with communities, civil society and other stakeholders.

This report summarizes activities and achievements of the ACP-EU NDRR Program from November 2013 through June 2015. After almost four years of implementation, the impact of the program is being felt in more than forty ACP countries as regional and country-level capacities grow. The work being done today is laying the foundation for the disaster resilient communities of tomorrow.



HEAVY RAINFALL CAUSED FLOODING, LANDSLIDES AND TREMENDOUS DAMAGE IN **ST. LUCIA AND ST. VINCENT AND THE GRENADINES.**

TORRENTIAL RAINS LED TO FLOODS AND LANDSLIDES IN **BURUNDI,** KILLING 69 PEOPLE AND CAUSING DAMAGE OF OVER \$4 MILLION.

IN JANUARY 2014, CYCLONE IAN LEVELLED HOMES, DISRUPTED WATER SUPPLY AND DAMAGED ALMOST ALL ELECTRICAL LINES IN THE PACIFIC NATION OF **TONGA.**

Photo – alinopaneevino|Thinkstock.com.
Globe – Tonga on the globe (Polynesia centered): TUBS



About the ACP-EU NDRR Program

To support disaster risk reduction activities in Africa, Caribbean and the Pacific (ACP) countries, the World Bank (WB) and the European Union (EU) established the ACP-EU Natural Disaster Risk Reduction (NDRR) Program, a €54.5 million, single-donor Trust Fund managed by the WB-managed Global Facility for Disaster Reduction and Recovery (GFDRR).

€ **54.5**
million, single-donor Trust
Fund managed by GFDRR

The program was launched in October 2011 with the objective to address prevention, mitigation, and preparedness to natural hazards in ACP countries focusing on four priority areas: (i) mainstreaming of disaster risk reduction; (ii) risk identification and assessment; (iii) early warning systems and communication on Disaster Risk Reduction (DRR); and (iv) risk transfer and integration of DRR into recovery.

The ACP-EU NDRR Program has three main components:

Regional Projects (Window 1)

to strengthen regional/sub-regional cooperation to advance ACP countries' national disaster risk reduction agendas.

Country-Level Projects (Window 2)

to provide need-based and demand-driven technical assistance for DRR and climate adaptation policy development and implementation, including provision of technical advisory capacity in ACP countries.

Post-Disaster & Capacity Building Activities (Window 3)

to establish a fast-track mechanism supporting ACP countries in the aftermath of a disaster with rapid technical assistance to build back better, build ex-ante capacity for post-disaster needs assessment and foster DRR mainstreaming in recovery planning.

The expected results are:

● improved resilience of ACP countries to the impact of natural disasters;

● enhanced preparedness of the population in disaster-prone areas; and

● reduced response costs in the event of natural disasters.

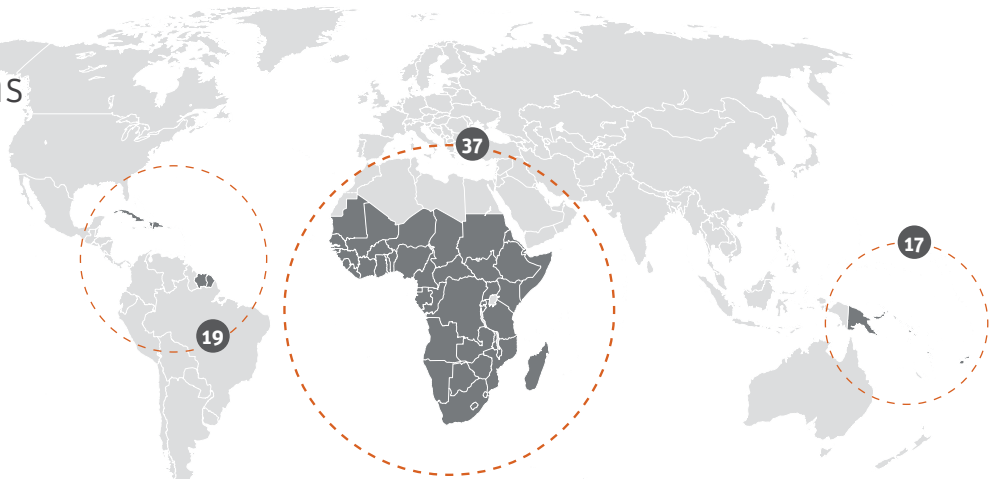
More information on the Program can be found at <http://www.drrinacp.org>

In August 2014, the World Bank signed with the EU a **€20 million** (\$24 million) top-up to the ACP-EU NDRR Program's regional component (Window 1) to support the DRM coordination capacity of African Regional Economic Communities (RECs). This supplemental contribution – known as “Result 2”, is one of the five components of the ACP-EU Program “*Building Disaster Resilience to Natural Hazards in Sub-Saharan African Regions, Countries and Communities*”, which is jointly implemented by the African Development Bank, African Union Commission, United Nations Office for Disaster Risk Reduction and the WB/GFDRR. More information can be found in Section 4.

Highlights

During the period under review (November 2013 – June 2015), the ACP-EU NDRR Program continued to scale up its support to disaster-prone countries. A total of \$14.2 million was committed for 33 new projects, bringing its portfolio to **73 projects worth \$43 million**, distributed as follows:

\$14.2
million committed for **33**
new projects



Africa
37

Caribbean
19

Pacific
17

Regional projects
Window 1
18


Country level projects
Window 2
35

Post-disaster and capacity building activities
Window 3
20

Ongoing
40

Completed
18

Under preparation
15

A woman with her hair in a bun, wearing a blue denim jacket and a long tan skirt, holds a baby wrapped in a blue blanket. They are inside a blue tent with white fabric walls. Laundry is hanging on lines in the background. The scene is lit with a cool blue light.

Tonga became the first country to
receive a recovery payment of

\$ **1.27**

million following Cyclone Ian
as part of PCRAFI's Regional
Catastrophe Risk Insurance Pilot.

- ❖ Example of achievements at the regional level **include two recovery payouts under the PCRAFI² Regional Catastrophe Risk Insurance Pilot: \$1.27 million to Tonga** in January 2014 following Cyclone Ian and **\$1.9 million to Vanuatu** in March 2015 following Tropical Cyclone Pam. The pilot is designed for Pacific Island Countries (PICS, namely, Marshall Islands, Samoa, the Solomon Islands, Vanuatu, Cook Islands and Tonga) to use parametric insurance as a mechanism to inject immediate cash following a major tropical cyclone, earthquake or tsunami.
- ❖ At the country level, the program helped the government of **Belize** bring together civil society organizations and the private sector to draft a national climate resilience investment plan to flood proof roads in four areas of the country, thereby reducing economic losses and protecting vulnerable communities. In **Seychelles**, the February 2013 ACP-EU NDRR-funded Damage and Loss Assessment (DaLA) laid the foundation for the creation of Sub-Saharan Africa's first World Bank-financed disaster contingent credit line, which provides the government with \$7 million in immediate liquidity in the aftermath of large-scale catastrophes. Using the assessment findings,
- ❖ The program financed eight post-disaster assessments in **Burundi, Cabo Verde, Malawi, Mozambique, Saint Lucia, Saint Vincent and the Grenadines, Solomon Islands, and Vanuatu** and provided technical assistance for recovery efforts in **Tonga**. These projects have contributed to leverage substantial World Bank recovery investment programs, including a joint IDA/IFC financing amounting to US\$84 million following Tropical Cyclone Pam in Vanuatu, a \$19 million from the World Bank's IDA Crisis Response Window to support Saint Vincent and the Grenadines reconstruction efforts and a \$80 million World Bank Flood Emergency Recovery project in Malawi.

² Pacific Catastrophe Risk Assessment and Financing Initiative.

Seychelles developed short, medium and long-term disaster resilient development initiatives which are expected to benefit

87,000

people and rehabilitate and protect

500 kilometers of roadways from disasters.

- ✦ **Over 6,800 government officials and local partners from more than 40 countries** have benefitted from trainings on different DRM topics, including disaster risk reduction, risk assessment, data collection or post-disaster needs assessments. The Community-Based Disaster Risk Reduction Project implemented by Oxfam in **Niger trained more than 2,800 community members – one-third women** – in disaster risk reduction, including the collection and analysis of early warning data. More than 20 technical outputs were developed; around 35 countries now benefit from new platforms for data sharing such as the **Dominode**³.
- ✦ A **Second Call for Proposals** was launched in March 2014. The evaluation of concluded in December 2014, and six projects were

³ Dominode is Dominica's national platform for data sharing and collaboration (<http://dominode.dm/>)

approved for funding in Burundi, Ethiopia, Mozambique, Zimbabwe, Dominican Republic and Micronesia/Marshall Islands/Palau.

- ✦ The visibility of the ACP-EU NDRR Program was enhanced and specific steps were undertaken including the revamping of the program website, delivery of various outreach materials (i.e. brochure, stories of impact, program video shooting).
- ✦ Finally, within the framework of the ACP-EU Building Disaster Resilience to Natural Hazards in Sub-Saharan African Regions, Countries and Communities program, **GFDRR signed in August 2014 a €20 million top-up to support African RECs in strengthening their DRM capacities**, and help their respective member states in taking informed decisions in building resilience to disasters. See Section 4 for more details.

A total of more than
6,800
government officials and local partners from
more than 40 countries have benefitted from
trainings on different DRM topics.



Overview of Activities

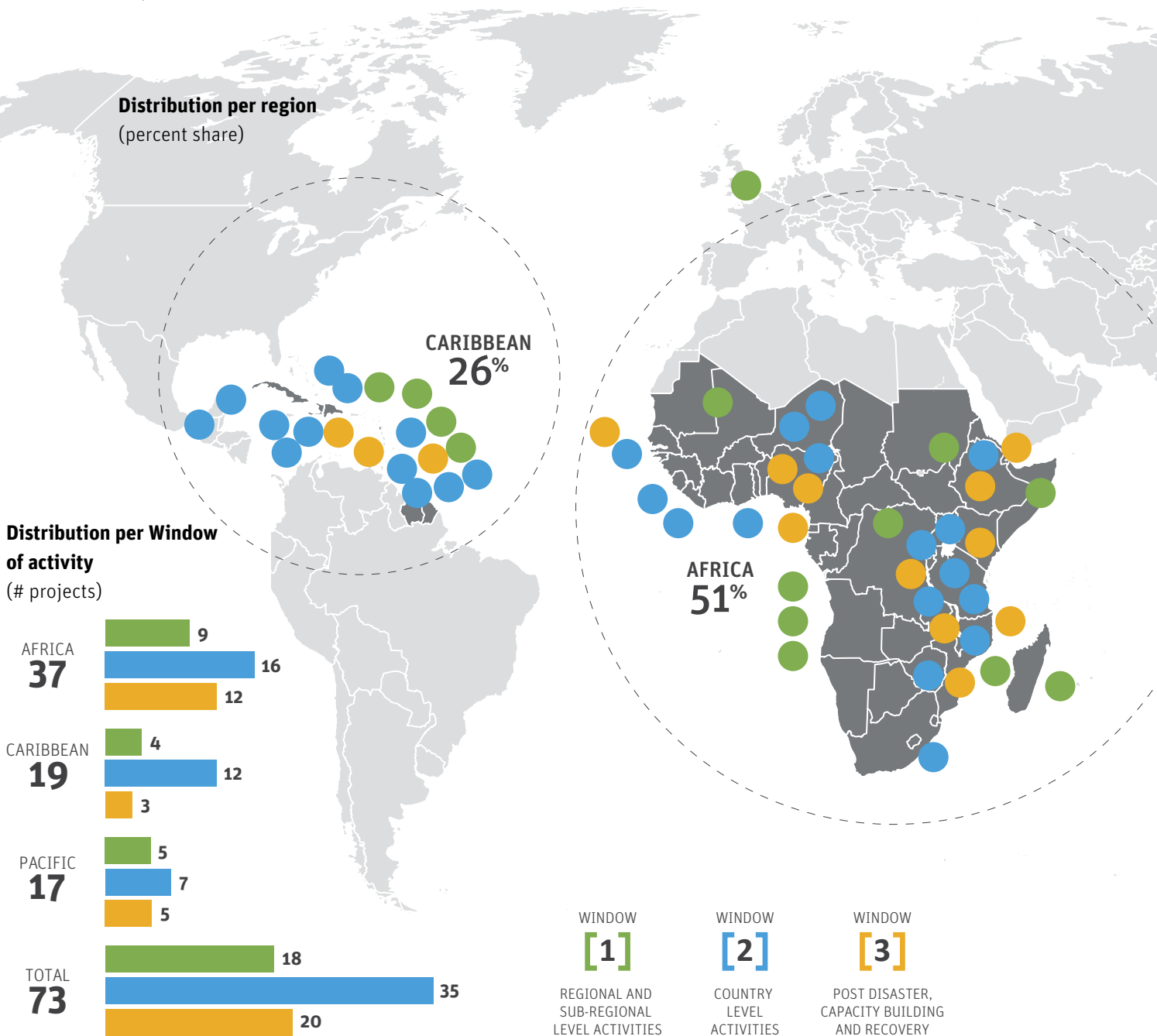
November 2013 – June 2015

1.1 Program Governance

Program Team: A dedicated GFDRR team in Brussels coordinates the overall implementation of the Program, ensuring day-to-day coordination with the EU, the ACP Secretariat and other partners. The team works closely with GFDRR Secretariat the World Bank Disaster Risk Management (DRM) Regional teams in charge of Africa⁴, the Caribbean, and the Pacific.

⁴ Africa refers to Sub-Saharan Africa.

Steering Committee (SC): A SC, comprising of representatives from the European Union, the ACP Secretariat, and the World Bank meets twice a year to review progress, provide advice and guidance, and address needs arising from the implementation of the projects. The meetings are chaired by the ACP Secretariat and provide an opportunity to present the overall portfolio, the financial overview, and status of the monitoring framework.



1.2 Operational Portfolio Analysis and Monitoring & Evaluation

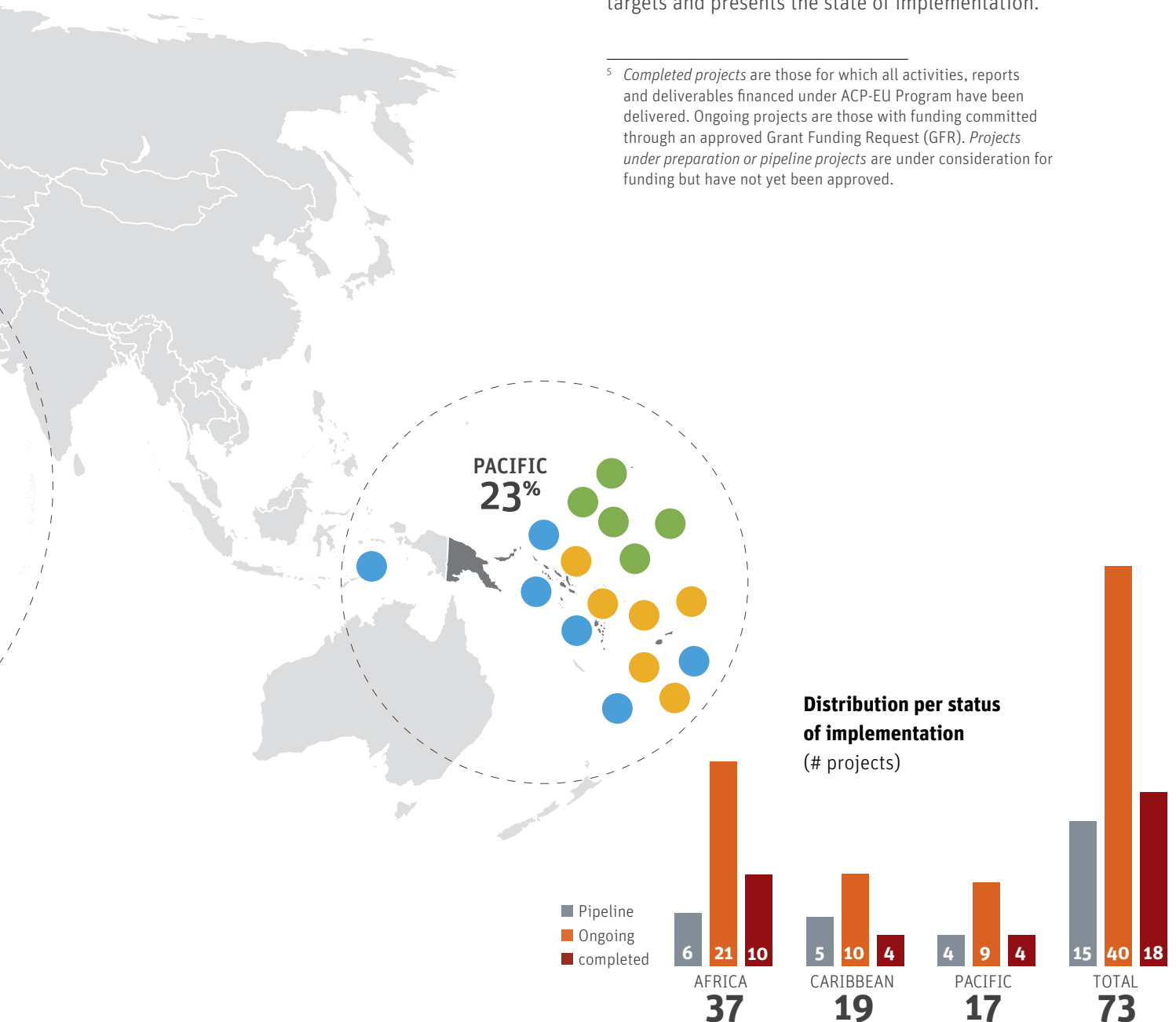
As of June 30, 2015, the Program has developed a **portfolio of 73 projects**, of which **18 are completed, 40 ongoing** and **15 under preparation**.⁵ More than 40 countries have received support directly from the program, whereas thanks to the regional projects, all ACP countries have benefitted in some way from the Program.

During the reporting period, a total of **\$14.2 million** was committed for **33 new projects**.

The charts below provide an overview of the portfolio distribution per category of activity, number of projects, geographic and window distribution. The full list of projects, in the different stages of implementation can be found in Annex 2.

Monitoring framework: A methodology was developed to track the progress of the Program implementation. It evaluates the respective contribution of each project to the Program’s targets and presents the state of implementation.

⁵ *Completed projects* are those for which all activities, reports and deliverables financed under ACP-EU Program have been delivered. *Ongoing projects* are those with funding committed through an approved Grant Funding Request (GFR). *Projects under preparation or pipeline projects* are under consideration for funding but have not yet been approved.







2

Antananarivo, Madagascar. Photo credit: dennisvdw | Thinkstock.com

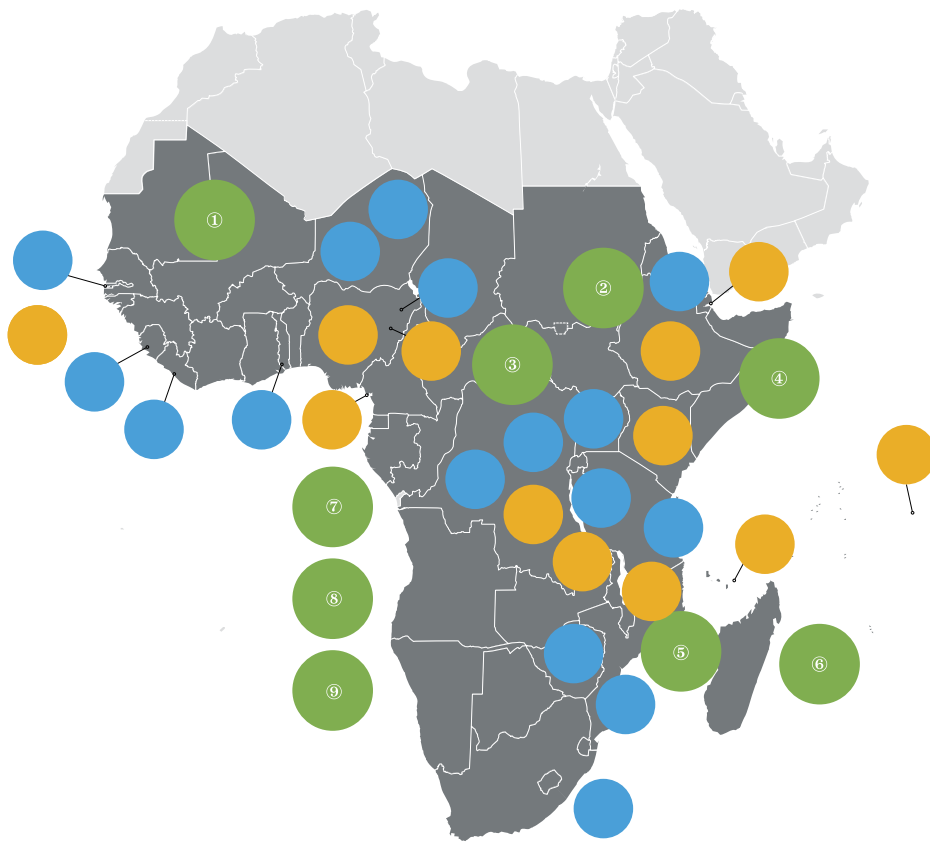
Progress by Region

Operational Portfolio – AFRICA

Number of projects as of 30 June, 2015

	Window 1	Window 2	Window 3	Total
COMPLETED	2	–	8	10
ONGOING	7	10	4	21
PIPELINE	–	6	–	6
TOTAL	9	16	12	37

The Program in Africa 37 Projects



WINDOW 1

REGIONAL AND SUB-REGIONAL LEVEL ACTIVITIES

SAHEL^① – IGAD^② – ECCAS^③ – RCMRD^④ – DIMSUR^⑤ – IOC^⑥ – UNDERSTANDING RISK FORUM 2012 (CAPE TOWN, S.A.)^⑦ – 5TH AFRICA REGIONAL PLATFORM FOR DRR 2014 (ABUJA, NIGERIA)^⑧ – AFRICAN RECS^⑨

WINDOW 2

COUNTRY LEVEL ACTIVITIES

BURUNDI – ETHIOPIA – GAMBIA – LESOTHO – LIBERIA – MOZAMBIQUE – NIGER – NIGERIA – RWANDA – SIERRA LEONE – TANZANIA – TOGO – UGANDA – ZIMBABWE

WINDOW 3

POST DISASTER, CAPACITY BUILDING AND RECOVERY

BURUNDI – CABO VERDE – CAMEROON – DJIBOUTI – ETHIOPIA – KENYA – MALAWI – MOZAMBIQUE – NIGERIA – SEYCHELLES

① Burkina Faso, Chad, Mali, Mauritania, Niger, Senegal

② Djibouti, Ethiopia, Kenya, Somalia, Sudan, South Sudan, Uganda

③ Angola, Burundi, Cameroon, Central Af., Chad, Congo-Republic of, DR Congo, Eq. Guinea, Gabon, São Tome & Príncipe

④ Djibouti, Eritrea, Ethiopia, Kenya, Somalia, Sudan, South Sudan, Uganda

⑤ Comoros, Madagascar, Malawi, Mozambique

⑥ Comoros, Madagascar, Mauritius, Seychelles, Zanzibar (Tanzania)

2.1 ACP-EU NDRR Program in Africa

As of June 30, 2015 the African region accounts for half of the projects under the ACP-EU NDRR Program both in terms of number and committed funding. The operational portfolio for Africa consists of 37 projects (51 percent of the total) with \$19.5 million allocated to national, regional, post-disaster and capacity building activities (46 percent of total program budget). Of these, 10 are completed, 21 are under implementation and six are in the pipeline. The full list of projects, including implementation status, is included in Annex 2.

During the reporting period the Program actively supported African countries and Regional Economic Communities (RECs) in a wide spectrum of DRM areas, such as:

- ✦ DRM mainstreaming
(*DIMSUR project, The Gambia, Liberia, Niger, Sahel, Sierra Leone, Togo, Mozambique, Zimbabwe*);
- ✦ Risk assessments
(*Ethiopia, Rwanda, Sierra Leone*);
- ✦ Developing risk tools
(*Horn of Africa, Liberia, Lesotho, Togo, RCMRD⁶*);
- ✦ Community-based resilience
(*Liberia, Niger, Sierra Leone, Tanzania, Togo*);
- ✦ Enhancing the DRR capacities of RECs
(*ECCAS, IGAD*);
- ✦ Preparedness and early warning systems
(*Burundi, Lesotho, Sierra Leone, Togo*);
- ✦ Risk financing
(*Indian Ocean Islands*);
- ✦ Post-disaster assessments and recovery planning
(*Burundi, Cabo Verde, Malawi and Mozambique*).

The section below highlights selected project progress during the period under review.

Window 1: Regional projects

Central Africa

The **Development of Risk Reduction Measures, Preparedness and Response to Disaster Risk in Central Africa project**, which is implemented with the **Economic Community of Central African States (ECCAS)**, started in early 2015. The project contributes to the implementation of ECCAS regional mainstreaming of DRR for sustainable recovery in Central Africa. Key officials are being trained to increase their technical capacity to understand and assess hazards and vulnerabilities at the national and regional level, and improve preparedness and response to disasters. The project builds upon previous and ongoing support to ECCAS from other development partners, such as the European Commission, UNISDR and UNDP, and contributes to Result 2 of the 10th EDF ACP-EU Program **Building Disaster Resilience to Natural Hazards in Sub-Saharan African Regions, Countries and Communities**.

Eastern Africa

Under an ACP-EU NDRR grant, the World Bank is working closely with the **Intergovernmental Authority on Development (IGAD)** to provide high-level policy and technical advice, as well as supporting planning, development and implementation of IGAD's DRR investment program. Activities include the development of a DRM framework and institutional base, the development of a regional disaster response mechanism, strengthening and harmonizing disaster preparedness and recovery response capabilities integrated with regional early warning and disaster financing mechanisms, institutionalization of a regional platform for disaster and climate risk management (including food security), and the development and strengthening of IGAD's official structures for disaster management. The grant also supports IGAD's member states regional meetings focusing on DRM and CCA awareness creation and drought resilience.

⁶ RCMRD: Regional Center for Mapping of Resources for Development.



Snapshot of Activities in Africa

DRM Mainstreaming activities are successfully progressing at national, provincial, district and community levels in different sectors, including transportation, territorial/land use planning, and environment (adaptation of low-lying coastal areas).

Regional and national risk tools or data platforms are being built up or consolidated. Support is granted to the **integration of risk information systems** and flows at the national or local level.

Since Program inception, ten African countries have benefitted from a series of national **trainings in post-disaster needs assessments and/or damage and loss assessment methodologies**. Most of these took place during in-country post-disaster assessments.

Recommendations from several post disaster assessment reports have **contributed to leveraging significant investment funding** from various sources.

Several projects are implemented by, or jointly with, partners such as Oxfam, UNDP, WFP, and beneficiary countries.

Horn of Africa

The **Building Resilience by Sharing Data to Rebuild the Region Project** strengthens climate and disaster risk management in the Horn of Africa by providing open access to disaster information combined with training to utilize these data. A regional data platform was developed in 2013 and is available online at <http://horn.rcmr.org/>. Several experts have used the open data platform for their projects. In addition, technical training on geospatial technologies and data sharing for DRR provided an overview of the use of spatial information in pre-disaster, during disaster and post disaster management, such as early warning, hazard, vulnerability, risk, and damage assessments. About 30 participants from member states⁷ of the Regional Centre for Mapping of Resources for Development (RCMRD) working in national disaster risk management institutions were trained. The project, which will close end 2015, has been instrumental in complementing innovative DRM work in the Horn of Africa.

The Sahel

Under the **Sahel – Supporting National and Regional Disaster Response and Resilience Project**, a workshop was held in Niamey,

Niger in September 2014 with representatives from hydrometeorological, food security and DRM services from Burkina-Faso, Chad, Mali, Mauritania, Niger and Senegal. The workshop revised the institutional diagnosis to reflect the role of regional organizations⁸ in DRM in the Sahel; detailed support needed and developed a new institutional collaboration framework among the six countries and regional organizations; proposed a road map for the development of a data sharing and collaboration system; and initiated an analysis of benefits from end-users with a gender-disaggregated approach.

Southern Africa

The **Disaster Mitigation and Sustainable Recovery Centre for Southern Africa (DIMSUR)**, supported through a grant managed by UN-HABITAT, enhances inter-country cooperation, knowledge sharing, technical assistance and capacity development, particularly in increasing urban resilience. During the year under review, notable progress was made in terms of operationalization of the Centre, including:

- ✦ The first meeting of the Executive Board of DIMSUR, held in Abuja, Nigeria, in May 2014;

⁷ Djibouti, Ethiopia, Kenya, Somalia and Uganda.

⁸ ACMAD, AGRHYMET, CILSS, SSO.

- ❖ The signature of the Memorandum of Understanding and Charter of DIMSUR by the four founding member countries – Madagascar, Malawi, Mozambique and the Union of Comoros – which marked the legal establishment of DIMSUR in December 2014;
- ❖ Pilot trainings in participatory risk mapping and urban food security in Mozambique and Malawi. The pilots contribute to the preparation of urban risk reduction and resilience training tools to be tested in at least five cities in the four member countries from May to December 2015.

Southwest Indian Ocean

The **Southwest Indian Ocean Risk Assessment and Financing Initiative**, was launched in April 2014 to help Indian Ocean countries better understand and manage the fiscal costs of disasters and address the region's high vulnerability to disaster losses from cyclones, floods, earthquakes, and tsunamis. See the Project Highlight on p. 27 for details.

Window 2: Country projects

Gambia

The **National Disaster Risk Assessment and Strengthening of National Disaster Management Agency Project**, implemented with the Gambia National Disaster Management Agency (NDMA), supports the development of standard operating procedures for disaster risk management, including preparedness, prevention, response, recovery and rehabilitation. Several activities have been completed or are well underway, including:

- ❖ A successful compilation of inventory of existing studies, data, national capabilities, and national DRR practices;
- ❖ An outline of all hazard-prone areas of the country and their exposure to elements at risk;
- ❖ Development of an internet map service to enable NDMA disaster response and planning team to input timely critical information; and

- ❖ Support provided in the implementation of NDMA institutional framework and simulation exercises based on five hazards captured in the National Contingency Plan.

Lesotho

The **Climate Risk Analysis & EWS Information Management Systems for Lesotho Project** supports two main activities: the Lesotho Early Warning and Information Systems Development Project (EWISDP), implemented by the World Food Program (WFP), and the Lesotho Climate Change (CC) and Water Impact Analysis Project, implemented by the World Bank in collaboration with the Stockholm Environment Institute. An inception meeting was held in Maseru in November 2014 and subsequent activities include a series of stakeholder engagements and capacity building initiatives in February and May 2015, as part of scenario building. The analysis will be used as a guiding document for several water sector development projects.

The EWISDP kicked off with an inception meeting in April 2014. A hazard risk baseline assessment was completed in November 2014. These activities are integrated within a portfolio of ongoing projects financed by the World Bank, including the Metolong Dam and Water Supply Program which is part of a \$400 million, multi-donor initiative involving several co-financing partners including for example the Arab Bank for Economic Development in Africa, the European Investment Bank, and the Organization of the Petroleum

Togo

900

volunteers trained in hydrometeorology data collection in remote areas.

Exporting Countries Fund for International Development. These activities provide strategic planning tools for several potential World Bank investments.

Liberia

The **Strengthening DRM Project**, jointly implemented by the WFP and the World Bank, made good progress in supporting the government of Liberia in drafting a DRM policy and the act for the establishment of a National Disaster Management Agency. The project, however, was temporarily suspended (March–December 2014) after the government of Liberia declared a state of national emergency to address the Ebola epidemic. Activities related to the development of a risk financing strategy and strengthening of traditional micro-insurance practices within communities have not yet begun. Project teams are working together with the government to decide upon activities to be reactivated.

Niger

The **Community-based Disaster Risk Reduction Project**, implemented by Oxfam, continues to make substantial progress towards its goal of building the capacity of beneficiary communities to prepare and respond to weather-related shocks. The project provides training in disaster risk reduction and incorporates climate adaptation interventions to improve and protect livelihoods. During the reporting period, the project:

Niger reactivated

13

community early warning systems and emergency response unit

- ❖ Reactivated **13 community early warning systems and emergency response units** (in addition to ten reactivated during the previous reporting period) along with **46 municipal-level vulnerability monitoring observatories** that help communities and local authorities better understand the availability of food staples and food prices fluctuations;
- ❖ **Provided targeted training to more than 2,800 community members**, one-third of whom were women, to build their capacity in disaster risk prevention and emergency response;
- ❖ **74 percent of the communities** have transmitted a community-based vulnerability assessment every month to the sub-regional level, in comparison with the baseline of 17 percent at the beginning of the project;
- ❖ **Trained members of 14 regional committees** responsible for stakeholder coordination and food crisis management at the department level;
- ❖ **Strengthened five sub-regional committees for disaster prevention and management**, with four of them meeting regularly whereas only two met at the beginning of the project according to the baseline. A database for monitoring vulnerability has been established in each of these committees;
- ❖ **Reached 4,800 household by supporting implementation of 23 community micro projects** aimed at reducing disaster risks and promoting adaptation to climate change;
- ❖ **Integrated DRR/CCA into development plans** in six municipalities.

The **Technical Assistance for Multi-Hazard Early Warning System with Focus on Rapid-Onset Hazards Project** to support the government of Niger's action plan for information management and early warning systems with a multi-hazard approach was approved. A number of technical activities identified as a priority are covered under this project, while subsequent investments and capacity development will be carried out

through the Disaster Risk Management and Urban Development Project under preparation with \$100 million in funding from the World Bank and \$6.6 million from the Global Environment Facility's Least Developed Countries Fund. The activity complements various ongoing initiatives including the above-mentioned Community Based Disaster Risk Reduction project and the Sahel - Regional and National Disaster Response and Resilience Project.

Rwanda

The **Development of Comprehensive Disaster Risk Profiles for Enhancing Disaster Management Project** has made substantial progress toward completing key technical activities. Training workshops provided senior government officials of key line ministries and agencies involved in DRM with the methodological and technical tools to move forward the undertaking of disaster risk assessments for the main natural hazards identified in close collaboration with the Ministry of Disaster Management and Refugee Affairs (MDMRA), and technical staff from development partners, regional and national academic institutions, and concerned NGOs working in Rwanda. A major contribution of the project has been fostering a policy dialogue among key government and non-government stakeholders on the need to develop a technical capacity for disaster risk assessment in Rwanda. The project is also engaging regional partners as part of a south-south cooperation strategy and mechanism for regional cooperation to help knowledge sharing and fill capacity gaps. This includes collaboration with regional institutions like the Volcanic Observatory of Goma based in the Democratic Republic of Congo and the Regional Centre for Mapping of Resource for Development based in Kenya.

Sierra Leone

The **Supporting Community-Based DRR Project** has strengthened the country's national-level coordination capacity for DRR, preparedness and emergency response, **50 technical national experts from all line ministries were trained**

Sierra Leone

50

experts from all line ministries were trained on the DaLA conceptual framework.

on the DaLA conceptual framework. This included the practical application of tools for damage and loss assessment, thereby enabling the country to establish a cadre of disaster management professionals. A **multi-sectoral working group** (MWG) was also established to develop a framework for setting up Sierra Leone's platform on DRR. This will ensure that an integrated approach is adopted to optimize existing capacities within national institutions for effective DRR and DRM programs at all levels. Terms of reference were developed for the MWG and monthly meetings institutionalized. Finally, the project contributed to identify and engage key stakeholder institutions, leading to the development of the zero draft of the platform document, now under review. The project was temporarily suspended because of the 2014 Ebola outbreak in Sierra Leone. Activities resumed in early 2015, with preparations for a vulnerability risk assessment for six cities (including Freetown). In addition, pilot programs and capacity building for community-based disaster risk management efforts will be undertaken.

Tanzania

Implementation of the **Strengthening Community Capacity for DRR Interventions in Drought Prone Regions through Children Project** experienced some delays during this reporting period. However, activities related to community-based preparedness components progressed: work with local government authorities, women

and youth groups was undertaken on food security information and drought risk assessment. Also, 195 youths representing the beneficiary communities were trained on DRR issues.

The **Building Climate Resilience in Tanzania Water Sector Project** started in May 2014 with the aim of reducing the vulnerability of rural and urban communities in Tanzania to hydro meteorological hazards. Procurement for the community mapping actions was concluded in November 2014. Activities undertaken so far include a kick-off stakeholder workshop, as well as community mapping and baseline work for the urban flood risk and water kiosks components.

Togo

The **Integrated Disaster and Land Management (IDLM) Project**, implemented by the Ministry of Environment and Forestry Resources, strengthens institutional capacity and raises awareness to manage flood risk and land degradation in targeted rural and urban areas. It also expands sustainable land management practices in targeted landscapes and climate vulnerable areas. Accomplishments from the first phase of the project include:

- ❖ Significant flood reductions in villages along the five kilometer canal between Boko and Zowla lakes resulting from a community cleaning effort. This enabled people to return to their homes, abandoned 10 to 15 years ago, and resume fishing;
- ❖ Rehabilitation of a 600 meter gutter in Tchamba city to reduce flood risk. This included acquisition of gutter cleaning equipment, which will allow efficient maintenance;
- ❖ Installation of hydrology and meteorology equipment for Early Warning System on floods for the Maritime Region;
- ❖ Support to Togo Red Cross volunteers for hydro meteorological data collection;
- ❖ Updating the cartography for the Greater Lomé area to plan investment for flood reduction.

- ❖ Training of 900 Red Cross volunteers for hydro-meteorology data collection in remote areas, an important component of the development of the national early flood warning system.

Other activities are still ongoing, including the preparation of 23 community-level sub-projects (mainly on flood risk reduction) and training of 1,000 other actors within the technical structures of line ministries, which will also be extended to civil society concerned with disaster risk reduction and sustainable land management.

Window 3: Post-disaster, Capacity Building & Recovery projects

Seychelles

The findings of the February 2013 DaLA supported under the program laid the foundation for the creation in September 2014 of Sub-Saharan Africa's first Catastrophe Deferred Drawdown Option (Cat DDO), a World Bank Group-financed disaster contingent credit line which provides the government with \$7 million in immediate liquidity in the aftermath of a large-scale catastrophe, a time when liquidity constraints are usually highest. Based on the assessment findings, the government of Seychelles implemented short, medium and long-term disaster-resilient development initiatives in order to better cope with disasters. These measures are expected to benefit 87,000 people and rehabilitate and protect 500 kilometers of roadways from disasters.

The program also funded **four post-disaster damage and loss assessments** in response to floods and landslides caused by torrential rains in Burundi (February 2014); Malawi and Mozambique (January 2015); as well as a volcanic eruption in Cabo Verde (March 2015). For more details see Section 3 below.



Port Louis, Mauritius. Credit: jbkrcmar | Thinkstock.com

PROJECT HIGHLIGHT

THE SOUTH WEST INDIAN OCEAN RISK ASSESSMENT AND FINANCING INITIATIVE

The Indian Ocean Islands (IOIs) are highly exposed to natural hazards and to the adverse impacts of climate change. Cyclones and flooding are most impactful across the region, although other perils such as volcanic eruptions also affect certain countries. Although the region is less exposed to earthquakes, the secondary threat posed by tsunamis is present, as demonstrated by the 2004 Indian Ocean event. Increasing climate variability linked to climate change is contributing to greater weather extremes – mainly precipitation and temperature – that are increasing the prevalence of floods and droughts. Climate change is also likely to increase rainfall and storm surges due to tropical cyclones while shifting their tracks further south, increasing the exposure of some IOIs while reducing that of others.

In September 2012 the Indian Ocean Commission (IOC) identified disaster risk management (DRM) as a priority and requested the World Bank's support to advance a regional DRM initiative in the short-term. The development objective of the project – the South West Indian Ocean Risk Assessment and Financing Initiative (SWIO RAFI), funded by the ACP-EU NDRR Program – is to improve the understanding of disaster risks and risk financing solutions of five IOIs states, namely Comoros, Madagascar, Mauritius, Seychelles and Zanzibar (a semi-autonomous island of Tanzania), to increase their capacities to meet post-disaster funding needs without compromising their fiscal balances and development objectives.

The project was officially launched at the 5th Regional Platform Meeting for Risk Transfer Mechanisms, hosted by the IOC, on April 29, 2014 in Mauritius. It has two parallel work streams. In the first phase, critical data on the exposure and existing hazard information for the five IOIs will be collected, collated, and shared. This process involves uncovering existing data, improving it for use in risk modeling (e.g., digitizing/cleaning existing data)

and launching crowd-sourcing campaigns to collect new exposure data as needed. This data will then be made available through a regional data sharing platform to be developed with training provided to each country. Using this data, new hazard analysis, exposure models and country-specific catastrophe risk loss assessments/profiles will be developed. These profiles will be used in conjunction with reviews of existing budgetary arrangements to assess fiscal risk financing gaps. Based on this information, regional and national catastrophe risk financing options will be assessed, and preliminary national disaster risk financing strategies will be developed. Institutional capacity building will form an essential component of all of these efforts. In the second phase, the preliminary catastrophe risk financing strategies selected by the IOIs will be further developed into national disaster risk financing strategies and operationalized through technical assistance support. This phase could also consider repurposing the hazard, exposure and risk information produced under the first phase for other DRM applications such as preparedness and prioritizing of risk reduction investments.

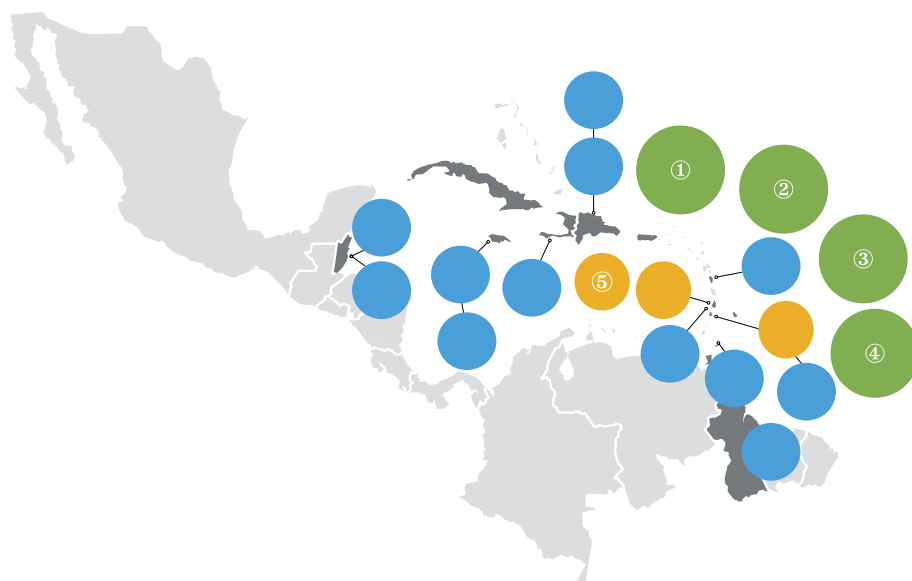
The SWIO RAFI benefits from an expanded collaboration platform of development partners. The data collection and management activity will build upon and align with the ongoing work of UNISDR in collecting data and establishing in-country historical loss and damage databases. Under the umbrella of the IOC and its Regional Platform for Disaster Risk Financing Mechanisms Initiative, this project coordinates closely with the EU-funded ISLANDS project and the UNISDR project on Risk Transfer and Risk Financing Mechanisms. Similarly, the project also coordinates closely with the French Agency for Development (AFD), which is supporting the regional project “*Risques Naturels*,” which in turn works on strengthening the policy and regulatory framework and community-based risk assessments.

Operational Portfolio – CARIBBEAN

Number of projects as of 30 June, 2015

	Window 1	Window 2	Window 3	Total
COMPLETED	1	1	2	4
ONGOING	2	7	1	10
PIPELINE	1	4	–	5
TOTAL	4	12	3	19

The Program in the Caribbean 19 Projects



WINDOW 1

REGIONAL AND SUB-REGIONAL LEVEL ACTIVITIES

STRENGTHENING PUBLIC INVESTMENT IN DRR & CCA (UNDP)^①
– CARIBBEAN RISK INFORMATION PROGRAMME^② – MOSSAIC^③ – CDEMA CONFERENCE^④

WINDOW 2

COUNTRY LEVEL ACTIVITIES

BELIZE – DOMINICA – DOMINICAN REPUBLIC – GRENADA – GUYANA – HAITI – JAMAICA – SAINT LUCIA

WINDOW 3

POST DISASTER, CAPACITY BUILDING AND RECOVERY

SAINT VINCENT AND THE GRENADINES – SAINT LUCIA
– STRENGTHENING CAPACITY IN PDNA^⑤

① Antigua and Barbuda, Barbados, Dominica, Grenada, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines

② Belize, Dominica, Dominican Republic, Grenada, Guyana, Haiti, Jamaica, St. Lucia, St. Vincent and the Grenadines

③ Belize, Dominica, Grenada, Jamaica, St. Lucia, St. Vincent and the Grenadines

④ CDEMA participating Member States (18 countries)

⑤ Antigua and Barbuda, Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Jamaica, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines

2.2 ACP-EU NDRR Program in the Caribbean

In the Caribbean region, the ACP-EU NDRR Program has a portfolio of 19 projects, totaling \$9.6 million. The reporting period ended with five projects in the pipeline, while four have been completed, and ten are ongoing. Please refer to the list of projects, at different stages of implementation in Annex 2.

Activities include:

- ✦ Mainstreaming DRM into sectoral planning (Haiti, Dominican Republic);
- ✦ Data generation, risk information and assessment (at the national and regional levels);
- ✦ Preparation of DRM investments (Belize, Saint Lucia, Dominica);
- ✦ DRM communication and Advocacy (Guyana);
- ✦ Technical capacity building (regional projects, including two with UNDP); and
- ✦ Post-disaster assessments (Saint Lucia, Saint Vincent and Grenadines).

Some of these activities funded by the Program have leveraged significant investment from the World Bank totaling of \$156 million.

The section below highlights selected project progress during the period under review.

Window 1: Regional projects

Caribbean

The **Caribbean Risk Information Program** is strengthening the quality of national-level data on hazards and risks for Belize, Grenada, Dominica, St. Lucia, and St. Vincent and the Grenadines. The project developed the Caribbean Handbook for Risk Information Management (CHaRIM⁹) that aims to support the generation and application of landslides and flood hazard and risk information to inform planning and infrastructure projects.

Relevant ministry and agency officials from Caribbean countries have been trained on risk fundamentals, hazard mapping and multi-

hazard risk assessment. The project is currently developing the Use Case Book, which illustrates the steps required to use the hazard and risk information for planning of infrastructure, risk reduction measures, emergency preparedness and emergency response.

The **Management of Slope Stability in Communities (MoSSaiC) Caribbean Community of Practitioners Program** supports the development of course materials, including a web-based learning and knowledge exchange platform and software for calculating and modelling landslide risk. The first residential training course of MoSSaiC is scheduled for fall 2015 in Saint Lucia. Twenty-four course participants are being identified in the six prioritized countries, namely Belize, Dominica, Grenada, Jamaica, Saint Lucia and Saint Vincent and the Grenadines. These were identified based upon beneficiary countries demand and need as well as ongoing DRM operations to which MoSSaiC activities could be linked.

The **Strengthening Public Investment in DRR and CCA in the Eastern Caribbean project**, implemented by UNDP, supports Eastern Caribbean countries in systematically accounting for disaster loss by developing probabilistic estimations of future risk. This information is used to strengthen public investment in DRR. The grant agreement with UNDP became effective in October 2014. A first project board meeting was organized by UNDP in February 2015, with representatives of the government of Saint Lucia and Saint Vincent and the Grenadines, UN-ECLAC, UNISDR, and World Bank. The UNDP/UNISDR and the World Bank teams are in the process of discussing the technical specifications of the risk profiles.

Window 2: Country projects

Belize

The Road Network Exposure database developed under the project **Hazard and Risk Assessment Framework for Belize: Prioritization of an Investment Plan** was handed over to the relevant line agencies, which will manage and update the data. To support the transfer, hands-on training in using the database was provided at a technical workshop in September 2014. The

⁹ <http://www.charim.net/>

project team also discussed best practices with the government to incorporate the database into the National Spatial Data Infrastructure in Belize (NSDI). The team also conducted a series of training workshops in connection with the Roads and Public buildings database, which was installed at Ministry of Works and Transports and at Ministry of Natural Resources and Agriculture. It will be turned over to the Ministry of Finance and Economic Development by the end of 2015. The project has also been assisting the Land Information Center in data collection and in adopting a mobile data collection platform based on the Open Data Toolkit platform. The final project workshop is scheduled for the end of 2015.

Dominica

A risk data management platform, the Dominode (www.dominode.net), was developed with the government of Dominica's Division for Physical Planning, Lands and Survey, and the Office of Disaster Management under the **Spatial Data Management and Identification of Most Vulnerable Schools and Shelters Project**. The platform hosts 45 data layers and is set to host additional data gathered under other projects and initiatives. Having this platform in place is the first step in mitigating continued data loss and is now serving the identification of the most vulnerable schools and shelters in Dominica. Over the last year, the project has organized several workshops for government officials on shelter standards and shelter assessment. A project final workshop will be carried out in August 2015 in order to present an evaluation of the shelter portfolio, and discuss the prioritization of investments.

Dominican Republic

An analysis on the fiscal and economic impact of natural disasters in the **Dominican Republic** was conducted jointly with the Ministry of

Economy, Planning and Development under the **Mainstreaming DRM and CCA in Public Investment, Territorial Planning and Public Finances Project**. The study showed that annual average losses associated with earthquakes and cyclones add up to \$670 million, equivalent to 1.1 percent of GDP in 2013. The project team is exploring options for disseminating the results of the study to set the basis for developing a disaster risk financing strategy. The project also designed and presented a territorial planning information system to the government and provided advisory services to the Vice-Ministry of the Presidency in the drafting process of the new DRM law.

The **Identifying Risk to Protect Schools in the Dominican Republic project**, implemented by Plan, Oxfam and Habitat for Humanity, focuses on strengthening risk assessment of public schools using an integrated risk assessment tool (school safety index), to consider both risks to the schools' physical infrastructure inherent in the construction of schools facility and hazards in the surrounding environment. The project, which was recently launched, aims at scaling up an existing pilot project (under DIPECHO program), and will strengthen government and academic sector capacities in emergency information management.

Guyana

The **Strengthening Guyana's Coastal Lands Information Systems and Adaptation Awareness Project, which was completed on June 30, 2014, aimed** at implementing a communications strategy for the Conservancy Adaptation Project (CAP) and strengthening the country's information systems on coastal lands. The project also improved coordination among stakeholders within government and the donor community towards developing a comprehensive flood control strategy. The Ministry of Agriculture and the World Bank held a final workshop in March 2014 focusing on CAP results for the 2008-2013 period and future investments under the 2013-2020 strategic plan. These included enhancing government knowledge and capacity to manage the East Demerara Water Conservancy and the coastal drainage systems, as well as a \$123 million package of investments critical for flood management. The project also

Annual average losses associated with earthquakes and cyclones add up to

\$670 million

PROJECT HIGHLIGHT

SPATIAL DATA MANAGEMENT AND IDENTIFICATION OF THE MOST VULNERABLE SCHOOLS AND SHELTERS IN DOMINICA



The Government of Dominica is much better positioned to prepare for potential disasters thanks to a risk data management platform, Dominode, developed with support from an ACP-EU NDRR grant. As a result, more than 72,000 people will benefit from improved climate resilient infrastructure and greater capacity to monitor climate risks.

The grant also enabled a vulnerability assessment and a multi-criteria evaluation that better inform the choice of investments under the Disaster Vulnerability Reduction Project (DVRP), financed by the World Bank.

Dominode hosts 45 data layers, which are maps containing specific types of information such as density of buildings, roads, health facilities, and more. The data layers allow the creation of digital evaluation models, which in turn enable better disaster risk management planning. Several of the data layers contain information created and sourced through the grant. Dominode will also host additional data generated under the DVRP, such as digital elevation data derived from LiDAR¹⁰. The platform helps mitigate data loss due to computer crashes and ensures that data is preserved when employees leave their positions or consultants complete their assignments. The Dominode platform has

also fostered a collaborative, inter-agency approach to managing spatial data. The Local Government Department and the Office of Disaster Management are using the platform to identify public buildings that could be used as shelters, initially by assessing the existing shelter portfolio and their amenities.

Plans include the rehabilitation of 42 kilometers of national roads, the construction of 3.5 kilometers of storm drains, increased water storage of more than 1.8 million liters, the preparation of climate adaptation plans, and the training of government officials in spatial data management. The program builds on the success of previous operations in other Eastern Caribbean countries and focuses on climate adaptation and enhancing the country's disaster preparedness and emergency response. The DVRP is financed from an International Development Association (IDA) grant of \$17 million, a \$12 million grant and \$9 million credit from the Strategic Climate Fund, as well as \$1.5 million from the Dominican government.

Photo: Participants from Dominican government ministries and departments learned how to use high-resolution imagery to determine evacuation routes and shelter accessibility in an intensive two-week course.

¹⁰ Light Detection and Ranging

supported the publication of the CAP findings, *Managing Flood Risk* in Guyana, and the production of a video animation.

Haiti

The **Haiti Disaster Risk Management Mainstreaming and Capacity Building Program** supports the government in advocating and integrating DRM into its policies and investments. A communication strategy on safe construction was jointly developed with the Ministry of Public Works to promote linkages between the ongoing National Building Code process and sector specifications for health and education. New guidelines for disaster resilient health infrastructure were completed, approved and attached as an annex to the Haitian Building Code. Moreover, an operational manual for the relocation of displaced people through a Rental Cash Grant Approach was developed with the Coordination Unit for Construction of Housing and Public Buildings.

St. Lucia

The government has identified the factors leading to increased vulnerability in the housing sector as a priority for the country's DRM and climate resilience agenda. To this end, the **Hazard and Disaster Risk Assessment Framework project** launched an island-wide structural vulnerability survey (to start in July 2015) with a sample size of 500 households to generate physical vulnerability indicators of housing structures. The survey findings will help determine eligible structural home improvement interventions for resilience building under the World Bank-financed Disaster Vulnerability Reduction Project, currently under implementation.

Moreover, flood hazard assessment for watershed management was successfully launched with the participation of a representative from the Water Resource Management Agency (WRMA) in a four-week training at the University of Twente ITC in The Netherlands from February to March 2015. During the training, the flood hazard assessment that was carried out on a national level was refined and discussions on appropriate methodologies for watershed level analyses were initiated. A

draft methodology and training plan for a two-week, hands-on capacity building activity for the entire WRMA staff and representatives from the Ministries of Infrastructure and Physical Development was developed by the University.

Belize, Grenada, Jamaica and St. Lucia

The **Caribbean Disaster Risk Financing Technical Assistance Project** is being undertaken jointly with the Ministries of Finance in **Belize, Grenada, Jamaica** and **St. Lucia**, and is supporting the understanding and quantification of sovereign contingent liabilities to natural disasters and the development of an integrated disaster risk financing framework for the focus countries to support them in improving their financial resilience. The four individual projects are being implemented in collaboration with the Caribbean Catastrophe Risk Insurance Facility (CCRIF) Technical Assistance Program, and will also benefit from experience gained in current risk financing initiatives in the Pacific and Indian Ocean Islands (also financed by the ACP-EU NDRR Program). The projects started in May 2015, with project teams performing a desk review of existing disaster risk financing data.

Window 3: Post-disaster, Capacity Building & Recovery projects

The program funded two **post-disaster damage and loss assessments** in St. Lucia and St. Vincent and the Grenadines in response to floods and landslides caused by torrential rain on December 24-26, 2013. See Section 3 for more details.

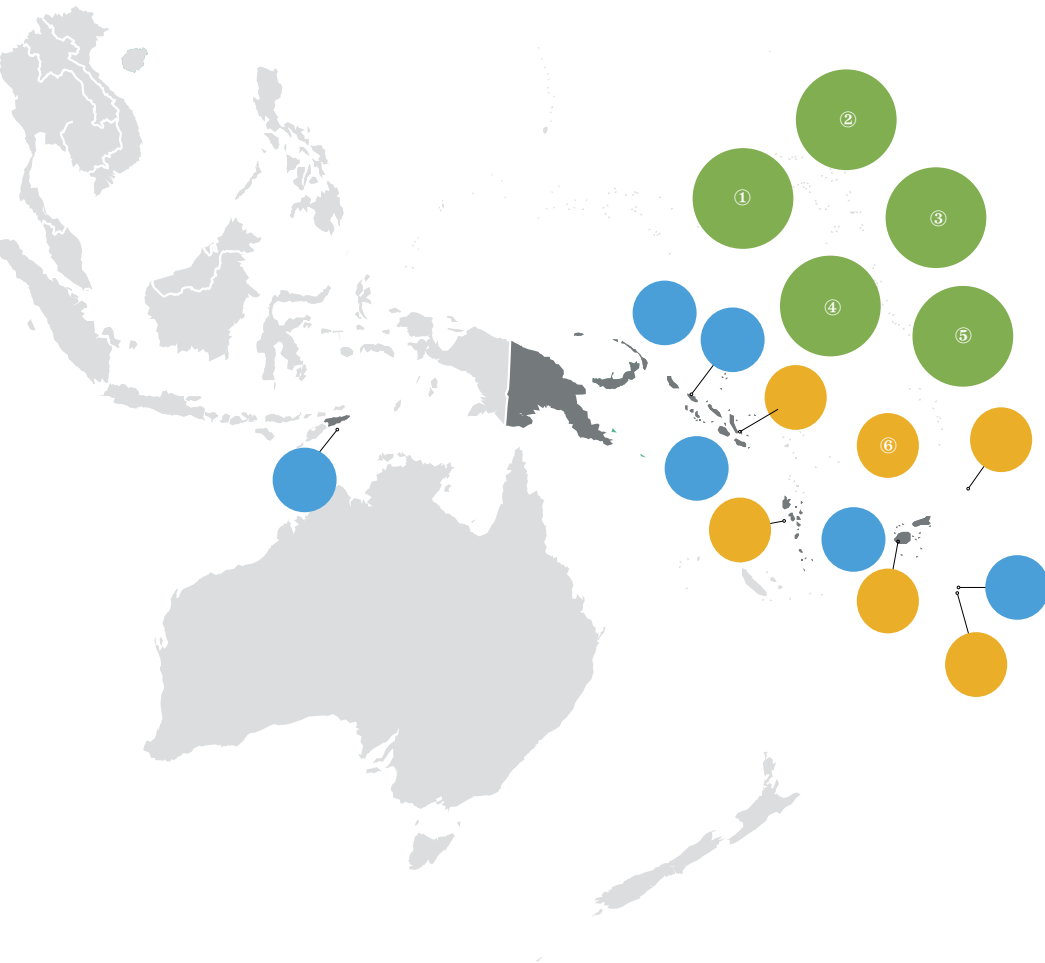
The **Strengthening Capacity in Post-Disaster Needs Assessment in the Caribbean Project**, implemented by UNDP, became effective in March 2014. In July, UNDP and the Caribbean Disaster Emergency Management Agency (CDEMA) launched a four-day regional workshop on PDNAs, building on the experience of the December 2013 floods assessment in St. Lucia and St. Vincent and the Grenadines.

Operational Portfolio – PACIFIC

Number of projects as of 30 June 2015

	Window 1	Window 2	Window 3	Total
COMPLETED	1	–	3	4
ONGOING	2	5	2	9
PIPELINE	2	2	-	4
TOTAL	5	7	5	17

The Program in the Pacific 17 Projects



WINDOW 1

REGIONAL AND SUB-REGIONAL
LEVEL ACTIVITIES

PCRAFI^① – BUILDING CLIMATE
DISASTER RESILIENCE^{②③} –
UNDERSTANDING RISK FORUM
2014 (LONDON, UK)^④ – ENHANCING
TARGETED DRR MEASURES^⑤



WINDOW 2

COUNTRY LEVEL ACTIVITIES

SOLOMON – SOLOMON ISLANDS –
TIMOR-LESTE – TONGA – VANUATU



WINDOW 3

POST DISASTER, CAPACITY
BUILDING AND RECOVERY

FIJI – SAMOA – SOLOMON ISLANDS
– TONGA – VANUATU – ECONOMIC
ASSESSMENT OF DISASTERS IN THE
PACIFIC^⑥

① Pacific Catastrophe Risk Assessment & Financing Initiative – Phase 3

②③ Fiji, Micronesia, Marshall Islands, Samoa, Solomon Islands, Tonga, Vanuatu

④ Marshall Islands, Micronesia, Palau

⑤ Attended by DRM Officials from the Caribbean & the Pacific

⑥ Secretariat of the Pacific Community Post Disaster Needs Assessment Capacity Building

2.3 ACP-EU NDRR Program in the Pacific

In the Pacific region, the ACP-EU NDRR Program has a portfolio of 17 projects, totaling \$13.5 million. Of these, four have been completed, nine are ongoing and four are in the pipeline, as of June 30, 2015.

Please refer to the list of projects, at different stages of implementation in Annex 2.

The Pacific projects portfolio includes:

- ✦ Mainstreaming at national/local level (Solomon Islands, Vanuatu);
- ✦ Data collection and risk information sharing (regional program PCRAFI);
- ✦ Sectoral risk assessment and building community resilience (Timor-Leste)
- ✦ Preparedness, contingency planning and early warning systems (Solomon Islands, Vanuatu);
- ✦ PDNAs and DaLA assessments (Solomon Islands, Fiji, Samoa, Vanuatu);
- ✦ Recovery Technical Assistance (Tonga)

The section below highlights selected project progress during the period under review.

Window 1: Regional projects

Pacific Island Countries

The **Pacific Catastrophe Risk Assessment and Financing Initiative (PCRAFI)** is a program that provides Pacific Island countries with state-of-the-art disaster risk information and tools to enhance their disaster risk management capabilities. It is made up of two components. The first is the **Pacific Risk Information System (PACRIS)**, a database containing detailed, country-specific information on assets, population, hazards, and risks. The project has progressed during the reporting period, despite hurdles in procuring qualified long-term technical consultants. SOPAC, the implementing agency, has made progress in setting up the PACRIS

database as a GeoNode¹¹ location. The pace of PACRIS upgrading and training is expected to pick up significantly in the next reporting period. The second component, aiming at developing an **Application for Rapid Disaster Loss Estimation** immediately following disasters, also progressed well. Prototypes of the initial rapid impact estimation tools for both tropical cyclones and earthquakes have been completed. Two events in 2014 provided opportunities to test the rapid assessment protocol: Tropical Cyclone Ian, which struck Tonga, and a tropical depression that flooded the Solomon Islands. In the next reporting period, the prototypes will be enhanced; the protocol will be refined and training provided to SOPAC.

The **Building Climate and Disaster Resilience in the Pacific Project**, covering up to up to seven selected Pacific Island Countries¹², which commenced in October 2014, is developing tools and methodologies to increase the capacity of these countries in mainstreaming DRM and CCA in the design of infrastructure investments. It will also undertake a needs assessment for providing end-to-end multi-hazard early warning services and develop an investment plan for upgrading/strengthening of early warning and preparedness systems. The project will also develop a baseline data acquisition using drone technologies, as well as support flood risk management specifically in the Solomon Islands and Fiji (these 2 sets of activities are still in the pipeline as of June 30, 2015).

The 3rd edition of the **Understanding Risk (UR)**¹³ Forum was held on June 30 - July 4, 2014 in London, UK, in partnership with University College London and the Willis Group. The five-day event provided

¹¹ GeoNode is a web-based application and platform for developing geospatial information systems (GIS) and for deploying spatial data infrastructures.

¹² Tentatively, participating countries are the Federated States of Micronesia, Fiji, Republic of Marshall Islands, Samoa, Solomon Islands, Tonga and Vanuatu. The countries will be selected based on their commitment to participate in a regional investment program to strengthen and modernize early warning and preparedness systems.

¹³ UR (<https://www.understandrisk.org/>) is a growing global community of over 3,000 experts and practitioners in the field of disaster risk assessment.

a platform to highlight new initiatives, build partnerships, and foster further advances in the field of disaster risk management, particularly risk assessments around the theme “Producing Actionable Information.” The London Forum featured 24 technical sessions, with more than 100 speakers, and almost 1,000 participants from governments, international organizations, finance, industry, civil society and academia. The ACP-EU NDRR Program supported in particular the participation of 10 Government representatives from Caribbean and Pacific countries, including the Minister of Land and Natural Resources of Vanuatu, and senior officials of Madagascar, Tonga, the Solomon Islands and Grenada. The technical sessions focused in particular on applying risk Information on Preparedness, Response, and Disaster Risk Financing. The UR conference proceedings are available at <https://goo.gl/vXj9Q1>.

Marshall Islands, Micronesia, Palau

The project **Enhancing Targeted Disaster Risk Reduction Measures in Micronesia**, implemented by the International Organization for Migration aims to enhance the resilience of selected communities to disaster risk and assist them in adapting to climate change throughout the Federated States of **Micronesia**, the Republic of the **Marshall Islands** and the Republic of **Palau**. Main activities foreseen are: participatory risk mapping and planning of community investments; beneficiary surveys and regional consultations to help design regional/national early warning systems; and geo-tagging and evaluation of public buildings and infrastructure with links to open source mapping platforms.

Window 2: Country projects

Solomon Islands

The **Community Resilience to Climate and Disaster Risk Project in the Solomon Islands (CRISP)** was launched in October 2014 with support from the Ministry of Environment, Climate Change, Disaster Management and Meteorology (MECDM). The project focuses on integrating climate change adaptation and disaster risk

reduction in government policies and operations, strengthening of climate and disaster risk information, and pilot climate change adaptation and disaster risk reduction investment activities. A draft structure to govern an integrated approach to CCA and DRM has been developed, with the following key features: (i) introduction of a Risk Resilience Development Council (RRDC), to replace the National Disaster Council (NDC), with both a disaster management and climate change focus; (ii) a rationalization of committee structures specified under the existing National Disaster Risk Management Plan (NDRM) and the National Climate Change Policy (NCCP); and (iii) introduction of a National Climate Change Bill and update of the 1990 National Disaster Council Act, with associated revisions to the NDRM and NCCP. Other completed activities include a South-South exchange between the Governments of Solomon and Vanuatu late 2014, which allowed to finalize the Volcano-Seismic Monitoring Needs Assessment for Solomon Islands report. Design, equipment requirements and specifications, including a draft work plan for the activity, covering three volcano monitoring sites (Simbo, Timbo and Tinakula) and two seismic monitoring sites (Buala and Rennel), have been prepared.

Tonga

A technical assistance (TA) grant for the **Increasing the Climate and Disaster Resilience of Post-disaster Reconstruction project** in support of the World Bank-funded Tonga Cyclone Reconstruction and Climate Resilient Project, is under preparation. The TA will support safer homes and communities through strengthening and updating of Tonga’s Building Code, public awareness and practices campaigns for self-enforcement; assessment and mapping of coastal hazards and risks to inform reconstruction planning and resilience building within the affected areas. A disaster recovery and reconstruction framework component will also aim at operationalizing and institutionalizing recovery and reconstruction, through the review and update of relevant legislation and institutional arrangements, and development of an operations

PROJECT HIGHLIGHT

INCREASING RESILIENCE TO CLIMATE CHANGE AND NATURAL HAZARDS IN VANUATU



The Vanuatu Meteorology and Geohazards Department in the capital Port Vila now has an upgraded Early Warning Center as well as new DRM and CCA units, strengthening its risk management capacity.

The Republic of Vanuatu, one of the Pacific Small Island Developing States, is exposed to one of the world's highest levels of disaster risk. The island group lies in the middle of the Pacific tropical cyclone belt and within the highly geologically active 'ring of fire.' The islands are therefore vulnerable to earthquakes, tropical cyclones, volcanic eruptions, storm surges, tsunamis, landslides, and coastal and river flooding. The World Bank-led Pacific Catastrophe Risk Assessment and Financing Initiative (PCRAFI), supported by the ACP-EU NDRR Program, estimates that the average annual natural disaster impact is \$48 million, equal to 6.6 percent of Vanuatu's GDP, one of the highest disaster-related financial burdens in the world.

Institutional Strengthening to Support DRM and CCA

The **Increasing Resilience to Climate Change and Natural Hazards in Vanuatu Project** has mobilized financing from the ACP-EU NDRR Program, the EU-funded Global Climate Change Alliance and the Global Environment Fund (totaling over USD 11 million), to support institutional strengthening for Disaster Risk Management (DRM) and Climate Change Adaptation (CCA), and to prepare investments increasing community resilience.

Vanuatu takes a coordinated, multi-sectorial approach that integrates DRM and CCA through the establishment of the **National Advisory Board for DRM and Climate Change (NAB)**, a cross-cutting body that includes directors of all government agencies and representatives from civil society. The ACP-EU NDRR grant is used to strengthen the National Disaster Management Office, a key member agency of the NAB, with the formulation of their strategic plan, legislation review and decentralizing its DRM services to the provincial level through the financing of the Disaster Centers for Tafea and Torba (to be completed in January 2016), and the hiring of two Provincial Disaster Officers.

The grant also supports NAB through a new Project Management Unit (PMU) that provides secretarial, central coordination and project management functions for DRR and CCA projects. NAB acts as both a focal point for all project activities and as an advisory board. The lessons learnt from the current arrangements have also informed government decision on undertaking further reform to set up a new Department of Climate Change under the Ministry of Climate Change to house the PMU and ensure closer collaboration and increased organizational efficiency and support to DRM and CCA operations across the country.

Efforts by the Ministry of Lands to integrate climate and disaster risk into urban and rural policies are also supported under the project, thus ensuring that the level of risk and sustainability are always considered in their implementation. Other key achievements include the creation of new DRM and CCA units now embedded within the Vanuatu Meteorology and Geo-hazards Department (VMGD), which has undertaken to procure early warning systems for volcanos in Ambrym, Tanna and Gaua and replace equipment damaged by TC Pam in March 2015.

The grant supports the Ministry of Internal Affairs' Department of Local Authority to develop its draft Community Development Planning Guideline integrating DRR/CCA. The guideline was trialed in August 2014, when formulating the South West Tanna Area Council Development Plan. Finally, the grant also helps recovery of TC Pam affected communities in Tanna and Shepherds through enhanced community disaster and climate resilience activities.

For more information, see <http://goo.gl/ZDIJLP>

manual detailing implementation and planning arrangements. Finally the project will aim at improving post-disaster mapping capacity to support efficient disaster response and recovery.

Timor-Leste

The **Climate and Disaster Resilience in Communities along Dili-Ainaro and Linked Road Corridors Project** kicked off in May 2014 with a workshop for key stakeholders and community members. In its first component, a natural hazards risk assessment was undertaken to collect data on floods, landslides and strong winds in 49 municipalities (sucos) along the Dili-Ainaro road. Using risk modelling, the project determined the vulnerability of each municipality. The produced data will help inform a community-based risk management system to be piloted under the next phase of the project in the 26 most vulnerable municipalities. Second, two rounds of Geographic Information System (GIS) training and a workshop on landslides assessment and analysis were delivered to 19 participants from various line ministries. A draft Community-Based Disaster Risk Management (CBDRM) Guide was developed and field tested, and selected technical manuals, for example, on landslide and flood mitigation measures, were produced for municipal-level implementation. Government officials also participated in an exchange study to Indonesia to observe CBDRM in action. Finally, a draft needs assessment report on CBDRM was produced. This

Timor Leste

A community-based risk management system will be piloted in the

26

most vulnerable municipalities

work has contributed to the signing of a \$2.7 million grant agreement between the Government of Timor-Leste and the World Bank in February 2015 to finance the Community-Based Disaster Risk Management project, which will use the hazard risk assessments and CBDRM guidelines developed under this project.

Vanuatu

See the Project Highlight below for details of the **Increasing Resilience to Climate Change and Natural Hazards in Vanuatu Project**.

Window 3: Post-disaster, Capacity Building & Recovery projects

Regional

The Pacific region was hit by disaster events such as tropical cyclones Evan (2012) and Ian (2014). The ACP-EU NDRR Program was at the forefront in responding to requests from governments and/or the ACP Secretariat to provide support for **post disaster assessments and recovery planning**, particularly in Fiji, Samoa, Solomon Islands, Tonga and Vanuatu. These activities were undertaken in close collaboration with the European Union, the United Nations and other development partners. See Section 3 on Post-Disaster Response for more detail.

Tonga

The **Technical Assistance for Recovery and Reconstruction Planning Post-Tropical Cyclone Ian Project** assisted in developing a Housing Reconstruction Policy (HRP) and strategy which supports the government's recovery and reconstruction planning through technical support for the mapping of post-disaster building damage and needs. The project is also providing training and capacity building to the Ministry of Infrastructure Policy and Planning Division. This includes preparation of a guidebook to draw lessons learned from housing recovery, reconstruction planning and implementation. It also provides practical guidance and tools for task teams.



Solomon Islands (April 2014). Photo credit: Rapid Assessment of the Macro and Sectoral Impacts of Flash Floods in the Solomon Islands Report – July 2014



Post Disaster Response

During the reporting period, a total of **eight post-disaster assessments** (Window 3) **were undertaken** in response to floods in Burundi, Cabo Verde, Malawi, Mozambique, Saint Lucia, Saint Vincent and the Grenadines, Solomon Islands, and Vanuatu.



On November 23, 2014, the Fogo volcano in the Cabo Verde (Cape Verde) islands began erupting for the first time in nineteen years. Photo credit: NASA image by Jeff Schmaltz

Burundi: Rapid Assessment Mission with Focus on Flood Risk Management

In February 2014, eleven hours of prolonged and heavy rainfall in Burundi created landslides and flash flooding leaving 69 people dead and destroying more than 3,000 houses. At the request of the government of Burundi (GoB), a **rapid assessment mission**, supported by the ACP-EU NDRR Program, took place in March 2014, led by the GoB and supported by the EU, the UN and the World Bank. The assessment report, published in mid-April, focuses primarily on urban planning, water and sanitation and road transport. The UN provided inputs on education, health and agriculture and the EU contributed to road sector and rural development.

The report includes three sections: (i) an analysis of hazard, exposure and vulnerability of infrastructure including identification of underlying risk factors;

(ii) quantitative evaluation of damages in each sector, with a qualitative description of how respective damages impact the economy and the population; and (iii) proposals for priority activities related to rehabilitation, reconstruction, and disaster risk management to reduce impacts on the occurrence of similar events in the future.

Total damages are estimated at \$4.4 million, about 0.18 percent of GDP. Short, medium and long-term recommendations have been proposed to increase the country’s resilience and advance the implementation of strategies set forth by the GoB in relation to infrastructure development and disaster risk management. This includes drainage schemes, urban planning, local development plans, national strategy for disaster risk reduction, and a national adaptation program of action.

To enable infrastructure rehabilitation together with DRM activities for a “build-back-better” resilient approach, \$17.2 million in funding is being considered for the emergency/medium term. In addition, \$20 million has been recommended for sustainable land management to stabilize watersheds and slopes around Bujumbura.

Recommendations from this assessment were used by the UN, EU, AfDB and the World Bank to justify the need for investments in agriculture, housing, road and urban infrastructure. Furthermore, an action plan for mainstreaming of disaster risk management into future development activities both at national and local levels is being developed by the GoB, with support from the World Bank.

Burundi – “build-back-better”

\$17.2
million in funding is being considered for emergency/medium term.

Saint Lucia, Saint Vincent and the Grenadines: Joint Rapid Damage and Needs Assessment

The Joint Rapid Damage and Needs Assessment (JRDNA) was conducted in January 2014 in collaboration with the authorities of **Saint Lucia** in response to a flood event of December 24-25, 2013. The assessment quantified damage to the country's infrastructure and social and productive sectors. It also identified and prioritized emergency recovery and reconstruction investments based on urgency, criticality and economies of scale.

An initial assessment of the total damage and loss was \$99.88 million (EC\$267.76 million), equivalent to 8.3 percent of Saint Lucia's gross domestic product. Transport infrastructure sustained 72 percent of damage, followed by agricultural infrastructure at 13 percent, water and sanitation at six percent and housing at four percent. Out of a total population of 180,870, six people were confirmed dead and over 550 were displaced. Nearly 20,000 were directly impacted by the event. The JRDNA findings were used to leverage emergency response resources, including \$17 million from the World Bank's IDA Crisis Window, approved in June 2014, to finance reconstruction. The government also used the findings to leverage additional bilateral funding for its emergency recovery needs. The JRDNA was presented to the government in February 2014 and published in June. To complement the JRDNA, an assessment of the hydro-meteorological and geotechnical characteristics of the disaster was conducted and a series of recommendations for short and long-term actions to improve resilience of the island to future adverse natural events was presented to the government. *Link to the report:* <http://goo.gl/xtDMnC>

In **Saint Vincent and the Grenadines**, the government declared a National Level Two disaster¹⁴, and shortly thereafter requested World

Saint Lucia, Saint Vincent and the Grenadines

\$17

million from the World Bank's IDA Crisis Window, approved in June 2014, to finance reconstruction.

Bank assistance to conduct a rapid damage and loss assessment and support for recovery and reconstruction. The World Bank team supported technical ministries such as the Central Water and Sewage Authority, the Ministry of Transport and Works and others in assessing and quantifying damages to critical infrastructure. According to the summary of the data reported from each affected sector, the flood event of December 24-25, 2013 resulted in total damages and losses of \$108.4 million (EC\$291.4 million), equivalent to 15 percent of the country's GDP. Most of the flood damage was sustained in the infrastructure sector (97 percent) followed by the social (three percent) and productive sectors (under one percent). The assessment findings were presented to the government of Saint Vincent and Grenadines in January 2014 and were used to **leverage bilateral funding to support emergency response, including \$19 million** from the World Bank's IDA Crisis Response Window to support the country's reconstruction efforts. *Link to the report:* <https://goo.gl/qMNp5k>.

The Saint Lucia and the Saint Vincent and the Grenadines assessments, process, findings and lessons learned were discussed and shared among national and regional technical experts during the Caribbean Open Disaster Risk Information Webinar, organized by the World Bank in April 2014 (https://www.youtube.com/watch?v=bsh5_gduilw). During the preparation of both assessments, World Bank teams consulted the EU Delegation in Barbados and with other

¹⁴ A classification which indicates that national emergency response and recovery capacities are not overwhelmed, but are limited and specialized regional and/or external assistance was requested.

development partners, such as UNDP, CDB and DfID. Linkages with these regional partners were created to ensure that knowledge and processes would be shared and that some capacity would be built throughout the process. More specifically, the ensuing UNDP-led PDNAs were informed by the findings of both assessments.

Solomon Islands: Rapid Assessment of the Macro and Sectoral Impact of Flash Floods

Following the severe flooding in Solomon Islands in April 2014, the Solomon Islands government (SIG) declared Honiara City and Guadalcanal Province as disaster zones on April 4, 2014. On April 5, the SIG requested international emergency assistance to aid relief efforts in response to this exceptional event. On April 17, 2014, the SIG asked the World Bank to take the lead in coordinating partners in a Rapid Assessment of the Macro and Sectoral Impacts of the flooding. The assessment began on April 28, 2014, and involved representatives from SIG, ADB, UNICEF, FAO and the World Bank, and close collaboration with the governments of Australia and New Zealand. Through global and regional cooperation, the assessment, coordinated by the SIG and the World Bank with key partners including the European Union Delegation, provides a summary for the estimated costs for recovery and reconstruction, assessed at \$56.02 million (SBD401 million). Of this amount, \$14.59 million (SBD99 million) is required in the short term (three to six months) with the remaining activities focused over the medium and long term (beyond six

Solomon Islands

\$56

million estimated costs for recovery and reconstruction.

Malawi

\$80

million World Bank funded Flood Emergency Project.

months), with the inclusion of some build-back-better initiatives. The assessment report was launched in October 2014 and can be accessed at <https://goo.gl/UgsKnj>.

Malawi: Flood Post Disaster Needs Assessment

Following the devastating January 2015 floods, the Government of Malawi (GoM) requested technical assistance to provide immediate support in the development of a Post-Disaster Needs Assessment (PDNA) and a subsequent Recovery and Reconstruction Framework on 28 January, 2015.

The January 2015 seasonal rainfall was the highest on record for Malawi, and caused significant flooding primarily in the Southern Region, which affected 1.1 million people, displaced 336,000 and killed 106. Based on the PDNA financially supported by ACP-EU NDRR program, estimates of damage and losses amount to \$335 million (equivalent to approximately five percent of GDP) and recovery and reconstruction needs to \$495 million. The GoM has tasked the Department of Disaster Management Affairs (DoDMA) to lead the development and coordination of a programmatic, cross-sectoral framework of recovery interventions. The PDNA has helped to leverage a World Bank funded \$80 million Flood Emergency Recovery Project, a multi-sectoral project, which addresses both short, medium, and long term interventions, with an objective to sustainably restore agricultural livelihoods, reconstruct critical public infrastructure to improved standards in the flood-affected districts, and improve the GoM's disaster response and recovery capacities. The



Malawi floods, 2015—Villagers rush towards an army boat—among thousands that were evacuated. Photo credit: UNICEF

report was launched in June 2015 and is available at <https://goo.gl/cpOn94>.

An ACP-EU NDRR Program-funded technical assistance (under the same project above) is also helping inform the recovery framework, making use of the Disaster Recovery Framework guidelines, jointly developed by the European Union, UNDP, the World Bank, and GFDRR. Activities include assisting the GoM and DoDMA to develop a Disaster Recovery Framework by: (i) defining and aligning national and sector-level recovery visions, guiding principles, and priorities to long-term development objectives; and, (ii) establishing sequenced and prioritized cross-sectoral framework of recovery interventions. The Disaster Recovery Framework would inform investment interventions supported by external partners.

Mozambique: Rapid Assessment with focus on Flood Risk Management

Starting January 12, 2015, Mozambique experienced widespread flooding in the Zambezia province. Floods extended to neighboring Nampula and Niassa provinces. Official data indicate 157,000 people affected by the floods (125,000 in Zambezia, 12,000 in Niassa and 20,000 in Nampula) and points to a death toll of 158 (out of which 134 were in the Zambezia province). Nearly 2,000 classrooms (of which 381 in conventional building materials) were

damaged. The Government requested support in February 2015 for a rapid assessment, to which the World Bank, United Nations and European Union positively responded. A mission co-financed by the ACP-EU NDRR Program was carried out from March 3 – 13, 2015. The objectives were to (i) evaluate the impact of the events on the population and infrastructure; (ii) provide expert advice to the Government on handling the flood impact, managing the short to medium-term response and identify areas for follow-up advisory support; (iii) based upon funds availability, identify financial support to the flood response and recovery, consisting of potential reallocation from ongoing projects, additional financing and grant funding, and; (iv) develop and agree with the government on a set of next steps for achieving flood recovery and building long-term disaster resilience in the three affected provinces.

The estimated damage is in the order of \$213 million or 1.3 percent of national GDP. The total recovery and reconstruction recommended priorities amounts to \$464 million, out of which \$281 million are for roads and bridges, \$67 million for drinking water supply, \$46 million for agriculture and fisheries, \$14.5 million for energy and \$12.6 million for dikes.

The Government, with support from the World Bank, is preparing a US\$40 million IDA emergency recovery project to restore the functionality of critical infrastructure in a resilient manner for the disaster-affected provinces, and to improve the

Mozambique—Grants from GFDRR

\$2.5

million for DRM capacity strengthening and Safer Schools Project following recommendations from the assessment.

Government of Mozambique's (GoM) capacity to respond promptly and effectively to an eligible crisis or emergency. The project focuses on recovery and reconstruction of classrooms (with a safer school approach), dikes (with a watershed flood management approach), and drinking water supply and irrigation schemes.

In parallel, resources from GFDRR have been allocated to support the GoM in two specific areas: a US\$1 million grant to strengthen the National Institute for Disaster Management's capacity for DRM; and, a US\$1.5 million grant for a Safer Schools Project. These grants will play a key complementary role in the recovery and reconstruction phase by providing technical assistance as well as analytical and planning support to reconstruction and long-term resilience building.

Cabo Verde: Volcano Eruption PDNA

The eruption of the Pico do Fogo volcano began on November 23, 2014 and continued until February 8, 2015. By the end of the eruption, the lava had covered an area of approximately 520 ha with an average 8-meter height lava wall. Although there were no reported fatalities, a total of 260 houses were destroyed as well as public infrastructure such as: schools; two hotels; a health center; 5.7 km of roads, two churches and the visitor center of Fogo Natural Park. Following the humanitarian relief efforts, the Government of Cabo Verde (GoCV) requested in March 2015 support from the EU, UN and the WB to conduct a PDNA.

The total value of the damages and socio-economic losses has been estimated at \$30.9 million. The effects of the disaster were concentrated on the productive sectors followed by the social sectors (27 percent of the total) with consequent major impact on the livelihoods of the affected population. The estimated value of destruction of assets and disruption of production flows is equivalent to about two percent of the country's GDP. The PDNA identified key recovery needs including the restoration of livelihoods, social systems and services while also covering rehabilitation, rebuilding and improvement of private and public infrastructure. The financial requirements to achieve post-disaster recovery have been determined at \$37 million. The government has established a recovery fund that is financed by a temporary increase in VAT of 0.5 percent. This fund will also include and disburse funds received from donors for recovery and reconstruction. The rehabilitation of temporary houses has started as well as the construction of new houses on a new location for the families that have lost their houses to the lava flow. The government expects that the recommendations will guide the use of funds out of the recovery fund for the medium to long term recovery.

In addition, the GoCV has started conversations with the World Bank, to be a pilot for an innovative instrument, known as a Debt-for-Resilience Swap. The swap will serve as a financing mechanism aimed at reducing the stock and cost of external debt in exchange for reforms to increase climate resilience, and to improve the ability to manage the impact of natural disasters and climate change. The proposed financing would complement a Development Policy Loan (DPL) that envisages debt reduction and debt restructuring, while creating fiscal space for growth, conservation, and resilience investments. The final PDNA report will be available by fall 2015.

Facing page: Vanuatu PDNA—Destroyed and severely damaged homes mapped from unmanned aerial vehicle footage.
Photo credit: Humanitarian Open Street Map.

Vanuatu: Tropical Cyclone Pam PDNA

Further to an official request from the Government of Vanuatu (GoV), the World Bank and GFDRR, in coordination with the EU and UN, supported the GoV **Tropical Cyclone Pam (TC Pam) PDNA**. The objective of the PDNA was to (i) assess the socio-economic impact of TC Pam including quantifying the damage and loss in critical sectors of the economy; (ii) identify priority needs for critical sectors of the economy with a particular focus on resilient recovery and reconstruction activities with indicative costs where possible; (iii) identify potential financing gaps and needs; and iv) review current disaster risk management capacity and propose a strategy with measures to reduce risks and make all recovery disaster resilient.

The assessment concluded that the total economic value of the effects caused by Tropical Cyclone Pam was estimated to be approximately \$390 million. This is equivalent to 47 percent of GDP in Vanuatu, giving an indication of the scale impact. The sectors which sustained the highest level of damage were the housing sector (40 percent of the total damage costs), followed by the education sector (17 percent) and transport sector (13 percent). In contrast the largest level of economic loss is expected in the agriculture and tourism sectors, which are estimated at 33 percent and 26 percent of the total losses respectively. In addition, the environmental sector suffered significant losses to ecosystem services, although these losses are not accounted within the impacts to GDP. Total recovery and reconstruction needs are

**Economic value of the effects
caused by Tropical Cyclone Pam**

\$390

**million or 47 percent of GDP
in Vanuatu.**

estimated at \$268.4 million. Of this amount, \$55.3 million is required in the short term (during the first twelve months) with the remaining activities focused over the medium-long term (twelve months). The PDNA report is available at <https://goo.gl/IMXDTk>.

The assessment helped the GoV to access financial resources, including IDA Crisis Response Window funds, to finance infrastructure rehabilitation and reconstruction as well as support to the private sector, and enhanced DRM. It has leveraged US\$164 million out of which a joint IDA/IFC additional financing for TC Pam recovery amounted to US\$84 million. In addition, ADB mobilized US\$12 million and bilateral donors have mobilized a total of US\$68 million.

In addition, TC Pam has triggered an **insurance pay-out of \$1.9 million** to the GoV under the Pacific Catastrophe Risk Insurance Pilot, implemented in the framework of the ACP-EU NDRR-supported Pacific Catastrophe Risk Assessment and Financing Initiative (PCRAFI). This insurance pay-out allowed a rapid cash injection to the national budget of Vanuatu.





Students from Rensarie College, Malekula Island, return from school.
Photo credit: Tom Perry / World Bank



4

Strengthening DRM Regional Coordination in Africa

In August 2014, the World Bank signed a \$24 million (EUR 20 million) commitment with the EU to support DRM activities in Africa. This funding is part of the EU-Intra ACP cooperation program “Building Resilience to Natural Hazards in Sub-Saharan African Regions, Countries and Communities”, financed under the 10th European Development Fund, and implemented by partner organizations, namely the African Development Bank, African Union Commission, UNISDR, and World Bank/GFDRR, each responsible for a “result area¹⁵”. Its scope includes mitigating the potential impacts of climate change in order to reduce poverty and promote sustainable development.

One of the two result areas managed by the World Bank/GFDRR, also known as “Result 2” or “R2”, aims at (i) strengthening the coordination capacity of African Regional Economic Communities (RECs) and (ii) helping them develop planning and policy advisory capacities to support their respective member states and regional/sub-regional programs on DRM. African universities, research centers, river basin authorities, and technical organizations are also engaged in this effort.

Participating RECs include the Economic Community for Central African States (ECCAS), the Economic Community of West African States (ECOWAS), the Intergovernmental Authority on Development (IGAD), and the Southern African Development Community (SADC). Thanks to their involvement, African governments, decision makers, and communities of practice will be able to leverage additional expertise, technical knowledge, and best operational practices from a wide range of stakeholders.

Activities kick-started with a preparatory workshop and Partnership Day held in Brussels in September 2014. Throughout the reporting period, GFDRR and the World Bank’s Africa DRM team worked in close collaboration with each REC to finalize work plans and explore areas of cooperation. As of June 30, 2015, two (ECCAS and ECOWAS) out of the four planned REC projects are operational and will focus on policy dialogue, flood management, risk management, preparedness, and capacity building.

¹⁵ R1 - Extended Programme of Action for the Implementation of the Africa Regional Strategy for Disaster Risk Reduction operational. Implemented by the AUC and the UNISDR.

R2 - African Regional Economic Communities have DRR coordination, planning and policy advisory capacities operational to support their respective member states and regional and sub-regional programmes. Implemented by the GFDRR.

R3 - Core capacities of the specialized national and Regional Climate Centres are improved, to meet the needs of DRM agencies and socio-economic sectors for effective use of weather and climate services and Community-focused and real-time Early Warning Systems. Implemented by the AfDB.

R4 - African countries have improved knowledge of risks through, the compilation of historical disaster related data to inform the assessment and modelling of future risks. Implemented by the UNISDR.

R5 - Multi-risk financing strategies are developed at regional, national and local levels to help African countries make informed decisions and to mitigate the socio-economic, fiscal and financial impacts of disasters. Implemented by the GFDRR.

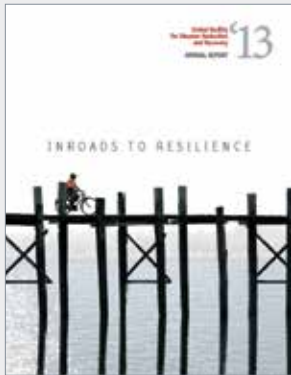


5

Annexes

Annex 1 – Communication and Visibility Outputs

Publications & Reports



The GFDRR Annual Report 2013 was published in early February 2014. A milestone year for GFDRR, 2013 saw a strengthening of GFDRR’s strategy and structure, including its monitoring and evaluation scheme, as well as robust results in a number of focus areas. The report highlights the Facility’s operational and knowledge sharing activities in the last fiscal year and features a special 2-page insert on the ACP-EU Natural Disaster Risk Reduction Program (pp. 32-33). Link to the report: <https://goo.gl/2aqIOr>

GFDRR’s work plan from July 2013 to June 2014, and is organized according to its Five Pillars of Action: Risk Identification, Risk Reduction, Preparedness, Financial Protection, and Resilient Recovery. The report also captures a snapshot of the organization’s most successful disaster risk management initiatives, and showcases the role partnerships play in making GFDRR’s work possible at the local, national, and global levels. A special feature on the ACP-EU NDRR Program is included. To read the full report go to: <https://goo.gl/XUEJ6N>

Short, medium and long-term recommendations have been proposed with the objective to increase the country’s resilience and to advance the implementation of strategies set forth by the GoB in relation with infrastructure development and disaster risk management (drainage scheme, urban planning document, local development plans, national strategy for disaster risk reduction, and national adaptation program of action). Link to the report (in French): <https://goo.gl/We6IF6>



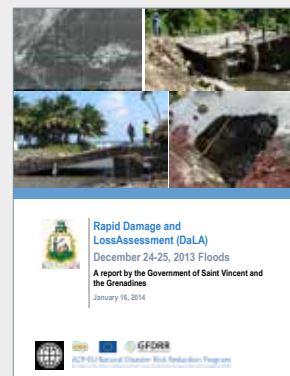
Rapid Assessment of the Macro and Sectoral Impacts of Flash Floods in the Solomon Islands

A slow-moving tropical depression caused persistent heavy rains in the Solomon Islands between April 1 and April 4, 2014. The total economic value of the flooding’s impact is estimated at SI\$787.3 million (US\$107.8 million), equivalent to 9.2 percent of GDP. The sectors that sustained the highest level of damage were housing (56%) and transport (23%), and the greatest economic loss is expected in the mining sector (50 %) and agriculture sector (31 %).The assessment was prepared with financial support from the ACP-EU NDRR Program. Link to the report: <https://goo.gl/UgsKnj>



Burundi Rapid Assessment 2014

At the request of the Government of Burundi (GoB), a rapid assessment mission, co-financed by the ACP-EU NDRR Program, took place in March 2014, led by the GoB and supported by the EU, the UN and the WB. The assessment report, which was published in mid-April 2014, focuses primarily on urban planning, water and sanitation and road transport.

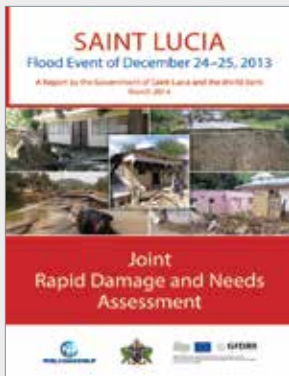


Saint Vincent and the Grenadines Rapid Damage and Loss Assessment (DaLA)

This report provides an the ACP-EU NDRR Program-financed rapid damage and loss assessment of the sectors affected by the December 2013 heavy rains – with a particular focus on infrastructure damage in order to inform the GoSVG’s recovery, reconstruction and financial planning. Link to the report: <https://goo.gl/qMnp5k>



GFDRR’s Annual Report 2014 “Bringing Resilience to Scale” highlights progress and results achieved against



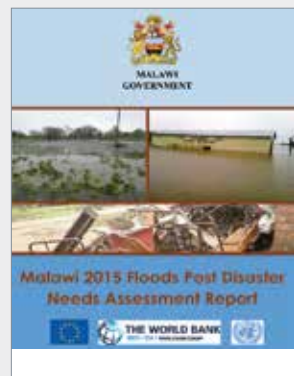
St Lucia Joint Rapid Damage and Needs Assessment

On December 24 and 25, 2013, at a time outside the normal hurricane season, a tropical trough system passed over Saint Lucia and produced extraordinarily heavy rains with the highest intensities recorded in the southern portion of the island. The island suffered severe damages to infrastructure, primarily related to transportation, water, and housing, with the worst damage in the south. Based upon an initial assessment of impacts to each affected sector -funded by the ACP-EU NDRR Program- the December 24–25 flood event resulted in total damage and loss of US\$99.88 million (EC\$267.76 million), equivalent to 8.3 percent of Saint Lucia’s gross domestic product. Link to the report: <http://goo.gl/xtDMnC>

Malawi 2015 Flood Post Disaster Needs Assessment

The extensive floods of January 2015 in Malawi were the most devastating in terms of geographical coverage, severity of damage and extent of loss: it constituted a 1 in 500 year event. An estimated 1.1 million people were affected, 230,000 displaced, 106 killed and 172 reported missing. According to the PDNA

findings, the total disaster effects and recovery and reconstruction needs come to around \$335.0 million (equivalent to approximately 5.0 percent of GDP) and \$494 million respectively. Excluding private housing, transport poses the single largest recovery needs (at 32 percent), followed by agriculture (including crops, irrigation, fisheries and livestock) (at 16 percent) and water and sanitation (at 13 percent). The report introduces guiding principles for reconstruction, presents the macro-economic impact of the floods, the social and environment effects of the disaster as well as the disaster risk management and climate change considerations. Link to the report: <https://goo.gl/cpOn94>



Vanuatu Post Disaster Needs Assessment Tropical Cyclone Pam, March 2015

The extensive and intensive PDNA exercise was conducted over three week period. The report indicates that total economic value of the effects caused by Tropical Cyclone Pam is estimated to be approximately \$449.4 million. The losses are estimated to reduce GDP growth by 5.5 percentage points relative to the 2015



pre-cyclone forecast, bringing the growth rate down to -0.9% and representing a significant slowdown to the Vanuatu economy in 2015. The cyclone also seriously harmed the livelihoods of over 40,000 households, severely limiting their capacities to generate income and resulting in losses in personal income, while damaging or destroying community infrastructure. To facilitate a resilient recovery, a detailed road map, including programs, are being developed for sectors where clear funding options have been identified. The report suggests that the first step in building long term disaster resilience is to perform a complete review of the DRM arrangements to cover disaster preparedness, response, and early warning as well as DRM arrangements across all of government, the private sector, and communities. Link to the report: <https://goo.gl/IMXDtk>

Stories of Impact

This innovative GFDRR outreach series highlighting achievements in disaster risk management initiatives featured seven ACP-EU NDRR funded projects:



Community based Disaster Risk Reduction in Niger

In the Sahel, the climatic and geographic transition into the Sahara desert creates enormous and unpredictable risk for drought and water scarcity. More frequent and intense natural disasters are hampering the recovery of vulnerable communities as new crises aggravate the lingering effects from older ones. To help mitigate these and other risks, the World Bank Group—with support from ACP-EU NDRR Program—have financed an almost \$1 million disaster risk reduction project in Niger to build capacity of local communities for early warning and response. Link to the SOI: EN: <https://goo.gl/P5E9P1> FR: <http://goo.gl/5DYyJd>



Assessing Post-Disaster Needs in Nigeria

Mid-2012 saw record rainfall and widespread flooding within the Federal Republic of Nigeria, with unprecedented losses in human life and productivity. Because of the scale and severity of the destruction the Government of Nigeria mobilized key partners to conduct a comprehensive Post-Disaster Needs Assessment. In the framework of the ACP-EU NDRR Program the assessment thoroughly analyzed the social and economic impact of the flooding, and provided the crucial framework for rapid response and recovery efforts. Link to the SOI: EN: <https://goo.gl/m03W5Y> FR: <http://goo.gl/TydzXZ>

Stakeholders Engage to Build Belize's Climate Resilience

With the increasing incidence of climate-related disasters, the Government of Belize



is working to improve its resilience by transforming the country's approach to economic and social development with a national plan that cuts across all sectors of the economy. The \$1 million ACP-EU NDRR/GFDRR grant leveraged a \$30 million World Bank Group project, which led to the development of the \$520 million National Climate Resilience

Link to the SOI: EN: <https://goo.gl/O08FiC> FR: <http://goo.gl/dczN6h>



Strengthening Financial Resilience in the Pacific

The Pacific Island region is highly vulnerable to natural disasters and climate-related hazards, costing some countries an average of up to 6.6% of gross domestic product (GDP) every year. In response to requests from 15 countries, the Pacific Catastrophe Risk Assessment and Financing Initiative (PCRAFI) was formed in 2007 to help mitigate disaster and climate change risk. Under this initiative, the first regional Catastrophe Risk Insurance Pilot (the Pilot Program) was formed and is significantly helping post-disaster response in the Marshall Islands, Samoa, the Solomon Islands, Vanuatu, Cook Islands and Tonga – the first country to receive a

recovery payment following the devastation from Cyclone Ian of January 2014. Link to the SOI: EN: <https://goo.gl/5Wtir4> FR: <http://goo.gl/qgbC8C>



Resilient Recovery in Samoa after Cyclone Evan

Following the powerful Tropical Cyclone Evan that swept across the island of Samoa in July 2012, the World Bank and GFDRR, with funding from ACP-EU NDRR Program worked with the government to assess damages, launch a comprehensive disaster recovery and reconstruction plan to make the transport and agriculture sectors more resilient, and strengthen the country's financial capacity to manage future shocks from natural disasters. Link to the SOI: EN: <https://goo.gl/tRw2xs> FR: <http://goo.gl/K2leSb>

Building Back Better in Tonga after Cyclone Ian

After Tropical Cyclone Ian swept through the Pacific Island nation of Tonga in 2014, the government, the World Bank, and GFDRR, with funding from ACP-EU NDRR Program worked to rapidly assess the damages, and implement a recovery program which would strengthen the housing and transport infrastructure sectors against future natural hazards.



Links to the SOI: EN: <http://goo.gl/n28wd6> FR: <http://goo.gl/zc9jlk>

Weathering Future Storms in the Seychelles

When Tropical Cyclone Felling battered the multi-island country of Seychelles with heavy rain in January 2013, the government of Seychelles (GoS), with support from the World Bank and ACP-EU NDRR Program worked to assess the damages and ensure that recovery efforts mitigate the effects of future natural hazards. The GoS developed short, medium and long-term disaster resilient development initiatives which are expected to benefit 87,000 people, and rehabilitate and protect 500 km of roadways from disasters. The Damage and Loss Assessment (DaLA) laid the foundation for the creation of Sub-Saharan Africa's first World Bank-financed disaster contingent credit line, which



provides the government with \$7 million in immediate liquidity in the aftermath of a large-scale catastrophe. Links to the SOI:

EN: <https://goo.gl/csOu6R>

FR: <http://goo.gl/WKIW7C>



ACP-EU NDRR Program

brochure outlines the Program’s objectives and selected achievements and was published in English and French. Link to the brochure: <http://goo.gl/QFpfII>

Investing in Resilience

(Sendai 2015) Released for the World Conference on Disaster Risk Reduction (WCDRR), held in Sendai in March, “Investing in Resilience” emphasizes that by investing in resilience, we can better manage climate and disaster risk to help end extreme poverty and boost shared prosperity. ACP-EU NDRR Program is highlighted as an example of the



successful partnership, showcasing the power of collaboration on the Hyogo Framework for Action. Link to the report: <https://goo.gl/YRopAe>

Articles & Blogs



World Bank to Help Solomon Islands with Disaster Resilience - Community Resilience to Climate and Disaster Risk Project (CRISP)

The CRISP was officially launched on October 30, 2014, in Honiara, Solomon Islands. The objective of CRISP, which was approved in December 2013, is to increase the resilient capacity of selected communities to the impacts of climate change and natural hazards. The US\$2 million ACP-EU NDRR Program support to CRISP is a co-financing as part of a larger project leveraging GEF1 funding of US\$7.31 million. The CRISP launch was covered in few media outlets, acknowledging support from the ACP-EU NDRR funding. Please see links: <http://goo.gl/2rdvTE>; <http://goo.gl/oyKosq>

World Bank and Government of Timor-Leste Improving Disaster Resilience along the Dili-Ainaro Road Corridor The Government of Timor-Leste and the World Bank signed on February 6, 2015 a \$2.7 million grant agreement that will finance the *Community-Based Disaster Risk Management project*, in a ceremony attended by the Minister of Social Solidarity, the Ambassador of Japan, UNDP Country Director, the Head of the EU Delegation, and World Bank Country Representative. EU funding through the ACP-EU NDRR Program enabled the development of hazard risk assessments in communities along the Dili-Ainaro road corridor and Community-Based Disaster Risk Management guidelines,



H.E. Isabel Amaral Guterres, Minister of Social Solidarity with EU Head of Delegation Sylvie Tabesse on the day of the launch. Photo credit: World Bank

which will guide project implementation moving forward. To read the full article: <http://goo.gl/1s01r5>



Resilience through innovative financing in the Pacific For small island states, climate and disaster resilience is more than merely a budgetary safeguard – it’s an economic imperative. To strengthen resilience for Pacific Island Countries (PICs), the Global Facility for Disaster Reduction and Recovery (GFDRR) has been developing targeted initiatives to bolster disaster preparedness and response, especially through innovative financial protection instruments. PCRAFI is made possible through the collective efforts of the World Bank Group’s Disaster Risk Financing and Insurance (DRFI) Program, the Secretariat of the Pacific Community, the Government of Japan, GFDRR, and the ACP-EU Natural Disaster Risk Reduction Program. Link to the article: <https://goo.gl/rMb2Im>.

Project Launches



Southwest Indian Ocean Risk Assessment and Financing Initiative (SWIO RAFI)

The SWIO RAFI seeks to address high vulnerability of the Southwest Indian Ocean Island States to disaster losses from catastrophes such as cyclones, floods, earthquakes and tsunamis. The initiative is being implemented with financial support from the ACP-EU NDRR Program. A Brochure about

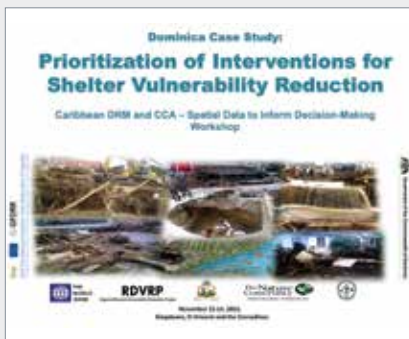
SWIO RAFI was published: <https://goo.gl/hBQgL1>



of Guyana together with the World Bank. The CAP workshop, the publication of the project findings – “Managing Flood Risk in Guyana,” and the production of a [video](#)

[animation \(https://goo.gl/dNISB9\)](https://goo.gl/dNISB9) were co-funded by the ACP-EU NDRR Program, in the framework of the “*Strengthening Guyana’s Coastal Lands Information Systems and Adaptation Awareness*” project, which aims at implementing a communications strategy for the CAP and strengthening Guyana’s information systems on coastal lands. The project also strives to strengthen the level of coordination among stakeholders in the Government of Guyana and the donor community towards developing a more comprehensive flood control strategy, which would ultimately reduce Guyana’s vulnerability to catastrophic flooding.

Capacity building



Caribbean Disaster Risk Management & Climate Change Adaptation: Data to Decision-Making Workshop (Kingstown, Saint Vincent and the Grenadines, November 12-14, 2013)

The Government of Saint Vincent and the Grenadines organized a workshop in Kingstown last November 12-14 to build upon national and regional activities in data sharing and management and the use of spatial data integration into decision-making processes. The workshop was attended by representatives of governmental agencies (Saint Vincent, Saint Lucia, Belize, Saint Kitts and Nevis, Grenada, Dominica, Guyana and Antigua and Barbuda) and regional organizations (Caribbean Development Bank, UNDP Caribbean, Organization of Eastern Caribbean States and University of the West Indies). The objective of the workshop was to share regional experience, build capacity for tools that support spatial data collection, processing, visualization and analysis and increase coordination between agencies and countries in the region by developing a support network. The prioritization of interventions for shelter vulnerability reduction in Dominica, activity funded by the ACP-EU NDRR program, was presented during the workshop.

Link to the presentation: <http://goo.gl/wcf33C>

Outreach events

Strengthening Guyana’s Coastal Lands Information Systems and Adaptation Awareness

The Conservancy Adaptation Project (CAP) Workshop was held in Guyana on March 7, 2014, organized by the Ministry of Agriculture

Support to the Fifth Africa Regional Platform for Disaster Risk Reduction (DRR)

The Africa contribution to the post-2015 framework for DRR is being developed, under the leadership of



of the African Union Commission, through a series of consultations at national, sub-regional and regional levels. The outcome of the processes – a *Draft Africa’s contribution paper on post-2015 framework for DRR* – has been discussed at the Fifth Africa Regional Platform for Disaster Risk Reduction (AfRP) in Abuja, Nigeria, on 13-16 May 2014, and adopted through a Declaration at the high-level Ministerial Segment of the Platform. The World Bank Africa Disaster Risk Management team has supported the AfRP process thanks to an ACP-EU NDRR Program grant, by facilitating the participation of senior government officials (ministers and/or their delegates) from selected sub-Saharan African countries, in order for them to consolidate and present Africa’s Contribution to the Post-2015 Framework for Disaster Risk Reduction; and by facilitating the contribution of speakers from African countries to various sessions (i.e. on risk financing) being organized at the Platform.

Workshop on the Caribbean Handbook on Risk Information Management (CHARIM)

A workshop was held in Kingstown on September 29-October 3, 2014 focusing on the Caribbean Handbook for Risk Information Management (CHaRIM), under the Caribbean Risk Information Programme to support the Integration of DRM Strategies in Critical Sectors (Window 1). This workshop built on previous in-country workshops over the last three months, which included and



focused on: Belize, Dominica, Grenada, Saint Lucia, and SVG. The objectives of CHaRIM Workshops were to build capacity on natural hazard risk and risk assessment

methodologies to inform physical and infrastructure planning, provide training on several components of the CHaRIM, and obtain feedback from participants on the handbook's content and applications. Participants included Chief/Senior engineers from the Ministries of Works/Infrastructure, Chief/Senior planners from the Ministries of Physical Planning and Geographic Information System (GIS) data coordinators from the participating countries. The website is openly accessible throughout the process in order to allow participating countries and regional partners to provide feedback. Link to website: <http://charim.net/>

Project Websites

Dominica's "Dominode" platform

In the framework of the ACP-EU NDRR-funded "Spatial data management and identification of most vulnerable schools and shelters project" in



Dominica, the Dominica Open Data Portal (Dominode), developed by The Government of Dominica's Divisions for Physical Planning, Lands and Survey, and the Office of Disaster Management, was launched and is accessible at <http://dominode.net/>. It captures data from all sectoral agencies and departments in Dominica, and provides a simple platform for data sharing. A new data dictionary is currently being created and teams are collecting additional data in order to upload additional layers.

Videos

ACP-EU NDRR Program

The French and the English versions of the ACP-EU NDRR video have been finalized and are ready to be shared with

key constituencies, upon agreement among the ACP Secretariat, the European Commission and GFDRR on a joint dissemination strategy.

Link: EN: <https://goo.gl/8CDOxz>

FR: <https://goo.gl/fjMXCv>



Understanding Risk (UR) 2014 highlights can now be viewed online

Over a period of five days in London, UR2014 convened 840 participants from more than 60 countries, representing 285 institutions that covered government agencies, the private sector, NGOs, research institutions, academia and civil society. The Forum was organized in partnership with Willis, University College London, the World Bank, Esri, RMS and Google. The ACP-EU NDRR Program provided financial support for the Forum, giving the opportunity for several government officials from the Caribbean and Pacific regions to attend. Under the theme Producing Actionable Information, 24 technical sessions and workshops led by various international organizations were held, covering topics such as: decision-making under uncertainty, risk modeling in the financial sector, earth observation systems, risk communication, community-based risk assessments, and assessing risk in a changing climate, among others. In addition to the technical sessions, there were 9 plenary events, 24 side workshops and trainings, 2 on-site exhibits, and numerous side meetings and events. <https://www.understandrisk.org/Media>

Annex 2 – Projects Portfolio and Summary of Commitments

#	Country(s)/Region	Title	Window of action	Implementation and local partners	Amount funded (USD)	Status
AFRICA						
1	Region	Risk Assessment Tools and Methodology Training (Understanding Risk 2012)	Window 1	WB	263,284	Completed
2	Region	Fifth Africa Regional Platform for Disaster Risk Reduction	Window 1	WB	124,022	Completed
3	ECCAS members: Angola, Burundi, Cameroon, Central African Republic, Chad, Congo Democratic Republic, Gabon, Guinea, Sao Tome and Principe	Development of Risk Reduction Measures, Preparedness and Response to Disaster Risk in Central Africa	Window 1	WB, ECCAS	300,000	Ongoing
4	IGAD members: Djibouti, Eritrea, Ethiopia, Kenya, Somalia, Sudan, Uganda	IGAD's Horn of Africa Regional Disaster Resilience and Sustainability Program	Window 1	WB, IGAD	990,000	Ongoing
5	Comoros, Madagascar, Mauritius, Seychelles, Tanzania	Indian Ocean Islands Catastrophe Risk Profiling & Financing Initiative	Window 1	WB, IOC, Ministries of Finance and Disaster Management Departments	1,300,000	Ongoing
6	Djibouti, Ethiopia, Kenya, Somalia, Uganda	RCMRD - The Horn of Africa Open Data Mapping Project: Building Resilience by Sharing data to Rebuild Region	Window 1	WB, RCMRD, Red Cross Kenya	290,000	Ongoing
7	Region (RECs)	Preparing collaboration with regional organizations in Africa under the ACP-EU Program	Window 1	WB, ECCAS, ECOWAS, IGAD, SADC, AfDB, AUC	500,000	Ongoing
8	Burkina Faso, Chad, Mali, Mauritania, Niger, Senegal	Sahel- National and Regional Disaster Response and Resilience Program	Window 1	WB, ACMAD, AGRHYMET (CILSS)	420,000	Ongoing
9	Comoros, Madagascar, Malawi, Mozambique	Support the establishment of a Technical Centre for Disaster Risk Reduction and Climate Change Adapt	Window 1	UN-HABITAT COSEP, BNGRC, and CPGU	900,000	Ongoing

#	Country(s)/Region	Title	Window of action	Implementation and local partners	Amount funded (USD)	Status
AFRICA (cont.)						
10	Burundi	Flood and landslide preparedness to improve community resilience	Window 2	WB, IFRC	744,000	Pipeline
11	Ethiopia	Building capacity for Woreda Disaster Risk Reduction and Climate Change Adaptation	Window 2	WB, Cordaid	750,000	Pipeline
12	Gambia	National Disaster Risk Assessment and Strengthening of National Disaster Management Agency	Window 2	WB	660,000	Ongoing
13	Lesotho	Climate and Water Risk Analysis & EWS Information Management Systems	Window 2	WB,WFP	1,000,000	Ongoing
14	Liberia	Strengthening Disaster Risk Management in Liberia	Window 2	WFP	544,500	Ongoing
15	Mozambique	Promoting the integration of disaster risk reduction and climate change adaptation into District Development Plans and Community-Based Risk Management	Window 2	WB, World Vision	575,300	Pipeline
16	Niger	Community Based Disaster Risk Reduction in Niger	Window 2	Oxfam UK, Niger	930,000	Ongoing
17	Niger	Multi-hazard approach to early warning system with focus on flood risk management	Window 2	WB	300,000	Pipeline
18	Nigeria	Strengthening Capacity for Disaster Risk Management	Window 2	WB, NEMA	850,000	Ongoing
19	Rwanda	Development of comprehensive disaster risk profiles for enhancing disaster management in Rwanda	Window 2	UNDP	691,000	Ongoing
20	Sierra Leone	Supporting community-based DRR in Sierra Leone	Window 2	WB	700,000	Ongoing

#	Country(s)/Region	Title	Window of action	Implementation and local partners	Amount funded (USD)	Status
AFRICA (cont.)						
21	Tanzania	Strengthening Community Capacity for DRR Interventions in Drought Prone Regions Through Children	Window 2	UNICEF	793,000	Ongoing
22	Tanzania	Building Climate Resilience in Tanzanian Water Sector	Window 2	WB	400,000	Ongoing
23	Togo	Integrated Disaster and Land Management Project	Window 2	Gov. of Togo	3,000,000	Ongoing
24	Uganda	Risk Assessment and Resilience Action Plan	Window 2	WB	650,000	Pipeline
25	Zimbabwe	Mainstreaming Disaster Risk Reduction and Climate Change Adaptation into Local Development Planning in Zimbabwe through the Zambezi River Basin Initiative	Window 2	WB, Danish Red Cross	499,850	Pipeline
26	Burundi	Rapid Assessment Mission with Focus on Flood Risk Management	Window 3	WB, EU, UNDP	75,000	Ongoing
27	Cabo Verde	Cabo Verde PDNA Volcano eruption 2014-2015	Window 3	WB	80,000	Ongoing
28	Cameroon	Emergency Flood Assessment and Rehabilitation Planning	Window 3	WB	71,338	Completed
29	Comoros	Capacity Building for Flood Assessment and Recovery Planning	Window 3	WB	104,313	Completed
30	Djibouti	Drought Post Disaster Needs Assessment	Window 3	WB, EU, UN	119,982	Completed
31	Ethiopia	Capacity Building in Post Disaster Needs Assessment	Window 3	WB, EU, UN	46,682	Completed
32	Kenya	Post Disaster Needs Assessment (PDNA) - Drought	Window 3	WB, EU, UNDP	201,233	Completed

#	Country(s)/Region	Title	Window of action	Implementation and local partners	Amount funded (USD)	Status
AFRICA (cont.)						
33	Malawi	Malawi Flood Post Disaster Needs Assessment	Window 3	WB, EU, UN	370,000	Ongoing
34	Mozambique	Mozambique Rapid Assessment Mission with Focus on Flood Risk Management	Window 3	WB, EU, UN	100,000	Ongoing
35	Nigeria	Flood impact scoping and capacity building for disaster preparedness	Window 3	WB	97,897	Completed
36	Nigeria	Nigeria Post Floods Needs Assessment 2012	Window 3	WB, EU, UNDP	255,000	Completed
37	Seychelles	Flood Impact Scoping and Recovery Planning	Window 3	WB, EU, UNDP	73,792	Completed
CARIBBEAN						
38	Region (CDEMA members)	Support and participation to the 6th Caribbean Conference on Comprehensive Disaster Management	Window 1	WB	102,000	Completed
39	Region (Belize, Dominica, Grenada, St. Lucia, SVG)	Caribbean Risk Information Programme to support the Integration of DRM Strategies in Critical Sectors	Window 1	WB	1,340,000	Ongoing
40	Region (Antigua and Barbuda, Barbados, Dominica, Grenada, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines)	Strengthening public investment in disaster risk reduction and climate change adaptation in the East	Window 1	UNDP, OECS	707,600	Ongoing
41	Region (Belize, Dominica, Grenada, Jamaica, St. Lucia, SVG)	MoSSaiC Caribbean Community of Practitioners	Window 1	WB – OECS – SSDF – ICRC	550,000	Ongoing

#	Country(s)/Region	Title	Window of action	Implementation and local partners	Amount funded (USD)	Status
CARIBBEAN (cont.)						
42	Belize	Hazard and Risk Assessment Framework for Belize: Prioritization of an Investment Plan	Window 2	WB	1,150,000	Ongoing
43	Belize	Belize Disaster Risk Financing Technical Assistance	Window 2	WB	233,000	Pipeline
44	Dominica	Spatial data management and identification of the most vulnerable schools and shelters in Dominica	Window 2	WB	722,000	Ongoing
45	Dominican Republic	Mainstreaming DRM and CC in Public Investment, Territorial Planning and Public Finances in the DR	Window 2	WB	600,000	Ongoing
46	Dominican Republic	Identifying Risk to Protect Schools in the Dominican Republic	Window 2	WB - Plan DR - Oxfam DR - Habitat	638,574	Ongoing
47	Grenada	Grenada Disaster Risk Financing Technical Assistance	Window 2	WB	233,000	Pipeline
48	Guyana	Strengthening Guyana's Coastal Lands Information Systems and Adaptation Awareness	Window 2	WB	250,000	Completed
49	Haiti	Haiti Disaster Risk Management Mainstreaming and Capacity Building Program	Window 2	WB - UNDP	1,000,000	Ongoing
50	Jamaica	Strengthening Disaster Risk Management and Climate Resilience in Jamaica's Development Planning Process	Window 2	WB and Government of Jamaica	860,000	Pipeline
51	Jamaica	Jamaica Disaster Risk Financing Technical Assistance	Window 2	WB	233,000	Pipeline
52	St. Lucia	Hazard and Disaster Risk Assessment Framework in Saint Lucia: Preparation of Vulnerability Reduction	Window 2	WB	300,000	Ongoing
53	St. Lucia	St Lucia Disaster Risk Financing Technical Assistance	Window 2	WB	233,000	Pipeline

#	Country(s)/Region	Title	Window of action	Implementation and local partners	Amount funded (USD)	Status
CARIBBEAN (cont.)						
54	St. Lucia	St Lucia Damage and Loss Assessment December 2013 Floods	Window 3	WB	50,000	Completed
55	St. Vincent and the Grenadines	St. Vincent and the Grenadines Floods and Landslides 2013	Window 3	WB and CDB	50,000	Completed
56	Region (Antigua and Barbuda, Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Jamaica, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines)	Strengthening Capacity in Post Disaster Needs Assessment in the Caribbean	Window 3	WB - UNDP	372,750	Ongoing
57	Region (Pacific islands/Caribbean countries)	Disaster Risk Assessment Capacity Building and Community Building - Understanding Risk Forum	Window 1	WB	200,000	Completed
58	Region	Pacific Catastrophe Risk Assessment and Financing Initiative - Phase 3 (PCRAFI-3)	Window 1	SPC-SOPAC	1,404,250	Ongoing
59	Region	Programmatic TA: Building Climate and Disaster Resilience in the Pacific	Window 1	WB, Ministries of Finance, SPC, SPREP	1,000,000	Ongoing
60	Region	Programmatic TA: Building Climate and Disaster Resilience in the Pacific (Risk data)	Window 1	WB	400,000	Pipeline
PACIFIC						
61	Region (Marshall Islands, Micronesia, Palau)	Enhancing Targeted Disaster Risk Reduction Measures in Micronesia	Window 1	IOM	660,000	Pipeline
62	Fiji	Programmatic TA: Building Climate and Disaster Resilience in the Pacific - Fiji Flood Risk Management	Window 2	WB	200,000	Pipeline

#	Country(s)/Region	Title	Window of action	Implementation and local partners	Amount funded (USD)	Status
PACIFIC (cont.)						
63	Solomon Islands	Community Resilience to Climate and Disaster Risk Project (CRISP)	Window 2	WB, Gov. of the Solomon Islands	2,000,000	Ongoing
64	Solomon Islands	Programmatic TA: Building Climate and Disaster Resilience in the Pacific - Solomon Islands Flood Risk Management	Window 2	WB	400,000	Pipeline
65	Timor-Leste	Building Climate and Disaster Resilience in Communities along Dili-Ainaro and Linked Road Corridors	Window 2	WB, Gov. of Timor Leste	990,000	Ongoing
66	Tonga	Tonga Cyclone Ian Reconstruction and Climate Resilience Project	Window 2	Gov. of Tonga	2,000,000	Ongoing
67	Vanuatu	Increasing Resilience to Climate Change and Natural Hazards in Vanuatu	Window 2	WB, Gov. of Vanuatu	3,000,000	Ongoing
68	Fiji	Fiji Post Disaster Needs Assessment (PDNA) for cyclone Evan 2012	Window 3	WB, EU, UNDP	103,330	Completed
69	Samoa	Samoa PDNA for cyclone Evan 2012	Window 3	WB, EU, UNDP	104,624	Completed
70	Solomon Islands	Post Disaster Needs Assessment (PDNA) Solomon Islands Floods April 2014	Window 3	WB, EU, UNDP	143,600	Completed
71	Tonga	Technical Assistance for Recovery and Reconstruction Planning post Tropical Cyclone Ian	Window 3	WB, UNDP, Red Cross, ADB, AusAid, New Zealand Aid, Ministry of Infrastructure	98,000	Ongoing
72	Vanuatu	Rapid Post-Disaster Needs Assessment of Tropical Cyclone PAM	Window 3	WB, EU, UNDP	160,700	Ongoing
73	Pacific Islands	Economic assessment of disasters in the Pacific	Window 3	WB	714,210	Pipeline

THE ACP-EU NATURAL DISASTER RISK REDUCTION PROGRAM PARTNERS

ACP Group of States

The African, Caribbean and Pacific Group of States (ACP) is an organization created by the Georgetown Agreement in 1975. It is composed of 79 African, Caribbean and Pacific states, signatories of the Cotonou Agreement (known as the “ACP-EC Partnership Agreement”), binding them to the European Union. Among the ACP Group’s main objectives is the sustainable development of its member-states and their integration into the global economy. In this regard, the Group has pioneered action on disaster reduction and resilience by calling to the European Union’s attention to the need to shift the focus from response to prevention in view of sustainable development as early as 2004. This Program is part of a long-standing cooperation between the ACP Group and the EU that brings together sister entities from Africa, Caribbean & the Pacific, active on disaster and climate resilience. These, together with specialized partners like the GFDRR, address ACP countries’ vulnerabilities to exogenous shocks through integrated measures on climate adaptation, environmental protection and disaster risk management.

For more information:
www.acp.int

European Union

The European Union is the leading donor of development aid and is fully engaged in the post-2015 Development Agenda. It is also the world’s largest contributor of climate finance and is at the forefront of the international agenda on Resilience supporting developing countries prepare for, withstand and recover from disaster events. Such efforts stem from the EU’s Strategy for Disaster Risk Reduction (2011) or the Commission’s Action Plan on Resilience (2013). This plan pools humanitarian and development resources to deliver on flagship-initiatives such as AGIR (Global Alliance for Resilience in the Sahel), SHARE (Supporting the Horn of Africa’s Resilience), or the GCCA (Global Climate Change Alliance). Furthermore, in its cooperation with the ACP Group, the EU has put at the core of its interventions the need to reduce vulnerability and to build resilience of regions, countries and communities, having committed more than EUR 320 million in the period 2008-2013, including the support to the GFDRR.

For more information:
www.europa.eu

Global Facility for Disaster Reduction and Recovery

The Global Facility for Disaster Reduction and Recovery (GFDRR) is a global partnership that helps developing countries better understand and reduce their vulnerabilities to natural hazards and adapt to climate change. Working with over 400 local, national, regional, and international partners, GFDRR provides grant financing, technical assistance, training and knowledge sharing activities to mainstream disaster and climate risk management in policies and strategies. Managed by the World Bank (www.worldbank.org), GFDRR is supported by 34 countries and 9 international organizations.

For more information:
www.gfdr.org



ACP-EU Natural Disaster Risk Reduction Program

Global Facility for Disaster Reduction and Recovery (GFDRR)
World Bank Brussels Office
17, av. Marnix – B-1000 Brussels, Belgium

infoacpeu@worldbank.org
www.drrinacp.org



GFDRR
Global Facility for Disaster Reduction and Recovery

ACP-EU Natural Disaster Risk Reduction Program

An initiative of the African, Caribbean and Pacific Group, funded by the European Union and managed by GFDRR