

---

# ACP-EU

NATURAL DISASTER RISK  
REDUCTION PROGRAM

Activity Report  
2016-2017



**GFDRR**  
Global Facility for Disaster Reduction and Recovery

© 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, 2017; all dollar amounts are in US dollars (\$) unless otherwise indicated.

**This report summarizes activities and achievements under the ACP-EU Natural Disaster Risk Reduction (NDRR) Program from July 1, 2016 to June 30, 2017.**

*Mirage in desert, Africa*  
Photo credit: Shutterstock



# ACP-EU

NATURAL DISASTER RISK  
REDUCTION PROGRAM

**Activity Report 2016-2017**



**GFDRR**  
Global Facility for Disaster Reduction and Recovery



# ACRONYMS AND ABBREVIATIONS

A	ACP	Africa; Caribbean, Pacific
	ADRF	Africa Disaster Risk Financing Initiative
	AFD	French Agency for Development
	AGRHYMET	Agro-Meteorology, Hydrology, Meteorology Regional Centre
	AUC	African Union Commission
	AWG	Africa Working Group
	BRC	Burundi Red Cross
	CAP	Conservancy Adaptation Project
	Cat DDO	Catastrophe Deferred Drawdown Option
	CCA	Climate Change Adaptation
	CDEMA	Caribbean Disaster Emergency Management Agency
	CDRP	Country Disaster Risk Profiles
	CILSS	Comité permanent Inter-Etats de Lutte contre la Sécheresse dans le Sahel ( <i>Permanent Interstates Committee for Drought Control in the Sahel</i> )
	Cordaid	Catholic Organization for Relief and Development
	CREWS	Climate Risk and Early Warning Systems
	CRISP	Community Resilience to Climate and Disaster Risk Project (Solomon Islands)
	CRW	Crisis Response Window
	DaLA	Damage and Loss Assessment
	DIMSUR	Disaster Mitigation and Sustainable Recovery Center
	Dominode	Dominica Open Data Portal
	DPL	Development Policy Loan
	DCR	Democratic Republic of the Congo
	DIPECHO	Disaster Preparedness ECHO Program
	DRF	Disaster Risk Financing or Disaster Recovery Framework
	DRFI	Disaster Risk Financing and Insurance
	DRFTA	Disaster Risk Financing Technical Assistance
	DRM	Disaster Risk Management
	DSA	Debt Sustainability Analysis
	DSS	Decision-Support System
	DRR	Disaster Risk Reduction
	DVRP	Disaster Vulnerability Reduction Project
	ECCAS	Economic Community of Central African States
	ECOWAS	Economic Community of West African States
	EU	European Union
	EWS	Early Warning System
	FEWS	Flood Early Warning System
	GDP	Gross Domestic Product
	GEF	Global Environmental Facility
	GFDRR	Global Facility for Disaster Reduction and Recovery
	GHoA	Greater Horn of Africa
	GIS	Geographical Information System
	HFA	Hyogo Framework for Action
	IADB	Inter-American Development Bank
	ICPAC	IGAD Climate Prediction and Applications Center
	IDA	International Development Association
	IFRC	International Federation of Red Cross and Red Crescent Societies
	IGAD	Intergovernmental Authority on Development
I	IMF	International Monetary Fund

# I

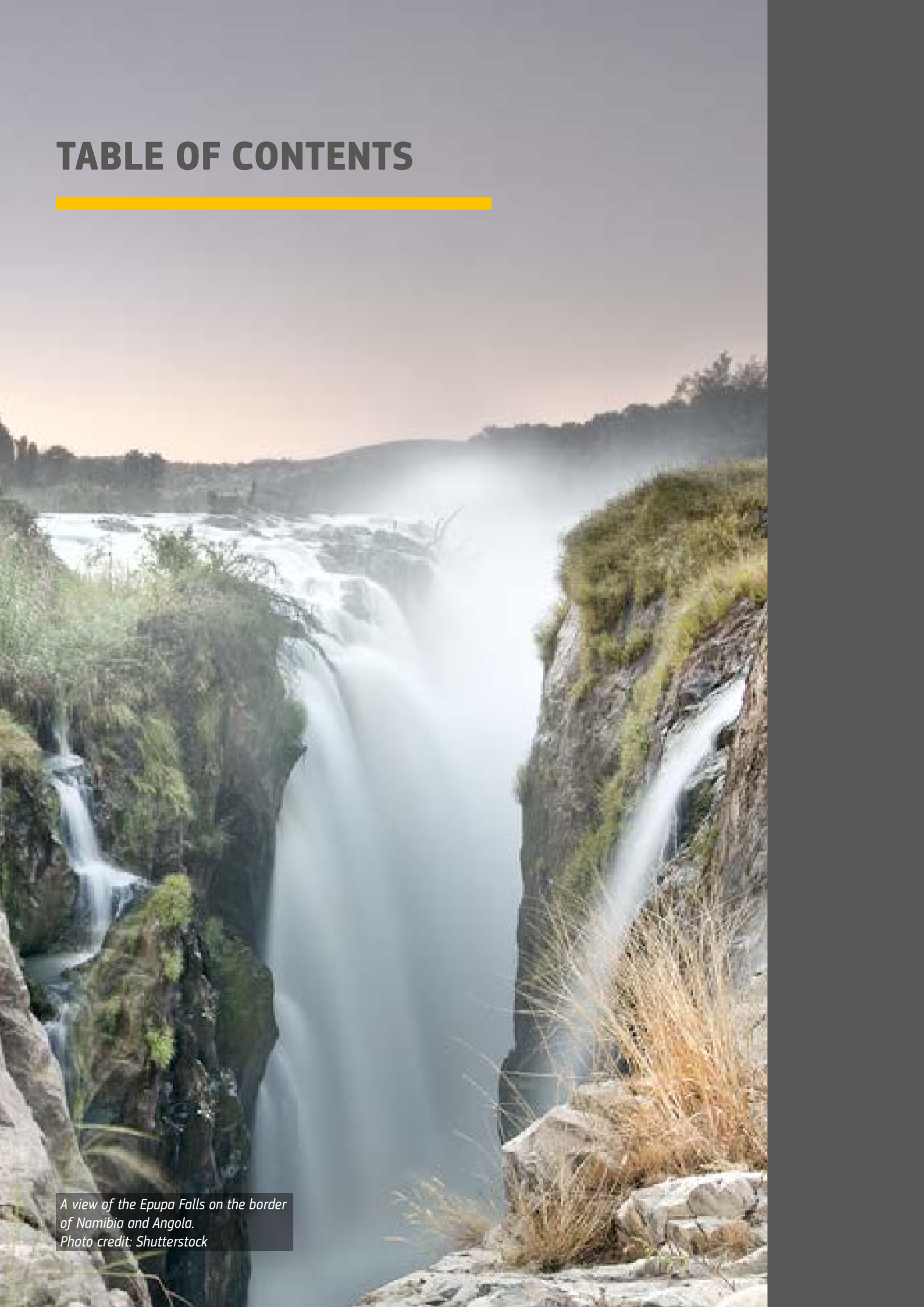


# Z

IOC	Indian Ocean Commission
IOIs	IOIs Indian Ocean Islands
IOM	International Organization for Migration
KiriSAFE	Strengthening Atolls for Climate-Resilient Future Urban Expansion project
LiDAR	Light Detection and Ranging
LRMC	Local Risk Management Committee
LSMS	Living Standards Measurement Study
MoSSaiC	Management of Slope Stability in Communities
NDMD	National Disaster Management Directorate (Timor-Leste)
NDM	National Disaster Management Plan
NDRMC	National Disaster Risk Management Commission (Ethiopia)
NDRR	Natural Disaster Risk Reduction (ACP-EU NDRR Program)
NGO	Non-Governmental Organization
PacRIS	Pacific Risk Catastrophic Information System
PCRAFI	Pacific Catastrophe Risk Assessment and Financing Initiative
PDNA	Post-Disaster Needs Assessment
PICs	Pacific Island Countries
PCRAFI	Pacific Catastrophe Risk Assessment and Financing Initiative
PREP	Pacific Resilience Program
RECs	Regional Economic Communities
REPARC	Central Africa Parliamentarians Network for Natural Disasters Resilience
RMI	Republic of Marshall Islands
SADC	Southern African Development Community
SDFRR	Sendai Framework for Disaster Risk Reduction
SPC-SOPAC	Secretariat of the Pacific Community Applied Geoscience and Technology Division
SSO	Sahara and Sahel Observatory
SWIO RAFI	Southwest Indian Ocean Risk Assessment and Financing Initiative
UAV	Unmanned Air Vehicle
UN	United Nations
UNDP	United Nations Development Programme
UNICEF	United Nations Children Fund
UNISDR	United Nations Office for Disaster Risk Reduction
UR	Understanding Risk
WB	World Bank
WBG	World Bank Group
WRC3	Third World Reconstruction Conference
WWF	World Wildlife Fund
WMO	World Meteorological Organization
ZRCS	Zimbabwe Red Cross Society

# TABLE OF CONTENTS

---



*A view of the Epupa Falls on the border  
of Namibia and Angola.  
Photo credit: Shutterstock*

# 08

## About the ACP-EU NDRR Program

# 09

## Highlights

# 15

## 1. Overview of activities

- 1.1 Program governance
- 1.2 Operational Portfolio Analysis and Monitoring & Evaluation
- 1.3. Cross-cutting issues

# 23

## 2. Progress by region

- 2.1 ACP-EU NDRR Program in Africa
- 2.2 ACP-EU NDRR Program in the Caribbean
- 2.3 ACP-EU NDRR Program in the Pacific

# 54

## 3. Post Disaster Response and Capacity Building

# 59

## 4. Strengthening DRM Regional Coordination in Africa

- 4.1 About Result Area 2
- 4.2 Joint Activities
- 4.3 Highlights of FY17 Achievements by REC

# 65

## 5. Annexes

- Annex 1: Communication and Visibility
- Annex 2: Projects Portfolio

# Boxes

## Boxes

- Box 1: Financial leveraging of the ACP EU NDRR Program Grants
- Box 2: Eastern Africa - The IGAD Regional Disaster Resilience and Sustainability Project
- Box 3: Building Climate Resilience in Tanzania Water Sector Project
- Box 4: Suriname - Managing Flood Risk in the Greater Paramaribo Area
- Box 5: Increasing Financial Resilience of Pacific Island Countries
- Box 6: The World Reconstruction Conference 3
- Box 7: Focus Day On Post-Disaster Response





*Small town Soufriere in Saint Lucia,  
Caribbean Islands.  
Photo credit: Shutterstock*



# ABOUT THE ACP-EU NDRR PROGRAM

**T**he Africa Caribbean Pacific (ACP) Group of States, the European Union (EU) and the World Bank (WB) established the ACP-EU Natural Disaster Risk Reduction (NDRR) Program to support disaster risk reduction activities in ACP countries. Its operations are financed by an EU grant of €54.5 million to a single-donor Trust Fund managed by the WB-led Global Facility for Disaster Reduction and Recovery (GFDRR).

Launched in October 2011, the Program aims to address prevention, mitigation and preparedness to natural hazards at regional, sub-regional, national and local levels in ACP countries. Its four priority areas are:

- Mainstreaming disaster risk reduction (DRR)
- Risk identification and assessment
- Early warning systems (EWS) and communication on DRR,
- Risk transfer and integration of DRR into post-disaster recovery

**The ACP-EU NDRR Program's operations fall into three components:**

● **Regional Projects (Window 1):**

to advance the national DRR agendas of ACP countries through regional/sub-regional cooperation

● **Country-Level Projects (Window 2):**

to drive DRR and climate change adaptation (CCA) policy development and implementation in ACP countries through need-based and demand-driven technical assistance, including provision of technical advisory capacity

● **Post-Disaster & Capacity Building Activities (Window 3):**

to improve the ability of ACP countries to respond to disasters efficiently and effectively by building ex-ante capacity to conduct post-disaster needs assessments, providing rapid technical assistance, and mainstreaming DRR 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
- Reduced response costs in the event of natural disasters

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

In August 2014, the Program was expanded with an additional **€20 million** EU grant to support the disaster risk management (DRM) coordination capacity of African Regional Economic Communities (RECs) under Window 1. This supplemental contribution—known as Result 2 (R2), 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 (AfDB), African Union Commission (AUC), the United Nations Office for Disaster Risk Reduction (UNISDR) and the WB/GFDRR. The R2 Program targets the four main RECs, namely (i) ECCAS—the Economic Community for Central African States; (ii) ECOWAS—the Economic Community of West African States; (iii) IGAD—the Intergovernmental Authority on Development; and (iv) SADC—the Southern African Development Community. *See Section 4 for more information.*



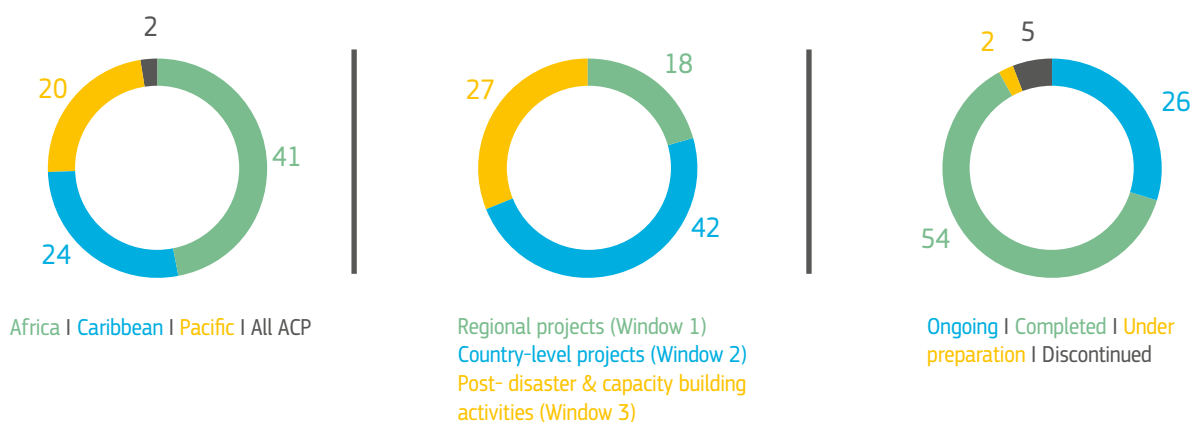


Unidentified Ethiopian people in  
the street, Ethiopia  
Photo credit: Shutterstock



# HIGHLIGHTS

The ACP-EU NDRR Program continued to support disaster-prone countries during the period under review. Between July 2016 and June 2017 **five projects were approved**, bringing the portfolio to **87 projects** which are distributed as follows:



Together with the four regional projects under R2<sup>1</sup> the total value of the ACP-NDRR portfolio is **\$56.9 million**.

Since Program inception, the ACP-EU NDRR Program has leveraged **over \$960 million** through projects that are either co-financed or have had a direct link to a broader DRM or post-disaster operation.

Examples of achievements at the regional and country levels are detailed below.

## Africa

At the regional level, in the **Sahel**, the *National and Regional Disaster Response and Resilience* project supported national and regional institutions in defining their roles and mandates with regards to existing early warning systems and developing new ones. Collaboration among regional organizations, such as the Permanent Interstates Committee for Drought Control in the Sahel (CILSS) and ECOWAS, has been fostered with national governments to ensure that their policies, products and services are tailored to their needs.

In the **Southwest Indian Ocean**, the *Indian Ocean Islands Catastrophe Risk Assessment & Financing Initiative* project has helped the Island States better understand their sovereign risk, which is important for building resilience against the most prevalent natural hazards.

<sup>1</sup> See Section 4



At the country level, in **Ethiopia**, the *Woreda Disaster Risk Reduction and Climate Change Adaptation Planning* project supported the Ethiopian National Disaster Risk Management Commission in developing district risk profiles, risk reduction plans, and enhancing institutional capacity.

As part of the **Uganda** *Risk Assessment and Resilience Action Plan* project, several key policy recommendations were developed and adopted for improving the country's disaster risk preparedness and emergency response capacity. In particular, the project addressed food insecurity shocks resulting from drought and extreme rainfall events that affect the country's small-scale farmers practicing rain-fed agriculture, small-herd owners, and the urban poor.

### **Caribbean**

The *Strengthening Disaster Risk Management and Climate Resilience* project in **Jamaica** launched the *Guidelines for Coastal Management and Beach Restoration* in June 2017. This project supports the government of Jamaica in better integrating disaster vulnerability reduction and climate change adaptation considerations in national development planning processes.

In **Saint Lucia**, the *Vision 2030: Measurable Reduction of Disaster Risk Specific to Public Infrastructure* project held a series of workshops on technical assessments, geographical information systems and asset management for over 100 government officials. The workshops strengthened participants' capacity to better understand and assess risks from natural hazards and climate change and generate and apply risk information in public policy and investment planning.

Assessments in comprehensive flood risk and coastal resilience were undertaken for the Greater Paramaribo area in **Suriname** within the framework of the *Flood Risk Management* project. The results of these assessments were presented during two public workshops organized in partnership with the Ministry of Public Works, Transport and Communication in Paramaribo in April 2017.

### **Pacific**

Immediately following disasters in **Pacific Island Countries**, the *Programmatic Technical Assistance on Building Climate and Disaster Resilience* project supported the development of an application methodology for rapidly estimating disaster losses for use in the Federated States of Micronesia, Fiji, Republic of Marshall Islands, Samoa, Solomon Islands, Tonga and Vanuatu. The project also entailed the preparation of country reports on early warning systems identifying priority areas and needs for strengthening existing systems in Samoa, Tonga, Vanuatu and the Republic of Marshall Islands, as well as the development of safer school roadmaps in Samoa, Tonga and Vanuatu.

In the **Solomon Islands**, an emergency radio communication system was set up as part of the *Community Resilience to Climate and Disaster Risk Project (CRISP)*. It was successfully used during the December 2016 earthquake that struck the Makira Province. Through this new communication system and a related national disaster management operation structure, urban centers received warning messages 20 minutes after the earthquake struck, demonstrating strengthened climate and disaster risk information and early warning systems.

Through the **Tonga Increasing Climate and Disaster Resilience of Post-Disaster Reconstruction** project, a national housing reconstruction policy and provisions to the Tonga Building Code were developed, supporting the government in consolidating technical knowledge on cyclone resilient housing reconstruction and repairs, particularly for low-income housing.

### **Post-disaster response**

More than 500 participants from civil society, national and local governments, academia, the private sector and international organizations shared experiences and discussed the role of post-crisis recovery and reconstruction for resilience building and disaster risk reduction at **the third edition of the World Reconstruction Conference (WRC3)**<sup>2</sup> to advance the implementation of the 2015 Sendai Framework for Disaster Risk Reduction. The conference was jointly organized in Brussels on June 6–8, 2017 by the EU, ACP Secretariat, United Nations Development Programme (UNDP), and the World Bank.

On June 9, 2017, in the margins of WRC3, GFDRR held a **Focus Day on Post Disaster Response and Recovery Frameworks**<sup>3</sup> that brought together 75 officials from ACP countries and embassies in Brussels and over 30 representatives and technical experts from the EU, the ACP Secretariat, UNDP and the World Bank/GFDRR. The Focus Day, hosted by the ACP Secretariat, provided an opportunity to present the results of the ACP-EU NDRR Program to date and discuss more broadly the longstanding cooperation with the EU and UNDP on the post-disaster agenda.



Storm clouds on Dravuni Island, Fiji  
Photo credit: Shutterstock

<sup>2</sup> For additional information please consult the WRC3 website: <https://www.gfdr.org/wrc3>

<sup>3</sup> For a more extensive summary of the Focus Day please consult: <https://www.gfdr.org/es/acp-eu/focus-day-on-post-disaster-response-in-brussels> or <http://www.drrinacp.org>

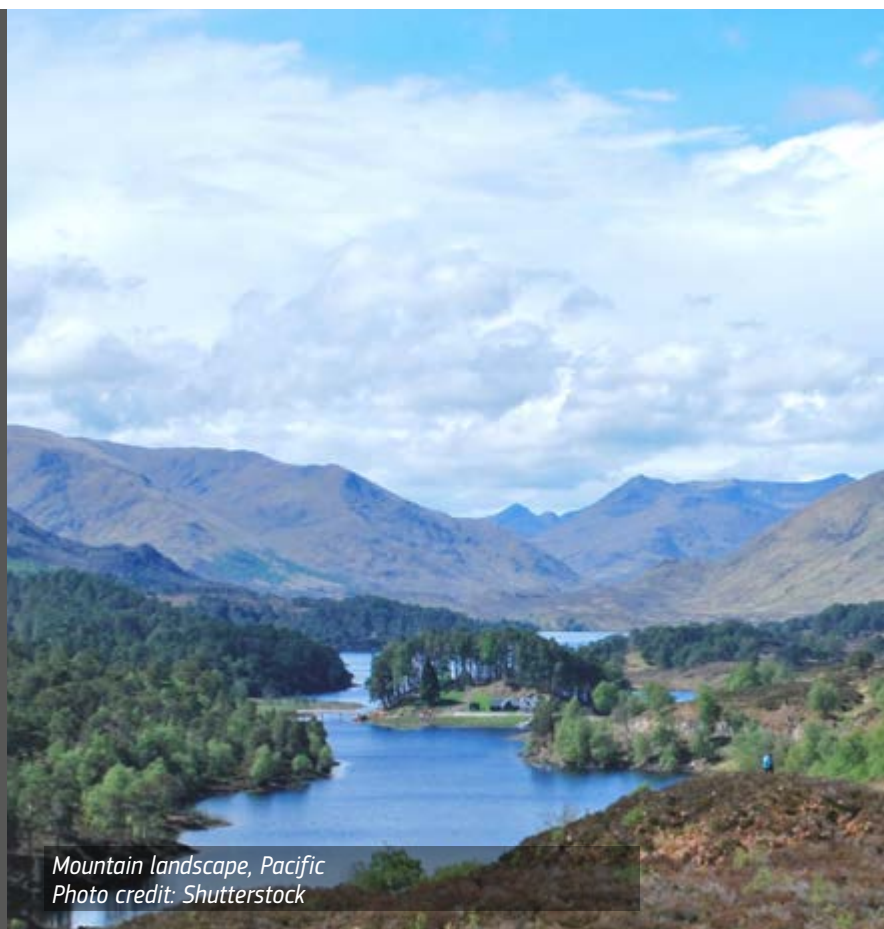
### *Capacity building*

In the period under review, **3,654 officials** from line ministries and regional authorities were trained on various DRM-related topics during **29 training events**. Since inception, the Program has organized **389 training events** benefitting **13,854 participants**.

### *Knowledge sharing*

Launched in the frame of the R2 Program in June 2016, the **ACP-EU DRR Regional Knowledge Exchange Group Capacity for Development or Capacity4DEV**<sup>4</sup> is an exclusive group tailored to DRR regional focal points in African RECs and the Regional Organizations in the Caribbean and Pacific, namely ECCAS, ECOWAS, IGAD, SADC, the Caribbean Disaster Emergency Management Agency (CDEMA) and SPC. The platform includes a catalogue of documents on DRM knowledge and experiences, a shared calendar on forthcoming events as well as an informal tool for knowledge- sharing and discussions. A refresher presentation and a short tutorial on the Capacity4DEV platform were provided to facilitate its regular use by the partners during a program coordination meeting held in June 2017 in the margins of the WRC3.

Since inception,  
the Program has  
organized **389  
training events**  
benefitting  
**13,854  
participants**.



<sup>4</sup> For more information on Capacity4DEV please consult the EU's website: <https://europa.eu/capacity4dev/>



### ***Regional cooperation***

Within the framework of R2, **ECCAS** organized the 5th Central Africa Regional Platform on DRR and a regional training on Post-Disaster Needs Assessment (PDNA) and Disaster Risk Financing (DRF) with 80 participants in Yaounde, Cameroon, in December 2016. Preliminary regional risk assessment studies were undertaken on the ECCAS Water Information System to prepare a geo-portal for water and risk information. **ECOWAS** finalized its DRR Plan of Action for 2015–30 and supported PDNA trainings being rolled out in its member states. **IGAD** organized two national trainings on PDNA/DRF in Sudan and Tanzania, including 100 officials, and recruited specific technical assistance to carry out the development of an IGAD Regional Framework for Mainstreaming of DRM and CCA in the education sector curriculum. **SADC** finalized the formulation of a comprehensive work plan for its R2 project and launched an expression of interest to support the implementation of a regional university collaboration program for capacity building on DRM and policy support in SADC region.

*For more information on R2 program activities, please see Section 4.*



# 1. OVERVIEW OF ACTIVITIES

## 1.1 Program Governance

**Program Team:** Since 2011, a dedicated GFDRR team in Brussels has managed 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 the GFDRR Secretariat of the World Bank DRM Regional teams in charge of Africa,<sup>5</sup> the Caribbean, and the Pacific.

**Steering Committee:** The Steering Committee, consisting 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 project implementation. 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

Between July 2016 and June 2017, **five projects** were approved. The Program developed a **portfolio of 87 projects**, of which 54 are completed, 26 ongoing, two under preparation; five have been discontinued.<sup>6</sup> At least 40 countries received support directly at the national level from the Program, whereas regional projects have ensured that all ACP countries have benefitted from support in various ways.

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:** Program progress is tracked through a dedicated methodology that evaluates the contribution of each project to established targets and provides regular updates on implementation status.

**Capacity building:** As part of the implementation of the ACP-EU NDRR Program, nearly 14,000 people have participated in training or workshops since program inception at 389 training events. The regional distribution of people trained is as follows: 11,491 persons in Africa; 1,258 persons in the Caribbean, and 792 persons in the Pacific. An additional 313 persons were trained through two global events. During the review period alone, **3,654 officials from line ministries and regional authorities were trained on various DRM areas during 29 training events.**

Program tracking distinguishes between people trained on DRM-related topics in general and people trained on PDNA and Damage and Loss Assessments (DaLA) in particular. As of June 2017, the results show that 9,982 people were trained on DRM and 2,150 on PDNA/DaLA throughout the ACP regions. In addition, 1,722 people were invited to attend conferences worldwide.

**Analytical and Knowledge Products:** The Program supported the development of an important number of publications, knowledge documents, tools, databases, and websites, and facilitated access to information and expertise gathered throughout the ACP countries. Selected outputs such as PDNA reports are regularly shared on the ACP-EU NDRR Program website (<http://www.drrinacp.org>) which has been revamped in the period under review. Most project outputs are also available online on the partners' country websites.

As of June 2017, a total of 246 knowledge products were developed as part of the ACP-EU NDRR Program: 73 from the Africa region projects; 105 from the Caribbean; 67 from the Pacific, as well as one from the WRC3 Conference report.

<sup>5</sup> Africa refers to Sub-Saharan Africa.

<sup>6</sup> Completed projects are those for which all activities, reports and deliverables financed under the ACP-EU NDRR Program have been delivered. Ongoing projects are those with funding committed through an approved grant funding request. Projects under preparation or pipeline projects are under consideration for funding but have not yet been approved. Discontinued projects are those initially approved but withdrawn due to various implementation issues.

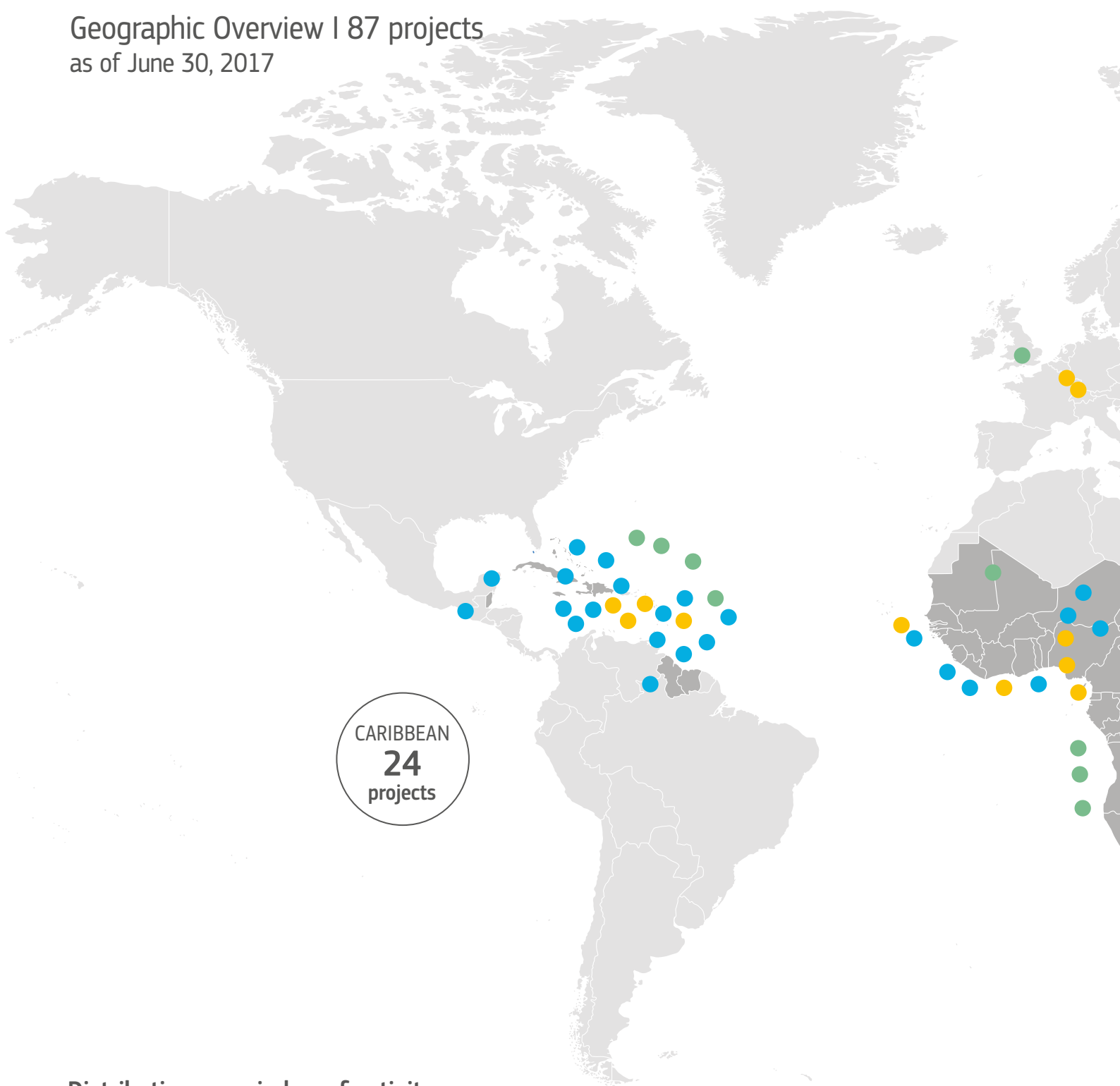




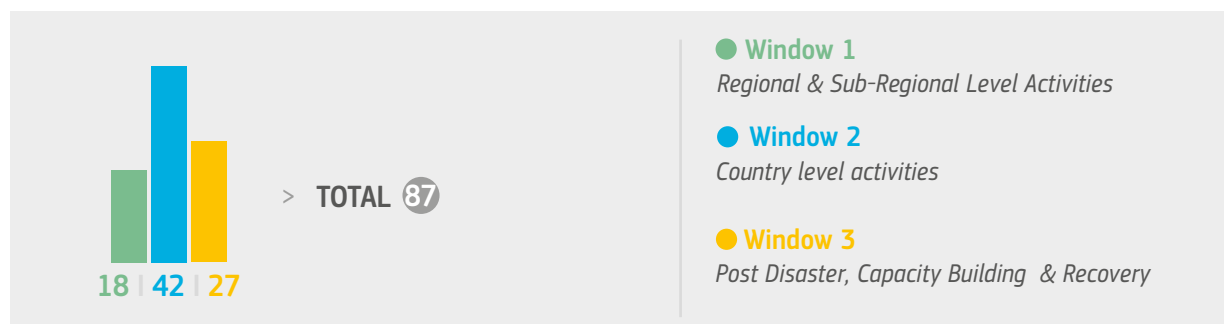
Busy residential street, Mozambique  
Photo credit: Shutterstock

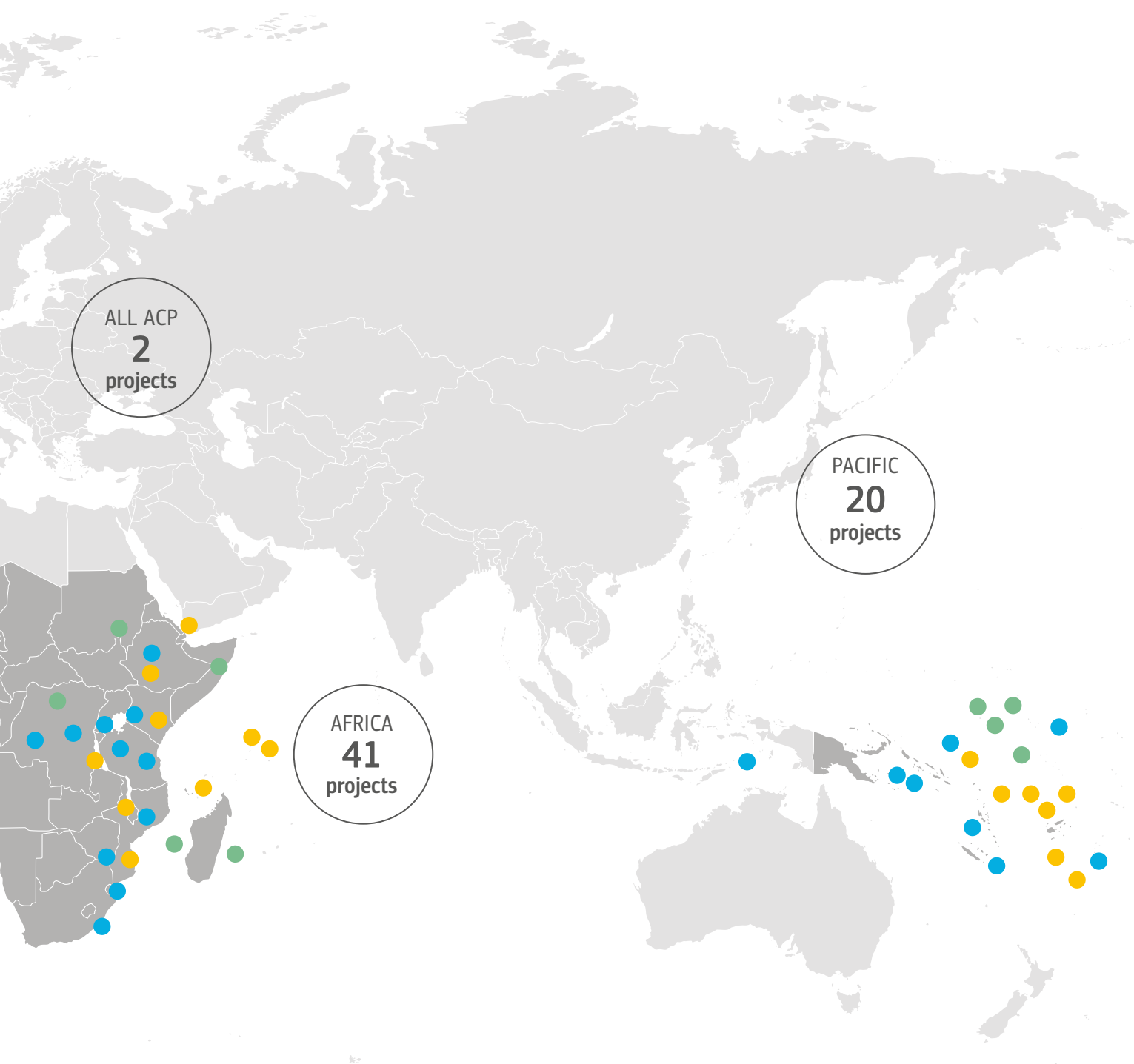


## Geographic Overview | 87 projects as of June 30, 2017

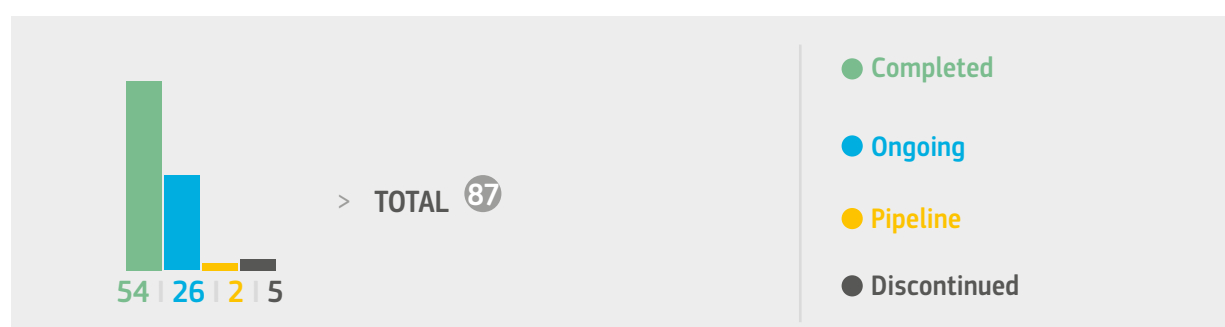


### Distribution per window of activity





### Distribution per status of implementation | 87 projects



# Box 1

## FINANCIAL LEVERAGING OF ACP EU NDRR PROGRAM GRANTS

Since its inception, the ACP-EU NDRR Program has benefitted from GFDRR's ability to harness not only the World Bank's convening power and technical expertise, but also to leverage its financing capacity. The ACP-EU NDRR Program has implemented 87 projects in more than 40 ACP countries, yielding major results in scaling up DRM investments and enhancing the DRM policy dialogue. To date, the ACP-EU NDRR Program has leveraged an estimated **\$960 million** through projects that are either co-financed or have had a direct link to a World Bank DRM or post-disaster operation.

This amount was calculated through a portfolio analysis of the ACP-EU NDRR projects which also determined varying degrees and types of leverage, spanning from enabling, co-financing, or informing. This refined analysis of the leveraging capacity of ACP-EU NDRR projects allows us to better understand its degree of influence on future operations. The section below outlines the three identified types of leveraging along with selected examples:

**Enabling in leveraging** is the ability of an ACP-EU NDRR project to trigger financing that would not have become available without the said activity. This includes, for example, cases where co-financing is a prerequisite for additional financing (as in the case of GEF support) or where an activity is financed by a grant set as a prior action for triggering disbursements in a World Bank Development Policy Operation (DPO). Enabling in leveraging has been identified in five ACP-EU NDRR projects:

- The **Fiji Post-Cyclone Winston Post Disaster Needs Assessment** carried out in 2016 led to the design of a \$50 million World Bank Emergency Development Policy Operation. The completion of the ACP-EU NDRR-financed PDNA (\$216,000) was set as a condition for triggering the ensuing operation.
- The **Togo Integrated Disaster and Land Management**, totaling \$16.44 million, includes \$9.1 million from GEF; \$4.34 million from TerrAfrica; and a \$3 million ACP-EU NDRR project.
- The **Strengthening Hydro-Meteorological and Climate Services in the Democratic Republic of Congo (DRC)**, totaling \$11.5 million includes \$3.5 million from the Climate Risk and Early Warning Systems (CREWS)<sup>7</sup> initiative, \$5 million from GEF, and \$3 million from the ACP-EU NDRR Program.

<sup>7</sup> The French-led CREWS Initiative was launched at the Paris COP21 to strengthen Multi-Hazards Early Warning Systems in LDCs and SIDS. It is implemented by UNISDR, WMO and the World Bank/GFDRR..



**Co-financing** is a joint or parallel financing of a project through loans and/or grants. As such, the ACP-EU NDRR project is part of the financing package of World Bank operations, complementing its own resources and/or other Trust Fund and government resources. These finance the same program, objective, components and expected results together, thereby avoiding fragmentation of aid by bringing several funding sources together under the same implementation framework. Co-financing has been identified for two ACP-EU NDRR projects:

- The **Tonga Cyclone Ian Reconstruction and Climate Resilience Project** is a co-financed operation totaling \$16 million and includes co-financing of \$2 million from ACP-EU NDRR Program; \$12 million from the International Development Agency (IDA) Crisis Response Window (CRW);<sup>8</sup> as well as \$2 million of the government's own funding.
- The **Programmatic TA: Building Climate and Disaster Resilience in the Pacific** is another co-financed operation totaling \$45 million and a subsequent \$49 million, including \$1 million in co-financing from the ACP-EU NDRR Program.

**Informing in leveraging** occurs when the ACP-EU NDRR project informs the World Bank financing operation and has been instrumental in mobilizing a larger investment from national governments or development partners (for example, through knowledge products, risk assessments, or post-disaster assessments) that provided evidence for larger investments. This has been identified for fifteen ACP-EU NDRR projects, notably:

- The **Hazard and Risk Assessment Framework for Belize: Prioritization of an Investment Plan** project informed the subsequent Belize Climate Resilient Infrastructure operation worth \$30 million. Due to the challenge of a data scarcity, a \$1.15 million ACP-EU NDRR project, Hazard and Risk Assessment Framework for Belize: Prioritization of an Investment Plan, supported the rolling-out of a unique multi-criteria evaluation process, engaging a wide range of stakeholders to prioritize the socio-economic and climate-risk impact of roadways. Teams also worked with engineers from the government to analyze flood susceptibility. The methodology was tailored to draw from existing data, expert and local knowledge, and strategic survey processes to make up for information gaps, ultimately leading to the creation of a robust geospatial model to further enable decision-making.
- The **Seychelles Flood Impact Scoping and Recovery Planning project** informed the subsequent Disaster Risk Management Development Policy Loan with a Catastrophic Deferred Drawdown Option (Cat DDO) worth \$7 million. The Damage, Loss and Needs Assessment DaLa, financed by a \$74,000 ACP-EU NDRR grant, Seychelles—Flood Impact Scoping and Recovery Planning, recommended that the government consider establishing a DPO with a Cat DDO. This shows that the ACP-EU NDRR-funded DaLa recommendations were followed, since the CAT DDO refers to the DaLa as the rationale behind it.

<sup>8</sup> Crisis Response Window: the primary objective of the CRW is to provide IDA countries with additional resources that will help countries to respond to severe economic crises and major natural disasters and return to their long-term development paths.

## 1.3 Cross-cutting issues

### Gender


Empowering women and mainstreaming gender is a key GFDRR operating principle in climate and DRM, and a critical component of effective DRR. GFDRR launched the Gender Action Plan 2016–2021 to accelerate its commitment to: (i) understanding and addressing the different needs of men and women in DRM investments; and (ii) promoting women's empowerment for broader resilience strengthening. The ACP-EU NDRR Program introduced indicators in its monitoring and evaluation framework to monitor the progress made on enhancing gender and women's empowerment in the Program portfolio. Interventions highlighted target technical advice, capacity building and knowledge products. The following examples showcase how gender considerations are being transferred into beneficial outcomes in the three regions:

#### *Africa*

In Mozambique, a project implemented by World Vision and the WB contributes to the integration of DRR and CCA in development strategies to increase the resilience of vulnerable communities. To achieve this, capacity building in target communities to implement community-based DRM is an essential part of the project. During the period under review, the WB team organized four workshops on DRR and CCA integration strategies as well as local adaptation plans, and ensured that women were equally represented in the training sessions. On average, 43.3 percent of all training participants were women (61 out of 141). In addition, the project helped to establish ten local risk management committees which consist of 90 female and 90 male members.

#### *Caribbean*

The Building Physical and Fiscal Resilience of the Dominican Republic to Ensure Shared Prosperity project aims to promote disaster and climate resilience in priority sectors and develop technical and institutional capacity in disaster risk financing. With the help of the Survey of Well-being via Instant and Frequent Tracking (SWIFT) methodology, the WB team in the Dominican Republic is investigating the impact of disasters on socioeconomic and well-being indicators at the household level. The methodology provides gender disaggregated data, and thus will allow analysis of gender elements in the context of natural disasters and their relation to poverty. The baseline resulting from this exercise will be consequently used to design, as well as assess, gender disaggregated impacts of DRM interventions in the Dominican Republic.



*Savannah landscape in the  
National park, Kenya  
Photo credit: Shutterstock*





### *Pacific*

As part of the Building Climate and Disaster Resilience in the Pacific project, gender considerations have been included in the overarching programmatic technical assistance and are being included within any terms of reference that have been developed thus far. The project will, among others, undertake a needs assessment for providing end-to-end multi-hazard early warning services in the region. So far, assessment reports have been completed in four of the five countries (Samoa, Tonga, Vanuatu and Marshall Islands), and country-specific recommendations have been collected. Regional recommendations on how gender considerations can be integrated into the prioritization of early warning and preparedness initiatives are under development.

### **CSO engagement**

GFDRR also continued to support civil society engagement in DRM efforts for greater accountability and impact. Activities included consultations with local CSO groups to inform project design or organize events encompassing the participation of various CSO groups. Below are examples about the Program's engagement with CSOs in the three regions:

### *Africa*

As part of the **Togo** Integrated Disaster and Land Management project, targeted information campaigns were organized at national and local levels to raise awareness of the risks of flooding and land degradation with the effective involvement of rural and community radio stations, which serve as relays through local languages. As a result, 105 schools were sensitized to climate change impacts through comic strips, Discovering Climate Change. Such sensitization will continue through five non-governmental organizations (NGOs) in each of the country's five regions.

### *Caribbean*

During a workshop on February 22, 2017 organized under the **Jamaica** Strengthening Disaster Risk Management and Climate Resilience in Development Planning Process project, about 40 representatives from government agencies, the private sector, civil society and academia contributed to the development of guidelines for coastal management and beach restoration. Participants were invited to provide comments to the initial draft document and make suggestions for the final guidelines.

### *Pacific*

The third component of the **Solomon Islands** Community Resilience to Climate Change and Disaster Risk project involves CCA and DRR investments in local communities to strengthen their ability to cope with natural hazards and climate change, including the development of community-led sub-projects. So far, seventy-four sub-projects have been developed (twenty-five in Guadalcanal; nineteen in Temotu; fifteen in Central Islands and fifteen in Malaita) which involved training events on Community Vulnerability and Risk Mapping in eight communities, and Fiduciary Arrangements training in nine communities, both involving CSOs and local community entities.

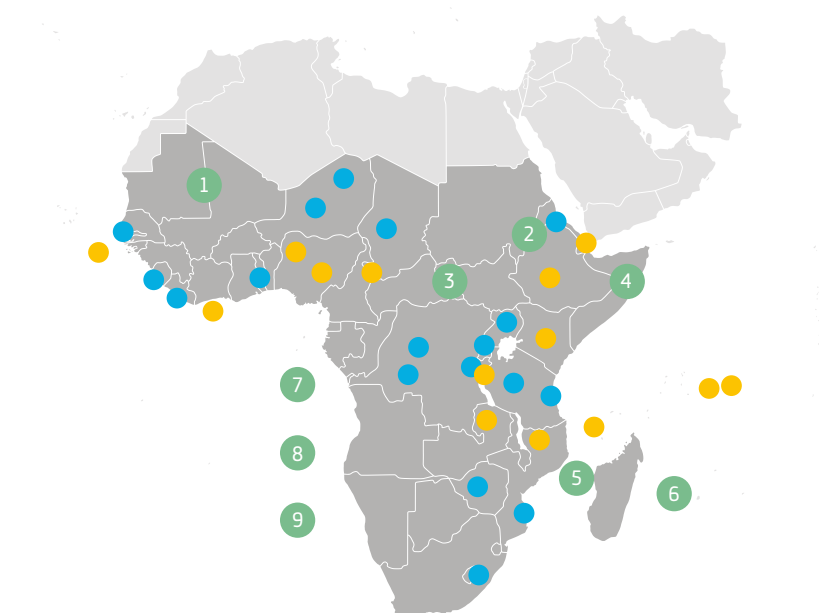
## 2. PROGRESS BY REGION

### 2.1. ACP-EU NDRR Program in Africa

As of June 30, 2017 the operational portfolio for Africa consisted of 41 projects (47 percent of the total) with \$ 30.5 million<sup>9</sup> allocated to national, regional, post-disaster and capacity building activities.

	Window 1	Window 2	Window 3	Total
Completed	9	9	14	32
Ongoing	-	7	-	7
Pipeline	-	-	-	0
Discontinued	-	2	-	2
<b>Total</b>	<b>9</b>	<b>18</b>	<b>14</b>	<b>41</b>

### The Program in Africa | 41 projects



- ① Burkina Faso, Chad, Mali, Mauritanie, 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, Sao Tome & Principe
- ④ Djibouti, Eritrea, Ethiopia, Kenya, Somalia, Sudan, South Sudan, Uganda
- ⑤ Comoros, Madagascar, Malawi, Mozambique
- ⑥ Comoros, Madagascar, Mauritius, Seychelles, Zanzibar (Tanzania)

#### ● Window 1

##### Regional & Sub-Regional Level Activities

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

#### ● Window 2

##### Country Level Activities

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

#### ● Window 3

##### Post Disaster, Capacity Building & Recovery

BURUNDI | CABO VERDE | CAMEROON | COTE D'IVOIRE | DJIBOUTI | ETHIOPIA | KENYA | MALAWI | MOZAMBIQUE | NIGERIA | SEYCHELLES

<sup>9</sup> This amount includes allocations to the R2 program

The Program actively supports African countries and RECs in a wide spectrum of DRM areas, such as:

- DRM mainstreaming (DIMSUR<sup>10</sup> project, The Gambia, Liberia, Niger, Sahel, Sierra Leone, Togo, Mozambique, Zimbabwe)
- Risk assessments (Ethiopia, Indian Ocean Islands<sup>11</sup>, Rwanda, Sierra Leone, Uganda)
- Developing risk tools (Liberia, Lesotho, Togo)
- Community-based resilience (Liberia, Niger, Sierra Leone, Tanzania, Togo)
- Enhancing the DRR capacities of RECs (ECCAS, ECOWAS, IGAD, SADC)
- Preparedness and EWS (Burundi, DR Congo, Lesotho, Sierra Leone, Togo)
- Risk financing (Indian Ocean Islands)
- Post-disaster assessments and recovery planning (Côte d'Ivoire, Malawi, Seychelles)

**The sections below highlight progress made from active projects during the period under review.**

*Note: Details for each project, including title, budget, implementing partners and status of implementation can be found in Annex 2.*

## Window 1: Regional Projects

### Eastern Africa

**The IGAD Regional Disaster Resilience and Sustainability project**, implemented by the WB in collaboration with the IGAD Secretariat, ran from September 2013 to October 2016. It aimed to build national and regional capacity to enhance DRM, as well as mainstream climate risk management into sustainable development policies. The activities planned under this project have been successfully completed with key outcomes achieved and planned outputs delivered. *See Box 2 for more information.*

### The Sahel

The **Supporting National and Regional Disaster Response and Resilience project**, implemented by the WB, was launched in June 2014 and closed in June 2017. The project aimed to increase resilience of the vulnerable population in the Sahel region to droughts and other natural hazards. The components included: (i) Fostering knowledge on water resources for increased resilience in the Sahel; (ii) Strengthening cross-cutting and regional collaboration for preparedness; and (iii) Understanding the needs of vulnerable communities for preparedness. Work during this reporting period centered around fostering future collaboration among regional organizations such as CILSS and its technical center, AGRHYMET, the African Center for Meteorological Application for Development (ACMAD), the intergovernmental river basin organizations (Senegal, Niger, Volta, Chad Lake) and the Sahel and Sahara Observatory (SSO) and national governments to ensure that their methodologies, products and services are tailored to their needs. A draft final activity report, presented as part of a mission in June 2017, completed operations of this project. Over the course of the project, more than 100 people were trained on early warning systems, information management, and institutional collaboration; and two investment plans were prepared to strengthen existing food security early warning systems and develop new early warning systems for flooding.

<sup>10</sup> DIMSUR: Disaster Mitigation and Sustainable Recovery Center

<sup>11</sup> Comoros, Madagascar, Seychelles, Zanzibar.



# Box 2

## EASTERN AFRICA – THE IGAD REGIONAL DISASTER RESILIENCE AND SUSTAINABILITY PROJECT

*Gardens in the mountains at island New Guinea*  
Photo credit: Shutterstock

Implemented by the World Bank in collaboration with the IGAD Secretariat, the project aims at building national and regional capacity to enhance DRM and mainstreaming climate risk management into sustainable development policies.

A substantial improvement on the institutional standing of the IGAD Secretariat is reflected in its enhanced convening power in the areas of DRR and CC adaptation, such as desertification in the Greater Horn of Africa (GHOA) and on issues related to transboundary resource management and governance. Among these transboundary challenges, food insecurity and conflict are now being addressed with a more comprehensive view integrating DRR and CC dimensions. This project also helped consolidate the leading role of IGAD's specialized regional weather and climate body, the Climate Prediction and Applications Center (ICPAC)—designated by the World Meteorological Organization (WMO) as the regional climate center for the GHOA region, which is responsible for coordinating the organization of regional Climate Outlook forums.

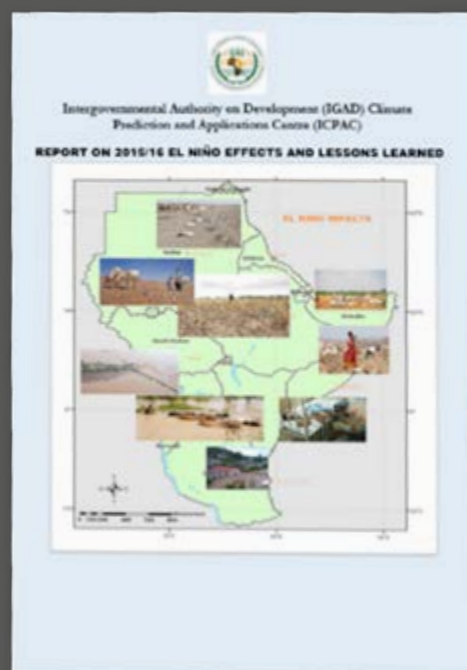
The project facilitated IGAD Secretariat's efforts for mainstreaming DRR and CC adaptation into the region's sustainable development dialogue. This resulted in IGAD Member States adopting mutually-agreed recommendations on a range of topics, including increased collaboration and coordination to address common challenges. This included policies as well as strengthening institutions that contribute to building resilience against natural hazards and the exacerbating effects of climate variability and change. The project also promoted synergies with other development and humanitarian partners' interventions aimed to enhance overall resilience of IGAD member states, for example, by supporting efforts to improve the Secretariat's project management capacity. Activities covered a range of IGAD-led technical workshops on DRR, CC adaptation and mitigation; regional and country-level weather and climate monitoring and forecasting; post-disaster damage and needs assessment training; as well as coordinating regional interventions aimed to combating drought and desertification.





The project also financed the assessment of the impacts of the 2015- 2016 El Niño Southern Oscillation (ENSO) events (the 2015–16 El Niño episode followed by the 2016 La Niña) that affected the entire GHoA region, as well as national governments' levels of preparedness and response to such events. The 2015–2016 ENSO events caused increased levels of food insecurity across the GHoA and triggered migrations across borders, exacerbating the already fragile food security situation among refugees and their host communities. To evaluate the impacts of the 2015–16 ENSO events, ICPAC was delegated to lead activities related to monitoring the evolution of the ENSO phenomena, culminating with the preparation of a report on ENSO impacts on key productive and social sectors in selected ICPAC's Member Countries (Burundi, Djibouti, Kenya, Rwanda, South Sudan, Sudan, Tanzania, and Uganda).

The assessment report, entitled Report on 2015/16 El Niño Effects and Lessons Learned, highlighted impacts on climate-sensitive sectors such as agriculture, water management, water & sanitation, health, and infrastructure, as well as government and other stakeholder interventions aimed at addressing the effects of ENSO across the region. The report also provided insights on ICPAC Member Countries' disaster risk preparedness and response capabilities and provided recommendations for improving capacities at the regional and national levels, such as enhancing multi-hazard EWS and integrating these with existing food security EWS for improved coordination among disaster risk management and food security audiences.







Sunrise over Indian Ocean  
Photo credit: Shutterstock

## Southwest Indian Ocean

**The Southwest Indian Ocean Risk Assessment and Financing Initiative (SWIO RAFI)**, implemented by the WB, was launched in April 2014 to improve understanding of disaster risks to Indian Ocean Islands (IOIs) and increase their financial risk resilience against natural disasters. The project aimed to build their capacity to meet post-disaster funding needs without compromising their fiscal balances and development objectives. Risk assessment activities involved collecting and sharing critical data on the exposure and existing hazard information for the IOIs. This data is made available through national data sharing platforms (GeoNode<sup>12</sup>) that have been established in Comoros, Madagascar, Seychelles and Zanzibar.

Country-specific risk profiles for Comoros, Madagascar, Mauritius, Seychelles and Zanzibar were completed by early November 2016<sup>13</sup>. All risk information, exposure and risk profiles were shared with the participating Island States, the Indian Ocean Commission (IOC), the EU Delegation, the United Nations (UN) and other partners during a IOC Regional

Platform Meeting in Mauritius in January 2017. Following this meeting, a summary report was produced and the project closed in June 2017. Risk financing activities were integrated into the ACP-EU Africa Disaster Risk Financing (ADRF) Initiative.

Because of this initiative, the participating SWIO Island States now have a much better understanding of their sovereign risk and can use this information to build resilience against the most prevalent natural hazards, for example, by building fiscal resilience, strengthening physical resilience, better land use planning, raising the awareness of natural hazards and building capacities to manage them.

The outputs of the project included technical reports, databases and Geographical Information System (GIS) layers, as well as the SWIO-RAFI Summary Report<sup>14</sup> and the individual Risk Profiles, all accessible online to internal and external audiences. In total, 21 training events were conducted for nearly 200 people on OpenDRI, GeoNode, QGIS, InaSafe, and OpenStreetMap.

<sup>12</sup> GeoNode is a web-based application and platform for developing geospatial information systems and for deploying spatial data infrastructures.

<sup>13</sup> The risk profiles are published at the project page on the ACP-EU NDRR website: <https://www.gfdrr.org/en/indian-ocean-islands-catastrophe-risk-profiling-financing-initiative>

<sup>14</sup> <https://goo.gl/NC7vdi>

<sup>15</sup> <https://goo.gl/EUxJ5k>



## Window 2: Country Projects

### Burundi

The **Flood and Landslide Preparedness to Improve Community Resilience project** was awarded under the Program's second call for proposals in December 2014 to the International Federation of Red Cross and Red Crescent Societies (IFRC) and the Burundi Red Cross (BRC) to address priorities of 56 flood-prone and landslide-prone communities. Since the beginning of a still-ongoing conflict in April 2015, violent unrests have reduced the mobility of local government officials as well as IFRC and BRC staff, which dramatically delayed the commencement of the project. Since January 2017, the situation has been gradually improving and the World Bank country office is now resuming operations. The signing of the contract with IFRC was under preparation by the end of June 2017. Activities will support three expected outcomes:

- community-managed early warning, early action mechanisms and improved weather forecasts;
- community awareness raising and capacity building of local authorities; and
- capturing and disseminating learning to improve DRR programing and financing to reduce vulnerability.

### DR Congo

The **Strengthening Hydro-Meteorological and Climate Services project**, implemented by the Government of the Democratic Republic of the Congo (DRC), was launched in April 2017. The project objectives—to improve the quality of the government of the DRC's targeted hydro-meteorological and climate services—will be achieved by strengthening the capacity of the national hydromet service, namely MettelSat. Support will be provided to optimize the collection, management and sharing of data on weather and climate; developing basic forecasting capacities for extreme weather conditions; integrating resources provided through remote

sensing and regional/global forecasting centers; improving the skills and motivation of staff; and developing the ability to anticipate impacts and enhance preparedness of populations at-risk in relevant sectors, with priority targeting of urban flooding, agriculture and navigation. The project is co-funded by CREWS and the Global Environmental Facility (GEF).

### Ethiopia

The **Woreda<sup>16</sup> Disaster Risk Reduction and Climate Change Adaptation Planning project**, launched in July 2015, is implemented by the Catholic Organization for Relief and Development (Cordaid) in collaboration with the Ethiopian National Disaster Risk Management Commission (NDRMC), African Center for Disaster Risk Management and the World Bank.

The project's overall objective is to learn from the process of district risk profiling and build consensus for enhanced risk profiling. The project supports the NDRMC to complete 25 district risk profiles and risk reduction plans and enhance institutional capacity.

The evaluation and assessment of existing processes, procedures, analytical tools and presentation platforms (desk review study) was completed in the latter half of 2016, leading to the design of new and improved project tools, including the development of data collection and analytics tools. The outcome of the risk profiling was shared with the NDRMC with recommendations for further improvement.

More than 300 government staff were trained on risk assessment methodologies and data collection methods, as well as contingency/DRR and mitigation plan development. Sixteen disaster risk profile documents were developed; two of which were uploaded on the NDRMC website. The risk profiling of the nine remaining districts are being finalized. In total, 25 risk profiling documents will be uploaded on the NDRMC website by project closing in late 2017. A validation workshop will be organized to discuss the outcomes of the project and disseminate lessons learned.

<sup>16</sup> Woreda means "district" in the local language.



*Ilha de Mozambique*  
Photo credit: Shutterstock

## Mozambique

The **Integration of DRR and CCA into District Development Plans and Community Based DRM project**, launched in September 2015, is implemented by World Vision. The project aims to contribute to the integration of DRR and CCA in development strategies in Mozambique to increase resilience of vulnerable communities. To achieve this primary objective, the project has two components: i) capacity building of target communities to implement community-based DRM, and ii) technical assistance to district and national institutions to integrate DRR and CCA in development planning.

A two-day start-up workshop was held in October 2016 in Chókwe, Gaza province, with representatives from national, provincial and district organizations, to officially launch the project and plan project activities involving all stakeholders. A baseline survey was conducted in 31 communities of the target districts to assess the situation of communities regarding i) vulnerability to climate risks; ii) capacity to prepare and respond to disasters; iii) existence of EWS; and iv) inclusion of DRR and CCA in community plans.

As part of the first component, 10 Local Risk Management Committees (LRMC) were established in March 2017 and a consultative meeting was held to review the DRM manual and training methodology for LRMC. Workshops were organized to discuss preliminary findings and gather feedback on recommendations for further improvement, as well as revise the DRR manual and training methodology. Furthermore, a desk review of DRR methodologies was concluded in May 2017, allowing the mapping of key actors and of methodologies used by various implementing partners to establish and train CLGRCs in Mozambique. As part of the second component, a desk review and stakeholder analysis of organizations involved in the design of the methodology to integrate DRR and CCA into district development plans was concluded in March 2017. Workshops also took place in partnership with the Ministry of Economy and Finance to gather information from governmental organizations and NGOs on the integration of DRR and CCA into district development plans, test the revised methodology for development of Local Adaptation Plans, and discuss recommendations for improvement.





## Niger

The **Multi-Hazard Early Warning System with Focus on Flood Risk Management project**, implemented by the World Bank, was launched in April 2015 and closed in June 2017. It supported the government of Niger's action plan for information management and EWS. During the period under review, a workshop on risk information and disaster risk financing was organized at the Office of the Niger Prime Minister in March 2017. A final mission to Niger in May 2017 presented the EWS platform (<http://risques-niger.org>) to several Ministry bodies and national institutions. It was concluded that

- the sharing of data between national institutions through the EWS had started (and provided a good basis for the related CREWS Initiative project in Niger); and
- a clarification of the roles of General Directorate for Civil Protection in Niger and other national bodies with regards to the EWS has been achieved. A draft final report was completed in June 2017, providing detailed information about progress to date and recommendations for follow-up.

## Sierra Leone

The **Supporting Community-Based DRR project** was initiated in October 2012 and is being implemented by the WB. The project aims to contribute to the integration of DRR and CCA in development strategies in Sierra Leone to increase resilience of vulnerable communities.

The outbreak of Ebola in Sierra Leone in 2014 and 2015 has prevented the project from moving forward for a long time. Consequently, an extension request was filed and eventually granted until May 30, 2018, with the intent of supporting an upcoming IDA operation.

To achieve the primary objective, the project strives to build the capacity of target communities to implement community-based DRM and provide technical assistance to district and national institutions for integrating DRR and CCA in development planning. During the reporting period, a consulting consortium (ARUP-INTEGEMS- JBA) was recruited and is supporting the government of Sierra Leone in developing three city-level risk assessments for selected hazards (floods, landslide, sea level rise, coastal erosion) using globally and locally available datasets (including community knowledge).





Unidentified Togolese people sit in back part of a car in Togo  
Photo credit: Shutterstock

The study will comprise a description of various hazards, risks and vulnerabilities mappings on city-level, identify priority needs and investments, and carry out feasibility studies for at least three key hazards.

The Sierra Leone Multi-City Hazard Review and Risk Assessment study was launched in February 2017 and an inception report has been prepared by the consultants, and reviewed both by the World Bank and the Sierra Leone Office of National Security. The qualitative risks assessment was developed and is in finalization, based on feedback received from local and national stakeholders during a mission held in June 2017. Discussions gathered the local authorities of Freetown, Makeni and Bo, the three mayors and district council chairmen, the central government's department, the UN Country team and NGO representatives. The revised risks assessment report will provide a quantitative risks assessment and cost-benefit analysis and mitigation options for each selected cities and hazards. Workshops with the city representatives in Freetown, Makeni and Bo will be held in each of the cities in early Fall 2017 to share the draft final report and gather feedback from the local and national stakeholders.

### Tanzania

The **Building Climate Resilience in Tanzania Water Sector project**, implemented by the WB, started in May 2014 with the aim of reducing the vulnerability of rural and urban communities in Tanzania to hydromet hazards. The project was closed in September 2016 with the completion of activities under its two components on increasing the performance of critical water sector infrastructure in rural communities, and urban flood risk mapping. See Box 3 for more information.

### Togo

The **Integrated Disaster and Land Management project**, implemented by the Togolese Ministry of Environment and Forestry Resources, was launched in November 2014 and closed in June 2017. The project was part of a larger engagement co-financed by GFDRR, the Global Environmental Facility, the Least Developed Countries Fund, and Terrafrica.

The project aimed to strengthen institutional capacity and raise awareness to manage flood risk and land degradation in targeted rural and urban areas, and expand sustainable land management practices in targeted landscapes and climate vulnerable areas. Activities are implemented around three components:

- institutional strengthening and awareness raising;
- community-based activities for adaptation and sustainable land management, and
- early warning, monitoring, and knowledge systems.

During the period under review, hydrological and meteorological equipment, such as rain and river-level gauges, was provided for the country's five regions to build hydromet capacities. In addition, key meteorological stations were retrofitted and 13 meteorological parks were established. In parallel, five NGOs and 15 community radio stations were selected for awareness campaigns on DRR and CCA that reached 105 schools and vulnerable areas. In total, 865 people (including primary and secondary school teachers) were trained on DRM and PDNAs in the whole country during the review period. Two teaching guides on DRM and CC were also created and





disseminated. Finally, the operationalization of the EWS through establishment of a EWS Centre was completed, and simulation of a Flood Early Warning System (FEWS) with the participation of all stakeholders at the national level and humanitarian partners was organized. The direct beneficiaries of the project are estimated at one million, of which about 40 percent are women. Based on this positive impact on the population, the government requested additional funding from the World Bank to scale up the project's best practices in other areas in the country.

### Uganda

The **Risk Assessment and Resilience Action Plan project**, launched in April 2015 and implemented by the World Bank, aims at developing a proactive approach to DRM by building a comprehensive understanding of hazards, risks and vulnerabilities at all levels. The project is structured in four complementary components:

- understanding national disaster risk in Uganda;
- building community resilience through improved disaster risk knowledge;
- mainstreaming multi-sectoral DRR and CCA considerations at the community level; and
- measuring progress towards building resilience.

In early December 2016, the government of Uganda and World Bank convened a meeting with specialized technical agencies and various stakeholders to agree on a joint food security assessment, which was carried out at the request of the Office of the Prime Minister in January 2017. The

assessment led to the production and adoption of several key policy recommendations for improving the country's disaster risk preparedness and emergency response capacity, particularly for addressing food insecurity shocks resulting from drought and extreme rainfall events that affect the country's small-scale farmers practicing rain-fed agriculture, small-herd owners, and the urban poor.

Following the assessment, the Ugandan government recognized the need for further increasing its capacity for disaster preparedness and emergency response, as well as the need for building a better understanding of the country's natural hazard risk profile. The need for systematically monitoring hydromet conditions and the provision of climate services to small farmers and pastoralists was recognized as well. Budgetary constraints are, however, limiting the government's ability to carry out resilience building activities, particularly against extreme hydromet events which exacerbate the country's food security situation.

**On 10 September 2016, a magnitude 5.7 earthquake struck northern Tanzania causing also severe damage in the Ugandan village of Minziro, in the district of Rakai.** It triggered landslides and destroyed more than 200 homes. The earthquake left hundreds of people homeless and in need of temporary shelter. The Ugandan government quickly mobilized a technical team comprising government officials from relevant agencies who had benefited of the post-disaster assessment methodology training provided under this project. The intervention showed that the effectiveness and efficiency of the government's emergency response has been substantially improved.



# Box 3

---

## BUILDING CLIMATE RESILIENCE IN TANZANIA WATER SECTOR PROJECT

Masai village, northern Tanzania  
Photo credit: Shutterstock



This project has supported an activity publicly known as Ramani Huria, which is Swahili for “Open Map.” Ramani Huria has enabled the collection of over 750,000 building footprints; 120 kilometers of imagery and surface models; 2,091 kilometers of roads; and tens of thousands of points of interest such as toilets, water points, schools and other critical infrastructure. Over 100 community members and 165 GIS and Urban Planning students of local universities were engaged in creating data and facilitating knowledge transfer on community-based flood and disaster issues.

By empowering communities to digitize their spaces through community mapping, the project supported the development of community awareness and demonstrated how to leverage citizen participation for hyperlocal data collection. This citizen participation is focused on vulnerable and flood prone areas—presenting an opportunity to empower ward officers and community leaders to identify and prioritize community resilience and action plans against flooding.

The project demonstrated how low-cost tools such as OpenStreetMap, drones and in-situ sensors can be scaled and provide a platform for innovation. There is great value in fusing traditional flood modelling techniques with local community-led participatory driven methods. Community knowledge is elicited on the extent of flooding from the last big flood, and through a participatory mapping process, the inundation extent is captured by community members drawing on the underlying map. It offers an opportunity for quick assessment of inundation from a community perspective complementing more complex techniques, such as hydrological modelling for a fuller understanding of flood inundation.

As part of the project, training on open data for mapping purposes was conducted to equip students, government and community members with valuable skills to improve Tanzania’s development planning. The training took the form of 43

sessions with varying target audiences that covered topics including Java OpenStreetMap, InaSAFE, QGIS, data quality and quantity, and general map creation. These sessions reached 830 citizens of Tanzania, including university students, government and community members, as well as local team members. Ten additional workshops were delivered in collaboration with CSOs and universities—particularly the Tanzanian Red Cross Society, one of the key implementing partners—to establish community-led emergency response mechanisms in urban areas.

The Ramani Huria project was showcased during the Africa Open Data Conference from September 2–5, 2016, which included over 450 participants from African governments. The project was featured as a major innovation in sourcing low-cost mapping data, citizen data and building community, student skills and collaboration for urban flood risk assessment and management. The innovative, citizen-based participatory approach has already started to spread to other cities (such as Stone Town, Zanzibar) which have adopted the participatory mapping methods pioneered by Ramani Huria.

A closing workshop, attended by over 150 stakeholders (community members, local and national government, development partners, and civil society) was held on November 27–28, 2016 in Dar es Salaam. At the event, copies of the Risk Profile Atlas were disseminated and an agreement made to form committees on harmonizing data across Dar es Salaam, providing a foundation for a national framework of urban open data sharing.

For more information about Ramani Huria, see:

<http://ramanihuria.org>.

Information on the Code for Resilience Tanzania can be found at: <http://codeforresilience.org/2016/01/30/tanzania-cfr.html>

## Zimbabwe

The **Mainstreaming DRR and CCA into Local Development Planning through the Zambezi River Basin Initiative**, launched in September 2015, is implemented by the WB in collaboration with the Zimbabwe Red Cross Society (ZRCS). It aims to support the integration of DRR and CCA measures within the local development planning process at village, ward and district levels.

Activities implemented include awareness-raising and stakeholder sensitization to create enabling environments at local levels for integrating DRR/CCA into local development plans, and advocacy to link early warning to early action. Several meetings at district, ward and community level were conducted with key staff from partner organizations and community leaders and members. Disaster Reduction Action Plans have been integrated in ward and district plans, and joint monitoring visits were undertaken to optimize learning and collaboration. Key stakeholders in the project traveled to Malawi for a study tour where the collaboration between different committees—from the community to the national

level—was a key learning aspect. A total of 18 DRR champions, four of whom are female, were identified and are currently carrying out disaster risk awareness activities in their communities. Each ward has six champions comprising two extension workers and four volunteers from the communities. Branch meetings are now taking place monthly, and are helping the ZRCS and communities effectively communicate and update each other on progress and constraints.

Furthermore, training of community leaders, Red Cross volunteers and community members to conduct participatory risk assessment and hazard mapping was carried out. Funding of government departments for their own activities remains a challenge. This project partially addresses this issue for the wards included in its activities.

A mid-term review of the project was undertaken and found it to be highly relevant to the needs of the targeted communities and well aligned to the strategic priorities and approaches of ZRCS and the government of Zimbabwe.

## Window 3: Post-disaster, Capacity Building & Recovery Projects

### Côte d'Ivoire

The **Post Disaster Need Assessment Training project** concluded with a follow-up workshop held on October 6–7, 2016 in Grand Bassan (see the picture below). The objective of the workshop was to set up and launch the country's PDNA core team. The project closed in December 2016.



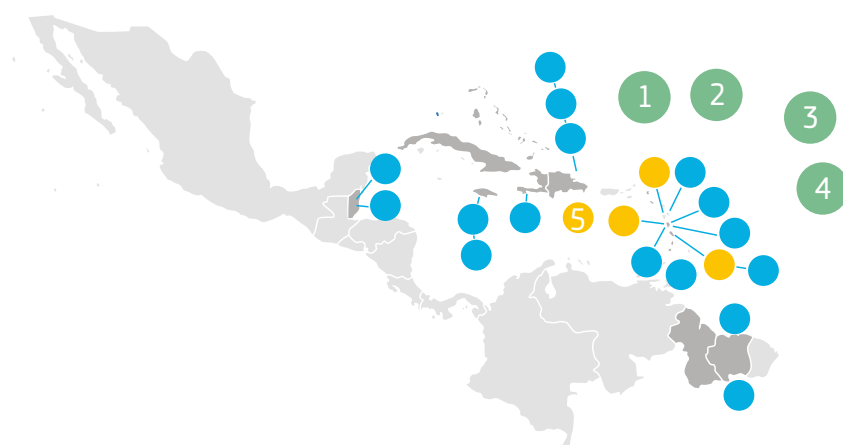
Côte d'Ivoire - PDNA Core Team.  
Photo credit: Worldbank

## 2.2. ACP-EU NDRR Program in the Caribbean

In the Caribbean region, the ACP-EU NDRR Program has a portfolio of 24 projects (28 percent of total) for an amount of \$ 11.7 million allocated to national, regional, post-disaster and capacity building activities.

	Window 1	Window 2	Window 3	Total
Completed	3	6	4	13
Ongoing	-	10	-	10
Pipeline	-	-	-	0
Discontinued	1	-	-	1
<b>Total</b>	<b>4</b>	<b>16</b>	<b>4</b>	<b>24</b>

### The Program in the Caribbean | 24 projects



#### ● Window 1

##### Regional & Sub-Regional Level Activities

STRENGTHENING PUBLIC INVESTMENT IN DRR & CCA (UNDP)<sup>1</sup> | CARIBBEAN RISK INFORMATION PROGRAMME<sup>2</sup> | MOSSAIC<sup>3</sup> | CDEMA CONFERENCE<sup>4</sup>

#### ● Window 2

##### Country Level Activities

BELIZE | DOMINICA | DOMINICAN REPUBLIC | GRENADA | GUYANA | HAITI | JAMAICA | SAINT LUCIA | SURINAME

#### ● Window 3

##### Post Disaster, Capacity Building & Recovery

DOMINICA | SAINT VINCENT AND THE GRENADINES | SAINT LUCIA | STRENGTHENING CAPACITY IN PDNA<sup>5</sup>

- <sup>1</sup> Antigua and Barbuda, Barbados, Dominica, Grenada, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines
- <sup>2</sup> Belize, Dominica, Dominican Republic, Grenada, Guyana, Haiti, Jamaica, St. Lucia, St. Vincent and the Grenadines
- <sup>3</sup> Belize, Dominica, Grenada, Jamaica, St. Lucia, St. Vincent and the Grenadines
- <sup>4</sup> CDEMA participating Member States (18 countries)
- <sup>5</sup> Antigua and Barbuda, Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Jamaica, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines



The Program supports activities in a wide spectrum of DRM areas, including:

- Mainstreaming DRM into sectoral planning (Haiti, Dominican Republic, Jamaica, Saint Lucia, Suriname)
- Data generation, risk information and assessment (at the national and regional levels)
- Preparation of DRM investments (Belize, Dominica, Saint Lucia)
- DRM communication and advocacy (Guyana)
- Technical capacity building (regional projects, but also at national level)
- Technical assistance in disaster risk financing (Belize, Dominican Republic, Jamaica, Grenada and Saint Lucia)
- Post-disaster assessments (Dominica, Saint Lucia, Saint Vincent and the Grenadines)



<sup>17</sup> <http://dominode.dm>

<sup>18</sup> Initially proposed by UNICEF and adapted to the Central American and Caribbean context by a DIPECHO project in Central America. The index considers structural (schools' physical infrastructure) and non-structural components.



The sections below highlight progress made from active projects during the period under review.

*Note: Details for each project, including title, budget, implementing partners and status of implementation can be found in Annex 2.*

## Window 1: Regional Projects

**The Management of Slope Stability in Communities (MoSSaiC) Caribbean Community of Practitioners project**, launched in February 2014 and implemented by the WB, closed in February 2017. The project supported the development of course materials, including a web-based learning and knowledge exchange platform and software for calculating and modelling landslide risk.

A training course took place in July 2016 in St. Lucia with 15 government officials, including senior engineers and local government staff from Dominica, Grenada, St. Lucia and St. Vincent and the Grenadines. The workshop covered all aspects of the preparation and delivery of a MoSSaiC program in a Caribbean low-income community. A critical aspect of continuing the development of MoSSaiC as a community of practitioners will be to secure funding for implementing its projects in communities. The lack of funding is a constraint in some of the Caribbean countries; and discussions on this issues are ongoing.



Aerial view of Boca Chica town, Dominican Republic  
Photo credit: Shutterstock

## Window 2: Country Projects

### Dominica

The **Spatial Data Management and Identification of Most Vulnerable Schools and Shelters project**, launched in December 2012 and implemented by the WB, closed in June 2017. The project aimed at reducing Dominica's vulnerability to natural hazards and climate change impacts by identifying and undertaking specific hazard and disaster risk assessments. To reduce risk efficiently and strategically, it is crucial to know risk levels and use the information adequately. Therefore, this project supported the government of Dominica in setting up a risk data management platform, the Dominode,<sup>17</sup> as well as a Vulnerability Assessment and a Multi-Criteria Evaluation to better inform the choice of investments under the proposed Disaster Vulnerability Reduction Project (DVRP), financed by the World Bank (effective from September 8, 2014). These activities supported the government in identifying and retrofitting vulnerable shelters, and in designing and constructing new resilient structures. Moreover, the project aimed at making hazard and risk information data available, increasing the government of Dominica's capacity to manage and share geospatial data, promoting a culture data sharing, for informed decision making at multiple levels.

To ensure sustainability and wide use of these outputs, the project team integrated the project results under a national monitoring and evaluation framework that aims to provide a mechanism for national monitoring of climate resilience outcomes and progress across all public, bilateral and multilateral investments. The project team reinforced the national monitoring and evaluation framework and consolidated geospatial related work. This activity supported a systematic approach to results monitoring, impact evaluation, knowledge management and learning at the program level.

### Dominican Republic

The **Identifying Risk to Protect Schools in the Dominican Republic project**, launched in April 2015 and implemented by the WB in collaboration with Plan International, Oxfam and Habitat for Humanity, focuses on strengthening the evaluation of disaster risk for public schools in the Dominican Republic using the Safe School Index.<sup>18</sup> The project aims to scale up an existing pilot project funded by the EU's Disaster Preparedness ECHO (DIPECHO) Program to strengthen government and academic sector capacities in disaster risk assessment and emergency information management. The Safe School Index has been applied to 48 schools in the country and three hazard maps (drought, flooding and wildfire) have been



*Fishing boats moored in a small fishing settlement, Jamaica  
Photo credit: Shutterstock*

produced for the assessed schools. A cooperation agreement has also been signed with the National Geological Service to produce additional seismic and multi-hazard maps for the 48 assessed schools. To date, approximately half of those maps have been produced.

In parallel, the NGO consortium has supported the Ministry of Education in training and certifying five regional commissions (51 people trained) on the use of the Safe School Index, which will allow to replicate and expand those efforts across the country. National Emergency Commission delegates are also following GIS and open-data platforms training courses to be able to produce basic hazard map of the schools mapped out to facilitate the future application of school safety risk assessments. Two manuals on the elaboration of flooding and drought maps have been produced to ensure that further capacity-building activities can be conducted when the project closes.

### **The Building Physical and Fiscal Resilience of the Dominican Republic to Ensure Shared Prosperity**

**project**, launched in early 2017, and implemented by the WB, focuses on improving the government's capacity to build physical and fiscal resilience to disasters. The project aims at promoting disaster and climate risk reduction policies in key sectors, supporting the Ministry of Finance in developing technical and institutional capacity in disaster risk financing, and targeting DRM policies and investments towards promoting shared prosperity. After a joint planning process with the government, several activities have started such as a quantitative assessment of the impact of disaster-related asset losses on household welfare that will allow to measure the impact of policy reforms supported by a CAT DDO<sup>19</sup> Program. Two Country Disaster Risk Profiles (CDRPs) for earthquakes and hurricane windstorms were also developed; findings were presented and discussed with the Ministry. The results of the CDRP are being used to integrate the impacts of climate and disaster shocks into the Debt Sustainability Analysis (DSA) performed by the WB and the International Monetary Fund (IMF). The Ministry created a mechanism for the fiscal management of contingent liabilities associated with disasters, which is currently mapping and assessing these liabilities.

<sup>19</sup> A Cat DDO is a contingent credit line that provides immediate liquidity to WB member countries in the aftermath of a natural disaster. It is part of a broad spectrum of risk financing instruments available from the WBG to help countries plan efficient responses to natural disasters.





## Jamaica

The **Strengthening DRM and Climate Resilience project**, launched in January 2015 and implemented by the WB, supports the government of Jamaica in better integrating disaster vulnerability reduction and CCA considerations in national development planning processes. It also develops new risk tools to guide vulnerability reduction and emergency preparedness. During the review period, project activities focused on preparing the National Strategy for Resettlement related to DRM, reviewing and updating the National Guidelines for Coastal Management and Beach Restoration, analyzing and providing capacity building for emergency preparedness, and analyzing the disaster risk for the transport sector infrastructure. The draft National Strategy for Resettlement was prepared with the support and review of a technical team of representatives from 15 government agencies, and should be approved and implemented in the second half of 2017.

In September 2016, a multi stakeholder workshop was held with key local institutions as part of the development of the Guidelines for Coastal Management and Beach Restoration. Forty representatives from public, private and civil society organizations participated in the workshop. A final document

of the Guidelines (see Annex 1) was launched in June 2017 and was followed by a high-level policy dialogue hosted by the World Bank in August 2017. In addition to the guidelines, two additional reports were produced. One includes a series of recommendations to transform the guidelines into a web-based dynamic instrument; the other identifies the most catalytic research needs in this field. Finally, a first draft institutional gap analysis for emergency preparedness was prepared and will be completed in the second half of 2017.

A methodological framework for the risk evaluation concerning flooding and landslides was developed and implemented in a GIS-based platform for the transport sector. This model integrates a travel demand model and a disaster impact model that focus on the social impact of road disruption in terms of changes in accessibility for populated areas nationwide.





Typical blue house on seashore in Dominican Republic  
Photo credit: Shutterstock



## St. Lucia

The **Vision 2030: Measurable Reduction of Disaster Risk Specific to Public Infrastructure project**, launched in February 2016, is implemented by the WB with the Ministries of Finance and Infrastructure. This project aims to:

- quantify disaster risk on transportation and public infrastructure to improve the assessment and understanding of risks from natural hazards and climate change;
- generate and apply risk information in public policy and investment planning; and
- reduce the adverse effects through better and more credible and defensible investment planning into risk reduction measures.

A multi-hazard risk management system is being developed to quantify, prioritize, and reduce current asset risks. Following a series of workshops with the Ministry of Infrastructure on technical assessments, GIS and asset management at the end of 2016, the hazard risk assessment work moved forward through analysis of landslide, seismic and flood risk and their effects on transportation assets. The government of Saint Lucia, with support from the project team, took steps to build a risk-based asset management framework that would allow a data-driven approach to manage key assets. The project is developing a multi-hazard risk assessment methodology to support in asset-level quantification of potential losses. The government and project team also worked on the development of a Decision-Support System (DSS) that would provide information technology capabilities to prioritize infrastructure budgets based on relevant data, including risk information. Detailed specifications for the proposed DSS will be drawn up during the next stages of the project, with a view to implementing an IT solution during 2017–18.

The **Measuring the Impact of Disaster Events on Poverty and Social Vulnerability project** was launched in early 2017 and is implemented by the WB. The project aims to: (i) analyze the impact of natural disasters on social vulnerability through an innovative framework that includes developing a “DRM Shocks Module” for all national household surveys; (ii) determine unconventional data sources to be used as proxies

for standard data used in poverty models; and (iii) develop and deploy a novel rapid and cost-efficient poverty survey. The technical assistance findings and data will inform policy and institutional areas for reform that could be included in a WB DRM Development Policy Loan (DPL),<sup>20</sup> including the Cat DDO currently under preparation in Saint Lucia.

The Central Statistical Office has completed in June 2017 the Living Standards Measurement Study (LSMS) survey, which contained a “DRM Shocks Module” that will be used to inform the current analysis. This module will be adjusted to better capture the impacts of climate change and will be included in all the LSMS surveys conducted throughout the Eastern Caribbean. In addition, proxies for traditional poverty indicators and data on the impacts on disasters in Saint Lucia over the past 25 years are being analyzed. The LSMS data is being used to develop a model for determining poverty levels and for determining key proxies that can be quickly collected to inform the model.

## Suriname

The **Flood Risk Management in Greater Paramaribo Area project**, launched in April 2016 and implemented by the WB, aims to manage flood risk in the Greater Paramaribo area. See Box 4 for more information.

## Belize, Grenada, Jamaica and Saint Lucia

The **Caribbean Disaster Risk Financing Technical Assistance (DRFTA) project**, with country-level projects in **Belize, Grenada, Jamaica and Saint Lucia** implemented by the WB, was launched in May 2015 to increase fiscal resilience by supporting Ministry of Finance in building technical and institutional capacity in disaster risk finance. Since the beginning of the DRFTA project, several analyses (CDRP, country diagnostics, public financial management analysis on post-disaster expenditures and budget management) were completed for the four countries. The results led to the drafting of a final report including recommendations for a financial protection strategy against disasters. These findings will be evaluated with respective Ministry counterparts in the second half of 2017. Implementation options will also be discussed. The next steps will include a South-South knowledge exchange seminar bringing together key stakeholders from the countries engaged in the project and technical experts. This seminar will focus on understanding and interpreting the countries’ disaster risk profiles and associated contingent liability.

<sup>20</sup> A DPL is a type of WB financial operation where funds are made available to a Government based on (i) maintenance of an adequate macroeconomic policy framework, as determined by the WB with inputs from IMF assessments; (ii) satisfactory implementation of the overall reform program; and (iii) the completion of a set of critical policy and institutional actions, called prior actions, agreed between the WB and the government.



# Box 4

---

## **SURINAME: MANAGING FLOOD RISK IN THE GREATER PARAMARIBO AREA**

Wooden pier near Paramaribo, Suriname  
Photo credit: Shutterstock

The Flood Risk Management in Greater Paramaribo Area project, launched in April 2016 and implemented by the WB, aims to manage flood risk in the Greater Paramaribo area through a strategic flood risk assessment, a coastal resilience assessment, and a prioritized risk reduction investment plan. These will reduce the impact of recurrent flooding while taking into consideration environmental and social aspects, land acquisition, and involuntary resettlement.

The comprehensive flood risk assessment, as well as a coastal resilience assessment in the concerned area, included modeling and studies on flood hazard, vulnerability and potential exposure, and structural, natural, and non-structural options to manage the disaster risk in the low-lying urban areas of Paramaribo city.

Based on the results of these assessments, eleven structural and four non-structural mitigation measures were analyzed to provide a quantified risk-based support tool for decision-making. The assessments have highlighted that a sea-wall is not a sustainable solution for Paramaribo and Suriname; instead the Greater Paramaribo area requires an integrated flood risk management strategy that is likely to require some form of flood barrier combined with a mix of natural, structural and non-structural interventions, as well as with significant land planning policy and institutional changes. The cost-benefit analysis of these measures enabled the development of prioritized risk reduction investment plan. Furthermore, training on Flood Risk Assessment and Modelling was provided to build the capacities of the technical specialists representing various Ministries. To this effect, a series of freeware were shared for installation beforehand. This initiative was one of the main components of project handover to the government.

The results of these assessments were presented during two well-received public workshops organized in partnership with the Ministry of Public Works in Paramaribo on April 24–25, 2017.

Approximately 70 representatives from key stakeholders attended, including government departments, Anton de Kom University of Suriname; national NGOs, such as the World Wildlife Fund (WWF), National Institute for Environment and Development in Suriname (NIMOS) and the Center for Agricultural Research in Suriname (CELOS); members of the international community, including The Dutch Embassy and French Development Agency (AFD); multilateral organizations, such as the UNDP and the Inter-American Development Bank (IADB); and private sector representatives. In addition, a two-and-a-half-day Flood Modelling Training was carried out on April 26–28 for 25 technical government officials responsible for flood risk management in the country. The outputs of this technical assistance project were instrumental in building knowledge and the institutional capacities of the Ministry of Public Works and other stakeholders managing disaster risks in the country. The government of Suriname has since expressed interest in a flood risk management investment project funded by the WB.



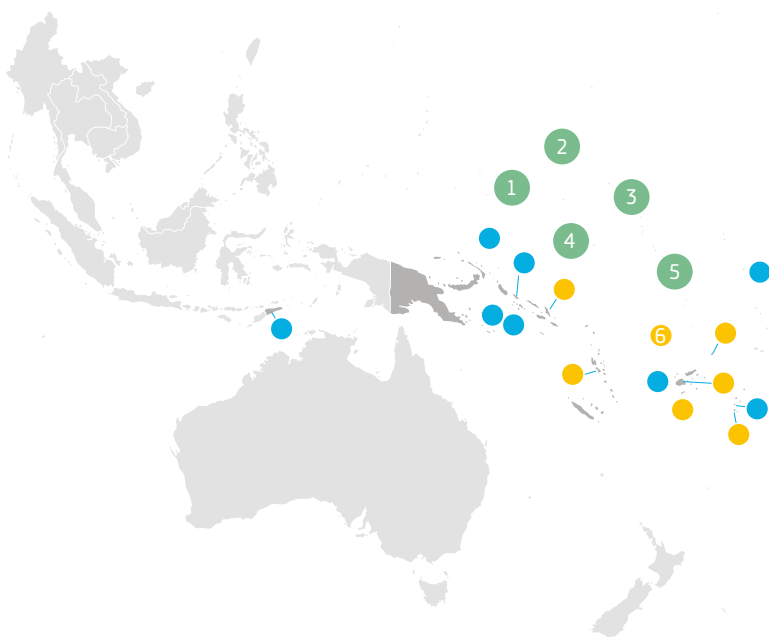
*Presentation of the final results of the flood risk assessment, the coastal resilience assessment and the flood mitigation options and investment plans in Suriname*  
Source: World Bank

## 2.3. ACP-EU NDRR Program in the Pacific

The ACP-EU NDRR Program has a portfolio of 20 projects in the Pacific region (23 percent of total), with \$14 million allocated to national, regional, post-disaster and capacity building activities.

	Window 1	Window 2	Window 3	Total
Completed	2	1	6	9
Ongoing	3	4	-	7
Pipeline	-	2	-	2
Discontinued	-	1	1	2
<b>Total</b>	<b>5</b>	<b>8</b>	<b>7</b>	<b>20</b>

## The Program in the Pacific | 20 projects



- ① Pacific Catastrophe Risk Assessment & Financing Initiative - Phase 3
- ② ③ Fiji, Micronesia, Marshall Islands, Samoa, Solomon Islands, Tonga, Vanuatu
- ④ Disaster Risk Assessment Capacity Building and Community Building - Understanding Risk Forum (in London)
- ⑤ Marshall Island, Micronesia, Palau
- ⑥ Secretariat of the Pacific Community

### ● Window 1

#### Regional & Sub-Regional Level Activities

PCRAFI<sup>①</sup> | BUILDING CLIMATE DISASTER RESILIENCE<sup>② ③</sup> | UNDERSTANDING RISK FORUM 2014 (LONDON, UK)<sup>④</sup> | ENHANCING TARGETED DRR MEASURES<sup>⑤</sup>

### ● Window 2

#### Country Level Activities


FIJI | KIRIBATI | SOLOMON ISLANDS | TIMOR LESTE | TONGA | VANUATU

### ● Window 3

#### Post Disaster, Capacity Building & Recovery

FIJI | SAMOA | SOLOMON ISLANDS | TONGA | VANUATU ECONOMIC ASSESSMENT OF DISASTERS IN THE PACIFIC<sup>⑥</sup>





*Destruction caused by tropical cyclone Winston, Fiji*  
Photo credit: Shutterstock

The Program supports activities in a wide spectrum of DRM areas, including:

- Mainstreaming DRM at both the national and local levels (Solomon Islands, Vanuatu)
- Data collection and risk information sharing (regional program Pacific Catastrophe Risk Assessment and Financing Initiative-PCRAFI)
- Climate vulnerability assessment (Fiji) and Climate-resilient urban expansion (Kiribati)
- Preparedness, contingency planning and EWS (Solomon Islands, Vanuatu)
- PDNAs and DaLA (Solomon Islands, Fiji, Samoa, Vanuatu)
- Recovery and resilient (re-)construction Technical Assistance (Tonga)

**The sections below highlight progress made from active projects during the period under review.**

*Note: Details for each project, including title, budget, implementing partners and status of implementation can be found in Annex 2.*

## Window 1: Regional Projects

### *Pacific Islands Countries*

The **Pacific Catastrophe Risk Assessment and Financing Initiative (PCRAFI)**, launched in August 2012 and closed in June 2017, was implemented by the WB and the Secretariat of the Pacific Community Applied Geoscience and Technology Division (SPC-SOPAC). This project provided Pacific Island Countries with state-of-the-art disaster risk modelling and assessment tools to enhance their DRM capabilities. See Box 5 for more information.

The **Programmatic Technical Assistance on Building Climate and Disaster Resilience project**, which covers seven Pacific Island Countries,<sup>21</sup> started in October 2014 and is implemented by the WB. Countries are selected based on their commitment to participate in a regional investment program, the WB-funded Pacific Resilience Program (PREP), to strengthen and modernize early warning and preparedness systems. The project is supporting the development of tools and methodologies to increase the capacity of these countries in mainstreaming DRM and CCA in the design of infrastructure investments. It also aims to undertake a needs assessment for providing end-to-end multi-hazard early warning services and develop an investment plan for upgrading and strengthening early warning and preparedness systems.

During the period under review, mainstreaming activities have started in Samoa and specifically a review of the Vulnerability Assessment and Climate Resilience Strategy for the country's road network was carried out. Results of this assessment will be shared as lessons learned within the Program, to facilitate integration of disaster and climate resilience for future transport projects in the Pacific region. In the Republic of Marshall Islands (RMI), activities included the preparation of the Rapid Assessment of Coastal Hazards and Risk in RMI report (being finalized) which led to a full and comprehensive coastal vulnerability assessment. Country reports on EWS have also been prepared in Samoa, Tonga, Vanuatu and RMI to identify priority areas and needs for strengthening existing

<sup>21</sup> Participating countries are the Federated States of Micronesia, Fiji, Republic of Marshall Islands, Samoa, Solomon Islands, Tonga and Vanuatu.



systems. The project has also focused on the development of safer school roadmaps in Samoa, Tonga and Vanuatu as well as the preparation of a knowledge note on urban flood risk management in the Pacific.

The **UAV4Resilience—Utilizing Unmanned Aerial Vehicles for Disaster Assessments in the Pacific Islands project** was launched in January 2017 and aims to develop the capacity and readiness of Fiji and Samoa in deploying Unmanned Aerial Vehicles (UAVs) for disaster and climate risk assessments as well as rapid identification of damage to the physical environment in post-disaster situations. Activities include the generation of best practice on the use for UAVs for DRM and climate resilience which can in turn be used in other areas, such as agriculture and development planning. Three consultants and one firm were hired to field test the UAVs and respond to the challenges set out in the Terms of Reference. The individual consultants will evaluate the outputs of the field testing and develop best practices on the use of UAVs, as well as assist in overseeing the implementation of the project in terms of the technical quality and efficiency. All necessary permissions to fly the UAVs in Tonga and Fiji have been obtained and in-field testing began in June 2017. The data collected through this project will also directly be fed into the PacRIS as well as PCRAFI asset databases.

The **Community Vulnerability Mapping in Republic of Marshall Islands and Federal States of Micronesia project**, awarded under the Program's second call for proposals in December 2014 to the International Organization for Migration (IOM), was launched in February 2017. The start of activities has been delayed owing to a readjustment in the scope of work expected and the related negotiations between IOM and the WB. The project aims to enhance the resilience of selected communities to disaster risk and assist them in adapting to climate change. The scope of the project activities includes risk mapping and planning of community investments to facilitate increased community resilience to meet adversities posed by climate change. Technical data collection and relevant consultations have begun to facilitate the design of an effective regional and national early warning system as well as an evaluation of public buildings, such as schools and infrastructure. This data will be published on open source mapping platforms to facilitate rapid response and future investments in risk mitigation.



*A traditional men's house has been built on the coastline of the island of Yap in the Federated States of Micronesia  
Photo credit: Shutterstock*



## Window 2: Country Projects

### Solomon Islands

The **Community Resilience to Climate and Disaster Risk project (CRISP)** is a five-year initiative launched in April 2014 by the Solomon Islands government through the Ministry of Environment, Climate Change, DRM and Meteorology with financial support from the ACP-EU NDRR Program and the GEF Fund for Least Developed Countries. The project addresses natural hazards and climate change risks by strengthening climate and disaster risk information, EWS, and direct community investments in CCA and DRR. The project aims at establishing a volcanic-seismic monitoring network and the foundations of a national risk information system that will be critical to assess disaster and climate change effects for sectors and investment planning.

Under the first component, which aims to strengthen institutional arrangements, a framework for DRM and CCA institutional arrangements was drafted and the review of the National Disaster Management (NDM) Plan was completed. A new operational structure for the Ministry was developed as an outcome of the NDM Plan review and has been trialed during the emergency response following the December 2016 earthquake that struck the Makira Province. Furthermore, a discussion paper was prepared highlighting the need for an integrated DRR and CCA policy, as well as an effective structure and procedure for better integration and policy coherence across sectors.

Within the framework of the second component aiming to strengthen climate and disaster risk information and early warning systems, an emergency radio communication system was set up to transmit tsunami warning messages to urban centers following an earthquake. The system was used during the December 2016 earthquake emergency operation. Through this new communication system and the related national disaster management operation structure, urban centers received warning messages twenty minutes after the earthquake struck. In parallel, the implementation of a seismic monitoring network involving six seismic sites continued.

The third component involves CCA and DRR investments in local communities to strengthen their ability to cope with natural hazards and climate change. This activity involves the development of community-led sub-projects with seventy-four ongoing (25 in Guadalcanal, 19 in Temotu, 15 in Central Islands and 15 in Malaita). Furthermore, eight provincial-led sub-projects (two each in Temotu, Malaita, and Central; and one each in Bellona and Guadalcanal) were launched by the government.

The **Honiara Flood Risk Study and Management Plan**<sup>22</sup> project, under the World Bank's Programmatic Technical Assistance for Building Climate and Disaster Resilience in the Pacific, aims to provide the Solomon Islands government with an understanding of urban flood risk and flood risk reduction options in the capital city, Honiara. Activities have started for the development of fit-for-purpose flood modeling for greater Honiara's main river systems to:

- inform and enhance city land use planning;
- inform and enhance emergency response planning; and
- assess potential flood mitigation options.

Terms of Reference for the Honiara Flood Risk Study were readjusted to capitalize on plans by the government to perform its own Light Detection and Ranging (LiDAR)<sup>23</sup> work in the area proposed under this grant. For this specific activity, a firm was hired to provide technical support to the government.

<sup>22</sup> Previously named Solomon Islands Strategic Flood Risk Study and Management Plan project, originally covered an urban flood master plan for flood affected areas for both Solomon and Fiji. It was a sub-component of the regional project Building Climate and Disaster Resilience in the Pacific. However, Fiji was finally supported by the Japanese International Cooperation Agency. Thus, this activity was reverted to Window 2 as it now covers only one country.

<sup>23</sup> Light Detection and Ranging (LiDAR) is a remote sensing method that uses light in the form of a pulsed laser to measure ranges (variable distances) to the earth.

## Tonga

The **Increasing Climate and Disaster Resilience of Post-Disaster Reconstruction project**, launched in May 2015 and implemented by the government of Tonga, aims at supporting the WB-funded Tonga Cyclone Ian Reconstruction and Climate Resilience project.

The project team delivered technical assistance to the government to operationalize and institutionalize good recovery and reconstruction practices and improve post-disaster mapping capacity and damage assessments. Activities also supported the government on consolidating technical knowledge on cyclone resilient housing reconstruction and repairs. Through lessons learned from past housing reconstruction policies, a draft national housing reconstruction policy was developed as well as draft provisions to the Tonga Building Code, particularly for low income housing. Technical support was also provided to increase the capacity of relevant government agencies for post-disaster damage assessment including:

- cataloging and improving asset datasets and databases;
- strengthening and providing technical training on post-disaster data collection surveys and procedures;
- reviewing and strengthening the inter-governmental information flow for disaster response (led by National Emergency Management Office-NEMO); and
- identifying data gaps and recommendations on approaches to acquire the relevant datasets/information as well as data sharing arrangements between government agencies in emergency situations.

These capacity building activities undertaken during the period under review will lead to clearer definition of roles and responsibilities of the technical agencies in terms of data preparedness and response functions for natural disasters, which will improve coordination, strengthen capacity, and lead to more efficient disaster response.



*Views from Marum volcano in Ambrym Island, Vanuatu  
Photo credit: Shutterstock*





### Vanuatu

The **Increasing Resilience to Climate Change and Natural Hazards project**, launched in August 2013 and implemented by the government of Vanuatu and the WB, aims to strengthen institutions that manage disasters, increase the resilience of communities to the impacts of climate variability and change and natural hazards on food and water security.

Under the first component focusing on institutional strengthening, the construction of the Provincial Disaster Center (PDC) for Torba province was completed and officially opened in November 2016. The review of the National Disaster Act was finalized and will be endorsed by the government. The drafting of the Natural Disaster Management Office strategic plan was also completed. The Public Service Commission has approved the creation of a new Department of Climate Change, which will support the Provincial Disaster Officers in Sola and Isangle.

Under the second component focusing on increasing community resilience, the government requested activities focusing on micro projects to enhance the resilience of selected communities of Tanna islands and Shepherds that were affected by tropical cyclone Pam in 2015. Some 55 micro-projects were selected (45 in Tanna and 10 in Shepherds) using an agreed government process entailing community consultations, engagement of local stakeholders, provincial government and the Project Steering Committee. In doing so, local NGOs were hired to help with the identification of micro-projects as well as conducting baseline surveys on hazards.

## Window 3: Post-disaster, Capacity Building & Recovery Projects

### Fiji

The Program supported a **PDNA** in the aftermath of **Tropical Cyclone Winston** in February 2016. The final PDNA was published in August 2016. TC Winston's damage and losses are estimated at \$1.38 billion (31 percent of GDP), including \$959 million to Fiji's productive, social and infrastructure sectors. Nearly 130,000 homes were damaged or destroyed, affecting approximately 15 percent of Fiji's total population. The PDNA helped garner significant subsequent funding in the form of the Fiji Post-Cyclone Winston Emergency Development Policy Operation, a \$50 million project financed by the WB to aid recovery from the storm's immediate impact by addressing the recovery needs identified in the PDNA. These included the construction of resilient houses and public infrastructure designed to withstand future shocks. The PDNA financed under the Program was instrumental in leveraging the financing insofar as its completion was formally a condition for triggering the WB funding. The project closed in December 2016. See Box 1 on leveraging for more detail.

# Box 5

## INCREASING FINANCIAL RESILIENCE OF PACIFIC ISLAND COUNTRIES

*Indigenous Fijian girl walk in flooded land in Fiji*  
Photo credit: Shutterstock

Pacific Island Countries (PICs) are vulnerable to recurrent cyclones, tropical storms, earthquakes and tsunamis. In response, the Pacific Catastrophe Risk Assessment and Financing Initiative (PCRAFI) was formed in 2007 to mitigate disaster and climate change risks in PICs. Under this initiative, the first regional Catastrophe Risk Insurance Pilot, part of the Pacific Disaster Risk Financing and Insurance (DRFI) Program, was launched to support post-disaster response through recovery payments following a disaster.

The ACP-EU NDRR Program contributed to PCRAFI's undertaking from August 2012 to June 2017 by providing PICs with disaster risk information and rapid impact assessments to enhance their DRM capabilities. This project, which was implemented by the WB and the Secretariat of the Pacific Community Applied Geoscience and Technology Division (SPC-SOPAC), focused on two components. The first supported the **Pacific Risk Catastrophic Information System** (PacRIS), a database containing detailed, country-specific information on assets, population, hazards, and risks, which was set-up as a GeoNode location. Throughout the life of the project, 122 staff from the governments of Republic of Marshall Islands, Samoa, Solomon Islands, Kingdom of Tonga, Republic of Vanuatu and the Cook Islands were provided access and training to the upgraded PacRIS information risk platform and rapid post disaster assessment tools. These six governments also received post-disaster budget execution guidelines which provide a suite of tools for managing financial demands in the wake of any natural disaster. SPC directly benefited from the additional expertise, enabling it to update and develop protocols for the maintenance and upgrading of the PacRIS database.





Final activities undertaken on the PCRAFI project focused on developing an **Application for Rapid Disaster Loss Estimation** to be used immediately following disasters. An initial rapid impact estimation tool was rolled out in Tonga, Samoa, Palau, Cook Islands, Solomon Islands and Vanuatu. It produces reports and maps of estimated damages that are easier to use for non-GIS users. In December 2016, several coordination meetings were held in the margins of the Pacific GIS conference in Suva to discuss overall progress, work plans, synergies and challenges for the PacSAFE<sup>24</sup> and RiskScape risk tools. Final activities took place until June 2017 with:

- the final dissemination of the user manual for the latest version of InaSAFE/PacSAFE;
- the delivery of an introductory and advanced InaSAFE programming training workshop;
- presentations on the latest Tropical Cyclone impact estimation; and
- discussions on enhancements to the Tropical Cyclone impact functions.

Furthermore, several meetings were held with key stakeholders, including the EU and the Australian Government, in May and June 2017 during the Global Platform for Disaster Risk Reduction in Cancun, Mexico and the third edition of the World Reconstruction Conference (WRC3) in Brussels, Belgium. This component also co-financed the preparation and implementation of the Pilot Program for the 2014–15 season, including institutional capacity building for the participating PICs on the selection of their catastrophe risk insurance coverage and technical support for the placement of the portfolio of catastrophe risk insurance policies on the international reinsurance markets.

<sup>24</sup> InaSAFE is free software that produces realistic natural hazard impact scenarios for better planning, preparedness and response activities. See <http://www.inasafe.org>. PacSafe is a desktop tool based on QGIS and InaSafe plugin, designed and developed for non-GIS users.



Waterfall in Southern Africa, Zambia  
Photo credit: Shutterstock



### 3. POST DISASTER RESPONSE AND CAPACITY BUILDING

During FY17, the ACP-EU NDRR Program supported three activities under the post-disaster and capacity building component (Window 3).

#### ***ACP-Wide: Recovery Framework Guide Roll-Out in ACP Countries***

The ACP-EU NDRR Program supported the rollout of a Disaster Recovery Framework (DRF) Guide in all ACP countries through a capacity building program targeting international/regional organizations and government officials. This project financed or co-financed three types of capacity building activities, as outlined below:

- **Regional level training-of- trainers & resource persons:** A training-of-trainers event was organized in partnership with ECCAS and the R2 program for ECCAS member States in April 2017 in Libreville. Eighty-four people participated. (participation was financed under the R2 program).
- **Country-level capacity development programs:** PDNA/DRF trainings took place in Sudan and Tanzania in April and May 2017, respectively, benefitting approximately 90 government and non-government participants. Follow-up training was conducted by selected government experts who were trained in the initial workshops. This initiative aims to open the door for a government-led sustainable model for enhancing capacity. Materials developed as part of this activity have proven useful for other activities in the recovery agenda, in particular, for training government officials and experts during post-disaster engagements in Fiji (PDNA, DRF) and Seychelles (PDNA).
- **The development of an e-learning module for the DRF Guide** has been put on hold pending a review of the DRF guide, which forms the basis of the course. The e-learning module will complement the DRF Guide training material through a publicly-accessible, online tool. The review is expected in early 2018.

#### ***Third edition of the World Reconstruction Conference and Focus Day on Post Disaster Response***

*See boxes 6 and 7.*

# Box 6

---

## THE WORLD RECONSTRUCTION CONFERENCE 3

*Victoria Falls, located on the Zambezi River  
Photo credit: Shutterstock*





The third edition of the **World Reconstruction Conference (WRC3)**, co-financed by the ACP-EU NDRR Program, and co-organized by the World Bank/Global Facility for Disaster Reduction and Recovery (GFDRR), the European Union (EU), the United Nations Development Program (UNDP) and the African, Caribbean and Pacific (ACP) Group of States, was held in Brussels from June 6 to 8, 2017. It brought together approximately 800 practitioners from governments, civil society, development partners, academia and the private sector to discuss recovery in a changing world. They addressed the role of post-crisis recovery and reconstruction for resilience building and disaster risk reduction and shared experience with a view to advance the implementation of the 2015 Sendai Framework for Disaster Risk Reduction.

The WRC3 took place against the backdrop of a continuing rise in the number of people affected by disasters around the world. From 2012 to 2014, nearly 1,000 disasters impacted more than 326 million people across the globe. The cost of physical damage caused by these events is also rising, from an estimated €18 billion per year in the 1990s to about €90 billion per year in the first decade of this century. Today, physical damage and economic losses together range from €220 to €270 billion annually. As climate change, urbanization, and migration accelerate, the need for recovery will continue in an upward trajectory. Despite ongoing and expanding efforts to minimize hazard impacts through disaster risk reduction, the recovery function remains relevant and necessary.

The WRC3 hosted 29 sessions organized around four main themes:

- recovery interventions;
- recovery in conflict and fragile situations;
- recovery preparedness; and
- leveraging political consensus on Sendai Priority 4: Enhancing disaster preparedness for effective response and to “Build Back Better” in recovery, rehabilitation and reconstruction. The conference included sessions on the recent drought in Somalia, women’s participation as actors in recovery, the effects of disasters on cultural heritage, and partnering with the private sector.

Participants identified effective and forward-looking approaches to achieve resilient post-crisis recovery in which climate and disaster risk reduction, fragility and conflict considerations are mainstreamed. There was widespread agreement that resilient recovery effort involves strengthening capacities to deal with future risks, thereby supporting the Sustainable Development Goals. In view of the increasing frequency, intensity and cost of disasters, investments in recovery preparedness are required, in particular in the most vulnerable and least developed communities and countries. Strong institutional arrangements, financial mechanisms and policies support quicker and more effective recovery.

The full story, key messages and a video of the closing ceremony can be found at: <http://gfdrr.org/wrc3>

# Box 7

## FOCUS DAY ON POST-DISASTER RESPONSE



Roundtable at the Focus Day  
Photo credit: World Bank



Taking advantage of the participation of many ACP delegates to the WRC3, sponsored by the ACP-EU NDRR Program, GFDRR organized a “Focus Day” on lessons learned from post disaster response in ACP countries in the frame of the Program.

The Focus Day was hosted on June 9, 2017 by the ACP Secretariat and aimed at promoting intra-ACP knowledge exchange of best practices and lessons learned on post-disaster response in ACP countries since the inception of the ACP-EU NDRR Program in 2011. The core objective of this one-day workshop was to bring together officials from ACP countries, the ACP Secretariat, EU, UNDP and World Bank/GFDRR to strengthen the discourse on post-disaster response activities in ACP countries. The event provided the opportunity for participants to gain a better understanding of the purpose and process which entails capacity building. Greater visibility was given to the scope of leveraged financial resources in favor of ACP countries and regions.

The Focus Day consisted of three sessions. The first was an overview of the ACP-EU NDRR Program and its post-disaster response activities. This provided an introduction to the background and institutional framework surrounding PDNAs, which are key to the mobilization of resources and international development assistance after a disaster. The second session allowed representatives of ACP countries to share and learn from country experiences, triggering intensive discussions. Case studies from six African and three

Caribbean and three Pacific countries formed the basis of discussion. The third session elaborated on the concept and process of Disaster Recovery Frameworks.

From the perspective of ACP countries, the basis of recovery and reconstruction plans lies in post-disaster assessments. These therefore need to be results-oriented and conducted in a timely and comprehensive manner. Local capacity in the aftermath of disasters is often limited to providing and financing recovery when needed. In this respect, the significance of capacity building and solid data collection and aggregation was strongly emphasized.

The majority of country delegates appreciated the support received by the ACP-EU NDRR Program, which has shown impact by building capacities at the country and regional levels and leveraging additional financing from other sources. The Focus Day reminded participants of the importance of having a regular intra-ACP knowledge exchange mechanism and highlighted the need for organizing more South-South and regional cooperation activities in the future.

GFDRR, the ACP Secretariat and the EU will continue exploring effective ways to exchange knowledge and best practices. Future events will not be limited to the topic of post-disaster response, but may also encompass the broader DRM and resilience agenda.

The full story, all presentations, key messages and other relevant documents related to the Focus Day can be found on the dedicated ACP-EU NDRR website at: <https://www.gfdr.org/acp-eu/focus-day-on-post-disaster-response-in-brussels>

## 4. STRENGTHENING DRM REGIONAL COORDINATION IN AFRICA

**T**he ACP Group of States and EU established the ACP-EU **Building Disaster Resilience to Natural Hazards in Sub-Saharan African Regions, Countries and Communities**<sup>25</sup> Program—referred to as Building Disaster Resilience in Sub-Saharan Africa—which has the overall objective of **strengthening the resilience of sub-Saharan African regions, countries and communities to the impacts of natural disasters**. These include the potential impacts of climate change to reduce poverty and promote sustainable development.

To achieve this objective, five Result Areas were identified, implemented by several partners, including the AfDB, AUC, UNISDR and the WB/GFDRR. These are as follows:

**R1:** Extended Programme of Action for the implementation of the Africa regional strategy for disaster risk reduction. 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 programs. Implemented by GFDRR.

**R3:** Core capacities of the specialized national and regional climate centers 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 GFDRR.

The implementing partners work in close coordination, facilitated by a Program Steering Committee that meets biannually and is chaired by the AUC.



<sup>25</sup> Financed under the 10<sup>th</sup> European Development Fund.





Cape Coast, Ghana  
Photo credit: Shutterstock

## 4.1 About Result Area 2

Result Area 2, known as “Result 2” or more simply, “R2,” is one of two Result Areas managed by the WB/GFDRR (the second one being Result 5). The **specific objective** of Result 2 is to **strengthen and accelerate the effective implementation of an African comprehensive DRR and DRM framework at regional level**. It does this by:

1. Strengthening the coordination capacity of RECs, and
2. Assisting RECs in developing planning and policy advisory capacities to support their member states and regional/sub-regional programs on DRM

This objective is achieved by providing targeted support to African RECs to strengthen their capacities for improved coordination, planning, policy advisory and knowledge dissemination to advance the regional DRM agenda and better support their respective member states in taking informed decisions in building resilience to disasters.

Activities under R2 support and align with the strategic approach articulated by AUC’s Program of Action, the RECs’ DRR strategies and the Sendai Framework for Disaster Risk Reduction (SFDRR) 2015–2030,<sup>26</sup> and are implemented through an additional contribution to the ACP-EU NDRR Program. This additional contribution targets the four main RECs and their key partners, such as African universities and research centers, river basin authorities or technical organizations. The four participating RECs are:

- ECCAS—the Economic Community for Central African States; based in Libreville, Gabon (<http://www.ceeac-eccas.org>)
- ECOWAS—the Economic Community of West African States; based in Abuja, Nigeria (<http://www.ecowas.int>)
- IGAD—the Intergovernmental Authority on Development (for Eastern Africa) based in Djibouti, Djibouti (<http://www.igad.int>), and
- SADC—the Southern African Development Community based in Gaborone, Botswana (<http://www.sadc.int>)

Participating RECs, 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 through comprehensive regional engagement. The R2 program also aims to provide an advocacy platform, improve cooperation and networking among global, regional, and national technical institutions, and leverage additional stakeholder outreach to ultimately support national development plans and improve regional capacity for post-disaster needs assessments and recovery frameworks.

**The sections below outline selected REC’s achievements thanks to the R2 Program Support. A dedicated Activity Report for the R2 Program is available separately.**

<sup>26</sup> And its predecessor at the time of launch, the Hyogo Framework of Action (HFA) 2005–2015.



## 4.2 Joint activities

Program-wide activities under R2 contribute to strengthening regular coordination among development partners and stakeholders to the overall program Building Disaster Resilience in Sub-Saharan Africa. Particular attention was given to the coordination among the different Result Areas through its second and third Steering Committee meetings, as well as a proactive coordination between GFDRR and the Implementation Partners of Result Areas 1 (AUC and UNISDR), 3 (AfDB), and 4 (UNISDR):

- The second Steering Committee meeting of the Building Disaster Resilience in Sub-Saharan Africa Program took place in Livingstone, Zambia on 27 October 2016, in the margins of the 9 th Africa Working Group on DRR (25-26 October 2016). The WB team presented the status of implementation of its work on improving coordination and DRR capacity of the RECs. The implementing partners agreed on actions focused on scaling up the program's communication strategy and strengthening coordination across activities implemented by the five Result Areas partners.

The 10 th session of the Africa Working Group (AWG), held in Addis Ababa, Ethiopia on 7-8 March 2017 was the first session after the endorsement of the Mauritius Declaration and the Program of Action for the Implementation of the Sendai Framework in Africa at the African Union Summit in January 2017. Discussions focused on reviewing progress in DRR in Africa in the context of the SFDRR since the 9 th AWG held in October 2016 in Livingstone, Zambia, and developing the Africa Common Position presented at the 2017 Global Platform for Disaster Risk Reduction in Cancun (May 2017).

- The third Steering Committee took place in Addis Ababa, on 9 March 2017, in the margins of the 10 th Africa Working Group on DRR, providing an opportunity to review progress of activities under the different Result Areas. The WB team presented the status of implementation of its work in the realm of the African RECs DRM (Result 2) Program and the Africa Disaster Risk Financing Initiative (Result 5).



*Crowd of people sit in boats and wait for departure to their villages at fish harbor in Mpulungu, Zambia.  
Photo credit: Shutterstock*

**Several R2 program-wide activities on knowledge exchange and coordination that took place during FY17 are outlined below:**

- An event entitled Leveraging the Potential of Regional Cooperation for Disaster Resilience was held in November 2016 during the 6th Africa Regional Platform on DRM held in Mauritius, attended by more than 45 officials, including member states from DR Congo, Equatorial Guinea, Ethiopia, Gabon, Madagascar, Mauritius, Niger, Nigeria, Sudan, and South Sudan. The session included a quick overview of each REC's achievements, main challenges and opportunities in DRR and a discussion panel composed of high-level REC representatives, focusing on their vision for a strong and inclusive DRR program by 2030.
- A Program coordination meeting was held in June 2017 in the margins of the WRC3 in Brussels, to take stock of progress and discuss communications and coordination. Representatives from ECCAS, ECOWAS,<sup>27</sup> IGAD and SADC presented their respective work plan implementation status, including the main challenges and priorities for upcoming months.
- The ACP-EU DRR Regional Knowledge Exchange Platform was launched in August 2016 to continue exchanges among six ACP sub ACP sub-regional organizations developed under the 9th European Development Fund DRR Program. The platform forms an exclusive group tailored for DRR regional focal points in African RECs, and the Regional Organizations in the Caribbean and Pacific, namely ECCAS, ECOWAS, IGAD, SADC, CDEMA and SPC.<sup>28</sup> This private group is hosted on the Capacity4DEV website, an initiative of the European Commission which provides an open platform for DRR (<http://capacity4dev.ec.europa.eu/drr-acp/>), as well as many other broad development issues supported by the EU. It facilitates the sharing of knowledge and experience across the DRR regional communities by allowing members to easily post and exchange documents, technical guidelines, studies, forthcoming events and opinions with the members of the group. It also provides a space for open, free and lively discussions among stakeholders.
- Finally, the REC partners have been fully engaged in the Focus day on PDNA organized in June 2017 in the margins of the WRC3 (see Box 7 for more information).



<sup>27</sup> ECOWAS representatives joined by audio-conference.

<sup>28</sup> Secretariat of the Pacific Community.



### 4.3 Highlights of FY17 Achievements by REC



**ECCAS** focused its efforts on policy dialogue events: the 5th Central Africa Regional Platform on DRR and the Awareness Workshop to the Cameroon DRR National Platform, both held in Yaoundé, Cameroon, in December 2016. Following these events, an ECCAS regional training on PDNA and DRF with more than 80 participants was held in April 2017 in Libreville, Gabon, to reinforce capacities of ECCAS Secretariat's experts and focal points from member states on post-disaster management, preparedness and recovery. The annual meeting of the Central Africa Parliamentarians Network for Natural Disasters Resilience (REPARC) also took place during the PDNA/DRF training workshop mentioned above. Within the framework of the ECCAS Regional Risk Assessment exercise, preliminary studies were undertaken on the ECCAS Water Information System to prepare a geo-portal for water and risk information.



**ECOWAS** finalized the DRR Plan of Action for 2015–2030 in Accra, Ghana in October 2016. The goal of the Action Plan was to strengthen key institutions at the regional and national levels and to mobilize a broad coalition of partners to build resilience to hazards and integrate DRR into sustainable development. Following a successful regional training course on PDNA and recovery planning, organized in collaboration with UNDP and GFDRR in March, 2016 in Abuja, Nigeria for member states delegates, ECOWAS started to roll out support to PDNA trainings in its member states.



**IGAD** and its new operational DRM Program Unit organized the IGAD R2 Program launch in Addis Ababa, Ethiopia in February 2017, involving multiple stakeholders. The meeting contributed to the successful organization of the Ministerial Conference on drought/conflict humanitarian crisis in the IGAD Region (held in Nairobi, Kenya in March 2017). 100 officials participated in two national trainings on PDNA/DRF in Sudan and Tanzania in April and May, 2017. Specific technical assistance experts were recruited to carry out several activities including the development of an IGAD Regional Framework for Mainstreaming DRM and CCA in the education sector curriculum, the DRM strategy development support for Sudan, and work on a Climate Smart Agriculture pilot project in a highly climate-affected area in Kenya.



The **SADC** Secretariat in Gaborone, Botswana hosted meetings in January 2017 to advance the preparation of its program under R2. It finalized of a comprehensive work plan for 2017, building on broad consultation with departments and divisions from various sectors to ensure complementarity with ongoing projects and programs. In June 2017, an expression of interest was launched to support the implementation of a regional university collaboration program for capacity building and policy support in the SADC region.

#### *Capacity building*

As of June 2017, the R2 Program has provided training and invited to a conference a total of nearly 500 people, of which nearly 100 were women.

For more information, kindly refer to the *Building Disaster Resilience in Sub-Saharan Program: Result Area 2 Activity Report 2016-17*.

## 5. ANNEXES

### Annex 1: Communication and Visibility

#### Publications & Reports



#### **2015–2016 ACP-EU NDRR Activity Report**

The 2015–16 Activity Report of the ACP-EU NDRR showcases the Program's support to more than 40 countries in Africa, the Caribbean and the Pacific in building their resilience to natural hazards and climate change adaptation while also featuring highlights on lessons learned from specific projects in Malawi, Belize and Timor-Leste. The report can be downloaded in English (<http://goo.gl/2CsJzw>) and French (<http://goo.gl/dVq31r>), and is also available on the dedicated ACP-EU NDRR website (<http://www.drrinacp.org>).



#### **2014–2016 Result Area 2 Activity Report**

The first Activity Report of the Result 2—African Regional Economic Communities (RECs) DRM Program for the period 2014–16 showcases support to RECs to develop coordination, planning, and policy advisory capacities for the benefit of their member states. The report is available in English (<http://goo.gl/fJEJkn>) and French (<http://goo.gl/RkuSn5>).

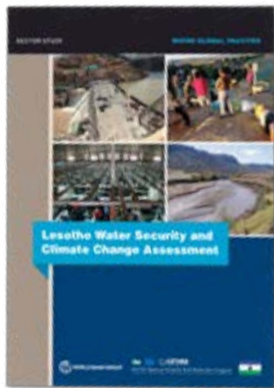


#### **2014–2016 Africa Disaster Risk Financing Initiative Activity Report**

The first Activity Report of the Africa Disaster Risk Financing (ADRF) Initiative for the period of August 2014 to June 2016 provides an overview of the ADRF Initiative's achievements and highlights to date and identifies upcoming priorities and challenges. The report is available in English (<http://goo.gl/hqZtyC>) and French (<http://goo.gl/cZTMAS>).



## Project Outputs



### Lesotho Water Security and Climate Change Assessment

The Lesotho Water Security and Climate Change Assessment examines the implications of climate change for Lesotho's future development and economy, focusing particularly on the different water infrastructure investments being considered by the government of Lesotho. Through assessing the performance of the water management system, the study tests how different adaptation strategies would affect water availability for different sectors under a wide range of possible future climatic conditions up to 2050. The report is available at <http://goo.gl/djGPE1>.



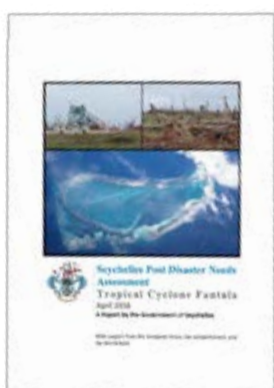
### Post-Disaster Needs Assessment—Fiji Tropical Cyclone Winston February 2016

In February 2016, category 5 Tropical Cyclone Winston struck Fiji, killing 44 people and leaving a trail of destruction across large parts of the island. The cyclone was the most powerful storm on record in the Southern Hemisphere. Following the disaster, the government of Fiji completed a comprehensive PDNA with support from the World Bank, the European Union, United Nations, Asian Development Bank and other development partners. This PDNA, published in August 2016 and undertaken with the support of the ACP-EU NDRR Program, enabled the government to assess damage and impact following the cyclone. The report highlights that the damage to the housing and agriculture sectors was severe, with significant damage to public buildings, transport, electricity and communications infrastructure. The report is available at <http://goo.gl/qidKfg>.



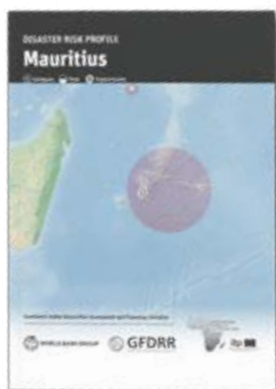
### Fiji Disaster Recovery Framework

In addition to the above PDNA undertaken with the support of the ACP-EU NDRR, the government of Fiji published a Disaster Recovery Framework. This document was prepared in coordination with the World Bank, the United Nations, the European Union, the Asian Development Bank, and the Pacific Community. The document is available at <http://goo.gl/sM6TEi>.



### Post-Disaster Needs Assessment—Tropical Cyclone Fantala

The Seychelles Post Disaster Needs Assessment in the aftermath of Tropical Cyclone Fantala in April 2016 was undertaken with the support of the ACP-EU NDRR Program, enabling the assessment of damage and impact following the cyclone. The report provides a breakdown of key sectors affected, the economic damages and losses, as well as the resources needed to finance the recovery of the areas in the aftermath of the cyclone. The PDNA also provides recommendations and guidelines to ensure that the recovery process is guided by a risk reduction perspective that incorporates a build-back-better approach. The report is available at <http://goo.gl/1bLzI2>.



### Publication of Five SWIO RAFI Disaster Risk Profiles

Five Disaster Risk Profiles for Madagascar are available in English (<http://goo.gl/HHASH7>) and French (<http://goo.gl/6Z1eNE>); Comoros in English (<http://goo.gl/SWUwYJ>) and French (<http://goo.gl/AZZUEj>); Mauritius in English (<http://goo.gl/2DScMr>); Seychelles in English (<http://goo.gl/8DvPp3>); and Zanzibar in English (<http://goo.gl/ZNLNms>). All hazard and exposure data from the SWIO RAFI project will be transferred to the Island States. The data will also be available in country-owned geospatial platforms, text files, and detailed final reports. In addition, the hazard data and risk profiles will be uploaded to GFDRR's ThinkHazard! Tool (<http://thinkhazard.org>), enabling global access to the results.



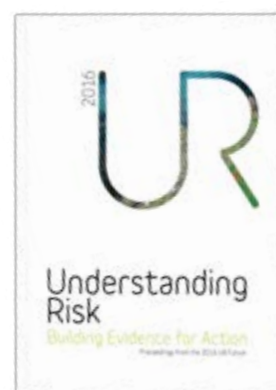
### Summary report on the SWIO RAFI

A summary report was published on the SWIO RAFI, co-financed by the ACP-EU NDRR Program and the ACP-EU ADRF Initiative. The report summarizes progress made in advancing analytical work to improve the understanding of disaster risks and risk financing solutions for Comoros, Madagascar, Mauritius, Seychelles and Zanzibar. The risk profiles, including key findings, provide detailed quantitative risk data for each island nation. The report is available at: <http://goo.gl/G35krD>.



### Coastal Management and Beach Restoration Guidelines in Jamaica

As part of the ACP-EU NDRR Strengthening DRM and Climate Resilience project, launched in January 2015 and implemented by the WB, the Guidelines were published in June 2016 and aim to support national policy and institutional development relating to coastal resources, natural hazards, climate-related impacts and sustainable development. This was accomplished through the review, consolidation and updating of existing priority guidelines and regulations into an integrated and coherent package, that establishes linkages between existing sector specific policies and ocean and coastal zone issues. The report is available at: <http://goo.gl/RAaoRk>.



### Proceedings from the Venice Understanding Risk Conference

The biennale Understanding Risk (UR) Forum took place in Venice, Italy from 16–20 May, 2016, bringing together practitioners from more than 100 countries to meet, learn, and share best practices. This was GFDRR's most ambitious and global forum yet. More than 2,000 meetings and networking opportunities saw policy makers, risk modelers, urban planners, economists, psychologists, communicators, and others sharing knowledge and experience. Capacity building engagements at the UR2016 was supported by the ACP-EU Result 2 Program. The proceedings can be downloaded at <http://goo.gl/lwz7lj>.



## Stories of Impact

SOI-The GFDRR Outreach Series highlighting achievements in DRM initiatives



### Communicating Flood Risk Along Guyana's Coast

The government of Guyana, working with the World Bank, initiated the GEF-funded \$3.8 million Conservancy Adaptation Project to address catastrophic flood risks in Guyana & coastal areas. The project strengthened understanding of the coastal drainage system and water conservancy, improved drainage infrastructure, pinpointed key strategic interventions to reduce flood risk and built institutional capacity. A parallel technical assistance project funded by the ACP-EU NDRR Program, Strengthening Guyana's Coastal Land's Information Systems and Adaptation Awareness, enabled policymakers, stakeholders and the public to be fully informed of efforts to understand and strengthen flood control systems, heighten awareness of flood risks, and explain the technologies used to mitigate these risks. The SOI can be found in English (<http://goo.gl/ocMBe4>) and in French (<http://goo.gl/SDu8zz>).



### Building Disaster Resilience in Timor-Leste

Timor-Leste, a small, mountainous country in Southeast Asia occupying the eastern half the island of Timor, is highly vulnerable to natural hazards. Weather-related risks, such as monsoon rains, droughts, flash floods, landslides, and destructive winds are frequent threats. These risks are exacerbated by the potential for seismic risks, volcanoes, and tsunamis. Timor-Leste's government, recognizing the need for disaster preparedness, established the National Disaster Management Directorate (NDMD) to manage these risks. In 2014-15, in collaboration with the World Bank, UNDP, and specific branches of the government, NDMD implemented the Climate and Disaster Resilience in Communities in the northern part of Timor-Leste, along the Dili-Ainaro and Linked Road Corridors project, with support from the ACP-EU NDRR Program. The project aimed at generating and using quantified data to better understand and prepare for natural hazard risks along the corridors, and to support capacity building in community-based DRM. The SOI can be found in English (<http://goo.gl/XqzMUa>) and in French (<http://goo.gl/KpCj61>).

## Videos



### **Project video—Ramani Huria Community Mapping in Dar es Salaam, Tanzania**

In the frame of the Building Climate Resilience in Tanzania Water Sector project funded by the ACP-EU NDRR Program, Ramani Huria is a community-based mapping activity in Dar es Salaam training university students and local community members in creating highly accurate maps of the most flood-prone areas in the city. Tanzanians are mapping their own city to solve flooding using better urban planning, drainage, maintenance and community waste management. The video is available at the following link: <http://goo.gl/BNsvpi>



### **Fostering Post-Cyclone Recovery and Improving Climate Resilience in Tonga**

The Tonga Increasing Climate and Disaster Resilience of Post-Disaster Reconstruction project, launched in May 2015 and implemented by the government of Tonga, aims to restore housing, community facilities, and basic services to the affected population of Ha'apai while strengthening the country's resilience to natural disasters after Cyclone Ian. A project video highlights the achievements of the project, and can be found at the following link: <http://goo.gl/morWBz>



## Annex 2: List of Portfolio Projects

### AFRICA

#	Country(ies)	Title	Window of action	GFDRR pillars	Partners	Amount funded (USD)	Start date	End date	Status
1	Africa regional	Fifth Africa Regional Platform for Disaster Risk Reduction	Window 1	2	WB	124,022	Apr-14	Jun-14	Completed
2	Africa regional	Risk Assessment Tools and Methodology Training (Understanding Risk 2012)	Window 1	1	WB	263,284	May-12	Dec-12	Completed
3	Burkina Faso, Chad, Mali, Mauritania, Niger, Senegal	Sahel - National and Regional Disaster Response and Resilience Program	Window 1	1 2 3	WB, ACMAD, AGRHYMET (CILSS)	402,630	Jun-14	Jun-17	Completed
4	Comoros, Madagascar, Malawi, Mozambique	Support the establishment of a Technical Centre for Disaster Risk Reduction and Climate Change Adaptation	Window 1	2	UN-HABITAT COSEP, BNGRC, and CPGU	897,399	Jan-13	Dec-15	Completed
5	Comoros, Madagascar, Mauritius, Seychelles, Tanzania	Indian Ocean Islands Catastrophe Risk Profiling & Financing Initiative	Window 1	1 2 3 4	WB, IOC, Ministries of Finance and Disaster Mgmt Dept	1,269,078	Jan-14	Jun-17	Completed
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	1	WB, RCMRD, Red Cross Kenya	281,504	Nov-12	Jun-15	Completed
7	ECCAS members	Development of Risk Reduction Measures, Preparedness and Response to Disaster Risk in Central Africa	Window 1	2	WB, ECCAS	299,731	Feb-15	Jun-17	Completed
8	IGAD members	IGAD's Horn of Africa Regional Disaster Resilience and Sustainability Program	Window 1	2	WB, IGAD	962,626	Oct-12	Aug-16	Completed
9	Regional Economic Centres (RECs)	Preparing collaboration with regional organizations in Africa under the ACP-EU Program	Window 1	2	WB, ECCAS, ECOWAS, IGAD, SADC, AfDB, AUC	497,955	Nov-14	Jun-17	Completed
10	Burundi	Flood and landslide preparedness to improve community resilience	Window 2	1 2 3	WB, IFRC	744,000	Jun-15	Jun-19	Ongoing
11	DR Congo	Strengthening Hydro-Meteorological and Climate Services	Window 2	1 2 3	WB	3,000,000	Aug-16	Dec-19	Ongoing
12	Ethiopia	Building capacity for Woreda Disaster Risk Reduction and Climate Change Adaptation	Window 2	1 2	WB, Cordaid	750,000	Jul-15	Sep-17	Ongoing

## AFRICA

#	Country(ies)	Title	Window of action	GFDRR pillars	Partners	Amount funded (USD)	Start date	End date	Status
13	Gambia	National Disaster Risk Assessment and Strengthening of National Disaster Management Agency	Window 2	1 2 3 4	WB	605,769	Oct-12	Jun-15	Completed
14	Lesotho	Climate and Water Risk Analysis & EWS Information Management Systems	Window 2	1 3	WB, WFP	1,199,771	Mar-13	Sep-16	Completed
15	Liberia	Strengthening Disaster Risk Management in Liberia	Window 2	1 2 3	WFP	543,317	Oct-12	Jun-16	Completed
16	Mozambique	Promoting the integration of disaster risk reduction and climate change adaptation into District Development Plans and Community-Based Risk Management	Window 2	2 3	WB, World Vision	580,309	Sep-15	Jul-18	Ongoing
17	Niger	Community Based Disaster Risk Reduction in Niger	Window 2	1 2 3	Oxfam UK, Niger	1,054,816	Nov-12	Jun-16	Completed
18	Niger	Multi-hazard approach to early warning system with focus on flood risk management	Window 2	2 3	WB	298,686	Apr-15	Jun-17	Completed
19	Nigeria	Strengthening Capacity for Disaster Risk Management	Window 2	1 2 5	WB, NEMA	850,000	Oct-15	Jun-17	Dropped
20	Nigeria	Strengthening Nigerian Universities as Centers of Excellence for Training and Research in DRR	Window 2	1 2 5	WB	330,000			Dropped
21	Rwanda	Development of comprehensive disaster risk profiles for enhancing disaster management in Rwanda	Window 2	1	UNDP	652,221	Oct-12	Jun-15	Completed
22	Sierra Leone	Supporting community-based DRR in Sierra Leone	Window 2	1 2 3	WB	700,000	Oct-12	May-18	Ongoing
23	Tanzania	Strengthening Community Capacity for DRR Interventions in Drought Prone Regions Through Children	Window 2	2 3	WB, UNICEF	776,602	Oct-12	Oct-15	Completed
24	Tanzania	Building Climate Resilience in Tanzania Water Sector	Window 2	1 2	WB	392,003	May-14	Sep-16	Completed
25	Togo	Integrated Disaster and Land Management Project	Window 2	2 3	Gov. of Togo	2,832,638	Nov-14	Jun-17	Completed
26	Uganda	Risk Assessment and Resilience Action Plan	Window 2	1 2	WB	650,000	Apr-15	Dec-17	Ongoing



## AFRICA

#	Country(ies)	Title	Window of action	GFDRR pillars	Partners	Amount funded (USD)	Start date	End date	Status
27	Zimbabwe	Mainstreaming Disaster Risk Reduction and Climate Change Adaptation into Local Development Planning in Zimbabwe through the Zambezi River Basin Initiative	Window 2	1 2 3	WB, Danish Red Cross	499,850	Sep-15	Jun-18	Ongoing
28	Burundi	Rapid Assessment Mission with Focus on Flood Risk Management	Window 3	5	WB, EU, UNDP	73,706	Apr-14	Mar-15	Completed
29	Cabo Verde	Cabo Verde PDNA Volcano eruption 2014-2015	Window 3	5	WB	79,613	Apr-15	Aug-15	Completed
30	Cameroon	Emergency Flood Assessment and Rehabilitation Planning	Window 3	5	WB	71,338	Nov-12	Mar-13	Completed
31	Comoros	Capacity Building for Flood Assessment and Recovery Planning	Window 3	5	WB	104,313	Aug-12	Jun-13	Completed
32	Côte d'Ivoire	Post Disaster Need Assessment (PDNA) training in Cote d'Ivoire	Window 3	5	WB	82,487	Jan-16	Dec-16	Completed
33	Djibouti	Drought Post Disaster Needs Assessment	Window 3	5	WB, EU, UN	119,982	Sep-11	Oct-12	Completed
34	Ethiopia	Capacity Building in Post Disaster Needs Assessment	Window 3	5	WB, EU, UN	46,682	Jun-12	Mar-13	Completed
35	Kenya	Post Disaster Needs Assessment (PDNA) - Drought	Window 3	5	WB, EU, UNDP	201,233	Apr-12	Jan-13	Completed
36	Malawi	Malawi Flood Post Disaster Needs Assessment	Window 3	5	WB, EU, UN	368,685	Feb-15	Jul-16	Completed
37	Mozambique	Mozambique Rapid Assessment Mission with Focus on Flood Risk Management	Window 3	2 3 5	WB, EU, UN	99,662	Mar-15	Dec-15	Completed
38	Nigeria	Flood impact scoping and capacity building for disaster preparedness	Window 3	5	WB	97,898	Dec-11	Sep-12	Completed
39	Nigeria	Nigeria Post Floods Needs Assessment 2012	Window 3	5	WB, EU, UNDP	254,958	Nov-12	Dec-13	Completed
40	Seychelles	Seychelles: Flood Impact Scoping and Recovery Planning	Window 3	5	WB	73,792	Mar-13	Dec-13	Completed
41	Seychelles	Seychelles Rapid Damage Assessment TC Fantala 2016	Window 3	5	WB	72,896	May-16	Apr-17	Completed

## CARIBBEAN

#	Country(ies)	Title	Window of action	GFDRR pillars	Partners	Amount funded (USD)	Start date	End date	Status
42	Caribbean regional	Strengthening public investment in disaster risk reduction and climate change adaptation in the East	Window 1	1 2	UNDP, OECS	707,600			Dropped
43	CDEMA members	Support and participation to the 6th Caribbean Conference on Comprehensive Disaster Management	Window 1	2 3	WB	101,532	Nov-11	Nov-12	Completed
44	Belize, St. Lucia, Grenada, Dominica, SVG	Caribbean Risk Information Programme to support the Integration of DRM Strategies in Critical Sectors	Window 1	1	WB	1,338,956	Nov-12	Jun-16	Completed
45	Belize, St. Lucia, Grenada, Dominica, Jamaica, SVG	MoSSaiC Caribbean Community of Practitioners	Window 1	2	WB, OECS, SSDF, ICRC	366,966	Feb-14	Feb-17	Completed
46	Belize	Hazard and Risk Assessment Framework for Belize: Prioritization of an Investment Plan	Window 2	1 2	WB	1,144,461	Jun-12	Jun-16	Completed
47	Belize	Belize Disaster Risk Financing Technical Assistance	Window 2	4	WB	273,000	May-15	Dec-17	Ongoing
48	Dominica	Spatial data management and identification of the most vulnerable schools and shelters in Dominica	Window 2	1 2	WB	719,829	Dec-12	Jun-17	Completed
49	Dominican Republic	Mainstreaming DRM and CC in Public Investment, Territorial Planning and Public Finances in the DR	Window 2	1 2 4	WB	316,136	Jul-12	Jun-15	Completed
50	Dominican Republic	Identifying Risk to Protect Schools in the Dominican Republic	Window 2	1	WB, Plan DR, Oxfam DR, Habitat	638,574	Apr-15	Oct-17	Ongoing
51	Dominican Republic	Building physical and fiscal resilience of the Dominican Republic to ensure shared prosperity	Window 2	1	WB	900,000	Dec-16	Jul-19	Ongoing
52	Grenada	Grenada Disaster Risk Financing Technical Assistance	Window 2	4	WB	273,000	May-15	Dec-17	Ongoing
53	Guyana	Strengthening Guyana & Coastal Lands Information Systems and Adaptation Awareness	Window 2	1 2	WB	250,646	Sep-12	Jun-14	Completed
54	Haiti	Haiti Disaster Risk Management Mainstreaming and Capacity Building Program	Window 2	2	WB, UNDP	786,895	Aug-12	Dec-15	Completed



## CARIBBEAN

#	Country(ies)	Title	Window of action	GFDRR pillars	Partners	Amount funded (USD)	Start date	End date	Status
55	Jamaica	Strengthening Disaster Risk Management and Climate Resilience in Jamaica's Development Planning Process	Window 2	1 2	WB, Government of Jamaica	645,000	Jan-15	Jan-18	Ongoing
56	Jamaica	Jamaica Disaster Risk Financing Technical Assistance	Window 2	4	WB	273,000	May-15	Dec-17	Ongoing
57	St. Lucia	Hazard and Disaster Risk Assessment Framework in Saint Lucia: Preparation of Vulnerability Reduction	Window 2	1 2	WB	294,278	Oct-12	Apr-16	Completed
58	St. Lucia	St Lucia Disaster Risk Financing Technical Assistance	Window 2	4	WB	273,000	May-15	Dec-17	Ongoing
59	St. Lucia	Saint Lucia Measurable Reduction of Disaster Risk Specific to Public Infrastructure	Window 2	2	WB	1,300,000	Feb-16	Jan-19	Ongoing
60	St. Lucia	Saint Lucia Measuring the Impact of Disaster Events on Poverty and Social Vulnerability	Window 2	3 5	WB	175,000	Mar-17	Mar-19	Ongoing
61	Suriname	Suriname - Greater Paramaribo Flood Risk Management Program	Window 2	1 2	WB	350,000	Apr-16	Dec-17	Ongoing
62	Caribbean regional	Strengthening Capacity in Post Disaster Needs Assessment in the Caribbean	Window 3	5	WB, UNDP	272,796	Jan-13	May-16	Completed
63	Dominica	Dominica: Rapid Damage Assessment of Critical Infrastructure and Support to Recovery Planning	Window 3	5	WB	140,268	Sep-15	Jun-16	Completed
64	St. Lucia	St Lucia Damage and Loss Assessment December 2013 Floods	Window 3	5	WB	49,395	Mar-14	Dec-14	Completed
65	St. Vincent and the Grenadines	St. Vincent and the Grenadines Floods and Landslides 2013	Window 3	5	WB, CDB	49,595	Jan-14	Dec-14	Completed

#	Country(ies)	Title	Window of action	GFDRR pillars	Partners	Amount funded (USD)	Start date	End date	Status
66	Marshall Islands, Micronesia, Palau	Enhancing Targeted Disaster Risk Reduction Measures in Micronesia	Window 1	2	IOM, WB	720,000	Feb-17	Sep-18	Ongoing
67	Pacific islands/ Caribbean countries	Disaster Risk Assessment Capacity Building and Community Building – Understanding Risk Forum	Window 1	1 5	WB	195,450	May-14	Mar-15	Completed
68	Pacific regional	Pacific Catastrophe Risk Assessment and Financing Initiative – Phase 3 (PCRAFI-3)	Window 1	1 4 5	SPC-SOPAC	1,300,419	Aug-12t	Jun-17	Completed
69	Pacific regional	Programmatic TA: Building Climate and Disaster Resilience in the Pacific	Window 1	1 2 3	WB, Ministries of Finance, SPC, SPREP	1,000,000	Oct-14	Feb-19	Ongoing
70	Pacific regional	UAV4Resilience – Utilizing Unmanned Aerial Vehicles for Disaster Assessments in the Pacific Islands (under the Programmatic TA Building Climate and Disaster Resilience in the Pacific)	Window 1	1	WB	500,000	Jan-17	Dec-18	Ongoing
71	Fiji	Programmatic TA: Building Climate and Disaster Resilience in the Pacific – Fiji Flood Risk Management	Window 2	5	WB	200,000			Dropped
72	Fiji	Climate Vulnerability Assessment for Fiji	Window 2	1	WB	450,000	Jul-17	Jun-18	Pipeline
73	Kiribati	Strengthening Atolls for Climate-Resilient Future Urban Expansion (KiriSAFE)	Window 2	1	WB	455,000	Jul-17	May-18	Pipeline
74	Solomon Islands	Community Resilience to Climate and Disaster Risk Project (CRISP)	Window 2	1 2 3	WB, Gov. of the Solomon Islands	2,000,000	Apr-14	Apr-19	Ongoing
75	Solomon Islands	Honiara Flood Risk Study and Management Plan (under the Programmatic TA Building Climate and Disaster Resilience in the Pacific)	Window 2	1 2 3	WB	500,000	Jun-17	Apr-19	Ongoing
76	Timor-Leste	Building Climate and Disaster Resilience in Communities along Dili-Ainaro and Linked Road Corridors	Window 2	1 2	WB, Gov. of Timor Leste	990,000	Jul-13	Oct-15	Completed
77	Tonga	Tonga Cyclone Ian Reconstruction and Climate Resilience Project	Window 2	5	Gov. of Tonga	2,000,000	Apr-15	Jun-18	Ongoing

## PACIFIC

#	Country(ies)	Title	Window of action	GFDRR pillars	Partners	Amount funded (USD)	Start date	End date	Status
78	Vanuatu	Increasing Resilience to Climate Change and Natural Hazards in Vanuatu	Window 2	1 2 3	WB, Gov. of Vanuatu	3,000,000	Aug-13	Jun-18	Ongoing
79	Samoa	Samoa PDNA for cyclone Evan 2012	Window 3	5	WB, EU, UNDP	104,624	Jan-13	Jun-13	Completed
80	Fiji	Fiji Post Disaster Needs Assessment (PDNA) for cyclone Evan 2012	Window 3	5	WB, EU, UNDP	103,330	Feb-13	Dec-13	Completed
81	Fiji	Fiji Cyclone Winston PDNA 2016	Window 3	5	WB, EU, UNDP	212,254	Mar-16	Dec-16	Completed
82	Solomon Islands	Post Disaster Needs Assessment (PDNA) Solomon Islands Floods April 2014	Window 3	5	WB, EU, UNDP	39,333	May-14	Mar-15	Completed
83	Tonga	Technical Assistance for Recovery and Reconstruction Planning Post Tropical Cyclone Ian	Window 3	5	WB, UNDP, Red Cross, ADB, AusAid, New Zealand Aid - Min. of Infrastructure	80,242	Mar-14	Dec-15	Completed
84	Pacific islands	Economic assessment of disasters in the Pacific	Window 3	5	WB	615,000			Dropped
85	Vanuatu	Rapid Post-Disaster Needs Assessment of Tropical Cyclone PAM	Window 3	5	WB, EU, UNDP	140,697	Apr-15	Jun-16	Completed

## ALL ACP

#	Country(ies)	Title	Window of action	GFDRR pillars	Partners	Amount funded (USD)	Start date	End date	Status
86	All ACP	Recovery Framework Guide Roll Out in Africa, Caribbean and the Pacific	Window 3	5	WB, EU, UNDP	890,000	Mar-16	Dec-17	Ongoing
87	All ACP	World Reconstruction Conference 3 - Knowledge and Lessons Learned from ACP Countries	Window 1	1 2 3 4 5	WB, EU, UNDP	350,000	Jan-17	Dec-17	Ongoing



# The ACP-EU Natural Disaster Risk Reduction Program Partners

## ACP Group Of States

The African, Caribbean and Pacific Group of States (ACP) is an intergovernmental 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 objectives is the sustainable development of its member states and their gradual integration into the global economy. In this regard, the ACP Group, as early as 2004, took the initiative to pioneer action on natural disaster reduction and resilience by sensitizing the European Union’s attention to the need to expand its scope from humanitarian response to include a more pro-active and holistic approach to prevention and natural disaster risk management in support of sustainable development. This ACP-EU Natural Disaster Risk Management Program is hence part of a long-standing cooperation between the ACP Group and the EU that brings together, under an intra-ACP umbrella, active programs on natural disaster and climate resilience entities from Africa, Caribbean & the Pacific regions. These, together with specialized partners such as GFDRR, address ACP countries’ vulnerabilities to exogenous shocks through integrated measures on climate adaptation, environmental protection and natural disaster risk management.

For more information, see:

<http://www.acp.int>

## European Union

The European Union (EU) is the leading donor of development aid and climate finance. The EU is fully engaged in supporting the implementation of the new Agenda 2030 and the Sustainable Development Goals, the Paris Agreement and the Sendai Framework for Disaster Risk Reduction. The EU is at the forefront of the international agenda on resilience to support developing countries in preparing for, withstanding and recovering from disaster events. Such efforts stem from the EU’s Strategy for Disaster Risk Reduction (2011), the Action Plan on Resilience in crisis prone countries (2013), and the Action Plan on the Sendai Framework for Disaster Risk Reduction 2015–2030 (2016). These two plans pool 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), GCCA+ (Global Climate Change Alliance plus) or DIPECHO. Furthermore, in its cooperation with the ACP Group of States, the EU has put the need to reduce vulnerability and to build resilience of regions, countries and communities at the core of its interventions.

For more information, see:

<http://www.europa.eu/>

<http://www.gcca.eu/>

EU DRR policy: <https://goo.gl/Dh3Pyz>

and <https://goo.gl/MtwFSH>

## 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 EU DRR policy. GFDRR is supported by 34 countries and ten international organizations.

For more information, see:

<http://www.gfdr.org/>







Landscape in mainland of Viti Levu, Fiji  
Photo credit: Shutterstock

---

**ACP-EU Natural  
Disaster Risk Reduction Program**

---

**World Bank Brussels Office**  
17, av. Marnix-B 1000 Brussels, Belgium

[infoacpeu@worldbank.org](mailto:infoacpeu@worldbank.org)

[www.drrinacp.org](http://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