

# ACP-EU Natural Disaster Risk Reduction Program

2020 - 2021 Activity Report



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

## ACP-EU Natural Disaster Risk Reduction Program 2020 - 2021 Activity Report

This report summarizes activities and achievements under the Africa, Caribbean, Pacific-European Union Natural Disaster Risk Reduction (ACP-EU NDRR) Program from July 1, 2020 to June 30, 2021.

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Notes: The financial contributions and expenditures reported are reflected up to June 30, 2021; all dollar amounts are in US dollars (\$) unless otherwise indicated.

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Cover Image: Sierra Leone, iStock.com

# Acronyms and Abbreviations

ACP	Africa, Caribbean and Pacific
AFD	French development agency - <i>Agence française de développement</i>
CCA	Climate Change Adaptation
CDEMA	Caribbean Disaster Emergency Management Agency
CHaRIM	Caribbean Handbook for Risk Information and Management
CSO	Civil Society Organization
DaLA	Damage and Loss Assessment
DRM	Disaster Risk Management
DRR	Disaster Risk Reduction
ECCAS	Economic Community for Central African States
ECOWAS	Economic Community of West African States
EOC	Emergency Operation Centre
EP&R	Emergency Preparedness and Response
EU	European Union
EWS	Early Warning Systems
FY21	Fiscal Year 2021 (1 July 2020 – 30 June 2021)
Geo-CRIS	Caribbean Risk Information System geospatial platform
GFDRR	Global Facility for Disaster Reduction and Recovery
IGAD	Intergovernmental Authority on Development
IOM	International Organization for Migration
KCCA	Kampala Capital City Authority
LiDAR	Light Detection and Ranging
MEPyD	Dominican Republic's Ministry of Economy, Planning and Development - <i>Ministerio de Economía, Planificación y Desarrollo</i>
MettelSat	Democratic Republic of Congo's National Hydrological and Meteorological Service
MoLSD	Sudan Ministry of Labor and Social Development
NBS	Nature-Based Solutions
NDMA	National Disaster Management Agency
NDMO	National Disaster Management Organization
NDRR	Natural Disaster Risk Reduction (ACP-EU NDRR Program)
NFTs	Non-Fungible Tokens
NGOs	Non-Governmental Organizations
NHMS	National Hydrological and Meteorological Services
OACPS	Organization of African, Caribbean, and Pacific States
PDNAs	Post-Disaster Needs Assessments
PICs	Pacific Island Countries
RECs	African Regional Economic Communities
RINA	Rapid Impact and Needs Assessment
RWFA	Rwanda Water and Forestry Agency
SADC	Southern African Development Community
SWIFT	Survey of Well-being via Instant and Frequent Tracking
UN	United Nations
UNDP	United Nations Development Program
UNDRR	United Nations Office for Disaster Risk Reduction
ZRRF	Zimbabwe Recovery and Resilience Framework

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Foreword

Since its inception in 2011, the **Africa Caribbean Pacific-European Union Natural Disaster Risk Reduction (ACP-EU NDRR) Program** has been a driving force in helping member countries of the Organization of African, Caribbean, and Pacific States (OACPS) strengthen their resilience to climate change and disaster risks. The Program has worked alongside key stakeholders such as governments, international organizations, donors, civil society, the private sector, and academia to protect sustainable development gains from the impacts of disasters and climate change. In the fiscal year 2020-2021 (FY21), the Program continued to adapt its activities amid the COVID-19 crisis and worked with members of the OACPS to pair their pandemic responses with their overall disaster risk management (DRM) strategies. The Program's extension until December 2021 has provided additional opportunities to overcome the logistical and organizational challenges caused by the pandemic.

Over its ten years of operation, the Program has seen an increase in the integration of the principles and policies of DRM and Climate Change Adaptation (CCA) into development planning at the local, national, and regional levels. In FY21, the Program continued to respond to demands for stronger national DRM frameworks, especially by reinforcing the technical capacities of dedicated expert agencies and institutions and by encouraging the reform of legislations that govern these organizations. Tangible achievements in the Program's final year include the inauguration of **Sierra Leone's** new National Disaster Management Agency (NDMA) in November 2020 following an extensive collaboration between the government and the World Bank; the launch of Geo-CRIS, a new geospatial data platform to share DRM-related data in the **Caribbean**; and the adoption of new resilient building codes for the housing and construction sector in **Fiji**. The considerable interest in this type of institutional and legislative capacity-building highlights the crucial

role of effective governance and the weak and ineffective structures that significantly hinder disaster response. These activities also reflect the continued efforts of OACPS members to shift their approach from a reactive, ex-post disaster response to a proactive response that actively anticipates hazards and attempts to mitigate their impact.

Throughout FY21, OACPS states were severely exposed to climate-related disasters and the Program remained focused on providing technical assistance for CCA. There was significant demand from participating countries to strengthen their capacities in flood risk management, reflecting the devastating impact that heavy rains can bring, as evidenced by major flooding events in **Cameroon** and **Sudan**. Countries have been increasingly investing in flood risk studies and management plans as climate change compounds the frequency and severity of these events, as seen in **Haiti** with the implementation of flood risk reduction measures around Cap-Haitien, and with the adoption of a flood risk management plan for Honiara, the capital city of the **Solomon Islands**.

As the ACP-EU NDRR Program's implementation concludes in December 2021, it is crucial to continue investing in disaster risk reduction and DRM to build on the Program's successes and to ensure that the principles of resilience developed during its implementation can be sustained. These investments are essential for protecting those most at risk — who have become even more vulnerable to shocks due to the pandemic — and for building resilient communities that can withstand complex and overlapping emergencies. As the world slowly emerges from the health crisis, the OACPS, the EU, and the World Bank/GFDRR will continue to strengthen the partnership with OACPS countries for a greener, more resilient, and inclusive recovery.



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# Executive Summary



Tanji, The Gambia  
Source: iStock.com

## This report highlights the results achieved by the ACP-EU NDRR Program during FY21.

In view of the closing of the ACP-EU NDRR Program by December 2021, a particular focus was placed in FY21 on finalizing activities and responding to the most urgent demands from OACPS member states. The Program awarded 2 new projects in FY21 for a total of \$141,000, in Sudan and Cameroon, to respond to post-disaster emergencies following the rainy season of August 2020. This expands the Program's total portfolio to 149 projects, benefiting over 70 countries, since its inception. Additional funding was also granted to existing projects in Cabo Verde, Cameroon, The Gambia, Kenya, Malawi, Seychelles, Sudan, Vanuatu and for one regional project in the Caribbean, totaling \$746,000. Highlights in each region are presented below.

In Africa, the Program's portfolio numbered 29 active projects, 2 of which were launched in FY21. Responding to the August 2020 rainy season across Sub-Saharan Africa, the two new projects provided specific support to the governments of Cameroon and Sudan to assess post-disaster damages and to improve the understanding of risks of their respective governments. In terms of post-disaster activities, an important milestone has been reached in Sierra Leone with the creation of a new National Disaster Management Agency (NDMA), following long-term support from the Program since the

2017 landslides in the capital city of Freetown. At the regional level, governments, urban planners, and local communities received technical assistance to improve the quality of data for urban resilience through the introduction of disruptive technologies such as drone imaging and artificial intelligence. Other country-level activities continued to strengthen legislative and institutional frameworks for DRM and CCA in Benin, Kenya, Malawi, Mozambique or the Seychelles. Preparedness for floods and a better understanding of coastal resilience was also an important aspect of the Program's portfolio, including in The Gambia, Rwanda and Senegal. Urban resilience also remained a high priority for governments in Cameroon, the Republic of the Congo, the Democratic Republic of Congo or Uganda. Finally, several key achievements have also been recorded in Cabo Verde, which is taking steps to ensure that its schoolchildren are sufficiently protected in the event of a natural disaster. More information on the ACP-EU NDRR FY21 portfolio in Africa can be found on pages 18-36.

In the Caribbean, the Program's portfolio comprised 14 active projects in FY21. The provision of reliable and actionable disaster risk information remained high on the agenda, with the November 2020 launch of a new geospatial data platform — the Geospatial Caribbean Risk Information System (Geo-CRIS)<sup>1</sup> — managed by the Caribbean Disaster Emergency Management Agency (CDEMA), which ensures that Caribbean countries have access to data on

<sup>1</sup> The CRIS platform can be accessed at <https://geocris2.cdema.org/>.

DRM. The Program also continued to support a regional initiative strengthening regional and national disaster preparedness and response capacities under the auspices of CDEMA, which also included the launch of an innovative hurricane and multi-hazard communication campaign for the Caribbean entitled “Disaster Fighters.” In Haiti, which is highly vulnerable to disasters and severe climate events, the Program continued to support the government through three projects that focus on improved disaster preparedness and response capacity and strengthened urban infrastructure. Two projects in Saint Lucia, which supported the government on the inclusion of DRM and CCA considerations in development planning and the deployment of a comprehensive risk reduction strategy, also closed in FY21. The Dominican Republic also benefited from improved data collection methods to compile a virtual repository of disaster data that will inform potential needs for recovery and reconstruction. More information on the ACP-EU NDRR FY21 portfolio in the Caribbean can be found on pages 37-47.

In the Pacific, the Program's portfolio numbered 9 active projects in FY21. Several key policies and analytical products were finalized, including the publication of guidelines<sup>2</sup> in Fiji that have improved the design and construction of single-story houses and schools to prepare for climate and disaster risks and to strengthen the country's capacity to withstand future disaster risks. Another product was finalized in April 2021 when a detailed flood risk study<sup>3</sup> of a was published in the Solomon Islands, providing quality information on how flood risk can be better managed and reduced in the Greater Honiara area. In Vanuatu, activities have continued to strengthen institutional

frameworks for DRM, including by promoting communication on disaster risks. This materialized with the organization of a December 2020 tsunami awareness campaign and a June 2021 stakeholder workshop that engaged stakeholders in the national dialogue on reforms for subdivision planning and resilient settlements in the country. In addition, government ministries and agencies in Papua New Guinea continued to undergo an institutional review of their DRM policies to identify potential gaps and priority reforms, including an assessment of emergency preparedness, response, and recovery systems. More information on the Program's FY21 portfolio in the Pacific can be found on pages 48-55.

The ACP-EU NDRR Program is the materialization of a very strong partnership between the OACPS, the EU, and the World Bank/GFDRR. This decade-long collaboration among World Bank teams and EU Delegation counterparts has been essential to provide support to OACPS member states. More information on the cooperation with EU Delegations on the ground can be found on pages 11-12.

Finally, the ACP-EU NDRR Program has continued to benefit from GFDRR's abilities to harness the World Bank's convening power and technical expertise and to mobilize the World Bank's financing capacity and attract financing from other sources. Several projects implemented in FY21 have mobilized a total of \$374 million, bringing the total amount mobilized through the Program to over \$4.3 billion since its inception. More information on the ACP-EU NDRR Program's mobilization of DRM investments can be found on pages 56-57.

## Construction Site, Papua New Guinea



Source: iStock.com

<sup>2</sup> The guidelines are available in English at <https://bit.ly/3rxjlpj>.

<sup>3</sup> The study is accessible at: <https://bit.ly/2WpY18C>.

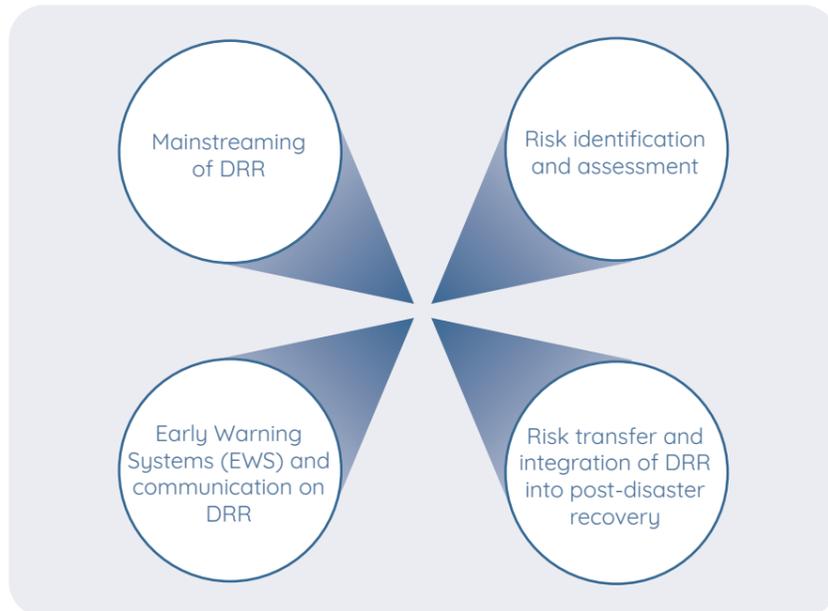


# Program Overview

Hillside homes in Kigali, Rwanda  
Source: iStock.com

## Program Objectives and Description

Launched in October 2011, the ACP-EU NDRR Program is implemented through a €54.5 million single donor trust fund managed by GFDRR. Its objective is to strengthen preparedness for natural hazards and develop capacities to prevent and mitigate disasters at the regional, sub-regional, national, and local levels in ACP countries, focusing on four priority areas:



All activities implemented under the ACP-EU NDRR Program provide technical assistance and strive to build the capacities of ACP countries in DRM and CCA. They also integrate multi-sectoral and multi-hazard risk management approaches into national and regional development planning. The Program fosters informed decision-making on resilience, recovery, reconstruction, and long-term development planning. It achieves its objectives by implementing three strands of activities or “Windows”:

**Window 1 – regional and sub-regional level projects**  
Activities at the regional level, advancing the national DRR agendas of ACP countries through regional and sub-regional cooperation.

**Window 2 – country-level projects**  
Activities at the national level, driving DRR and CCA policy development and implementation in ACP countries through needs-based and demand-driven technical assistance.

**Window 3 – post-disaster, capacity building, and recovery activities**  
Activities that improve the ability of ACP countries to respond to disasters efficiently and effectively by building ex-ante capacity to conduct Post-Disaster Needs Assessments (PDNAs), providing rapid technical assistance, and mainstreaming DRR in recovery planning.

Projects are demand-driven and needs-based. Standard eligibility criteria apply to all projects, namely: (i) an **official request** from governments and or regional or sub-regional organizations to demonstrate ownership; (ii) **consultation with the respective EU Delegation** to confirm that project proposals are complementary to other EU Country, Regional and/or Intra-ACP projects, and (iii) **alignment with the World Bank’s strategies** in the respective country.

(NGOs). This is in addition to coordinating with EU delegations, with more specific examples given on pages 11-12.

### Steering Committee meetings

A Steering Committee — consisting of representatives from the European Commission, the OACPS Secretariat, and the World Bank — meets regularly to review progress, provide advice and guidance, and address needs arising from project implementation. During the meetings, the overall portfolio, financial overview, and status of the monitoring framework are presented. The Steering Committee meeting for FY21 took place virtually on April 28, 2021.

### Supporting African Regional Economic Communities

In 2014, the Program was expanded with an additional €20 million for regional activities to support the DRM coordination capacity of African Regional Economic Communities (RECs), specifically the Economic Community for Central African States (ECCAS), the Economic Community of West African States (ECOWAS), the Intergovernmental Authority on Development (IGAD), and the Southern African Development Community (SADC). This supplementary contribution falls administratively under the ACP-EU NDRR Program, but the activities contribute to the achievement of the 2<sup>nd</sup> Result Area (R2) of the ACP-EU Program “Building Disaster Resilience to Natural Hazards in Sub-Saharan African Regions, Countries, and Communities.”<sup>4</sup> A separate activity report presents the activities of the R2 Program in FY21.

### Coordination with other partners

The Program works with national and local governments, communities, civil society, and other partners including United Nations (UN) agencies and international nongovernmental organizations



Source: iStock.com

<sup>4</sup> This program was implemented by a partnership of the ACP-EU NDRR Program, UNDRR, the African Union Commission, and the African Development Bank.

## Outcomes - Expected Results & Targets

The main expected results of the ACP-EU NDRR Program are:

Improved resilience of ACP countries to the impact of natural disasters

Better preparedness of the population in disaster-prone areas

Reduction of the cost of response in the event of natural disasters

The achievement of these results is measured against the following targets, which are to be reached by the Program's closing date in December 2021.

	Achieved as of June 30, 2021	Ongoing	Status as of June 30, 2021
30 ACP countries have integrated DRR and CCA in the national planning process	37	15	Target surpassed
20 countries have developed risk tools to guide vulnerability reduction	48	18	Target surpassed
3 river basins have enhanced flood risk management capacity	4	5	Target surpassed
6 sub-regional institutions have functioning DRR capacity	6	-	Target reached
20 countries have access to operational EWS for natural disasters	13	6	Target on track to be reached through regional activities
15 countries have developed risk financing and insurance strategies	17	4	Target surpassed
20 countries have developed national capacity for PDNAs	22	4	Target surpassed
15 countries have undertaken multi-stakeholder PDNA and recovery planning	22	1	Target surpassed
5 countries have effective implementation of DRR in the recovery phas	7	8	Target surpassed

## Cooperation with European Union Delegations on the ground

Port-Au-Prince, Haiti  
Source: iStock.com

The implementation of ACP-EU NDRR regional and country-level projects was undertaken in coordination with EU Delegations. Several examples of this coordination in FY21 are highlighted below.

In Africa, EU Delegations are kept abreast of the implementation of ACP-EU NDRR projects through regular updates, invitations for EU officials to attend workshops, training sessions, and capacity building events to improve coordination, and utilizing EU expertise on the ground in project execution. For example, in the Gambia, meetings were held with the Head of the EU Delegation in Banjul in December 2020 and May 2021 to discuss ongoing activities of the ACP-EU NDRR project that focuses on urban and coastal resilience. This was welcomed by the EU Delegation as a fruitful opportunity to ensure coordination with ongoing projects under the EU's Global Climate Change Alliance+.<sup>5</sup> In addition, in May 2021, the Deputy Head of Cooperation of the EU Delegation to the Gambia gave opening remarks for the opening of a two-day workshop, where the findings of the flood and coastal risk assessment for the Greater Banjul Area and surrounding region were presented. More than 50 participants attended the workshop, including from the Ministry of Finance and Economic Affairs and sector ministries, specialized agencies (DRM, environment, tourism, water resources, and public works), local governments, and other international partners.<sup>6</sup>

In the frame of a regional project that used disruptive technologies in Africa's fastest-growing cities to overcome risk information gaps, several EU Delegation counterparts from across the continent were consulted, including in Botswana, Tanzania, Kenya, and Rwanda. Partners in European agencies, including the European Commission's Directorate General for Humanitarian Aid & Civil Protection, the Directorate General for Mobility and Transport, and the European Union Aviation Safety Agency, were also involved in project activities.

Other examples in Africa demonstrate ongoing coordination between World Bank teams and EU Delegations. In Cabo Verde, the EU Delegation in Praia was kept informed on progress of activities related to the integration of disaster risk and climate change considerations in investments for school infrastructure. In Cameroon, EU Delegation counterparts were invited to the final workshops in October and November 2020 that presented the project activities that aimed to integrate climate and disaster risk considerations in spatial planning in the country. Furthermore, in Rwanda, EU Delegation representatives attended an event that presented World Bank projects related to the topics of climate change and the environment, including the development of a hydrological model to support the Rwanda Water Resources Board and Nature-Based Solutions (NBS) activities in the country.

<sup>5</sup> For more information, please see: <https://www.gcca.eu/>.

<sup>6</sup> The interventions delivered during the workshop can be accessed at: <https://bit.ly/3hkGJrC>.

Coordination with the EU was also ensured as part of post-disaster activities. In **Cameroon**, a new project was launched in the aftermath of the August 2020 floods in the capital city of Douala to **improve the understanding of risk and its consequences for urban planning and investments**. This project was implemented in coordination with the EU Delegation in Douala as well as other organizations, including the French development agency (Agence française de développement or AFD), and the Japanese International Cooperation Agency. In **Sudan**,

following the heavy seasonal rains of August 2020, the government spearheaded the development of a **rapid post-disaster needs and recovery assessment** funded by a new ACP-EU NDRR project. The government-led assessment was conducted by the United Nations Development Program (UNDP), the EU, and the World Bank and adapted from the PDNA methodology (for more information, results of the assessment are described in greater detail in an “In Focus” feature on page 36).

### Intervention from EU Delegation officials during the virtual launch event of the new Geo-CRIS geospatial data platform in November 2020



Source: CDEMA, the event can be viewed [here](#).

In the **Caribbean**, counterparts from the EU Delegation in **Barbados** provided opening remarks during the November 2020 launch event for Geo-CRIS<sup>7</sup>, a **new geospatial data platform** managed by CDEMA that was developed with support from the Program and contributions from several other Caribbean regional organizations.<sup>8</sup> Another example of coordination in FY21 was between the World Bank teams and EU Delegation counterparts in Santo Domingo, **Dominican Republic**, where a meeting was organized in February 2021 to discuss ongoing activities, including the two ACP-EU NDRR projects that aimed to **build physical and fiscal resilience to disasters** and improve access to reliable **risk information**. Coordination with the EU in the Caribbean takes place on a regular basis also on the implementation of other EU-funded activities, especially those implemented as part of the **Caribbean Regional Resilience Building Facility**<sup>9</sup>, which is a partnership between the EU, GFDRR, and the World Bank.

In the **Pacific**, project updates are regularly provided to the EU Delegation in Suva, Fiji, especially on related World Bank investments in relevant Pacific island countries (PICs) supported by the Program such as in **Fiji, Samoa, Tuvalu, and Vanuatu**. In Tuvalu, for instance, a collaborative partnership between the government, the World Bank, and other international partners such as the EU, the Asian Development Bank, and the Pacific Region Infrastructure Facility has been crucial<sup>10</sup> in assisting the government to organize a series of reforms related to the World Bank-funded Catastrophe Deferred Drawdown Option<sup>11</sup> Development Policy Financing, which was mobilized by technical assistance funded by the ACP-EU NDRR Program. This ongoing engagement between the government and international partners, including the EU, continues to provide momentum for the government to implement key reforms.

<sup>7</sup> The CRIS platform can be accessed at <https://geocris2.cdema.org/>.

<sup>8</sup> The launch event of the CRIS can be viewed at the following link: <https://bit.ly/3mRgtWu>.

<sup>9</sup> For more information, please see: <https://www.gfdr.org/en/caribbean-rrb>.

<sup>10</sup> For more information, please see: <https://www.theprif.org/>.

<sup>11</sup> A Cat-DDO is a contingent credit line that provides immediate liquidity to countries in the aftermath of a natural disaster: <http://pubdocs.worldbank.org/en/563361507314948638/product-note-cat-ddo-ida-english-2018.pdf>.

## Cross-cutting Issues



Conakry, Guinea  
Source: iStock.com

Gender inclusion, women’s empowerment, and engagement with civil society are key operating principles of the ACP-EU NDRR Program and more broadly of the work of GFDRR.

### Gender Inclusion and women’s empowerment

Gender issues are well-established in development approaches and have been globally recognized as fundamental to DRR. As outlined in its **Gender Action Plan 2016-2021**,<sup>12</sup> which identifies specific actions and outcomes that promote gender as an essential component of DRM, GFDRR monitors the progress and results on mainstreaming gender equality and women’s empowerment in its portfolio. The trend of gender considerations being included in the Program’s portfolio continued during FY21.

In **Africa**, several projects had a gender-specific focus, such as in **Cameroon**, where activities have included the collection of relevant, gender-sensitive post-disaster data using Open Data tools for risk mapping. Almost half of the field data collection cartographers who were trained in cartography and field survey tools were women, and surveys made sure to include women among their respondents. Furthermore, as part of a project in the **Democratic Republic of**

**Congo** that aimed to improve climate and hydrometeorological services, **gender-sensitive communication** was used when producing and delivering timely, accurate, and relevant information for key Congolese stakeholders, including river-transportation agencies, hydropower operators, disaster reduction and civil protection agencies, farmers and agricultural actors, aviation, the media, and the wider public.

In the **Caribbean**, a project in **Haiti** supports several government agencies, including the Civil Protection Directorate (within the Ministry of Interior and Local Authorities) and the Ministry of Women’s Affairs and Women’s Rights, in **tackling gender inequalities** as part of their DRM efforts. A gender gap analysis is being conducted – in consultation with women associations and the community at large – to improve the understanding of gender gaps in Haiti’s DRM sector. In addition, as part of a **regional** project in the Caribbean, an

<sup>12</sup> The GFDRR Gender Action Plan 2016–2021 is available at: <https://bit.ly/3kxskYH>.

initiative known as “Disaster Fighters”<sup>13</sup> was launched in June 2021 to promote disaster resilience and raise awareness in an engaging and dynamic manner, with a particular emphasis on reaching out to youth. This hurricane and multi-hazard communication campaign has been **informed by existing literature on gender strategies** for disaster preparedness communications (for more information, the “Disaster Fighters” initiative is described in greater detail in an “In Focus” feature on page 46).

In the **Pacific**, a project in **Fiji** has supported the government in developing a set of guidelines<sup>14</sup> based on the lessons learned from the 2016 tropical cyclone Winston to improve the resilience of single-

story houses and schools against future storms and earthquakes. These guidelines are addressed to individual homeowners and builders, as well as to community-level institutions responsible for overseeing the construction of schools. As part of their development, the guidelines looked at **differentiated benefits for women and children** as well as meeting the needs of the disabled for school design. These guidelines were promoted in a nation-wide outreach and awareness campaign by the country’s building industry.



Suva, Fiji

Source: iStock.com

<sup>13</sup> More information about this initiative can be found at <https://bit.ly/35JcFM>.

<sup>14</sup> The Guidelines are accessible at <https://bit.ly/2NqbBV8>.

## Engagement with Civil Society

Civil society organizations (CSOs) have continued to inform several projects. This is in line with GFDRR’s **Citizen Engagement Action Plan 2019-2023**,<sup>15</sup> which calls for an increase in the number of grants with citizen engagement activities in GFDRR’s portfolio.

In **Africa**, a **regional project** that promoted the use of disruptive technologies in Africa’s urban centers included inputs from several CSOs such as Village Reach, especially on the **use of digital tools and drones** to undertake urban risk assessments. In **Côte d’Ivoire**, local student mapping clubs and members of the local CSO OpenStreetMap Côte d’Ivoire were involved in each step of the risk mapping process: inception, field activities, training, and reporting. During field work, around 1,000 people from local communities were sensitized to hazard areas and on the use of technology to better understand disaster risks. Activities were informed by inputs **received from local universities**, such as in the **Republic of Congo**, where both the Université Marien Nguouabi and the new technical Université Denis Sassou-Nguesso in Brazzaville provided inputs on risk mapping activities. In **Uganda**, a project supported government capacity at national and subnational levels in the development of the Kampala Disaster Risk and Climate Change Resilience Strategy, which received input from CSOs such as the Red Cross, the African Hydro Meteorological Observatory, the Local Governments for Sustainability – Africa,<sup>17</sup> and the Livelihood Improvement Program of Uganda.<sup>18</sup>

In the **Caribbean**, activities in **Belize** to improve the road network’s management were partly based on natural hazard and **disaster risk community** sensitization. This entailed sharing technical knowledge with local communities and learning from a practical perspective about how to incorporate anecdotal inputs into engineering concepts and practices. Engagements in **Dominica** to enhance resilient reconstruction in the country after Hurricane Maria involved consulting **local populations**, including the Kalinago Council. Furthermore, in **Haiti**, municipal development and urban resilience activities in Cap-Haïtien, the country’s second largest city, entailed discussions with local CSOs as part of **neighborhood-level engagement**.

In the **Pacific**, a regional project implemented by the International Organization for Migration (IOM) enhanced the resilience of communities to disaster risks and climate change in **Micronesia** and the **Republic of Marshall Islands**. It included several engagements with civil society, such as three consultation workshops on **community-based DRM activities** involving several local CSOs.

Other activities that were carried out in the Pacific include the **consultation of several CSOs** as part of the development of important new policies and government guidelines, including the development of the new Building Code in **Tuvalu**, as well as the elaboration of the new safe construction guidelines in **Fiji**, which included inputs from local iTaukei communities (for more information, the project is described in greater detail in an “In Focus” feature on page 54).

### Hazard vulnerability capacity vulnerability mapping activity involving Kwajalein Atoll communities



Source: IOM, Marshall Islands.

<sup>15</sup> The GFDRR Citizen Action Plan 2019-2023 is available at <https://bit.ly/2R2mSjt>.

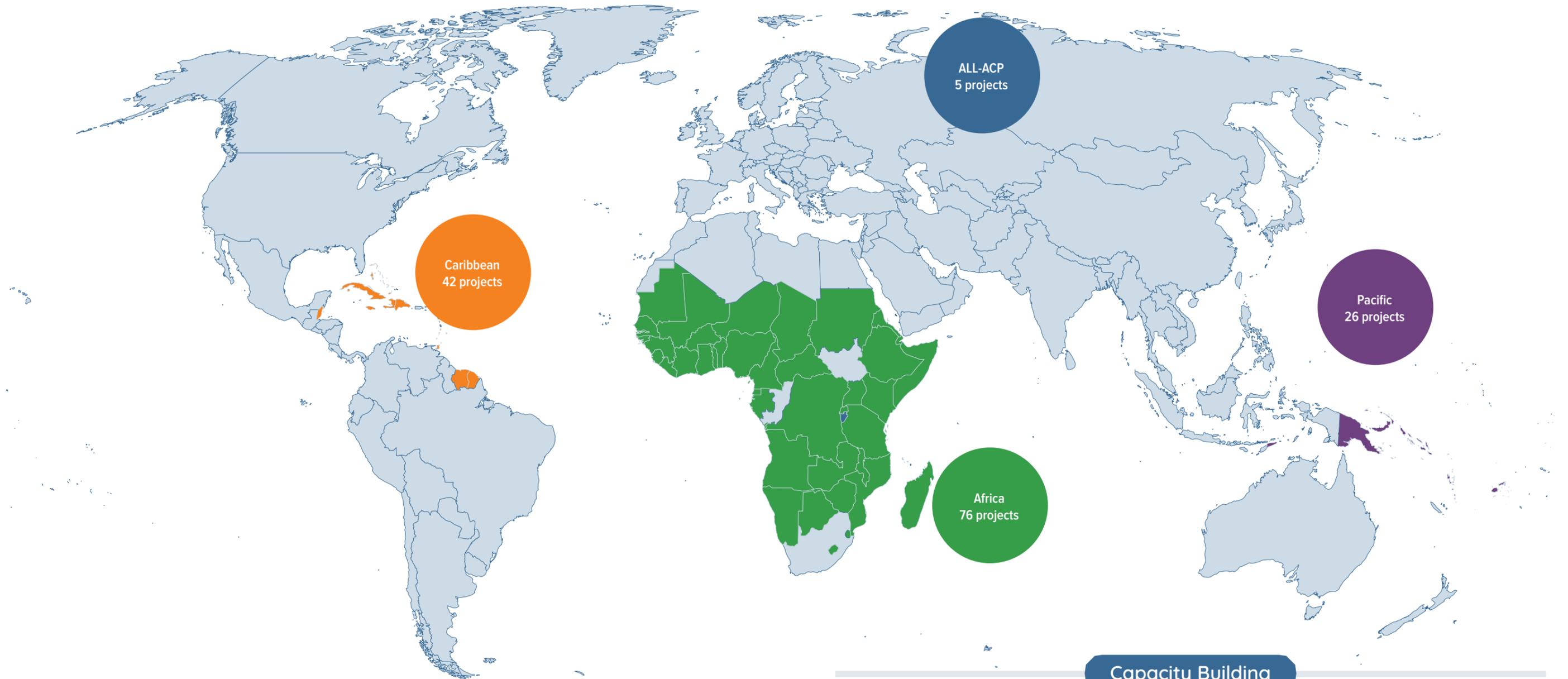
<sup>16</sup> For more information, please see: <https://www.villagereach.org/>.

<sup>17</sup> For more information, please see: <https://africa.iclei.org/>.

<sup>18</sup> For more information, please see: <https://bit.ly/2XlW83V>.

## Where the Program Operates

Distribution per region as of June 30, 2021



## Distribution per Window of Activity, as of June 30, 2021



## Capacity Building

Since inception, the ACP-EU NDRR Program has organized **872** training events, benefitting **36,450**

People trained on DRM  
**25,374**

People trained on PDNAs  
**3,727**

People invited to conferences  
**7,349**

## Knowledge Products

Since inception, the ACP-EU NDRR Program has developed **568** knowledge products



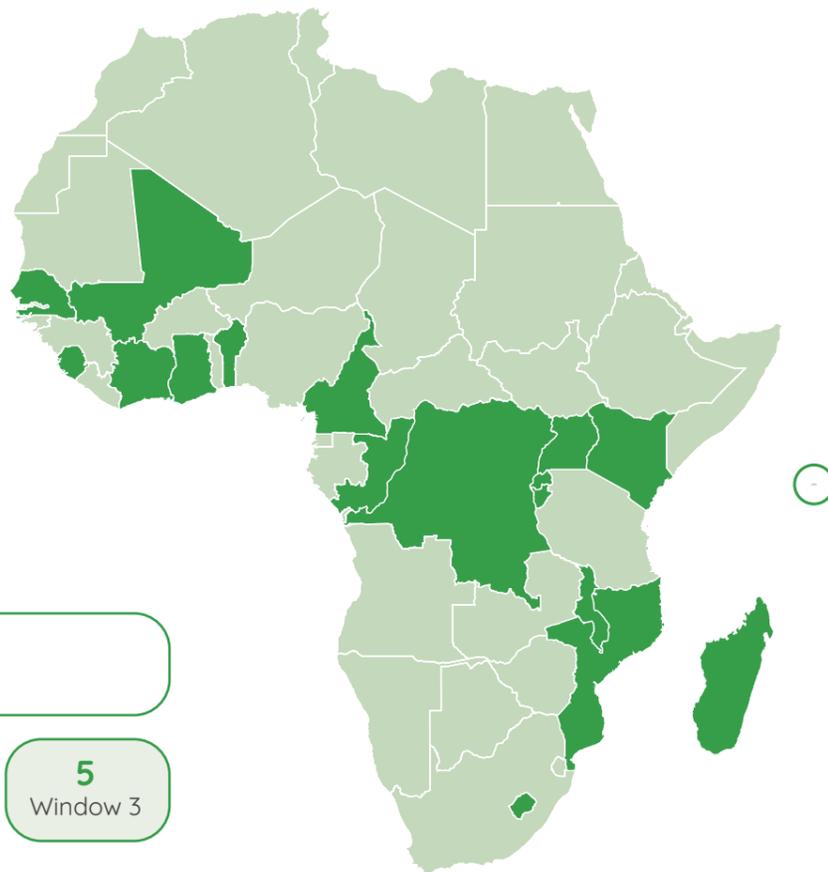
Overview of Activities in FY21  
**The Program in Africa**

Kampala, Uganda  
 Source: iStock.com

Activities in Africa

Activities in Africa in FY21 have addressed institutional, regulatory, and policy gaps within countries' disaster preparedness and response frameworks in key thematic areas such as urban resilience, flood hazard preparedness, and threats to agriculture and food security.

In FY21, the portfolio for Africa was comprised of 29 active projects, including 8 regional-level projects (Window 1), 18 country-level projects (Window 2), and 5 post-disaster and capacity building activities (Window 3). Two of these were approved for funding during the year.



**29**  
active projects

**8**  
Window 1

**18**  
Window 2

**5**  
Window 3

Regional-level projects

Community mapping exercises



Source: Resilience Academy, Final Report of the Digital World for Urban Resilience, World Bank.

Cities across **Africa** are at the center of the continent's demographic transformation, as urban population centers are rapidly growing. Urban planners are confronted with data gaps and limited resources for data collection and analysis, which are essential when identifying the communities and critical infrastructure that are the most at risk from disaster hazards.

A regional project<sup>19</sup> that closed in FY21 therefore aimed to **address these gaps in quality, actionable data for urban resilience**. It provided urban communities and institutions with trainings, tools, and expertise to collect data and carry out risk assessments to reduce this gap. Through this project, urban stakeholders learned to use technologies that have improved their data collection capacities, including satellite image acquisition, drone-based mapping, survey applications, and artificial intelligence. CSOs representing researchers, students, and youth groups were at the heart of the project's engagement with local urban communities and grassroots groups. An emphasis was placed on teaching data collection skills and using phones and laptops to facilitate these tasks. This project generated considerable enthusiasm: the number of cities across

Africa where risk analyses were produced increased from 23 to 118. Furthermore, technologies at the heart of the project have had real-life applications. For example, during the COVID-19 pandemic, satellite imagery, artificial intelligence, and drone surveys were used to identify outbreaks and virus hotspots in cities. Activities resulted in the delivery of *Drones for Risk Management* case studies that were shared with local authorities, as well as updated and enhanced *World Settlement Footprints* datasets for exposure information derived from satellite and artificial intelligence techniques. This resulted in demands for additional investments in digitalizing urban data using remote and satellite-based tools. Several valuable lessons were learned throughout the course of the project, such as the importance of grassroots data validation as a means of getting the community involved and sustaining the project's accomplishments.

Other regional projects were implemented as part of the Result Area 2 Program. They are outlined in a separate activity report that presents its activities in FY21.

<sup>19</sup> For more information on this regional project, please visit: <https://bit.ly/3BeZWcb>.

## Country-level projects



### Benin

Benin is exposed to a multitude of disaster hazards, such as flooding, coastal erosion, and forest fires. The government has initiated a series of key policy and regulatory reforms to better equip its institutions to manage these overlapping risks. It has been able to strengthen its technical, legislative, and institutional capacities for managing climate and disaster risks with support from a project that reinforced the **legislative and institutional frameworks** underpinning Benin's approach to anticipating and responding to disaster risks.<sup>20</sup> This included providing technical inputs to the Disaster Risk Management Bill and developing clear roles and lines of responsibility within government ministries for emergency situations. The government was also able to strengthen territorial planning and construction standards for DRR in key sectors such as education, transport, and health. In addition, DRM and climate change considerations were

integrated in land use planning tools, which resulted in increased opportunities for risk-informed territorial planning. The government was also able to deepen its understanding of the social, economic, and environmental impacts of these reforms, as evidenced by the development of the *Safer Schools Technical Guidelines and Safer Schools Strategy*, which has contributed to a better understanding and integration of resilience into the planning, design construction, and maintenance of education facilities. Final consultations are ongoing with the National Agency for Civil Security and the National Agency for Territorial Planning to identify needs and draft a roadmap to develop guidelines for local contingency plans in Pèrèrè and Kandi, including an update of local contingency plans. Another similar pilot will be launched to update local contingency plans in two cities that are highly vulnerable to natural hazards.

Ganvie, Lake Nokoue, Benin



Source: iStock.com

<sup>20</sup> For more information on this project in Benin, please visit: <https://bit.ly/31ajawB>.

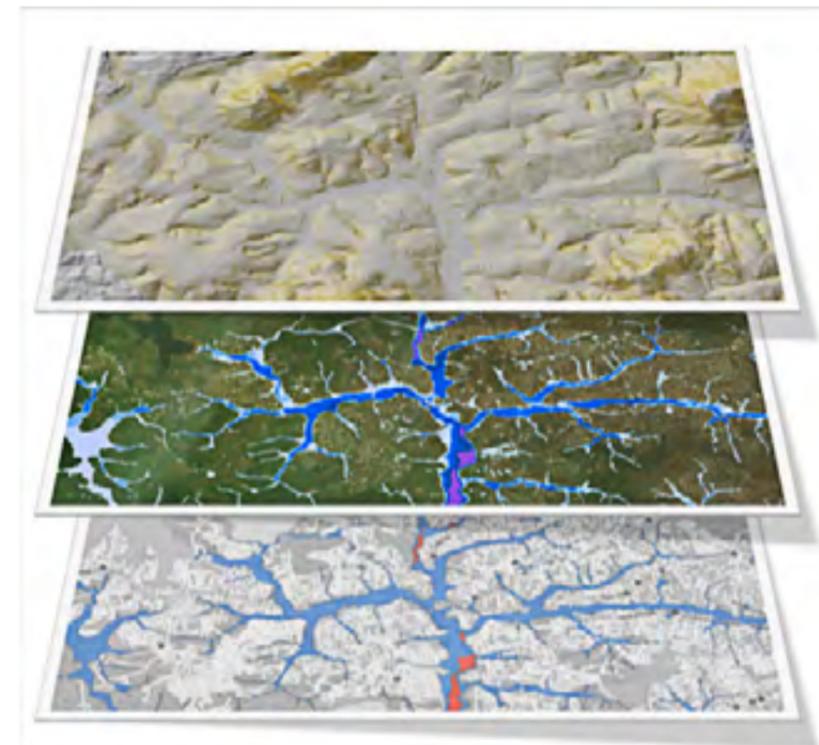


### Cameroon

The government of **Cameroon**, through the Ministry of Economy, Planning, and Regional Development and the Ministry of Housing and Urban Development, has prioritized the **mainstreaming of DRM and CCA into its development planning** with support from the Program.<sup>21</sup> It was involved in producing the *Guide to Integrate Climate and Disaster Risks into Development Planning*, which provides strategic guidance to help strengthen climate and disaster resilience in several cities. Several opportunities were provided for government officials and academic researchers to obtain valuable experience and capacities in advancing resilience. These included workshops that garnered significant interest from academic stakeholders, including researchers and students, who received training for important

hydrometeorological skills, such as land-use mapping, hydrological modelling, and geological data collection. In addition to improved human resources, the government's efforts in strengthening disaster and climate resilience have also resulted in several analytical tools being developed. These included a Flood Risk Atlas and 18 flood risk maps for several neighborhoods in Cameroon's capital city Yaoundé as well as for the municipality of Ngaoundéré, a city in the north of Cameroon. This approach greatly facilitated access to quality climate and disaster risk data for experts and their integration into the decision-making process for development planning.

Illustration of the flood risk layers exercise undertaken in Yaoundé, Cameroon



Source: World Bank, Flood Risk Layers report (unpublished).

<sup>21</sup> For more information on this project in Cameroon, please visit: <https://bit.ly/3pVRgjf>.



## Cabo Verde

Cabo Verde is taking steps to ensure that its **schoolchildren are sufficiently protected in the event of a natural disaster**. The Ministry of Education is working to improve its ability to assess the structural integrity of school infrastructure and to reduce schools' exposure to natural hazards. It is specifically prioritizing the National Plan for the Rehabilitation and Extension of School Infrastructure, which aims to rehabilitate, strengthen, and expand school infrastructure in the country. Through the "Integrating disaster risk and climate change considerations into school infrastructure investments" project,<sup>22</sup> which received additional funding in August 2020, promising results have been achieved, including the collection of existing data on school infrastructure and the identification of structural typologies, leading to updates to the Education Management Information System on school buildings by the Ministry of Education. A preliminary identification of schools exposed to natural hazards was also completed, which entailed collecting information and detailed photos of buildings from 45 schools that covered details about school occupancy, infrastructure condition, and functional spaces. With the support of the University of Cabo Verde, a diagnostic of

the school infrastructure policy environment was conducted to understand how schools are managed and what roles relevant actors play in the school infrastructure life cycle. In addition, an overall revision of the existing legislation and an assessment of the financial environment for school infrastructure were conducted to identify opportunities that can improve the management and quality of existing schools and to determine potential financing partners and opportunities for future investments. Another diagnostic was developed on the local construction sector's ability to undertake structural improvements strengthening the Ministry of Education's information system, providing guidance in preparing intervention strategies to ensure the quality and resilience of school infrastructure. Finally, capacity building activities are being undertaken to monitor interventions in schools across the country. This included a June 2021 training session, which focused on management, planning, design, construction, and maintenance of school infrastructure. It was attended by 13 officials, including three women, from the Ministry of Education and delegates from local municipalities.

Mindelo, Cabo Verde



Source: iStock.com

<sup>22</sup> For more information on this project in Cabo Verde, please visit: <https://bit.ly/3Ega6UX>.

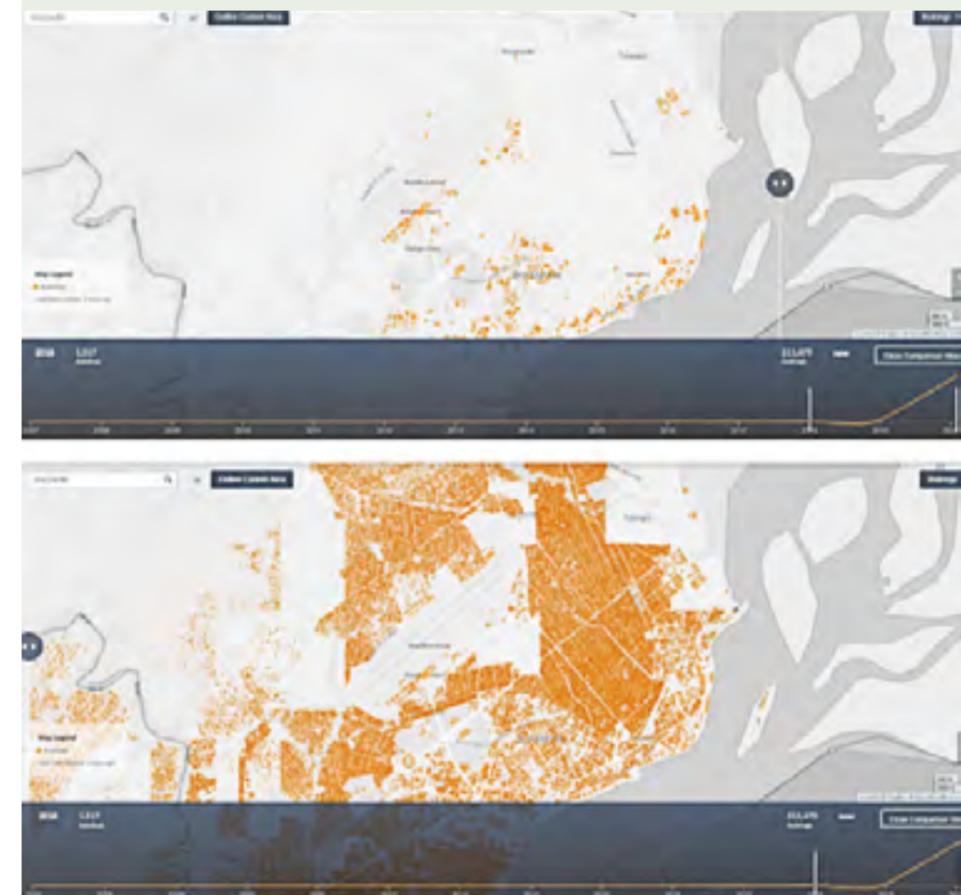


## Republic of the Congo

The **Republic of the Congo** is promoting **resilient urban development** in two of its largest cities: Brazzaville and Pointe-Noire. Rapid urban expansion and unplanned development have pushed poor residents in these cities to areas that are vulnerable to hazards, especially heavy rains and flooding.<sup>23</sup> Addressing this problem has been made more difficult by the lack of accurate data that can be used to identify at-risk neighborhoods. With the support of the Program, key government counterparts, including the Ministry of Large-Scale Works and Urban Development, the municipalities of both cities, researchers, and university students have been carrying out open data mapping activities to fill data gaps and support resilient urban development planning. The screenshots above depicting available information in Brazzaville before and after the street-

mapping activities demonstrate the amount of data that has been acquired through these activities. This data has helped inform risk assessments and mitigation measures by evaluating land based on its current use (i.e., residential), climate and environmental factors, and economic growth. Detailed spatial information on roads, residences, and other infrastructure has led to improvements in identifying neighborhoods that are vulnerable to heavy rains and flooding. A restitution workshop was held in Brazzaville in April 2021 after the completion of the street view-mapping activities to present the results of the street view analysis to national and local stakeholders. The establishment of a geospatial laboratory was proposed to preserve and sustain the knowledge and skills that were developed during the project's implementation.

Before (top) / After (bottom) of mapped building footprints in Brazzaville



Source: World Bank.

<sup>23</sup> For more information on this project in the Republic of Congo, please visit: <https://bit.ly/2ZwYv7>.



## Democratic Republic of the Congo

The government of the **Democratic Republic of the Congo** focused on improving **its climate and hydrometeorological services** managed by its specialized institution, MettelSat, an important component of its national DRM strategy. A project<sup>24</sup> that closed in FY21 followed three specific objectives to reflect this priority: (i) to invest in MettelSat's human and institutional resources required to implement and sustain weather and water observation and forecasting; (ii) to strengthen observation and forecasting networks; and (iii) to produce and deliver timely, accurate, and relevant information for key Congolese stakeholders, including river-transportation agencies, hydropower operators, disaster reduction and civil protection agencies, farmers and agricultural actors, aviation, the media, and the general public. As a measure of the application of this project's accomplishments, several innovative approaches were adopted by MettelSat to address flood and climate change in the N'Djili and Kalamu watersheds. MettelSat also received much-needed upgrades to its buildings and equipment and received the delivery of new meteorological and hydrological equipment, providing the basis for improved early-warning systems in the country.

As the city of Kinshasa continues to grow and expand, the **Democratic Republic of the Congo** has made **resilient urban development** in its capital a priority and has enhanced the use of risk information to inform its decision-making process on key investments. The Provincial Ministry of Plan, Public Works, and Infrastructure, the Ministry of

Urban Development and Housing, the municipal government of Kinshasa, and the University of Kinshasa have worked together to deepen knowledge and understanding about flood, erosion, and landslide risks in the N'Djili urban watershed. This effort resulted in the development of a report analyzing several urban development scenarios for the watershed as well as an analysis on measuring the economic impact of road closures due to flooding in Kinshasa. Information was also created to prioritize sustainable investment options while increasing women's participation in the decision-making process. The Kinshasa Urban Development and Resilience project<sup>25</sup> also generated innovative approaches for integrated urban resilience to disaster risk and climate change, which helped identify several possible interventions that can be replicated in situations and contexts found across the city of Kinshasa. A final component of the project facilitated exchanges of best practices between government bodies, the private sector, and the World Bank. This was accomplished by disseminating best practices in urban resilience through publications, presentations, and leaflets. Public debate on these practices, which was encouraged, contributed to involving stakeholders in decision making processes while informing World Bank and county strategies. This led to public agencies, such as the Infrastructure Cell and the municipality of Kinshasa, to be involved during the data collection stages of the project and led coordination efforts with local authorities and communities.



## eSwatini

Drought has become a significant risk to sustainable development in **eSwatini**, disrupting food security, health, and economic activity, disproportionately affecting the rural poor and communities dependent on agriculture. The devastating impacts from droughts have led the government, through its NDMA, to **strengthen its drought preparedness and mitigation capacities** with support from the Program.<sup>26</sup> Activities centered on improving the government's ability to adequately prepare for and respond to droughts. For instance, a comprehensive analysis was conducted to identify and quantify the risk from droughts to the agriculture, water, health, and education sectors. Pilot drought contingency plans were drafted with the input of relevant stakeholders, who also received a greater understanding of the design of risk financing

and insurance mechanisms. Finally, eSwatini's efforts to become a Center of Excellence in drought preparedness were showcased throughout Southern Africa and beyond. These activities were implemented through a series of capacity-building trainings and workshops. For example, 103 government officials, volunteers, and "citizen scientists," including 53 women, attended three workshops on drought monitoring, data validation, and impact reporting. A prototype drought monitor was also finalized during the project's implementation. It facilitated the sharing and integration of remotely sensed data within the NDMA and between other government agencies critical to drought preparedness efforts, such as the Ministry of Agriculture.

<sup>24</sup> For more information on this project in the Democratic Republic of the Congo, please visit: <https://bit.ly/3EIZbt2>.

<sup>25</sup> For more information on this project in the Democratic Republic of the Congo, please visit: <https://bit.ly/3jAurfG>.

<sup>26</sup> For more information on this project in eSwatini, please visit: <https://bit.ly/3jEzlmx>.



## Gambia

The government of **The Gambia**, notably through the NDMA, the Banjul City Council, and the Kanifing Municipal Council, has placed an emphasis on better understanding **flood and coastal risks to its capital city of Banjul and the surrounding region**. The government has increased its capacity to collect and analyze data thanks to support from a project that received additional funding in August 2020. This project informed long-term urban development strategies that integrate resilience to flood and erosion risks, thereby reducing the vulnerabilities of urban neighborhoods and minimizing the economic fallout from these types of risks.<sup>27</sup> Overall, the project led to the following results:

- A digital terrain model covering the Greater Banjul area was validated and processed to map risk exposure and the city's shoreline, including flooding, coastal erosion, sea-level rise and land deformation. Local authorities in the Kanifing Municipal Area were also supported to process drone imagery and produce a high-resolution land subsidence map with help from the European Space Agency.

- The collected data was used to produce a flood-risk assessment and a coastal risk assessment, which both included the development of an investment plan to promote a multi-sectoral approach to reducing these risks.

Results from this work were discussed with relevant government ministries and agencies during a two-day virtual workshop in May 2021 to validate the results and hotspots areas and the corresponding investment options. The workshop was attended by 63 participants, including 21 women, from the Ministry of Finance and Economic Affairs and sector ministries, specialized agencies (such as DRM, environment, tourism, water resources, and public works) local governments, and international partners, including the Delegation of the European Union.<sup>28</sup>

### Photos of the Gambia's coastline



Source: Screenshot from the May 2021 final delivery workshop, World Bank, accessible [here](#).

<sup>27</sup> For more information on this project in The Gambia, please visit: <https://bit.ly/3EjbKVM>.

<sup>28</sup> The interventions delivered during the workshop can be accessed at: <https://bit.ly/3hkGJrC>.



Ghana

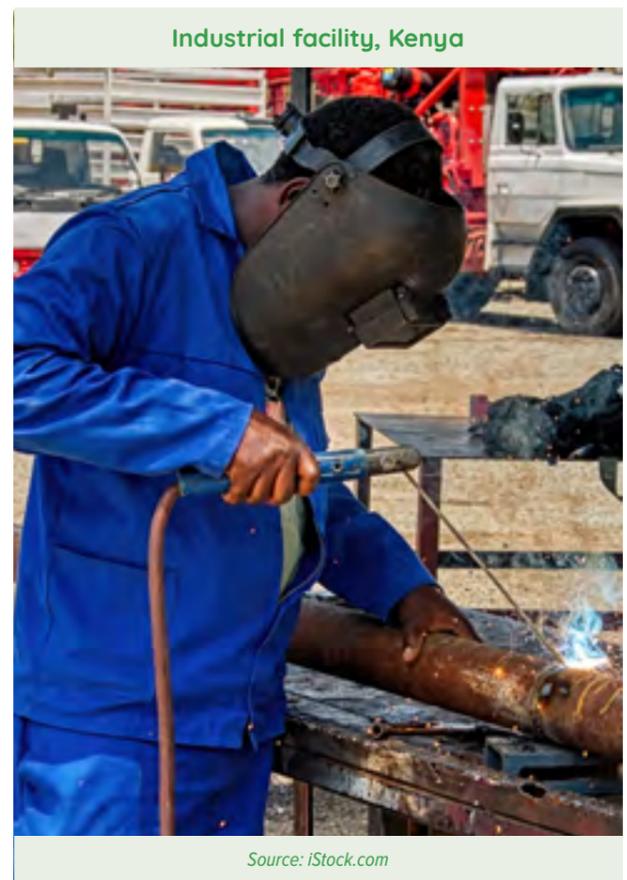
The Odaw River Basin in Ghana is home to over 2.5 million people and is a crucial source of water for the Greater Accra Region. Communities living alongside the river basin, however, have been adversely affected by poor solid waste management practices. Government agencies led by the Ministry of Works and Housing thus worked with support from the Program to increase their technical and operational capacities and improve the living conditions of these communities through **improved flood and solid waste management practices**. Activities under this project,<sup>29</sup> which closed at the end of FY21, focused on identifying the climate risks that the Basin faces, preparing possible risk mitigation measures, and developing tools to be placed at the disposal of disaster management agencies and local governments. In addition, it was essential to reach out to the

communities living near the Basin to solicit their feedback and gather accurate information. Several research initiatives explored possible flood mitigation measures in the Odaw River Basin as well as a Pilot Investment Plan for flood mitigation and management measures for Greater Accra. An overview of sustainable waste management measures in Greater Accra, a gender assessment and action plan, and a poverty disaster risk management analysis for flood-affected communities were also produced. These were made possible by open street mapping activities that were undertaken in collaboration with the Alogboshie, Alajo, Akweteyman, and Nima communities, and as part of a larger World Bank/GFDRR initiative called Open Cities Africa.<sup>30</sup>



Kenya

Kenya is pursuing **policy reforms that give DRM a prominent role** within its government institutions and legislation by granting additional technical and financial resources to manage the impact of climate and disaster risks.<sup>31</sup> These reforms are being implemented with support from the Program. Activities have thus far strengthened the government’s institutional, planning, and policy frameworks to manage climate and disaster risks by updating several key policies related to DRM. This included the methodology used by Kenya’s NDMA to develop county-level, multi-hazard risk profiles. It also entailed the revision of the 2009 National Emergency Response Plan, with updates to its scope and objectives, functional command levels, terminology, national coordination, and emergency response functions. Dialogue between the government and national stakeholders also helped inform a new DRM Bill to strengthen Kenya’s legal framework for responding to disaster risks. The State Department of Public Works, which is part of the National Construction Authority, also received technical advice on its framework for building regulations and enforcement of construction standards, including a benchmark comparing the Building Code to international best practices. These results have prompted the government to make several improvements to the Building Code, such as the inclusion of hazard maps. Additional funding for this project was allocated in July 2020 to help officials at the county level to implement the contents of the newly revised County-Level Emergency Operation Plans and ensure these plans are aligned with the National Emergency Response Plan. It also supported ongoing dialogue and consultations with county authorities, professionals from the building and construction sector, and the National Construction Authority on the implementation of the new *Building Code*.



Industrial facility, Kenya

Source: iStock.com

<sup>29</sup> For more information on the project in Ghana, please visit: <https://bit.ly/2ZnOxTT>.  
<sup>30</sup> For more information, please see: <https://opendri.org/project/open-cities-africa/>.  
<sup>31</sup> For more information on the project in Kenya, please visit: <https://bit.ly/3mcZKPB>.



Lesotho

Increasingly unpredictable meteorological patterns and the growing costs of climate change have spurred the government of Lesotho to **improve its ability to prepare for and respond to emergencies**.<sup>32</sup> Activities conducted with support from the Program have focused on upgrading the country’s ability to monitor, anticipate, and respond to climate events. One of the first steps for achieving this objective has been the strengthening of meteorological services and EWS. The Lesotho Meteorological Services benefited from institutional assessments to identify logistical weaknesses that limit the effectiveness from its staff in preparing for and responding to emergencies. Its 2019-2023 Strategy and Early Warning System Strategy were also updated. National stakeholders received technical assistance in preparing the Lesotho Multi-Hazard Contingency Plan, which includes components on floods, drought-induced hazards, and public health risks from pandemics. In addition, the Program supported the NDMA to put in place a regulatory framework for disaster management.

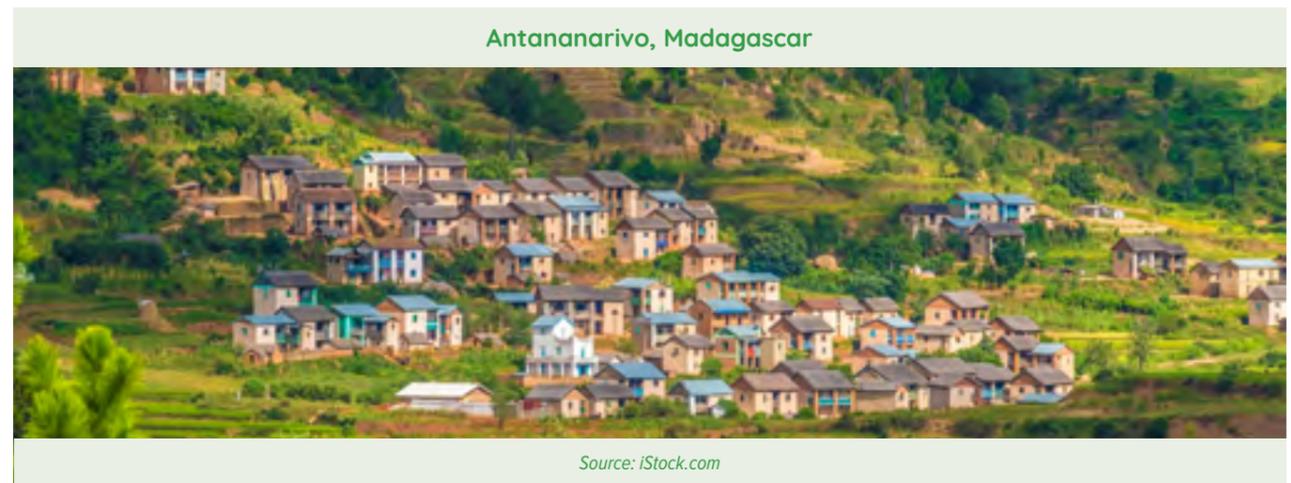
Furthermore, activities **adapted to the COVID-19 pandemic** and public health were integrated into Lesotho’s emergency response plans. A National Public Health and Emergency Response Plan was developed to improve the coordination of various agencies within and outside the Ministry of Health to prepare and respond to health-related emergencies. A review of the 2020 Disaster Risk Management Bill, which contains guidance on management of the Disaster Management Fund, was also conducted to help establish a sound financial management system for planning and monitoring resources allocated for emergency response. Project activities also included an Urban Forum in Maseru that was attended by over 100 participants and capacity development sessions that advanced policy developments.



Madagascar

Lower-income neighborhoods in Madagascar’s capital city of Antananarivo are exposed to several disaster risks, especially flooding events that significantly impact living conditions and livelihoods. The Ministry of Land Use Planning, the National Disaster Risk Management Agency, and Antananarivo’s municipal authorities were thus supported by the Program to provide **analytics on urban planning and disaster risk management and to integrate disaster risk considerations into urban practices**.<sup>33</sup> Activities have helped to develop innovative urban planning to incorporate DRM considerations, such as the inclusion of evacuation route plans, shelters, and first response centers. Project stakeholders also produced an evaluation

of the costs and benefits for implementing NBS in the city as well as an assessment of the challenges in designing a comprehensive solid waste management strategy. Coordination between donors and policy dialogue among government counterparts in urban planning were substantially improved. Key recommendations on risk-informed urban design and integration of green infrastructure were developed throughout the course of the project. The government also benefited from key findings regarding the implementation of better solid waste management practices and the inclusion of green infrastructure in resilient urban development.



Antananarivo, Madagascar

Source: iStock.com

<sup>32</sup> For more information on the project in Lesotho, please visit: <https://bit.ly/3mqsdUF>.  
<sup>33</sup> For more information on project in Madagascar, please visit: <https://bit.ly/3jyWn3G>.



## Malawi

The government of **Malawi** is **implementing key policy reforms for DRR to better respond to droughts, floods, and other weather-related shocks** that have had the greatest impact on lives and livelihoods, infrastructure, and the economy. The Program supported the government in investing in an institutional framework for ex-ante DRR. This framework aimed to improve its response capacities through a project that received additional funding in August 2020 and then completed its activities at the end of FY21.<sup>34</sup>

In view of supporting the uptake of DRM and CCA as priorities in Malawi and as a result of the Program's support, several legislative bills, policies, and guidelines have been adopted in collaboration with the Ministry of Disaster Management Affairs and the Department of Climate Change and Meteorological Service. New policies and legislation that integrate DRM principles, such as the National Urban Policy, the National Transport Policy, and the Safer Schools Construction Guidelines, were introduced. Improvements for building regulations, including the design of communication strategies to institutionalize the Safer School Guidelines, were also undertaken. Regarding infrastructure, an assessment of road design standards that provided recommendations for including climate resilience requirements in those standards was conducted. Other activities included the development of a feasibility study for crop and livestock insurance and the organization of consultations with stakeholders to inform flood-mapping. A flood risk assessment for Lilongwe City, which made possible a preliminary flood risk analysis for the city, was also developed. This input will contribute to the urban planning process the government is leading across both primary

and secondary cities, with a multi-level diagnostic. Finally, technical groundwork was undertaken to support the government in assessing disaster risk financing options, including a global benchmarking note on national disaster management funds.



## Mozambique

DRM has become a prominent policy priority in **Mozambique**, where the government has been implementing the National DRM Master Plan of 2017-2030 that now serves as the guiding document for DRM interventions in the country. The Program has been supporting government agencies including the Mozambique National Disaster Management Institute, the Ministry of Economy and Finance, the Ministry of Public Works and Water Management, and the Ministry of Health through analytics and policy dialogue. Through this collaboration, **government stakeholders have improved their capacities to implement early-warning systems for floods and cyclones** and have coordinated more effectively with non-governmental partners to plan DRM-oriented investments. The health and education sectors have especially benefited from this improved dialogue, as stakeholders from these sectors have gained key skills

in carrying out resilient construction practices, risk assessments, and retrofitting strategies. As Tropical Cyclone Idai struck just one month after the approval of the Strengthening Disaster Risk Management and Building Climate Resilience project, an additional component was added to support a PDNA, where the government, in partnership with the World Bank, the EU, and the UN, developed a "build back better" approach across key economic sectors as part of the PDNA process. The analytical work carried out under this project supported investments to operationalize and adequately capitalize the newly established disaster fund, strengthen early-warning capacities, and increase the resilience of public buildings.

<sup>34</sup> For more information on project in Malawi, please visit: <https://bit.ly/2ZvI891>.

<sup>35</sup> To learn more about this project in Mozambique, please visit: <https://bit.ly/312DVY>.



## Rwanda

In **Rwanda**, the government has been working to **improve its preparation and response capacities to severe flooding events**,<sup>36</sup> especially in Kigali and the North-West region where flooding has been prevalent. Agencies including the Rwanda Water and Forestry Agency (RWFA), the Rwandan Environmental Management Authority, the Rwandan Meteorological Agency (Météo Rwanda), and the Emergency Management Ministry are scaling up their abilities to perform hydrometeorological hazard mapping and to improve early-warning systems in the country. In the Sebeya River Basin in the Western Province, a hydrological model has been developed to serve as a flood forecasting system for the Rwanda Resources Board. In an effort to build on international best practices, Météo Rwanda is working with the International Research Institute from the University of Columbia to implement a quality control system, which will process real-time rainfall observations collected from its weather radar stations. In addition, hydrological and hydrodynamic modeling activities were undertaken by the RWFA in Kigali to understand flood hazards. Moreover, progress was made in identifying potential NBS

and green infrastructure, such as open green spaces, forestation, and bio-retention areas to strengthen the capital's flood resilience. These solutions offer multiple benefits in urban environments, such as water treatment, reduced urban heat, better recreation, reduced carbon emissions, improved urban agriculture, enhanced social resilience, and increased property values. In addition, the World Bank team is undertaking a diagnostic study to explore the impacts and suitability of NBS could be assessed. Through modelling, design studies, and stakeholder workshops, the feasibility of NBS will be evaluated in selected locations and offer guidance to the government to effectively integrate NBS in the built and natural environments. This will include an evaluation of the hydrological impacts of these solutions, their social, environmental, and economic costs and benefits, as well as their implementation, financing, and maintenance aspects.



<sup>36</sup> To learn more about the project in Rwanda, please visit: <https://bit.ly/3mhBH26>.



## Senegal

The coastal city of Saint-Louis in **Senegal** is exposed to flooding and erosion, prompting the government to explore solutions to protect the UNESCO World Heritage site, **reduce the vulnerability of its population to climatic hazards, and strengthen urban and coastal resilience**. To this end, local government agencies such as the Municipality of Saint Louis, the Technical Support Department, the Regional Development Agency, and the Municipal Development Agency have collaborated to develop its evidence collection and decision-making processes, with support from the Program.<sup>37</sup> Several initiatives were launched to improve data collection and analysis capacities. This work has resulted in the publication of key reports that have informed the project's government stakeholders, such as the Environmental and Social Impact Assessment, which ensured that the needs of affected populations would be taken into consideration in the event of relocation.

Technical assistance delivered under this project, including coastal zone management studies, drainage plans, and contingency scenarios also provided inputs for the World Bank-funded Saint Louis Emergency Recovery and Resilience Project and the Stormwater Management and Climate Change Adaptation Project. This assistance made use of the expertise of coastal engineers, urban specialists, and NBS experts. Technical assistance was also provided for the review of the preliminary design of the urban development plan of the city of Saint Louis. Activities allowed stakeholders to engage the wider public through a video documentary of stories of change for

households that had to relocate. Interviews with the beneficiaries and experts communicated impactful statements from those who had been supported by the project. A final documentary film is being prepared to recount the project's accomplishments since its inception and the experiences of the communities involved throughout the process.



Dakar, Senegal

Source: iStock.com



## Seychelles

Government institutions of the **Seychelles** — including the Ministry of Energy, Environment, and Climate Change, the Planning Authority under the Ministry of Habitat, Infrastructure, and Land Planning, and the Department of Risk and Disaster Management — are working to **strengthen the country's national framework related to disaster risk and climate resilience**. Through a project<sup>38</sup> that received additional funding in September 2020 and then closed at the end of FY21, the government has been able to enhance its Emergency Preparedness and Response (EP&R) system and to integrate disaster risk reduction into development planning and decision-making, thereby strengthening coastal resilience and flood protection. The project notably supported the implementation of recommendations set forth by the Coastal Management Plan<sup>39</sup> on NBS for building coastal resilience, such as coral reef restoration and beach nourishment. Technical assistance was provided through

the Ministry of Environment on integrating coral reef restoration practices. Furthermore, technical assistance on risk-based land planning was provided to the National Planning Authority. This included making geospatial data easily accessible to stakeholders, through the support with the design of the new Spatial Data Policy, which was approved by the Cabinet of Ministers. Training sessions for 20 government officials, including 10 women, were organized to help stakeholders from the National Planning Authority and the Ministry of Environment integrate risk information in spatial planning. Activities also included the development of the Seychelles' first National Integrated Emergency Response Plan, which was successfully deployed in response to the COVID-19 pandemic, resulting in stronger emergency management capacities at the national and district levels.

<sup>37</sup> To learn more about the project in Senegal, please visit: <https://bit.ly/3nMLJrB>.

<sup>38</sup> To learn more about the project in The Seychelles, please visit: <https://bit.ly/2XPtCK>.

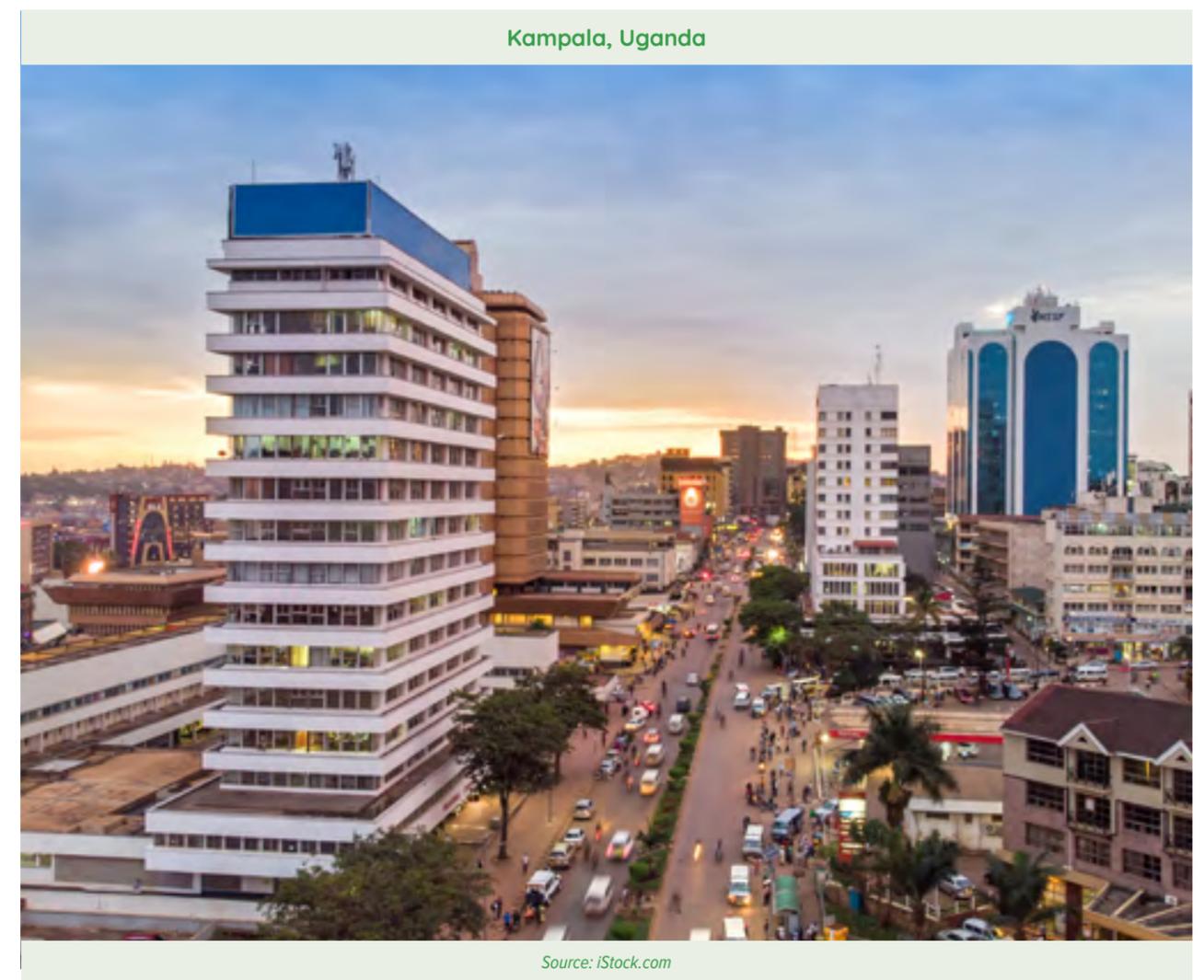
<sup>39</sup> The Coastal Management Plan is accessible at: <https://bit.ly/3iklwuu>.



## Uganda

**Uganda's** second National Development Plan, which served as its economic development plan for 2015-2020, prioritized disaster management as a necessary pillar for sustainable development. This prioritization formed the basis of the ACP-EU NDRR project that closed in FY21.<sup>40</sup> The government of Uganda and the Kampala Capital City Authority (KCCA) benefited from technical assistance that aimed at **building long-term resilience at the national and local levels in Uganda**. During FY21, a comprehensive review of Uganda's legal and institutional capacities was finalized to implement DRR and CCA policies. In particular, the Kampala Disaster Risk and Climate Change Resilience Strategy was developed to help the KCCA and government officials codify and understand the disaster risks that the city faces. These were also captured in the city's disaster and climate risk profile through geographic areas of hazard and risk

and specific vulnerabilities in the infrastructure networks. As part of this overarching strategy, the KCCA was also supported as it updated its Emergency Preparedness and Response Framework and its Advanced Flood Impact Warning Action Plan by conducting an OpenStreetMap exercise and strengthening community awareness on risk reduction actions and response during emergencies. These important policy outputs defined clear mechanisms to build resilience at the national level but also within local communities in Uganda. Overall, by improving disaster management efforts at the national level, this project not only provided a solid foundation for enhancing country-wide resilience, but also inspired local-level initiatives that helped find solutions to community challenges.



Kampala, Uganda

Source: iStock.com

<sup>40</sup> To learn more about the project in Uganda, please visit: <https://bit.ly/3vSvkoT>.

## Post-Disaster Activities

### Mapping activities between civil protection and local authorities in Douala, Cameroon



Source: World Bank.



### Cameroon

The rainy season of July 2020 in **Cameroon** saw above-average seasonal cumulative rainfall. The resulting conditions triggered significant flooding and led to the temporary displacement of populations as well as material damages across the country, affecting over 150,000 people and displacing over 1,500 households. With support from a new project approved in FY21,<sup>41</sup> the Ministry of Housing and Urban Development and the Municipality of Douala have been working to **improve the understanding of risk and its consequences for urban planning and investments**. Activities have included the collection of relevant post-disaster data using open data tools, which engaged a wide range of national and local stakeholders in mapping activities. This was coupled with the organization of several workshops in the spring of 2021 on the use of low-cost, collaborative, and open-data collection approaches for DRM, bringing together 53 people, including 15 women, from relevant ministries, government bodies, and the private sector. These gatherings helped map out relevant points of interest and areas at risk from flooding in the city. They were also an opportunity to discuss preliminary solutions for an urban resilience strategy. Along with the collected

data, these activities provided preliminary analyses concerning the nature of the damages caused by the floods, the organization of emergency services, the frequency and height of the floods, the duration of stagnation, and the causes flooding.

Overall, these activities raised the awareness and reinforced the capacities of the public sector. They also heightened the awareness of students on the importance of flood risk information for urban planning, introduced how to collect detailed and up to date information, and encouraged stakeholders on the use of this information to better inform their strategy and investments. Following the approval of additional funding in April 2021, further activities are being implemented, including new modeling activities that will be applied beyond the disaster event of August 2020, to produce flood models with a return period and a model on flooding caused by sea-level rise. Additional hydrological and meteorological data will be collected to inform these models and develop a flood hazard model for sea-level rise.

<sup>41</sup> To learn more about the project in Cameroon, please visit: <https://bit.ly/3vLUYeS>.



### Côte d'Ivoire

In **Côte d'Ivoire**, the Ministry of Safety, Environment and Sustainable Development, the Ministry of Construction, Housing and Urbanism, and the Ministry of Infrastructure continued to **develop a better understanding of flood risks in the capital city of Abidjan** with support from a project that closed in FY21.<sup>42</sup> Through community vulnerability mapping activities, several key results were achieved and conducted in the frame of the Open Cities Africa initiative.<sup>43</sup> These included the training of 60 youth from Abidjan — including 38 women — on land-use, community, and risk mapping. The result of the remote mapping of Abidjan they conducted included the digitization of 221,371 buildings of the capital city using surveys, street-view, and satellite imagery. These were captured in a web-based mapping platform and in an Atlas of Abidjan's "quartiers" or districts. Several knowledge sharing events were then organized:

- A four-day workshop provided an opportunity to present the final results to the 38 participants, including 23 women, from Ivorian institutions. Participants discussed flood risk maps of specific neighborhoods and worked with data created using geographic information systems software. They also exchanged ideas about how to make the initiative sustainable and how to make the best use of all the data and knowledge generated during the project. Finally, they organized three knowledge exchanges to present the results from this work and discuss the potential of both further collaboration and the extension of the activity.
- A presentation of the project was given to 800 students who learned about the importance of geospatial data for urban flood reduction. This was followed by a half-day workshop with the professors from the University Centre for Research and Application of Remote Sensing (Centre Universitaire de Recherche et Applications en Télédétection - CURAT). A follow-up workshop was also organized with the Ivorian Meteorological Agency (Société d'exploitation et de développement aéroportuaire, aéronautique et météorologique - SODEXAM) as they were particularly interested in using the data and technology within existing EWS in Côte d'Ivoire.

These activities resulted in enhanced collaboration on resilient urban planning and flood risk management as well as the development of strategic spatial information that will help in the planning of future activities and investments in a more resilient manner.

### Douala, Cameroon



Source: iStock.com



### Sierra Leone

With support from the Program, **Sierra Leone** was able to chart a path toward **resilient recovery** after the devastating landslide in the capital city of Freetown in August 2017. The project<sup>44</sup> is described in greater detail in an "In Focus" feature on page 35.

<sup>42</sup> To learn more about the project in Côte d'Ivoire, please visit: <https://bit.ly/2ZpiPox>.

<sup>43</sup> For more information, please see: <https://opendri.org/project/open-cities-africa/>.

<sup>44</sup> To learn more about the project in Sierra Leone, please visit: <https://bit.ly/3jULnY>.



## Sudan

## Flooding in Sudan



Source: Sudan rapid post-disaster needs and recovery assessment.

Following unusually heavy seasonal rains in August 2020 across much of Central and North-Eastern Africa, **Sudan** experienced some of its worst flooding in decades. It was particularly affected by the prolonged rains in the Blue and White Nile catchment. Following a government request for assistance, a **rapid damage, loss, and**

**recovery needs assessment**<sup>45</sup> for the 2020 seasonal floods and its recovery planning were undertaken<sup>46</sup> with support from a new project approved in FY21. Activities related to this rapid assessment are described in greater detail in the “In Focus” feature on page 36.



## Zimbabwe

**Zimbabwe** experienced the most devastating natural disaster in its recorded history when Tropical Cyclone Idai hit the eastern part of the country in March 2019. In the aftermath of the disaster, the government initiated a joint exercise that resulted in the publication of a Rapid Impact and Needs Assessment (RINA),<sup>47</sup> conducted by the government with support from the World Bank and GFDRR. To translate the RINA's findings into action, the government developed the **Zimbabwe Recovery and Resilience Framework (ZRRF)** with support from the Program. Spurred by the need to improve recovery coordination following Tropical Cyclone Idai, the ZRRF supports

Zimbabwe's progress — from early cyclone recovery to longer-term resilience and disaster preparedness. One of the key elements of the ZRRF includes a financing framework which outlines ways in which existing and future financial resources can best be deployed to support recovery from and resilience to future shocks. Other aspects of the ZRRF include the development of an institutional framework that prioritizes these needs and establishes an innovative and flexible approach to the results-based monitoring of recovery and resilience work being undertaken in Zimbabwe.

A description of all the ACP-EU NDRR projects implemented in the Africa region can be accessed on the ACP-EU NDRR website at <https://www.gfdrr.org/en/acp-eu/projects>.

<sup>45</sup> To learn more about the project in Sudan, please visit: <https://bit.ly/3nxtEgR>.

<sup>46</sup> The Sudan Rapid Post Disaster Needs and Recovery Assessment is available in English at: <https://bit.ly/3yZgQUh>. An executive summary is available in Arabic at: <https://bit.ly/38WokN6> and the assessment is available in Arabic at: <https://bit.ly/3njWH93>.

<sup>47</sup> The RINA is available at <https://www.gfdrr.org/en/publication/zimbabwe-rapid-impact-needs-assessment>.

## In Focus:

## Recovery in Sierra Leone leads to investments in long-term resilience

**Sierra Leone** has had to recover from many overlapping challenges in the aftermath of disasters, such as addressing the 2014-2016 Ebola epidemic that swept through West Africa and rebuilding government institutions and vital infrastructure that had been destroyed during the country's decade-long civil war. The population is exposed to several disaster risks due to the country's topography, its tropical monsoon climate, and human-induced factors such as deforestation, the effects of which are being exacerbated by climate change. The capital city of Freetown, with a population of over 1 million, has its own set of challenges resulting from its exposure to coastal climate influences, rapid unplanned urbanization, and recurrent flooding.

On August 14, 2017, Freetown had been enduring three days of heavy rains when a massive slope from the Sugar Loaf mountain overlooking the capital collapsed and swept through the Regent suburb, sending fast-flowing heavy debris including boulders and trees through the neighborhoods. The mudslide claimed the lives of 1,141 people and left over 3,000 homeless. It also destroyed schools, health facilities, bridges, and other critical infrastructure. In the immediate aftermath of the disaster, the government of Sierra Leone requested the World Bank's help in carrying out a rapid Damage and Loss Assessment (DaLA). The DaLA, which was conducted with support from the ACP-EU NDRR Program, estimated the value of total economic losses at over \$31 million and the cost for recovery efforts estimated at over \$82 million. The housing, health, education, and social protection sectors in Freetown were particularly hard hit.

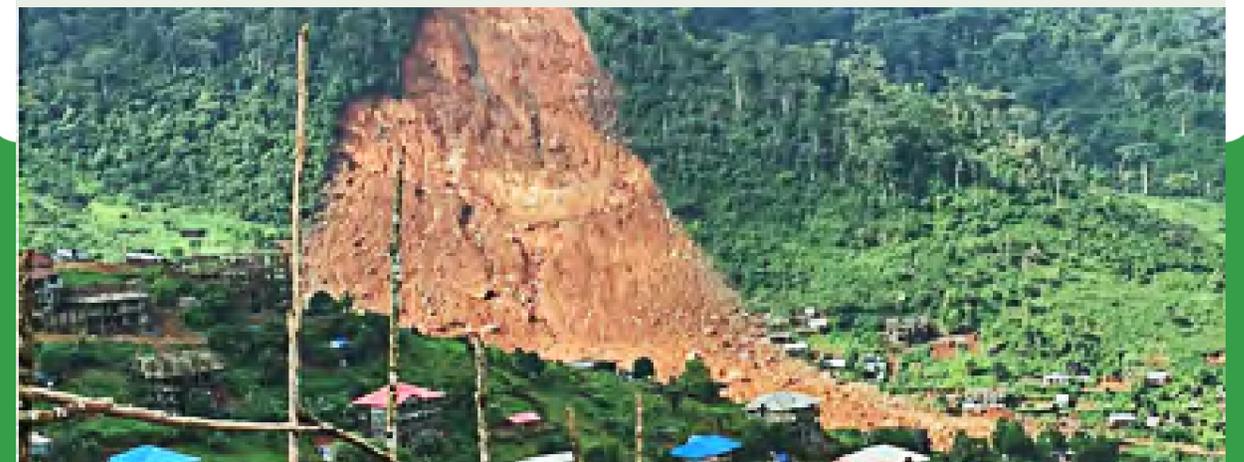
The DaLA also set forth a series of recommendations aimed at reinforcing Sierra Leone's long-term resilience against future mudslides and other disasters. It proposed a series of investments

in territorial planning that strengthen the country's legal and institutional frameworks and ensured that disaster risk reduction principles were integrated into broader economic development and social planning. These recommendations underscored the need for a shift from a reactive approach to disaster response to one that prioritizes risk prevention and mitigation.

The government used these recommendations to develop a recovery framework to build and strengthen its institutions dedicated to disaster risk management and emphasize preparedness and resilience. Relevant ministries that were mobilized included the Office of National Security, the Environmental Protection Agency, the Ministry of Lands, Housing and Environment, the Freetown City Council, and the Western Area Rural District Council. These investments in long-term resilience culminated with the inauguration of Sierra Leone's NDMA in November 2020, a significant milestone that enhances the country's early warning systems and ability to deal with future disaster events. The inauguration of the NDMA was attended by the President of the Republic of Sierra Leone, His Excellency Dr. Julius Maada Bio.

In the aftermath of this devastating landslide, Sierra Leone's focus on long-term resilience and preparedness has greatly improved the government's ability to anticipate and mitigate future disaster shocks. Building on these successes, the country is continuing to work with the World Bank and the EU, in the frame of the ACP-EU NDRR Program, to improve cross-cutting issues that contributed to the landslide, such as solid waste management and neighborhood infrastructure, and securing investment streams for the newly operational NDMA.

## Aftermath of the landslide near Freetown, Sierra Leone, 2017



Source: GFDRR

In Focus:

## Flooding prompts new approaches to predicting and preparing for flood hazards in Sudan

The transitional government in **Sudan** requested assistance in undertaking a rapid damage, loss, and recovery needs assessment after experiencing some of its worst flooding in decades. It was particularly affected by the prolonged rains along the banks of the Blue Nile and White Nile in August 2020. Flash-flooding in North Darfur also aggravated the humanitarian situation in the war-torn region. Over 875,000 people across the country were affected, leaving 120 people dead. Flood-related damages amounted to over \$3.34 billion.

The assessment was led by the Emergency Operation Centre (EOC) as the focal agency in coordination with technical advisory provided by the World Bank and the UNDP. Sector-by-sector meetings were organized to guide the data collection and analysis and report writing. In total, seven workshops were held with over 93 participants, 49 of whom were women. The assessment aimed to evaluate the floods' impact on key sectors — such as housing, health, agriculture, gender, and education — and developed a recovery strategy that addresses underlying risks and vulnerabilities. This assessment was carried out through questionnaires and interviews with relevant government entities including from the EOC, the National Council for Civil Defense, and the Humanitarian Aid Commission. The assessment was published in March 2021 (see link below) and made several key recommendations on streamlining government and institutional

responsibilities for Disaster Risk Reduction. For example, the assessment recommended adopting measures such as risk mapping, hazard-informed land use planning, and early-warning systems to shift from a reactive posture to a more preventive approach. A launch event of the Sudan Rapid Post Disaster Needs and Recovery Assessment report was held in May 2021 with relevant government entities that participated in conducting the assessment as well as the members of the High Committee for Flood Mitigation.

Thanks to their collaborative efforts, the transitional government and the World Bank were able to produce the National Resilience and Recovery Framework. This framework recognizes Sudan's unique circumstances as it recovers from the 2020 flooding amid a political transition, refugee crises, and the COVID-19 pandemic. Additional funding was provided to this project in April 2021 to produce a diagnostics report that summarizes Sudan's current capacities on emergency preparedness and response and key recommendations for improvements.

The Sudan Rapid Post Disaster Needs and Recovery Assessment is available in English at <https://bit.ly/3yZgQUh>. An executive summary is available in Arabic at <https://bit.ly/38WokN6> and the assessment is available in Arabic at <https://bit.ly/3njWH93>.

Tuti Island youth forming a human water barrier



Photo Credits: Faiz Abubakr



Rainforest, Dominica  
Source: iStock.com

## Overview of Activities in FY21 The Program in Caribbean

### Activities in the Caribbean



Activities in the Caribbean in FY21 addressed several key topics related to disaster risk management and climate change adaptation. These included a focus on enhancing countries' better understanding of disaster risks and an emphasis on protecting and preserving essential infrastructure, such as transport, housing, and urban assets. Several innovative activities related to the communication of risk were implemented, especially through the "Disaster Fighters" initiative.

In FY21, the portfolio for the Caribbean region counted 14 active projects, including 2 regional-level projects (Window 1), 11 country-level projects (Window 2), and 1 post-disaster and capacity building activity (Window 3).



## Regional-level projects



Building on a previous ACP-EU NDRR project,<sup>48</sup> the Caribbean Handbook for Risk Information and Management (CHaRIM) was developed by CDEMA as a platform for **disaster risk information** that governments could consult to inform their decisions and activities and guide hazard and risk assessments. After the initial project implementing this platform had been completed, the countries participating in CHaRIM (**Belize, Dominica, Grenada, St. Lucia, and St. Vincent and the Grenadines**) had requested additional support to continue strengthening the platform, through another regional ACP-EU NDRR funded initiative entitled *Second Caribbean risk information Program*.

Based on the methodological framework that was developed and employed during the previous ACP-EU NDRR project, a **new geospatial data platform** called Geo-CRIS<sup>49</sup> was launched in November 2020 with the support of the Program.<sup>50</sup> Managed by CDEMA, this platform serves as a “one-stop-shop” for gathering and sharing information and data on DRM, ensuring that Caribbean countries have access to data on DRM. The Geo-CRIS platform facilitates access to and sharing of DRM and CCA data for Caribbean countries to improve preparedness and response to hazards and

contributes to risk-informed and risk-resilient development planning. Training was provided to 70 CDEMA staff, including 14 women, on how to use the Geo-CRIS platform and technical support on flood and landslide risk management, including a disaster simulation exercise that made use of the Geo-CRIS platform. This technical support has helped inform resilience-building activities in each of the participating countries and resulted in key investments to protect infrastructure from flood and landslide risks. Furthermore, a new version of the CDEMA’s Virtual Library was brought online to which new knowledge products and data are uploaded. Several key products were launched in the frame of the Geo-CRIS platform, including the CDEMA virtual library,<sup>51</sup> which provides a repository for risk information for the region, and an informational video about the platform.<sup>52</sup>

This project, which closed in January 2021, has produced valuable lessons. For example, CDEMA has committed to finding ways to continue the development of GeoCRIS in other donor-funded initiatives, including by the Government of Canada and the World Food Program.

<sup>48</sup> For more information about this regional project, please see: <https://bit.ly/3mKkoVo>.

<sup>49</sup> The CRIS platform can be accessed at <https://geocris2.cdema.org/>.

<sup>50</sup> The launch event of the CRIS can be viewed at the following link: <https://bit.ly/3mRgtWu>.

<sup>51</sup> The CDEMA virtual library is accessible at: <https://www.cdema.org/virtuallibrary/>.

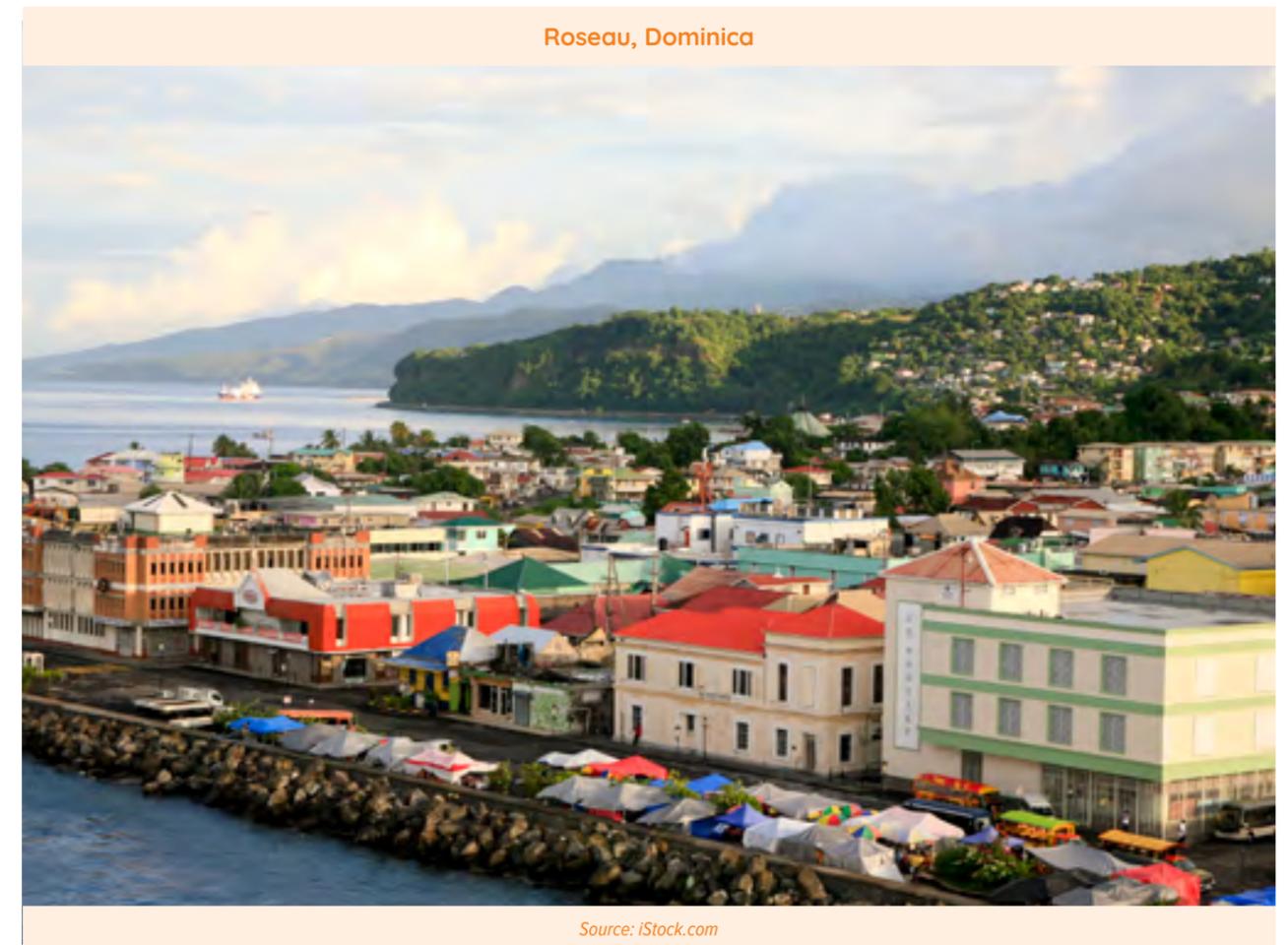
<sup>52</sup> The video about the CRIS platform can be accessed at: <https://bit.ly/37150SM>.

The Program supported another regional initiative to **improve regional and national efforts in disaster preparedness and response** under the auspices of CDEMA.<sup>53</sup> The National Disaster Management Organizations (NDMOs) in **Dominica, Grenada, Saint Kitts and Nevis, Saint Lucia, and Saint Vincent and the Grenadines** each underwent an institutional assessment of their current preparedness and response systems, which were captured in separate assessment reports shared with relevant officials. These evaluations served to identify institutional bottlenecks that prevented an effective disaster response. Outdated legislation and the lack of investment in financial and human resources were identified as common issues. The five institutional assessment reports were presented and discussed with national stakeholders at five country-level situational awareness workshops. Four of these had been organized in the first half of 2020, while the one for Saint Kitts and Nevis was held in July 2020.

In addition, the *Investment Proposal and Strategic Roadmap* report was published, building on the findings of each participating country’s institutional assessment report. It provides an overview of

the critical gaps and vulnerabilities identified in the five countries’ EP&R capabilities, including on governance and legislation, situational awareness, human resource development, and equipment and facilities. Based on this analysis, the report proposed a set of key investment solutions in each category and a roadmap for implementation, which were shared with relevant government counterparts.

Following the approval of additional funding in FY21, activities with CDEMA included the preparation and dissemination of a hurricane and multi-hazard communication campaign for the Caribbean, with multiple components and distribution channels, including radio, video, graphics, and text messages.<sup>54</sup> This activity is described in greater detail in an “In Focus” feature on page 46. A Results in Resilience story has also been published.<sup>55</sup>



Roseau, Dominica

Source: iStock.com

<sup>53</sup> For more information about this regional project, please see: <https://bit.ly/317BKW3>.

<sup>54</sup> The video campaign is accessible at: <https://www.youtube.com/watch?v=fDn-23xhFQg>. Also, critical prevention messages and materials can be found on the initiative’s website at: <http://www.disaster-fighters.org/>.

<sup>55</sup> The Results in Resilience story is accessible at <https://bit.ly/3spbfUj>.

## Country-level projects



### Belize

To support **Belize** in **improving the resilience of its road network**, a project that closed in FY21<sup>56</sup> provided technical assistance to the Ministry of Works, the Ministry of Economic Development, and the Belize Social Investment Fund. This was achieved through the Transport Asset Management Technical Analysis report, which was published in March 2021. The report provides best practices in road asset management and a comprehensive analysis of existing road

maintenance procedures. In addition, four virtual workshops were organized to disseminate the report's results and to focus on climate resilience challenges and transport asset management risks. These workshops gathered 15 people, including 6 women, from relevant ministries, including the executive engineer responsible for road maintenance in Belize and the management information system manager from the Ministry of Works.



### Dominican Republic

The **Dominican Republic** is highly exposed to meteorological and geophysical risks, which are further exacerbated by climate change. The country is one of the top high-risk countries in the world, ranking second in terms of vulnerability of its gross domestic product to three or more natural hazards. Two projects have been supporting the government through the Ministry of Economy, Planning and Development (Ministerio de Economía, planificación y Desarrollo or MEPyD) in enhancing its capacity to **build physical and fiscal resilience to disasters** by promoting DRR policies in key sectors and improving its access to reliable **risk information**.

prosperity, leading to the development with MEPyD of an econometric model to understand the impact of disasters and climate-related shocks on poverty and other socioeconomic indicators. In addition, the project supported the development of a methodology and technological tool called Damage Collection and Assessment System for the Dominican Republic (Sistema de Recopilación y Evaluación de Daños para la República Dominicana or SIREN-RD)<sup>58</sup> to assess economic losses from disasters. This tool was successfully deployed for the first time following hurricanes Isaias and Laura in the summer of 2020 to assess damages to infrastructure. Throughout project implementation, knowledge products were also developed, including assistance to set up the infrastructure for spatial data to generate actionable data risk information and inform public investments and territorial planning.

The Disaster Risk and Poverty in the **Dominican Republic** project,<sup>59</sup> which also closed in FY21, provided technical assistance to MEPyD to design a Survey of Well-being via Instant and Frequent Tracking (SWIFT), in collaboration with the National Statistics Office. In FY21, the survey was piloted, the questionnaire was finalized, and 30 participants, half of whom were women, took part in an enumerator training to familiarize themselves with data collection methods. The rollout of the survey was undertaken in May 2021 and June 2021 and the datasets were compiled and went through quality checks. The data generated is now providing the government with a deeper understanding about the effects of disasters on different dimensions of well-being, such as health, education, quality of dwelling, and access to services. The survey also includes a component to collect information about the adaptation mechanisms and provides a baseline to enable government to monitor the effects of a particular disaster on household welfare.



Through the Building Physical and Fiscal Resilience to Ensure Shared Prosperity project,<sup>57</sup> which closed in February 2021, the government has been able to upgrade its capacity to build physical and fiscal resilience to disasters. Disaster and climate risk reduction policies were promoted in priority sectors and a loss assessment tool was developed to assess the economic losses infrastructure sectors suffered from disasters. These outcomes will help inform MEPyD on potential needs for recovery and reconstruction in the future. DRM policies and investments were also designed to promote shared

<sup>56</sup> To learn more about the project in Belize, please visit: <https://bit.ly/3BkrSEC>.

<sup>57</sup> To learn more about the Building Physical and Fiscal Resilience to Ensure Shared Prosperity project, please visit: <https://bit.ly/3jzX2lh>.

<sup>58</sup> A video about the SIREN-RD tool is accessible at: <https://www.youtube.com/watch?v=FD13Wuah48>.

<sup>59</sup> To learn more about the *Disaster Risk and Poverty in the Dominican Republic* project, please visit: <https://bit.ly/3mnm6OB>.



### Haiti

#### Schools in Haiti



Source: Janice Rodgers, GeoHazards International – Rapid diagnostic of school infrastructure in Haiti (unpublished)

**Haiti** is among the most exposed and vulnerable countries in the world to disaster and climate risks. Recurrent disasters that affect the country, and underlying political instability, highlight the immense challenges faced on an ongoing basis by the country's disaster management practitioners. They also underscore the need for durable policies that reinforce national capacities to prepare for and respond to disasters. To this end, through three projects in Haiti, the Program has been helping the government tackle the challenges related to climate change and disaster shocks.

The Building Disaster and Climate Resilience in Haiti project,<sup>60</sup> which closed in FY21, supported the Civil Protection Directorate within the Ministry of Interior and local authorities in building disaster and climate resilience through improved disaster preparedness and response capacity. Final activities included the delivery of the Rapid Diagnostic of School Infrastructure which provides a better understanding of the vulnerabilities to natural hazards and impacts of climate change of existing and proposed school infrastructure in Haiti. It also aims to help the government identify contributing risk factors to inform the development of a comprehensive strategic plan to enhance school building safety and resilience. Other results of

this project, in addition to other GFDRR-supported initiatives, are described in greater detail in an "In Focus" feature on page 47.

With support from the *Enhancing disaster risk reduction and urban resilience in Cap-Haitien* project<sup>61</sup>, the government of Haiti is integrating critical aspects of DRM into **municipal development and urban resilience activities** in Cap-Haitien, the country's second largest city.

The first set of activities have focused on enhancing disaster risk reduction and urban resilience in Cap-Haitien for integrating urban development. This included supporting the conceptualization and implementation of **flood risk reduction measures** along the Bassin Rhodo and the urban ravines of Cap-Haitien. Technical assistance was provided to the Ministry of Public Works in developing the terms of reference for large-scale hydraulic engineering designs and for the implementation of non-structural measures along the urban ravines such as erosion prevention. A review of detailed proposals for dredging works and for the conceptualization and setup of a sediment management platform were also undertaken, to ensure that received sediments from the ravines and the Bassin Rhodo

<sup>60</sup> To learn more about the project in Haiti, please visit: <https://bit.ly/3GkVupj>.

<sup>61</sup> To learn more about the project in Haiti, please visit: <https://bit.ly/3GqskF4>.

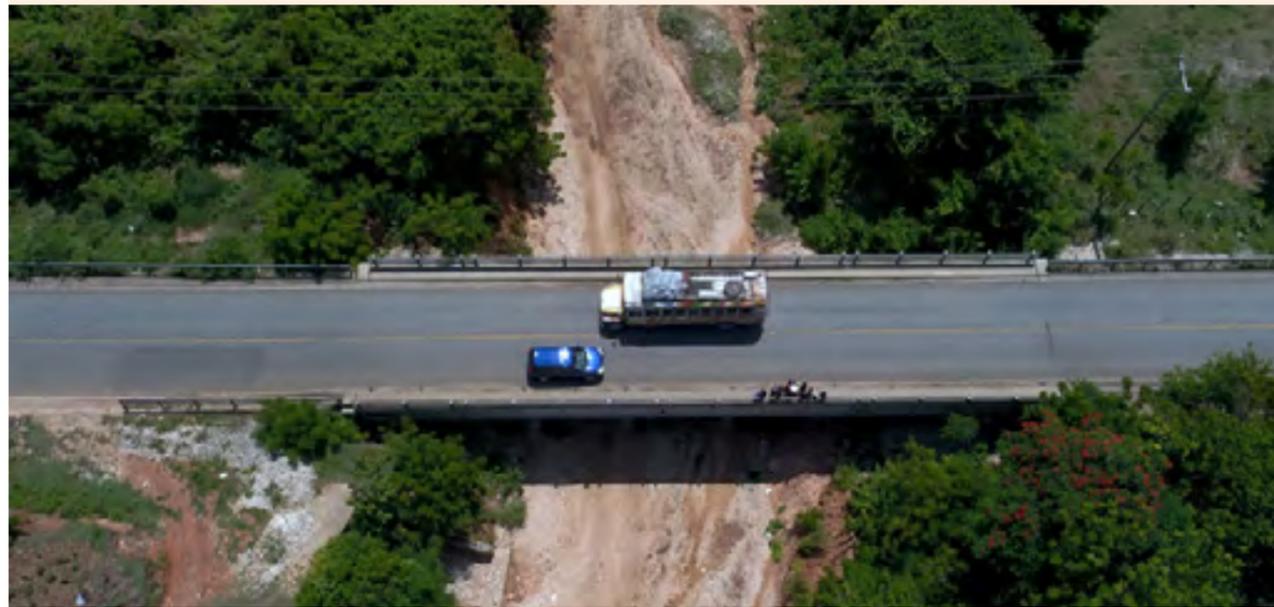
are well adjusted to the local context and incorporate international best practices. Given that it will be the first time that risk reduction works - at this scale – are undertaken in this area, these activities are key requirements to undertake the implementation of integrated flood risk reduction investments in urban watersheds in Cap-Haïtien. Technical support was also provided to the government to develop environmental and social analyses that are necessary for the implementation of flood risk reduction investments. This entailed the development of selection criteria for neighborhood investments taking into consideration hazard maps and recent risk management plan paired with consultations with key stakeholders and community members.

Other activities have focused on **integrating DRM in Cap-Haïtien's urban infrastructure improvements**, and specifically to integrate hazard and vulnerability assessments for the prioritization of urban development and upgrading interventions and to enhance resilient construction practices. This included elaborating a spatial analysis to identify and prioritize key neighborhoods for urban upgrading interventions. This allowed the government to identify a cost-efficient resilient urban upgrading investment program, taking into consideration technical, implementation and operation and maintenance capacities, and to conduct further stakeholder engagement at the local level to ensure community and local authorities' support. Furthermore, activities strived to integrate resilient construction practices and vulnerability reduction considerations in the conceptual studies for prioritized urban development and upgrading interventions. This included the development of pre-feasibility studies and conceptual designs for prioritized interventions, including but not limited to the

road infrastructure and the Cap-Haitian waterfront to ensure the incorporation of resilient construction and maintenance norms and practices as well as vulnerability reduction recommendations.

The third project in **Haiti**, titled *Integrating Gender and Behavioral Sensitive Approaches to Enhance DRM*<sup>62</sup> strengthened the government's capacity to **integrate gender-sensitive and behaviorally informed actions in the country's DRM program**, including emergency evacuation initiatives. The Civil Protection Directorate within the Ministry of Interior and Local Authorities and the Ministry of Women's Affairs and Women's Rights have co-led the development of a preliminary gender gap analysis in FY21 which included specific considerations related to COVID-19. A knowledge sharing session was organized to present the preliminary results of the study with the Civil Protection Directorate and other relevant stakeholders within the National DRM System. The study is to be completed by August 2021 and evaluates gender approaches and identifies progress and gaps, providing a baseline to carefully monitor progress on integrating gender in DRM activities in Haiti. The gender gap analysis was complemented with a literature review which gathered insights from the behavioral sciences, architecture and design to understand how to promote good behavior and safety, enhance management, and ensure equitable access to shelters. The literature review also includes an appendix on COVID-19 measures. In addition to the study and literature review, activities have also included the organization of a crowdsourcing survey – called *Nudgeathon* – which aims to better understand the challenges around emergency evacuation shelters, including gender-related behaviors, and whose results will be finalized by August 2021.

A bridge in Haiti



Source: GFDRR

<sup>62</sup> To learn more about the project in Haiti, please visit: <https://bit.ly/3CkNUbM>.



Jamaica

Final activities were undertaken in the beginning of FY21 to support the government of **Jamaica** to strengthen its **institutional capacity for disaster vulnerability reduction and mainstreaming DRM in policy development**.<sup>63</sup> The project had achieved several important milestones, including the finalization of the *National Resettlement Strategy* related to DRM, the development of a transport sector infrastructure disaster risk analysis, and the completion of a *Gap Analysis for Emergency Preparedness* which was developed and shared with first responders to improve standard operating procedures related to dealing with emergency situations.



Montego Bay, Jamaica

Source: iStock.com



Saint Lucia

As a small island developing state, **Saint Lucia** has experienced several extreme climate events that have caused significant losses over the years. Through two projects that closed in FY21, the government of Saint Lucia has been able to integrate socioeconomic considerations into its DRM strategies and policies to better protect the poor and socially marginalized.

The *Measuring the Impact of Disaster Events on Poverty and Social Vulnerability project*<sup>64</sup> aimed to support the government on the **inclusion of DRM and CCA considerations** for collecting demographic data. This entailed conducting poverty analyses and designing social protection programs and climate financing strategies. These led to changes in the way data and analyses fed into the government's broader approach on DRM and on how to tackle disaster shocks. For example, a socio-economic survey was conducted to inform a welfare analysis that supported the National Statistical Office in designing a survey module on the multi-dimensional aspects of poverty and other indicators of social vulnerability. This welfare analysis was then integrated in a comprehensive risk management framework undertaken by the government. Several knowledge products were also developed throughout the course of the project to help inform the government of Saint Lucia on the state of disaster vulnerability for poor communities. For instance, a *Social Vulnerability Index*

now contributes to the quantification of the impact of disasters on social wellbeing in the country. The project's climate resilient farming component also improved farmers' access to financing for climate-resilient agricultural activities through the *Saint Lucia Climate Adaptation Financing Facility*. In addition, financial support was provided to small businesses and the agricultural and fisheries sectors to reduce the financial impacts of the COVID-19 pandemic.

Through the *Measurable Reduction of Disaster Risk Specific to Public Infrastructure in Saint Lucia project*<sup>65</sup>, the government was able to put a **comprehensive risk reduction strategy** into action. The resilience of the housing sector was enhanced with the generation of geographic data on the vulnerability of households to withstand wind hazards, which in turn informed government policies and strategies. Through knowledge exchange activities during conferences and workshops, important knowledge sharing networks were created on topics such as urban development. Resilient social protection mechanisms were also strengthened through the development of a technical report on the ability of the existing safety net tool to identify poor households and potential beneficiaries for social programs, providing guidance to future policy recommendations.

<sup>63</sup> To learn more about this project in Jamaica, please visit: <https://bit.ly/3J5ZsH>.

<sup>64</sup> To learn more about the *Measuring the Impact of Disaster Events on Poverty and Social Vulnerability* project, please visit: <https://bit.ly/3mbiC1j>.

<sup>65</sup> To learn more about the *Measurable Reduction of Disaster Risk Specific to Public Infrastructure* project, please visit: <https://bit.ly/2XKOY9J>.



Saint Vincent and the Grenadines

Re-opening of schools during COVID-19 in Saint Vincent and the Grenadines



Source: Ministry of Education

To address rapid urbanization in cities that are already affected by climate change, the government of **Saint Vincent and the Grenadines** has sought to advance a **comprehensive urban resilience and economic growth agenda**.<sup>66</sup> Activities have included the review of several legislative documents which improve the regulatory framework for the enforcement of the *Building Codes as well as the National School Safety Policy*. Spearheaded by the Ministry of Education, these policy guidelines have helped incorporate risk

considerations into infrastructure investments and informed the reconstruction and design of critical buildings such as schools, health facilities and emergency shelters. In light of the COVID-19 crisis, health and policy experts were also mobilized to provide guidance to the Ministry of Education on the *COVID-19 Action Plan*, allowing for the safe re-opening of schools. This has been essential to keep providing education to children in a safe and healthy environment in the midst of the pandemic.



Suriname

Building on the findings and recommendations of a previous ACP-EU NDRR project<sup>67</sup>, another project has been supporting the government of **Suriname** to invest in **flood mitigation** along the Saramacca Canal in the Greater Paramaribo area.<sup>68</sup> This project closed in FY21, and final activities supported the Ministry of Public Works in updating the *Paramaribo Drainage Master Plan*, and in preparing the design of priority drainage investments in Paramaribo. Fiduciary and technical

trainings were also organized to strengthen the capacity of the Saramacca Canal Unit within the Ministry of Public Works in terms of financial management and procurement. The capacity of the newly established Evaluation Committee was also strengthened through several procurement trainings.

<sup>66</sup> To learn more about this project in Saint Vincent and the Grenadines, please visit: <https://bit.ly/3BeKANR>.  
<sup>67</sup> More information about the previous ACP-EU NDRR project can be found at: <https://bit.ly/3IPv6HH>.  
<sup>68</sup> To learn more about this project in Suriname, please visit: <https://bit.ly/3nrbCwA>.

Post-Disaster Activities



Dominica

Buildings affected by hurricane Maria in September 2017



Source: PDNA, funded by the ACP-EU NDRR Program, accessible [here](#).

Following hurricane Maria, which caused significant damages and losses across the island of **Dominica** in September 2017, the government initiated multiple large-scale housing reconstruction programs. A project has been supporting the government, specifically through the Ministry of Housing and Urban Development, the Ministry of Planning, and the Ministry of Finance, to implement the recommendations of a PDNA carried out in the aftermath of Hurricane Maria.<sup>69</sup> In FY21, activities have continued to support the operationalization of an information management system that stores and manages all data related to housing reconstruction programs undertaken by the government. So far, the system has allowed the government to manage over 2,800 application, assign

over 2,200 site surveys and approve projects for 210 beneficiaries. In addition, 58 government staff were trained through 6 events in local technical assistance centers to local builders, contractors and artisans to provide resilient reconstruction guidelines in accordance with revised building guidelines. This has helped the reconstruction of 18 facilities in the four locations: Kalinago Territory, Portsmouth, Mahaut and Bellevue Chopin.

A description of all the ACP-EU NDRR projects implemented in the Caribbean region can be accessed on the ACP-EU NDRR website at <https://www.gfdrr.org/en/acp-eu/projects>.

<sup>69</sup> To learn more about this project in Dominica, please visit: <https://bit.ly/3GrvecQ>.

In Focus:

## Caribbean Disaster Fighters team up ahead of 2021 Atlantic hurricane season

For the sixth consecutive year, the Atlantic hurricane season beginning on June 1 and ending November 30 has been predicted by the U.S. National Oceanic and Atmospheric Administration to be an above-average season. The 2020 season alone was the most active on record with no less than 31 tropical cyclones, 14 of which developed into hurricanes. 2021 is the second season to take place in the context of the COVID-19 pandemic and of its severe socioeconomic consequences in the region, placing at odds usual storm awareness practices with the need for social distancing measures.

The challenge of raising awareness on disaster resilience and preparedness in such a difficult context has been addressed by an initiative of the CDEMA, with the support of the World Bank, the EU, and the government of Canada. This initiative, known as “Disaster Fighters,” brings together several well-known current and former cricket players, musical talent, and other influential figures from across the Caribbean to promote awareness on preparedness and survival skills for disaster hazards, including hurricanes, volcanoes, and COVID-19, with an emphasis on reaching out to youth through engaging and dynamic content. This campaign builds on the lessons from a similar initiative in Haiti financed by the [Caribbean Regional Resilience Building Facility](#) and applies them at a regional level.

Through popular social media channels including TikTok, Facebook, Instagram, and Twitter, these “Disaster Fighters” are reaching a wide audience. Crucial messages on basic survival tips in the event of a hurricane, such as having a ready supply of fresh water, a flashlight, checking on elderly relatives and children, knowing the location of the closest emergency shelter, and keeping up to date with the latest news, are being communicated through a catchy and upbeat song that was

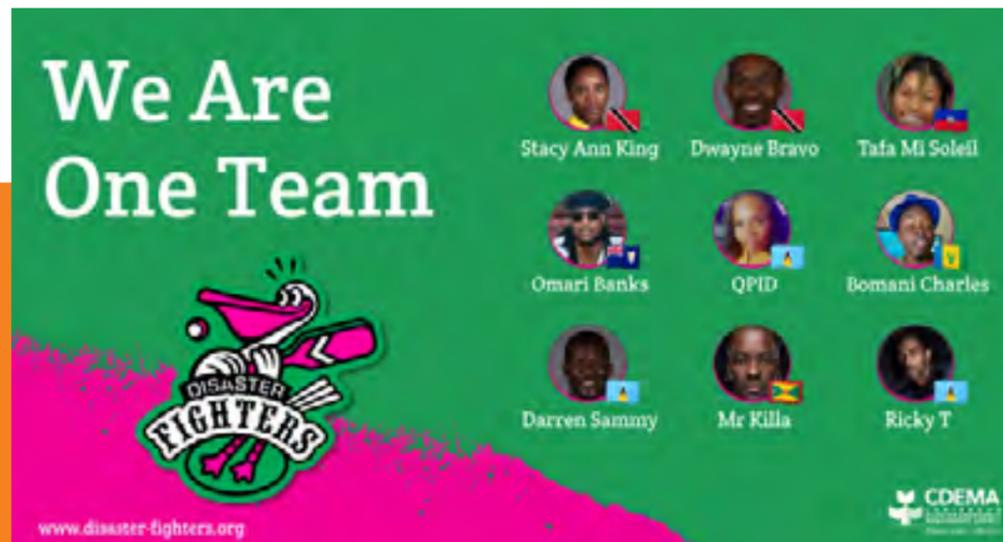
posted on social media on May 31, 2021. A simple and effective message — “Make a plan” — is repeated throughout this song to highlight the importance of preparedness.

The “Disaster Fighters” initiative also has a fundraising component to support CDEMA and national emergency agencies across the region. Cricket players and musicians participating in the initiative have put up for auction autographed cricket balls, bats, and jerseys. The initiative is also making use of collectible Non-Fungible Tokens (NFTs) to raise additional funds for emergency organizations. The NFT component was developed in partnership with Binance Charity and provides new opportunities for people to participate in the initiative. The head of Binance Charity, Helen Hai, praised the addition of NFTs as offering “a new and exciting opportunity to support such causes, raise money, and have real impact through the medium of digital art. It’s empowering creators, athletes, and musicians alike to convert their skill into social impact.”

This initiative, which is financed by the ACP-EU NDRR Program, the Canada Caribbean Resilience Facility, and Binance Charity, comes at a time where Caribbean countries have been coping with multiple concurrent disaster risks and provides a crucial service in promoting community awareness when such efforts have been hampered by the pandemic.

The video campaign is accessible at <https://www.youtube.com/watch?v=fDn-23xhFQg>.

Critical prevention messages and materials can be found on the initiative’s website at <http://www.disaster-fighters.org/>.



In Focus:

## Haiti’s path to building disaster resilience in a fragile context

Haiti is among the most exposed and vulnerable countries in the world to disaster and climate risk. The COVID-19 pandemic has also presented Haiti’s public health sector with one of its greatest challenges and has compounded the population’s exposure to hazards. Furthermore, sustainable resilience in Haiti remains dependent on the country’s political, social, and economic stability.

Despite these challenges, Haiti’s dedicated DRM institutions and specialists have taken considerable strides in comprehensively addressing not just the immediate impacts of risk but also the root causes that lead to compounded hazards. These efforts, which were undertaken with the support of the EU-funded Caribbean Regional Resilience Building Facility and the ACP-EU NDRR Program, have had a transformational effect on the way resources are being utilized to inform decision-making related to DRM and are being invested in rigorous data collection and analysis methodologies. As part of this holistic approach, Haiti and its partners are also integrating innovative approaches that consider societal inequalities when planning long-term DRM strategies, such as the inclusion of women in the decision-making process.

The positive impacts of these investments have become quickly evident, as seen by the development of new geospatial data collection tools and the use of Light Detection and Ranging, a highly advanced remote sensing technology that has been used to produce digital terrain models. This geospatial data has

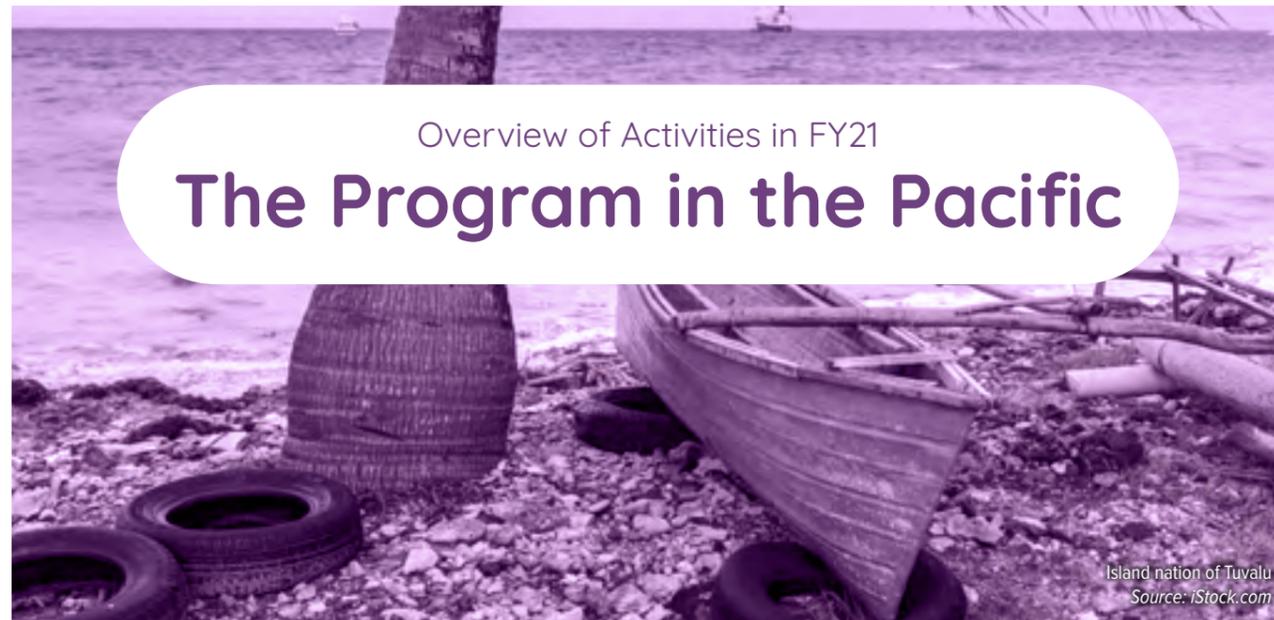
been key to not only creating a registry of emergency shelters, but also gathering data on the location of schools and road networks across the country. According to Bobby Emmanuel Piard, the Director-General of the National Center for Geo-Spatial Information, “Thanks to the support of the World Bank and the European Union, key investments were made in spatial data production, open data platforms, and technical training, to the advantage of DRM activities in Haiti.”

The practical impact of Haiti’s efforts has provided multiple opportunities for DRM experts to strengthen their technical capacities. The Director of the Hydrometeorological Institute of Haiti, Mr. Marcelin Esterlin is confident that these efforts will provide the agency with “the necessary tools and human resource capabilities to develop value-added products that meet the expectations of different types of clients and contribute to enhancing the country’s resilience to climate change.”

Despite multiple challenges from compounding natural hazards, Haiti has made considerable progress in strengthening its resilience to hazards by consistently targeting and improving its DRM-specialized institutions by adopting technological and investing in the human resources that power them. Moving forward, Haiti will continue to benefit from technical assistance that enables the Haitian government to work towards its objectives to strengthen the country’s resilience to climate and disaster shocks.



Source: iStock.com



Overview of Activities in FY21  
**The Program in the Pacific**

Island nation of Tuvalu  
 Source: iStock.com

**Activities in the Pacific**

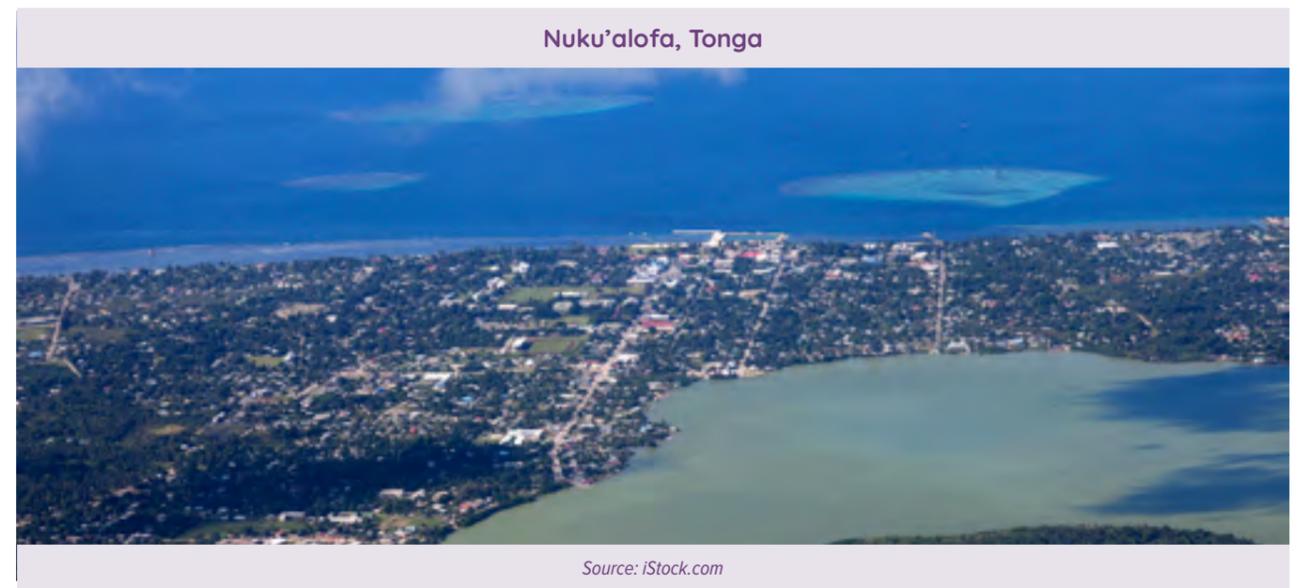


Activities in the Pacific in FY21 continued to support countries in making their governmental institutions integrate disaster risk management and climate change adaptation and in establishing these concepts as priorities in national policymaking. These reforms are also intended to inform community resilience and community-based disaster response, enabling governments to provide better guidance on post-disaster recovery and reconstruction. The new policies have also informed the disaster and climate resilient expansion of affordable urban settlements.

In FY21, the portfolio for the Pacific region numbered 9 active projects, including 2 projects at the regional level (Window 1) and 7 at the country-level (Window 2).



**Regional-level projects**



Nuku'alofa, Tonga

Source: iStock.com

The IOM finalized activities in July 2020 under the Community Vulnerability Mapping project it was implementing in **Micronesia** and the **Marshall Islands**.<sup>70</sup> The project enhanced the **resilience of communities to disaster risk and to climate change** in both countries. The scope of activities included risk mapping and planning of community investments to facilitate increased community resilience to meet adversities posed by climate change. Some of the key results include the design of an effective regional and national early warning system as well as an evaluation of public buildings, such as schools and infrastructure, through technical data collection and relevant consultations with local authorities and CSOs in both countries. Capacity building sessions on EWS and community-based DRM trained nearly 550 people, including over 270 women. Lessons learned from the project highlight that communities are recognizing the importance of communicating during the early signs of a disaster event and that there is a need for strong systems to alert the entire community and far-to-reach populations. In the Marshall Islands, hazard community vulnerability mapping exercises were undertaken in 18 targeted communities and a survey, which informed the national discourse and government plans for capacity building for community based EWS, was also conducted in 82 communities.

Another regional project that closed in FY21 increased the capacity of several PICs — the **Federated States of Micronesia, Fiji, Marshall Islands, Samoa, Solomon Islands, Tonga, and Vanuatu** — to **mainstream DRM and CCA in the design of infrastructure investments**.<sup>71</sup> FY21 activities included the finalization of a knowledge note titled “Spatial Development in Pacific Islands Countries: Toward Affordable and Resilient Urban Settlements,” which explores the challenges and opportunities for urban development in PICs and identifies possible strategies for enabling the resilient development of human settlements. It also discusses key trends and puts forward the potential benefits for countries with well-planned and managed urbanization processes. At the same time, it warns of the current and future risks from poorly managed human settlements, especially in a region under threat from natural disasters and climate change. The analysis draws on case studies from three PICs at different stages of urbanization in **Kiribati, Vanuatu, and Fiji**. An initial technical assessment was also developed to inform a knowledge note titled “Tourism Recovery in the Pacific: Building Resilience After COVID-19”. Overall, this project developed analytical products as well as tools and methodologies that contributed to the larger World Bank-funded Pacific Resilience Program, which supports investments in infrastructure in PICs.

**Trained nearly 550 people**



**Including over 270 women**



<sup>70</sup> To learn more about this regional project, please visit: <https://bit.ly/2ZmkNX4>.

<sup>71</sup> To learn more about this regional project, please visit: <https://bit.ly/3Bibt3K>.

## Country-level projects



### Fiji

In **Fiji**, the **implementation of the National Building Code** and specifically designed guidelines have improved the design and construction of single-story houses and schools to prepare for climate and disaster risks and strengthened the country's capacity to withstand future disaster risks. The project<sup>72</sup> is described in greater detail in an "In Focus" feature on page 54.

Aftermath of tropical cyclone Winston in 2016, Fiji



Source: World Bank, accessible [here](#).



### Kiribati

In **Kiribati**, a project that closed in FY21<sup>73</sup> improved the **resilience of key infrastructure** and cities throughout the country. Government institutions including the Office of the President and the Ministries of Lands and Fisheries have been actively engaged in planning for resilient urban development, especially for lower-income households. This was accomplished by analyzing data and information on the potential development of disaster and climate change-resilient urban settlements and by providing expert advice on planning and implementing policies and systems for safe and resilient urban growth. Several knowledge products were finalized, including a review of the country's long-term Coastal Security Strategy — a collection of lessons for affordable and resilient housing — as well as a report on urban service provision in the capital city of South Tarawa. These have helped identify crucial factors to plan for climate resilient allocation and the financing of safe and affordable land for urban expansion. The gains made from this project have facilitated the integration of DRR and CCA into Kiribati's national development planning process as well as fostered the development of risk tools to guide vulnerability reduction. New urban development options were unlocked for climate-resilient residences, small businesses, and educational and health facilities. The approaches developed under this project also offer the potential to be replicated in other low-lying island states.

Fanning Island, Kiribati



Source: iStock.com

<sup>72</sup> To learn more about the project in Fiji, please visit: <https://bit.ly/3nrTcMo>.

<sup>73</sup> To learn more about the project in Kiribati, please visit: <https://bit.ly/3Gr3YLk>



### Papua New Guinea

Efforts to **strengthen the policy and institutional framework for DRM in Papua New Guinea** have continued.<sup>74</sup> Activities have supported the Treasury, the National Disaster Center, and other relevant government agencies to update the country's DRM Bill. These included supporting the National Disaster Center in identifying areas, through a scoping and gap analysis exercise, that support the strengthening of national- and provincial-level disaster risk reduction plans. In parallel, in-depth diagnostics were undertaken on current policies and the identification of gaps within institutional systems

for DRM in the country. Recommendations were therefore made for policy and institutional reform actions to strengthen policy and institutional arrangements at the national, sectoral, and provincial levels, including through the development of an investment plan. In addition, a desk-based review of lessons learned from previous disasters in Papua New Guinea was undertaken and delivered in May 2021, providing an assessment of the opportunities for the country's EP&R systems.



### Samoa

In **Samoa**, the Ministry of Works, Transport, and Infrastructure and the Ministry of Natural Resources and the Environment have worked together to **strengthen the country's institutional policy framework for DRM and CCA**.<sup>75</sup> This included the review of several legislative documents, including the recently updated guidelines for the application of the National Building Code, which is helping to strengthen new residential housing against climate-related risks and earthquakes. These guidelines have also informed the Building Practitioners Licensing and Registration Policy, which was approved

by the Cabinet in 2020. This policy allows the government of Samoa to regulate the standards governing construction sector workers and contractors, issue licenses for construction works in accordance with the National Building Code and register suitably qualified building contractors. The government has also communicated the new building guidelines to stakeholders in the private sector and reached out to communities to raise awareness of climate and disaster-related risks.

Upolu Island, Samoa



Source: iStock.com

<sup>74</sup> To learn more about the project in Papua New Guinea, please visit: <https://bit.ly/314T4uM>.

<sup>75</sup> To learn more about the project in Samoa, please visit: <https://bit.ly/3baW0b5>.



Solomon Islands

Riverbank erosion, Mataniko River, Solomon Islands, following the April 2014 floods



Source: World Bank

Flooding in April 2014 affected some 80 percent of the population of Honiara, the capital city of the **Solomon Islands**. A project that closed in FY21<sup>76</sup> **investigated urban flood risk** and provided quality information on how flood risk can be better managed and reduced in the Greater Honiara area, thereby strengthening the city’s disaster preparedness and resilience to weather extremes. The final detailed

flood risk study report titled “Honiara Flood Risk Management Plan and Study” was published in April 2021.<sup>77</sup> It provides an assessment of flood risk in the study area and a description of the impacts of climate change on flood behavior and risk.



Tuvalu

Technical and analytical work continued in **Tuvalu** with the Climate Change and Disaster Policy unit, the Disaster Management Office, and the National Disaster Committee to **review existing DRM policies, plans and regulations**.<sup>78</sup> In FY21, technical assistance has enabled the operationalization of the Building Act through the review of building codes and associated regulations. A gap analysis of the existing draft Building Code was also developed. With this gap analysis, the Ministry of Public Works conducted consultations on the updated Building Code and in September 2021 submitted it for endorsement to the Cabinet.



Vanuatu

A project in **Vanuatu**<sup>79</sup> has made considerable progress in **strengthening institutional frameworks for DRM** in the country. The project is described in greater detail in an “In Focus” feature on page 55.

<sup>76</sup> To learn more about the project in the Solomon Islands, please visit: <https://bit.ly/3mloyoK>.

<sup>77</sup> The study is accessible at: <https://bit.ly/2WpY18C>.

<sup>78</sup> To learn more about the project in Tuvalu, please visit: <https://bit.ly/3be6h6o>.

<sup>79</sup> To learn more about the project in Vanuatu, please visit: <https://bit.ly/3mhlDgt>.

Post-Disaster Activities

No specific post-disaster activities (Window 3) were implemented in FY21 as these have been closed in the previous fiscal year.

Port Vila city, Vanuatu



Source: iStock.com

A description of all the ACP-EU NDRR projects implemented in the Pacific region can be accessed on the ACP-EU NDRR website at <https://www.gfdr.org/en/acp-eu/projects>.

In Focus:

## New construction guidelines in Fiji lead to safer homes and schools

When Tropical Cyclone Winston struck Fiji in February 2016, over 30,000 houses and 495 schools were damaged or destroyed, especially in the country's rural areas and predominantly iTaukei regions. The storm's total cost was estimated at half a billion US dollars. Much of the extent of the damage was attributed to the affected buildings not respecting or adhering to safe construction regulations that take into consideration climate and disaster resilience. The aftermath of the storm led to a reevaluation of the way the construction of buildings in Fiji is regulated. This new regulatory approach ensures that all new building permits adhere to the same standards and that all communities have access to standardized guidelines and information on the best construction practices. Even homeowners without a formal background in construction can benefit from these guidelines.

To this end, the government of Fiji, with the support from the ACP-EU NDRR Program, has developed a set of guidelines addressed to individual homeowners and builders, as well as to community-level institutions responsible for overseeing the construction of schools. These guidelines set practices for the different stages of construction, including the selection of building sites, resilient construction materials, step-by-step guidelines for laying foundations, wall construction, roofing, and good repair and maintenance practices. The guidelines also provide resources for further assistance, including from government departments such as the Ministry of Housing and Local Development and CSOs.

Activities to develop these guidelines included a dialogue with the Fijian Ministry of Industry, Trade, and Tourism, which informed the revisions to the standards of construction material in Fiji and in turn will improve the resilience of buildings more widely than the single-story houses and schools targeted by the guidelines. In practice, these guidelines have so far benefited 75 classrooms, which represent over 6,300 students. In addition, the guidelines were promoted in a nationwide outreach and awareness campaign by Fiji's building industry, including through an interview of the Minister for Ministry of Commerce, Trade, Tourism and Transport with the Fiji Broadcasting Corporation, highlighting the need to use the guidelines for informal housing (see link below). This knowledge product, which will continue to be disseminated throughout the country through training modules for national and provincial government staff from key agencies and building professionals operating mainly in rural areas and iTaukei lands, will contribute to certification of builders in the future.

*"A common man can now pick up this guideline, see how the diagrams are, how the drawings are and by using that they can build their home. Village carpenters and villagers using this will be able to come up with the home which will be Category 5 [hurricane] resistant."* - Ms. Premila Kumar, Minister for Housing in Fiji

The Guidelines are available in English at <https://bit.ly/3rxj1pi> and in iTaukei at <https://bit.ly/2UGUcC9>.

The interview with Ms. Premila Kumar, Minister for Housing in Fiji is accessible at <https://bit.ly/3BKEqGG>.



In Focus:

## Strengthening institutional frameworks for DRM in Vanuatu

Given Vanuatu's increasing exposure to natural hazards, the government is striving to reduce the underlying drivers of disaster risks and to take effective action as early as possible following a disaster. This is being accomplished with support from a project implemented in collaboration with the Office of the Prime Minister of Vanuatu and its Department of Strategic Planning, Policy, and Aid Coordination, the Ministry of Finance and Economic Management, and the Ministry of Climate Change and Natural Disasters.

The government has pursued its efforts to understand and prepare for natural hazards and risks, including by promoting the communication of disaster risks, especially at the provincial level. Vanuatu's National Disaster Management Office thus organized a tsunami drill on December 7-9, 2020 for the public at large that was attended by over 345 people. This drill raised the public's awareness about tsunamis and was promoted as part of the UNDRR's World Tsunami Awareness Day.

In addition, several capacity building activities were conducted, including a stakeholder workshop on Subdivision Planning and Resilient, which was organized in June 2021 by the Department of Lands and the Department of Urban Affairs and Planning and attended by 49 participants, including 8 women, from the local government, national agencies, and academia. The workshop was part of a series of activities undertaken by the government to engage stakeholders in the national dialogue on reforms on subdivision planning and resilient settlements in Vanuatu. The government has embarked on a number of policy and institutional reforms to strengthen subdivision developments and improve

institutional arrangement for strengthen urban settlement planning in Vanuatu by launching the National Subdivision Policy through the Ministry of Lands and Natural Resources in 2019 and establishing the Department of Urban Affairs and Planning under the Ministry of Internal Affairs in May 2021. The Subdivision Policy provides a clear purpose and guidelines for the creation of subdivisions and to establish the parameters of the administrative processes to achieve its purpose, and also taking into account disaster risk and climate change.

*"I am very pleased with the participation of our stakeholders in the workshop and their contributions to the development of the Subdivision Concept Plan and the Land Management Planning Committee administrative and review guidelines for subdivision applications. These documents are critical for the implementation of the Subdivision Policy and to facilitate affordable and resilient settlements in Vanuatu."* Mr. Arthur Faerua, Director General, Ministry of Lands and Natural Resources

*"It is essential that the Government undertakes the necessary policy and institutional reforms to strengthen settlement planning and improve living conditions and services not just in urban areas but also in the provincial centers of Vanuatu which are growing rapidly as part of its decentralization policy".* Mrs. Cheroi Ala, Director General, Ministry of Internal Affairs



Source: World Bank



Promotion flyer disseminated by the government of Vanuatu for a tsunami evacuation drill  
Source: World Bank



# Mobilizing Investments in Disaster Risk Management

Flood, Madagascar  
Source: iStock.com

The ACP-EU NDRR Program has continued to benefit from GFDRR’s ability to harness the World Bank’s convening power and technical expertise, mobilize the World Bank’s financing capacity and attract financing from other sources.

As of FY21, the ACP-EU NDRR Program has mobilized over **\$4.3 billion**, of which **\$374 million was committed in FY21**. GFDRR categorizes the way in which its activities have influenced financing in one of three ways: (1) informing, (2) enabling, or (3) co-financing investments. The mobilized amount is calculated through a portfolio analysis that differentiates types of mobilization and highlights related investments achieved. In FY21, several ACP-EU NDRR projects supported the mobilization of additional resources from other partners than the World Bank — such as the Global Environment Facility and the Nordic Development Fund — highlighting the ability of GFDRR and World Bank technical assistance activities to attract expertise and financing from external actors. It also underscores the cross-sectoral nature of ACP-EU NDRR activities that involve a wide-range of stakeholders and partners. These additional investments stemming from ACP-EU NDRR activities are outlined below.



**Co-financing** is the joint or parallel financing of a project through loans and/or grants to increase its scale. In this instance, an ACP-EU NDRR project is part of a broader financing package with other funding sources. These different funding sources finance the same program, objective, components, and expected results together to avoid the fragmentation of aid. There were no co-financed activities in FY21.

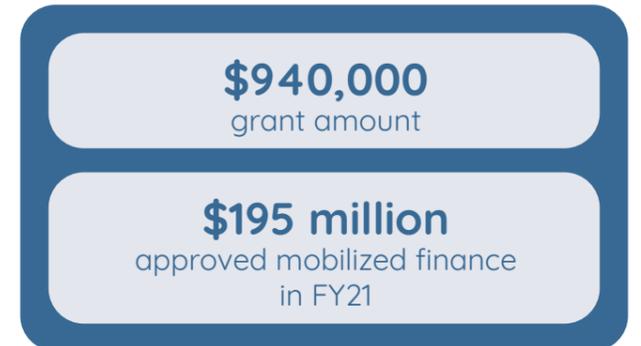
**Enabling development financing** refers to the ability of an ACP-EU NDRR project to trigger financing that would not have been available without that project. This includes, for example, cases where activities funded through the Program directly support the design and/or implementation of a DRM operation, or where an ACP-EU NDRR project ensures that a country meets the eligibility criteria for a World Bank loan (Development Policy Operation). Investments that were enabled in FY21 included the following cases:

- The **Building resilience to flood hazards in northwest Rwanda through improved national and local capacity** project in Rwanda, which was financed with \$850,000 from the Program, enabled the \$150 million World Bank-financed Second Rwanda Urban Development Project. In addition, the Building Resilience project enabled the mobilization of \$14 million from external partners through the Kigali Flood Control and Integrated Urban Catchment financed by the Global Environment Facility and the Nordic Development Fund<sup>80</sup> and \$15 million from government resources.

**Informing the mobilization of resources** involves an ACP-EU NDRR project laying the groundwork for larger investments from national governments or development partners. For instance, an ACP-EU NDRR project provides evidence such as risk assessments, PDNAs, or a recovery plan that provides analytical work or evidence, which helps to influence the design of a larger investment. The latter would thus have been designed differently had the activities under the project not taken place. Informed mobilization in FY21 included the following:

- The **Enhancing capacity for improving design and construction of single-story houses and schools for climate and disaster risk** project in **Fiji**, which was financed with \$100,000 from the Program, informed the \$145 million World Bank-financed Fiji Recovery and Resilience First Development Policy Operation with a Catastrophe Deferred Drawdown Option.
- The **Urban transformation and resilience for inclusive economic growth** project in **St. Vincent and the Grenadines**, which was financed with \$840,000 from the Program, informed the \$50 million World Bank-financed Supplemental Financing to the Fiscal Reform and Resilience Project.

<sup>80</sup> For more information, please see: <https://bit.ly/2YnjqH1>.



# Annex I: Communication and Visibility

Between July 2020 and June 2021, various reports, project outputs, and outreach documents were published.

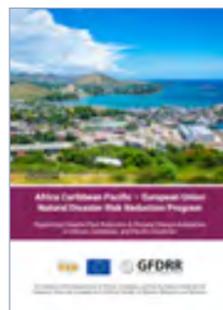
## Reports/Articles



### ACP-EU NDRR Activity Report 2019-2020

The ACP-EU NDRR Program Activity Report highlights the results achieved in 2019-2020 across Africa, the Caribbean, and the Pacific, underscoring how the Program adapted to the COVID-19 pandemic, but also responded to a high demand for improvements in urban infrastructure to make cities more climate-resilient, helping metropolitan hubs such as Accra, Antananarivo, Banjul, Kigali, and Lilongwe adopt policies that strengthen urban resilience. In FY20, 17 new projects were funded, bringing the ACP-EU NDRR's total portfolio to 147 projects supporting over 70 ACP countries.

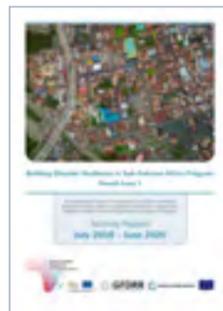
The report is available in English at <https://bit.ly/2LhVPRz> and in French at <https://bit.ly/3icVk9h>.



### ACP-EU NDRR Program Brochure

The updated ACP-EU NDRR Brochure provides a global overview of the ACP-EU NDRR Program, its objectives, its activities, and its areas of focus. Highlights include results from the Program's operations since its inception in 2011 and its accomplishments in ACP countries. The brochure reflects the participation of the EU, the OACPS, and GFDRR.

The brochure is available in English at <https://bit.ly/2KtDpwl> and in French at <https://bit.ly/2UVYCoN>.



### Result Area 2 Program - Activity Report 2019-2020

This report summarizes the activities and achievements under Result Area 2 of the Building Disaster Resilience in Sub-Saharan Africa Program for 2019-2020. The RECs continued to provide key technical assistance to their member states through training sessions for national and regional stakeholders in DRM. It also highlights how despite the impact of the COVID-19 pandemic the RECs have successfully transitioned their activities to remote and digital venues and continued to provide member countries with key technical assistance to improve human, institutional, and financial resources dedicated to strengthening disaster resilience.

The report is available in English at <https://bit.ly/39RQsT1> and in French at <https://bit.ly/3zMfv3K>.



### International Day for Disaster Reduction - Strengthening disaster risk governance in Africa, the Caribbean, and the Pacific

On the occasion of the 2020 International Day for Disaster Reduction, on 13 October 2020, an article was published highlighting how the ACP-EU NDRR Program is strengthening disaster risk governance in Africa, the Caribbean, and the Pacific.

The article underlines how ACP countries have taken great strides in making their governing institutions more responsive and resilient to disaster risks. With technical assistance funded by the EU through the ACP-EU NDRR Program, these countries have been improving their institutional capacities to respond to disasters and mitigate potential risks by promoting multi-sectoral DRM policies and reforms, embracing new technologies that improve the quality and accessibility of information, and empowering voices that had been previously ignored when dealing with the socioeconomic repercussions of disasters.

The article is available in English at <https://bit.ly/38wVmnw> and in French at <https://bit.ly/3FhKicu>.



### Mali - Rapid damage assessment and Disaster Recovery Framework

Following devastating floods in May 2019 in Bamako, Mali, which affected several parts of the capital city, the Ministry of Security and Civil Protection undertook a rapid damage assessment and a disaster recovery framework to inform recovery and reconstruction needs with support from the ACP-EU NDRR Program. It estimated the total damages and loss at nearly \$9 million and the recovery and reconstruction needs at almost \$33.5 million.

The rapid assessment is available in French at <https://bit.ly/33zVTU> and the disaster recovery framework in French at <https://bit.ly/2C2Mt7S>.



### Sudan - Rapid post-disaster needs and recovery assessment

Following unusually heavy seasonal rains in August 2020 across much of Central and North-Eastern Africa, Sudan experienced some of the worst flooding in decades. It was particularly affected by the prolonged rains in the Blue and White Nile catchment. The government requested assistance to undertake a rapid damage, loss, and recovery needs assessment for the floods and ensuing recovery planning.

Funded by the ACP-EU NDRR, this assessment evaluates the impact of the 2020 seasonal floods for Khartoum and other affected areas in Sudan and estimates the needs for recovery. The total economic value of the effects of the floods is estimated at \$4.4 billion. The assessment was conducted in collaboration with UNDP, the EU, and the World Bank. It is available in English at <https://bit.ly/3yZgQUh> in Arabic at <https://bit.ly/3njWH93>. An executive summary is available in Arabic at <https://bit.ly/38WokN6>.



### Final report of the Open Cities Africa initiative

The final Open Cities Africa report highlights how this regional initiative led by GFDRR has been engaging with local governments, CSOs, and the private sector to develop information infrastructures that address data gaps and facilitate the transfer of information between key stakeholders. This initiative had received funding from the ACP-EU NDRR Program and the EU-funded Africa Disaster Risk Financing Initiative.<sup>81</sup>

The final report is available in English at <https://bit.ly/3ntW6i5> and in French at <https://bit.ly/32KAeXK>. An article on the ACP-EU NDRR Program website is available at <https://bit.ly/3pxGo7g>.

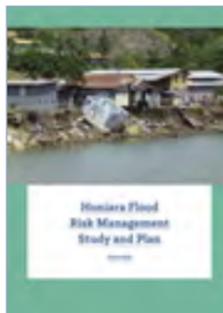
<sup>81</sup> For more information about the ADRF Initiative, please see: <https://www.preventionweb.net/resilient-africa/>.



### Fiji - New Guidelines to improve the resilience of homes and schools

In the aftermath of Tropical Cyclone Winston in 2016, which damaged over 30,000 houses and 495 schools, the government of Fiji has sought to improve compliance with construction standards.

To this end, the government has worked on developing a set of guidelines based on the lessons learned from this disaster to improve the resilience of single-story houses and schools against future storms and earthquakes, with support from the Program. The guidelines are addressed to individual homeowners and builders as well as to community-level institutions responsible for overseeing the construction of schools. These guidelines were also promoted in a nationwide outreach and awareness campaign by the country's building industry. The guidelines are accessible in English at <https://bit.ly/2NQbBV8>.



### Solomon Islands - Honiara Flood Risk Management Plan and Study

Honiara is the capital of the Solomon Islands and serves as its main transport hub as well as its economic, political, and educational center. Flooding in April 2014 affected some 80 percent of the population of the capital. With support from the Program, the government investigated urban flood risk, providing quality information on how it can be better managed and reduced in the Greater Honiara area and strengthening the city's disaster preparedness and resilience to weather extremes. A detailed flood risk study report, which provides an assessment of flood risk in the study area and a description of the impacts of climate change on flood behavior and risk, was published. The study is accessible in English at <https://bit.ly/3iv0AET>.



### Website Article - Informing resilient recovery policy, planning, and investments in Freetown, Sierra Leone

An article was published in February 2021 on the ACP-EU NDRR Program's website highlighting how Sierra Leone was able to chart a path toward resilient recovery after the devastating landslide in the capital city Freetown in August 2017.

In the aftermath of the disaster, the Program financed a rapid assessment, a follow-up project that aimed to strengthen the country's EP&R capabilities, and an institutional and policy framework for effective DRM. This culminated with the inauguration in November 2020 of a new NDMA for Sierra Leone. This major milestone, which involved collaboration between the Sierra Leone Meteorological Agency and the National Water Resource Management Agency, will improve the country's capacities to deal with a future disaster event and enhance its early warning systems.

The article can be accessed in English at <https://bit.ly/3pWQcqz> and in French at <https://bit.ly/3uFSxdk>.



### Website Article - Haiti's path to building resilience to multiple disaster risks - the importance of partnerships

An article was published in February 2021 on the ACP-EU NDRR Program website highlighting how the Haitian government and its partners are addressing institutional weaknesses and bolstering the country's DRM capacities. This is undertaken with coordinated support from the EU-funded Caribbean Regional Resilience Building Facility<sup>82</sup> and the ACP-EU NDRR Program, both managed by GFDRR.

The article can be accessed in English at <https://bit.ly/3uTA0u0> and in French at <https://bit.ly/3AanPuc>.

<sup>82</sup> For more information, please see: <https://www.gfdr.org/en/caribbean-rrb>.



### Hurricane Season is here: Disaster Fighters are one team, a Caribbean team

In May 2021, the CDEMA, with the support of the EU, Canada, and the World Bank, launched an initiative to promote disaster resilience and raise awareness in an engaging and dynamic manner, with a particular emphasis on reaching out to youth.

This initiative, known as "Disaster Fighters," brings together several well-known current and former cricketers, musical talent from across the Caribbean, and other influential figures to promote awareness on preparedness and survival skills for disaster hazards, including hurricanes, volcanoes, and COVID-19.

The "Disaster Fighters" initiative was financed by the ACP-EU NDRR Program and the Canada Caribbean Resilience Facility<sup>83</sup>, both of which are managed by GFDRR. More information about this initiative can be found at <https://bit.ly/35JJcFM>.

## Results in Resilience series



### Results in Resilience: Disruptive Technologies for Disaster Risk Management in Africa

A Results in Resilience story was published in January 2021 highlighting how the ACP-EU NDRR Program has supported local communities and institutions across Sub-Saharan Africa on technological innovations that facilitate data collection and risk assessments. These innovations include the promotion of technologies such as satellite imagery, artificial intelligence, and the use of drones. The document can be accessed at <https://bit.ly/3pR8old>.



### Results in Resilience: Upgrading Caribbean Disaster Preparedness and Response Capacities

Another Results in Resilience story was published in January 2021 highlighting how the ACP-EU NDRR Program has supported the CDEMA to advance institutional improvements in terms of preparedness and response in Dominica, Grenada, St. Kitts and Nevis, St. Lucia, and St. Vincent and the Grenadines. The document can be accessed at <https://bit.ly/3spbfUi>.



### Results in Resilience: Strengthening Disaster Management Policy in Pacific Island Countries

A Results in Resilience story was published in January 2021 highlighting how PICs are developing national policy and regulatory frameworks to address the threat of climate and weather-induced disasters, with support from the ACP-EU NDRR Program.

The document can be accessed at <https://bit.ly/312llyx>.

<sup>83</sup> For more information, please see: <https://www.gfdr.org/en/crf>.

## Result Area 2 outputs



### Result Area 2 - Report on technical and institutional knowledge and capacity for DRM in Central Africa

This report, titled “Knowledge and technical and institutional capacities in the field of Disaster Risk Management in Central Africa”, presents the results of a baseline study analysis for capacity building in DRR within ECCAS. This activity contributes to building the capacities of DRM experts to better support the implementation of DRR activities in Central Africa and DRM knowledge-sharing.

The report provides an overview of the main disaster risks within ECCAS, including droughts, floods, landslides, volcanic hazards, and epidemics. It outlines the strengths and weaknesses in preparing for and responding to these risks and cites the response strategies implemented by ECCAS member countries. The report is accessible in French at <https://bit.ly/2XDQ9Eu>.



### Result Area 2 - Strengthening hydromet services, flood and drought management in Central Africa

ECCAS has been working alongside the World Bank to evaluate the state of NHMS and of the early warning systems of its member states. Individual country reports analyzing the services of Angola, Burundi, Equatorial Guinea, and Rwanda, as well as an overall assessment of NHMS throughout ECCAS’ 11 member countries, were produced. These reports evaluate the legislative, institutional, technical, financial, and educational resources dedicated to supporting hydrological and meteorological services.

The regional synthesis report is available in French at <https://bit.ly/38FBbUx>. The **Angola** report is available in French at <https://bit.ly/3i7DzXg>, the **Burundi** report is available in French at <https://bit.ly/35BCYrL>, the **Equatorial Guinea** report is available in French at <https://bit.ly/3sm1hUx>, and the **Rwanda** report is available in French at <https://bit.ly/38GX5qo>.



### Result Area 2 - Improving the resilience of agro-sylvo-pastoral and fisheries systems in the face of natural disasters in ECCAS member states

Several documents that provide a situational analysis and recommendations on the agro-sylvo-pastoral and fisheries systems in the face of natural disasters in ECCAS member states were published.

The main document contains recommendations for all actors involved in the management of natural disasters in the agro-sylvo-pastoral and fisheries sector of the ECCAS member states. It also includes a draft action plan for ECCAS to support its member states as they aim for efficient natural disaster management as far as the national agro-sylvo-pastoral and fisheries sector is concerned. The Recommendation and Action Plan Strategy is available in French at <https://bit.ly/3le5DeZ>.

The recommendations and the draft action plan are formulated based on the results from three case studies. The first is a diagnostic of natural disasters and their impacts on the agro-sylvo-pastoral and fisheries sector in ECCAS member states and is available in French at <https://bit.ly/3oxG8Hk>. The second is a repository of the existing mechanisms for the resilience of local populations’ livelihoods affected by natural disasters. It is available in French at <https://bit.ly/3DbE8J1>. The last is an analysis of the ECCAS member states’ needs for hydrometeorological services for agro-sylvo-pastoral and fisheries sector. It is available in French at <https://bit.ly/3Bq3B3n>.

### Result Area 2 Program – Study on capacity building activities in DRR within ECCAS

A report that presents the results of the analysis of the baseline study on capacity building activities in DRR within ECCAS was published in August 2020. It is available in French at <https://bit.ly/3wa6Y9o>.



### Result Area 2 Program – Analysis of main hazards in the Central African region

A document that presents the main hazard in the ECCAS region was published in May 2021, and is available in French at <https://bit.ly/3ixfA66>.



### Result Area 2 Program - Risk Atlas for ECCAS countries

A risk atlas for the ECCAS region was published. The document helps to understand, spatialize, and contextualize natural hazards in the ECCAS region. It also introduces a range of approaches and maps to explain perceived and experienced risks, their consequences and their physical, socio-cultural, historical, or geographic determinants. The document is available in French at <https://bit.ly/3j6GXo0>.



## Videos

### Video of the results and achievements of the ACP-EU NDRR Program

The ACP-EU NDRR Program has provided key technical assistance to help stakeholders launch wide-ranging reforms and activities to strengthen resilience to climate change and natural hazards. By placing DRM at the heart of their development policies and prioritizing resilience and preparedness, ACP countries working with the ACP-EU NDRR Program have been able to equip themselves with new tools and resources to protect their populations and development gains.

The accomplishments and lessons learned from the collaboration between the EU, the OACPS, and the World Bank/GFDRR is outlined in the video, which is accessible at <https://bit.ly/3Ahli5>. A condensed version of this video focusing on the testimonials from program stakeholders is available at <https://bit.ly/3iyAp0g>.



### Regional videos of the results and achievements of the ACP-EU NDRR Program for Africa, the Caribbean, and the Pacific

The ACP-EU NDRR Program tailored its approach to the unique environments and challenges facing each region. The Program's regional achievements are presented in the following videos for Africa at <https://bit.ly/3mqTtTx>, the Caribbean at <https://bit.ly/2YrfpBJ>, and the Pacific at <https://bit.ly/2YqGqVY>.



### Video on the new Geospatial Caribbean Risk Information System

With support from the ACP-EU NDRR Program, a new regional geospatial data platform called Geo-CRIS was launched in November 2020. This platform managed by CDEMA serves as a “one-stop-shop” for gathering and sharing information and data on DRM, ensuring that Caribbean countries have access to DRM data. A video about the Geo-CRIS platform can be accessed at <https://bit.ly/37150SM>.



### Result Area 2 - Achievements of the Africa Regional Economic Communities Disaster Risk Management Program

Activities under this Program mobilized regional expertise and reinforced a collaborative approach to DRM through improved knowledge-sharing and more effective advocacy. RECs have been able to develop long-term disaster resilience strategies to address specific intervention areas such as hydrometeorological capacities, early warning mechanisms for floods and drought, and climate-smart agriculture to protect people from food insecurity caused by disasters. The RECs have also integrated gender considerations into DRM strategies as an essential aspect of building inclusive resilience to natural hazards.



The accomplishments and lessons learned from the African RECs Disaster Risk Management Program are presented in this video: <https://bit.ly/3ms7rQU>.

### Result Area 2 Program - IGAD Disaster Risk Management video

A documentary produced by IGAD provides an insight into the impact of disasters caused by natural hazards and presents activities and achievements of the Result Area 2 Program in the region. A long version of the documentary is available in English at <https://bit.ly/3yFxR6Z> and in French at <https://bit.ly/2SvZrmF>. A short version of the documentary is available in English at <https://bit.ly/2TozR3v> and in French at <https://bit.ly/3yFGL4o>.



## Social Media

### Disruptive technologies for disaster risk management in Africa

The ACP-EU NDRR Program has supported local communities and institutions across Sub-Saharan Africa on technological innovations that facilitate data collection and risk assessments. These innovations include the promotion of technologies such as satellite imagery, artificial intelligence, and drones. This was showcased on GFDRR's Twitter account, which is accessible at: <https://bit.ly/3DBH2lc>.



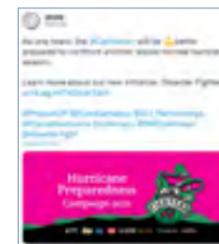
### Sudan rapid post-disaster needs and recovery assessment

Following the publication of the Sudan rapid post-disaster needs and recovery assessment, the assessment and cooperation with the EU was promoted via GFDRR's social media account. The GFDRR Twitter account is accessible at: <https://twitter.com/GFDRR>.



### Hurricane season is here: Disaster Fighters are one team, a Caribbean team

In the context of the initiative known as “Disaster Fighters” (see article above) that was launched in May 2021 by CDEMA with support from the EU, Canada, and the World Bank, GFDRR also promoted the social media messages associated with the initiative. The GFDRR Twitter account is accessible at: <https://twitter.com/GFDRR>.



- ANGOLA • ANTIGUA AND BARBUDA • BELIZE • CAPE VERDE • COMOROS • BAHAMAS •
- BARBADOS • BENIN • BOTSWANA • BURKINA FASO • BURUNDI • CAMEROON •
- CENTRAL AFRICAN REPUBLIC • CHAD • CONGO (BRAZZAVILLE) • CONGO (KINSHASA) •
- COOK ISLANDS • CTE D'IVOIRE • CUBA • DJIBOUTI • DOMINICA • DOMINICAN REPUBLIC •
- ERITREA • ETHIOPIA • FIJI • GABON • GAMBIA • GHANA • GRENADA • REPUBLIC OF GUINEA •
- GUINEA-BISSAU • EQUATORIAL GUINEA • GUYANA • HAITI • JAMAICA • KENYA • KIRIBATI •
- LESOTHO • LIBERIA • MADAGASCAR • MALAWI • MALI • MARSHALL ISLANDS • MAURITANIA •
- MAURITIUS • MICRONESIA • MOZAMBIQUE • NAMIBIA • NAURU • NIGER • NIGERIA • NIUE •
- PALAU • PAPUA NEW GUINEA • RWANDA • ST. KITTS AND NEVIS • ST. LUCIA •
- ST. VINCENT AND THE GRENADINES • SOLOMON ISLANDS • SAMOA •
- SÃO TOME AND PRINCIPE • SENEGAL • SEYCHELLES • SIERRA LEONE • SOMALIA •
- SOUTH AFRICA • SUDAN • SURINAME • SWAZILAND • TANZANIA • TIMOR LESTE • TOGO •
- TONGA • TRINIDAD AND TOBAGO • TUVALU • UGANDA • VANUATU • ZAMBIA • ZIMBABWE •

## The ACP-EU Natural Disaster Risk Reduction Program Partners

### ORGANIZATION OF AFRICAN, CARIBBEAN AND PACIFIC STATES

For more information: [www.acp.int](http://www.acp.int)

The Organization of African, Caribbean and Pacific States (OACPS), previously known as ACP Group of States, was created by the Georgetown Agreement in 1975. The OACPS consists of 79 member states and six regions, who are signatories of the Cotonou Agreement, which legally consolidates their partnership with the European Union.

Among the OACPS objectives is the sustainable development of its member states and their gradual integration into the global economy. In this regard, as early as 2004, the OACPS took the initiative to pioneer action on disaster risk reduction and resilience. It achieved this by persuading the European Union to expand its scope from humanitarian assistance and response, to a more pro-active and holistic approach to prevent and manage disaster risks caused by natural hazards.

The ACP-EU NDRR Program is part of a long-standing cooperation between the OACPS and the EU. It brings together disaster risk management and climate resilience entities from the members and regions of the OACPS, with specialised partners such as GFDRR, to address members of the OACPS' vulnerabilities to exogenous shocks, through integrated measures on climate adaptation, resilience building, environmental sustainability & protection, and disaster risk management.

### EUROPEAN UNION

For more information: [www.europa.eu](http://www.europa.eu)

The European Union (EU) is the leading donor of development aid and climate finance. The EU finances the NDRR Program by a grant of €54.5 million to a single-donor Trust Fund, under the 10th European Development Fund.

The EU is at the forefront of the international agenda on climate resilience, supporting developing countries in preparing for, withstanding and recovering from disaster events. The EU is fully engaged in supporting the implementation of the Agenda 2030 and the Sustainable Development Goals, the Paris Agreement and the Sendai Framework for Disaster Risk Reduction.

As one of the main priorities of the European Green Deal, the roadmap to transform the EU into a low-carbon and climate-resilient society, the European Commission launched in February 2021 the new and more ambitious EU Climate Change Adaptation Strategy. Reinforcing the call to strengthen the efforts on climate-proofing, resilience building, prevention and preparedness, the strategy calls for action in Europe but also beyond EU borders. This reaffirms that global challenges, such as climate resilience, require a global response.

In its cooperation with the OACPS, the EU has placed at the core of its interventions the need to reduce vulnerability and to build the resilience of regions, countries, and communities.

### GLOBAL FACILITY FOR DISASTER REDUCTION AND RECOVERY

For more information: [www.gfdr.org](http://www.gfdr.org)

The Global Facility for Disaster Reduction and Recovery (GFDRR) is a global partnership established in 2006 to support developing countries in understanding, managing, and ultimately reducing risks stemming from natural hazards and climate change. GFDRR's mission is to facilitate implementation of the Sendai Framework for Disaster Risk Reduction and to contribute to the achievement of the Sustainable Development Goals and the Paris Agreement by ensuring that development policies, plans, and investments—including post-disaster reconstruction—are designed to minimize disaster risks and build the resilience of people and economies to climate change. GFDRR provides grant financing, technical assistance, training and knowledge sharing activities to mainstream disaster and climate risk management in policies and strategies.



Lautoka, Fiji  
Source: iStock.com

## ACP-EU Natural Disaster Risk Reduction Program Global Facility for Disaster Reduction and Recovery

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**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