

# G F D R R



**BRINGING RESILIENCE TO SCALE**



**Bringing resilience to scale**

© 2016 Global Facility for Disaster Reduction and Recovery

1818 H Street, N.W., Washington, D.C., 20433, U.S.A.

The text in this publication may be reproduced in whole or in part and in any form for educational or nonprofit uses, without special permission, provided acknowledgement of the source is made. GFDRR's Secretariat would appreciate receiving a copy of any publication that uses this report as a source. Copies may be sent to the Secretariat at the above address.

No use of this publication may be made for resale or other commercial purpose without prior written consent of the Secretariat. All images remain the sole property of the source and may not be used for any purpose without written permission from the source.

Notes: Fiscal year (FY) runs from July 1 to June 30; the financial contributions and expenditures reported are reflected up to June 30, 2016; all dollar amounts are in US dollars (\$) unless otherwise indicated.

Design: Miki Fernández/ULTRAdesigns, Inc.

## GFDRR MEMBERS



AUSTRALIA



AUSTRIA



DENMARK



GERMANY



INDIA



ITALY



JAPAN



LUXEMBOURG



MEXICO



NIGERIA



NORWAY



SAUDI ARABIA



SERBIA



SWEDEN



SWITZERLAND



UNITED KINGDOM



UNITED STATES



VANUATU



AFRICA, CARIBBEAN & PACIFIC  
(ACP) SECRETARIAT



EUROPEAN UNION



UNISDR

UNITED NATIONS OFFICE FOR  
DISASTER RISK REDUCTION



WORLD BANK GROUP

## OBSERVERS



BRAZIL



CANADA



CHINA



DJIBOUTI



FINLAND



FRANCE



INDONESIA



IRELAND



KOREA REPUBLIC OF



KUWAIT



NETHERLANDS



NEPAL



PHILIPPINES



QATAR



RUSSIA



SPAIN



TURKEY



UNITED ARAB EMIRATES



GLOBAL NETWORK  
OF CIVIL SOCIETY  
ORGANISATIONS FOR  
DISASTER REDUCTION



INTERNATIONAL  
FEDERATION OF RED  
CROSS AND RED  
CRESCENT SOCIETIES



ISLAMIC  
DEVELOPMENT  
BANK



ORGANIZATION  
OF ECONOMIC  
COOPERATION  
AND DEVELOPMENT



ORGANIZATION  
OF ISLAMIC  
COOPERATION



UNITED NATIONS  
DEVELOPMENT  
PROGRAMME



WORLD  
METEOROLOGICAL  
ORGANIZATION

# Table of Contents

<b>Foreword</b>	vi
<b>Executive Summary</b>	ix
<b>How We Work</b>	xiv
<b>GFDRR's Contribution to Major International Events in FY16</b>	xvi
<b>The Country Program</b>	1
<b>Where We Work</b>	2
<b>Africa</b>	4
<b>In Focus:</b> Understanding Risk and Finance (UR&f)	5
<b>East Asia and Pacific</b>	6
<b>In Focus:</b> Philippines builds a comprehensive disaster risk management program	7
<b>Europe and Central Asia</b>	8
<b>In Focus:</b> Serbia's efforts to build disaster resilience set an example for its neighbors	9
<b>Latin America and the Caribbean</b>	10
<b>In Focus:</b> Financing instruments in Ecuador readily respond to a variety of disasters	11
<b>Middle East and North Africa</b>	12
<b>In Focus:</b> In Lebanon, risk management paves the way for a larger urban resilience program	13
<b>South Asia</b>	14
<b>In Focus:</b> India invests in protecting its coastal communities	15
<b>Informing Development Finance</b>	16
<b>Thematic Initiatives</b>	19
<b>Innovation Lab</b>	20
<b>In Focus:</b> 2016 Understanding Risk Forum (UR2016)	21
<b>Disaster Risk Financing and Insurance</b>	22
<b>In Focus:</b> Integrating insurance principles into social protection in Uganda	23
<b>Inclusive Community Resilience</b>	24
<b>In Focus:</b> Communities in Vietnam are better prepared for disasters	25
<b>Safer Schools</b>	26
<b>In Focus:</b> Armenia makes strides to protect its future	27
<b>Hydromet</b>	28
<b>In Focus:</b> Mali mobilizes additional resources for hydromet from multiple partners	29
<b>Urban Resilience</b>	30
<b>In Focus:</b> Building a safer world for the future	31

<b>Small Island States Resilience Initiative</b>	32
<b>In Focus:</b> Building a strong community of practice for Small Island States	33
<b>Resilient Recovery</b>	34
<b>In Focus:</b> Bringing donors together for Nepal’s reconstruction efforts	35
<hr/>	
<b>Empowering Women</b>	36
<b>Resilience to Climate Change</b>	38
<hr/>	
<b>Financing Windows</b>	41
<b>Multi-Donor Trust Fund</b>	42
<b>The Africa Caribbean and Pacific—European Union Programs</b>	44
<b>Japan-World Bank Program for Mainstreaming Disaster Risk Management in Developing Countries</b>	46
<b>International Events</b>	49
<b>Paris Agreement</b>	50
CREWS: United Nations Office for Disaster Risk Reduction, World Bank, and World Meteorological Organization coordinate efforts on early warning systems	51
<b>World Humanitarian Summit</b>	52
GFDRR’s support in fragile and conflict-affected states	53
<b>Capacity Building and Analytical Work</b>	55
<b>Capacity Building</b>	56
<b>Selected FY16 Capacity Building Engagements</b>	57
<b>Measuring Resilience</b>	58
<b>Publications</b>	60
<b>Annexes</b>	65
<b>Resources</b>	66
<b>Commitments</b>	67
<b>Disbursements</b>	68
<b>Portfolio Summary</b>	69
<b>Monitoring Progress</b>	70
<b>Financial Statements</b>	72

# Foreword

We are living through a time of deep uncertainty and growing risk. As millions move into urban environments around the globe and human-induced climate change destabilises weather patterns, impacts from natural disasters are rising at an alarming rate. Average annual losses from these events now range from \$150-200 billion—a remarkable and worrying figure, but one that does not capture the extensive and disproportionate hardship suffered by the poorest and most vulnerable populations, which would more than double these numbers if taken into account.

However, the international community is responding. Over the last two years, we have seen some of the most important milestones in disaster risk management in recent decades. The adoption of the Sendai Framework for Disaster Risk Reduction, which will guide action on disaster risk reduction for the next 15 years, was a major international achievement that set the stage for other important policy agreements that will help shape a more resilient future.

In September 2015, members of the United Nations General Assembly ratified the 2030 Agenda for Sustainable Development. Crucial to the success of this agenda is the resilience of communities in the face of growing climate and disaster risk. Months later, the world convened in Paris at the 21st Conference of the Parties of the United Nations Framework Convention on Climate Change (UNFCCC) to adopt a bold, global agreement to address the devastating effects of climate change. And in May 2016, the first-ever World Humanitarian Summit was held in Istanbul, where a Global Preparedness Partnership of 20 highly-vulnerable developing nations committed to improving their resilience to future disasters brought about by growing climate risk.

Throughout these historic achievements, the Global Facility for Disaster Reduction and Recovery (GFDRR) has worked closely with different stakeholders to ensure that disaster risk management was woven into the fabric of the Sustainable Development Goals, the Paris Agreement, and policies aimed at reducing the humanitarian burden around the globe. GFDRR's strategic technical expertise, along with its unique leverage of development financing through small grants, enable it to play an integral role in these important conversations, whether tackling gender disparity, promoting citizen engagement, or addressing the important links between disaster risk, fragility, and conflict.



John Roome  
CG Chair



Manuel Sager  
CG Co-Chair

This annual report highlights the results of GFDRR's grants, technical assistance, and knowledge-sharing activities in the fiscal year 2016 (FY16). Through its growing program, GFDRR worked to bring resilience to scale in vulnerable countries by integrating comprehensive approaches to disaster risk management into development policies and planning. By empowering its many partners and providing clear leadership on the international stage, GFDRR helped make communities in more than 70 countries around the world safer and more prosperous. This report shows that tremendous progress has been made in these efforts, and reveals the momentum—and the challenges—that will animate the years to come.

John Roome  
CG Chair  
Senior Director, Climate Change  
The World Bank

Manuel Sager  
CG Co-Chair  
Director-General  
Swiss Agency for Development  
and Cooperation





# EXECUTIVE SUMMARY

This report highlights the results achieved during fiscal year 2016. It provides an overview of GFDRR's grant-making activities as implemented through the Country Program, with support from specialized Thematic Initiatives.

The report also outlines GFDRR's contribution to the global resilience agenda and its efforts to develop innovative solutions, tools, and analytical products for strengthening the global knowledge base for disaster risk management.

# Executive Summary

**T**his report highlights the results achieved by the Global Facility for Disaster Reduction and Recovery (GFDRR) during fiscal year 2016 (FY16). It provides an overview of GFDRR's grant-making as implemented through the Country Program, and how these activities support the Sendai Framework for Disaster Reduction and Recovery, the Paris Agreement on Climate Change, and the Sustainable Development Goals. It highlights progress under GFDRR's eight Thematic Initiatives, and cross-cutting priorities such as women empowerment and resilience to climate change, as well as support to international cooperation and building knowledge and capacity for disaster risk management (DRM). The report also presents details of GFDRR's financial performance during the year.

## A Year of Action and Consensus

FY16 saw GFDRR continue to deliver strong outcomes at the same time that its core mission of building resilience was bolstered by major new international agreements, including the Paris Agreement on Climate Change, the Sustainable Development Goals (SDGs), and the Sendai Framework for Disaster Risk Reduction.

The active portfolio of grants comprising GFDRR's Country Program rose 11% year-on-year to \$240 million across 70 countries, 25 of which were fragile and conflict-affected states. Disbursements during FY16 amounted to \$63 million. This growth reflected continued demand in developing countries for support that builds long-term resilience to natural hazards and climate change. The program made strides towards helping scale up investments for resilience in fragile and vulnerable countries—including Togo, Myanmar, Uzbekistan, and Dominica—as well as supporting urgent recovery efforts in countries such as Nepal and Ecuador.

The international community placed resilience at the heart of the SDGs, the World Humanitarian Summit, and the Paris Agreement. GFDRR actively supported this global dialogue: it added to the evidence base informing global climate negotiations through flagship analytical reports such as *Shock Waves: Managing the Impacts of Climate Change on Poverty*, and it helped drive progress by convening new coalitions of public and private actors such as the first Insurance Development Forum. GFDRR's technical engagement added to growing consensus on areas such as hydro-meteorological services, which saw growing support for delivering universal access to weather and climate information to empower citizens to protect themselves from natural hazards.

GFDRR sustained strong momentum on delivering resilience outcomes at global scale, reflecting the engagement of the donors contributing to its Multi-Donor Trust Fund and to special programs supported by the European Union and Japan. Technical assistance grants were deployed strategically to crowd in much larger investments for resilience. This was exemplified in South Asia, where GFDRR grants influenced a total of \$1 billion in

development financing during FY16 as governments and donors rallied around the need to scale up risk reduction. GFDRR's Thematic Initiatives pushed the frontier of practice in areas such as geospatial data, risk financing, and resilience of small island states.

FY16 saw special attention to women's empowerment as a cross-cutting theme. In FY16, 62% of GFDRR grants were gender-informed, of which two-thirds had specific actions to empower women. GFDRR's Consultative Group approved a Gender Action Plan including a framework to track progress towards applying gender-sensitive approaches across all GFDRR grants.

## Driving Outcomes at the Country Level

GFDRR's Country Program financed demand-driven technical assistance in 70 countries during FY16. Activities spanned each continent, and were selected based on high impact potential through leveraging investments at scale or driving policy changes.

**Africa** received the largest share of GFDRR resources in FY16, with 23 countries supported. Engagements included the Africa Hydromet Program, where GFDRR joined with the African Development Bank, World Meteorological Organization (WMO), and others to support modernization of hydro-meteorological services nationally and regionally. New risk assessments were financed in Ethiopia, Kenya, Niger, Senegal, and Uganda, while GFDRR's engagement in Mali helped design and mobilize a \$22.75 million investment to expand access to weather information.

In **East Asia and Pacific**, key interventions included a post-disaster needs assessment (PDNA) in Myanmar which informed more than \$400 million in investments for emergency recovery from the devastating 2015 floods and landslides. GFDRR supported efforts to consolidate and scale up DRM efforts, such as through the Southeast Asia Disaster Resilience Program—which supports risk pooling in Cambodia, Lao PDR, and Myanmar—and through coordinated early warning and risk reduction investments in Pacific Island Countries. An important area of progress remains the Philippines, where a \$500 million contingent credit line (a Catastrophe Deferred Drawdown Option) was approved, building on extensive groundwork supported by GFDRR.

In **Latin America and the Caribbean**, GFDRR continued to provide countries with sophisticated solutions such as advanced risk assessments and modeling to inform development policy and planning. Cities such as Medellin, Porto Alegre, and Mexico City have requested support to transfer catastrophe risk to the capital markets. GFDRR supported the expansion of the Caribbean Catastrophe Risk Insurance Facility to seven additional countries, supported a safer schools investment in Peru that benefited 278,000 students, and informed the design of a \$150 million risk mitigation and emergency recovery project in Ecuador.

In the **Middle East and North Africa**, GFDRR applied technical approaches developed through post-disaster needs assessments in Iraq, Syria, and Yemen to assess post-conflict reconstruction needs. GFDRR provided financial assistance to women-run initiatives strengthening resilience in Egypt and Lebanon, helped integrate risk reduction into the urban resilience master plan of Beirut, and informed the application of innovative results-based financing approaches to a \$200 million investment in Morocco.

In **Europe and Central Asia**, GFDRR supported countries to put in place the building blocks of comprehensive DRM programs. In Armenia and Kyrgyzstan, probabilistic seismic hazard assessments yielded valuable information for future planning and development. In Serbia, GFDRR's efforts enabled a large national DRM program, with focused assistance on the water, agriculture, and environmental sectors.

**South Asia** saw growing policy dialogue on resilience bear fruit as GFDRR's program increased in scale. Key focus areas were hydromet information and reducing risk in populous coastal areas of India and Bangladesh. In Nepal, the government inaugurated a National Reconstruction Authority and launched a homeowner reconstruction program supported by \$550 million in international funding. Both steps built upon GFDRR's engagement in needs assessment and reconstruction planning following the April 2015 earthquake, which helped to align multiple donors behind a strong government-led process.

## Advancing Practice through Knowledge and Tools

GFDRR's eight Thematic Initiatives continued to enhance the impact of the Country Program by providing technical capabilities and specialized expertise at the frontier of DRM practice. During FY16, GFDRR's Innovation Lab launched ThinkHazard!, a free and open source tool that puts scientific risk information in the hands of decision-makers globally. The tool brings together data on eight hazards: earthquakes, landslides, cyclones, volcanic eruptions, water scarcity, river floods, coastal floods, and tsunamis across 196 countries.

The Safer Schools initiative developed a platform to establish a global baseline for school infrastructure. This effort has yielded information on the location of over three million schools in its initial stages. The Hydromet Initiative prepared an Assessment of the State of National Hydrological Services in Developing Countries. GFDRR released a flagship report, *Building Regulation for Resilience: Managing Risks for Safer Cities*, and launched pilot programs in Ethiopia, India, and Armenia to support the roll-out of effective building codes and land-use planning.

The Small Island States Resilience Initiative supported more than 20 island nations in building investment pipelines and addressing technical challenges to withstand impacts of climate change. The CityStrength diagnostic tool was applied to inform dialogue that prepared a \$250 million investment in urban resilience in Can Tho, Vietnam. On financial resilience, the Disaster Risk Financing and Insurance initiative rolled out a training program to more than 200 officials in 15 countries.

## Partnering for Results

GFDRR deepened a number of partnerships that are driving progress on specific resilience challenges. With the WMO, United Nations Office for Disaster Risk Reduction (UNISDR), and the Government of France, GFDRR launched a new Climate Risk and Early Warning Systems (CREWS) initiative to finance weather stations, radar facilities, and early warning in countries where weather data is unreliable or lacking. It co-organized a Development Partners Roundtable to bring together 37 meteorological and development organizations and coordinate investments in hydromet capacity.

The Understanding Risk community took a step forward as the pre-eminent platform to bring together the wide range of professionals—from across disciplinary boundaries—whose engagement is needed to solve tough resilience challenges. The fourth global Understanding Risk Forum, held in Venice, brought together 350 organizations to catalyze new partnerships and initiatives. The first-ever Understanding Risk and Finance platform was held in Addis Ababa and focused on risk financing in Africa.

## Resilience for a Changing World

Looking ahead, GFDRR worked with its partners to identify the priority gaps and needs confronting the global resilience agenda following the adoption of the Sendai Framework, SDGs, and Paris Agreement. On climate change, GFDRR aims to significantly scale up its support to catalyzing the large-scale investments and policy changes required to achieve the national goals embedded in the Paris Agreement. Efforts will focus on addressing the critical knowledge gaps and building pipelines of effective resilience investments ahead of the Paris Agreement's first Global Stocktaking in 2023, building on the momentum around the Paris Agreement's 'Nationally Determined Contributions.' Recognizing that rapid urban growth is creating unprecedented new concentrations of risk, while presenting new opportunities for effective interventions at the municipal level, GFDRR also laid the groundwork for a scaled-up engagement on urban resilience.

**MISSION** GFDRR supports the implementation of the Sendai Framework for Disaster Risk Reduction, and its goal of “substantial reduction of disaster risk and losses in lives, livelihoods, and health and in the economic, physical, social, cultural and environmental assets of persons, businesses, communities, and countries.” To achieve this, GFDRR works with partners to: (i) mainstream disaster risk management and climate change adaptation in development strategies and investment programs; and (ii) improve the timeliness and quality of recovery following a disaster.

## How We Work

**Financing Windows:** GFDRR finances demand-driven technical assistance through a number of implementing partners. Financing Windows include a multi-donor trust fund (MDTF) funded by all donor members of GFDRR and two special programs financed by the European Union and Japan.

**The Country Program:** GFDRR implements the majority of its program through the World Bank in partnership with national, regional, and other international agencies. Activities financed must: (i) respond to a request from a vulnerable country; (ii) contribute to the goal of the Sendai Framework; (iii) ensure technical soundness in their design; and / or (iv) demonstrate high potential for impact either because they inform development financing or support policy change.

**Thematic Initiatives:** To support the Country Program, GFDRR maintains eight Thematic Initiatives that provide grant recipients with specialized knowledge and quality assurance in the design and implementation of activities. They allow GFDRR to collaborate with a broad array of partners, facilitate global engagements and capacity building, and produce innovative knowledge. They are the Innovation Lab, Hydromet, Disaster Risk Financing and Insurance (DRFI), Resilient Recovery, Inclusive Community Resilience, Urban Resilience, Safer Schools, and the Small Island States Resilience Initiative (SISRI).

**Cross-Cutting Themes:** Addressing resilience to climate change and empowering women are core drivers of GFDRR’s mission and activities. To adequately measure the impact of its activities, GFDRR has developed results indicators along the four priorities outlined in the Sendai Framework, as well as the themes of women empowerment and resilience to climate change.

### The Sendai Framework for Disaster Risk Reduction

GFDRR was established in 2006 to support implementation of the Hyogo Framework for Action (HFA) 2005-2015, and to help make the world safer from adverse natural events. This was succeeded by the Sendai Framework for Disaster Risk Reduction, which was adopted in March, 2015 in Sendai, Japan. GFDRR supports the Framework’s four Priorities for Action:

- (i) understanding disaster risk;
- (ii) strengthening disaster risk governance to manage disaster risk;
- (iii) investing in disaster risk reduction for resilience; and,
- (iv) enhancing disaster preparedness for effective response, and to “Build Back Better” in recovery, rehabilitation, and reconstruction.

## FINANCING WINDOWS

MDTF

ACP-EU

JAPAN

CREWS

## THE COUNTRY PROGRAM

## THEMATIC INITIATIVES

The Country Program receives support from a number of Thematic Initiatives:

Innovation Lab | Disaster Risk Financing and Insurance | Inclusive Community Resilience  
Safer Schools | Hydromet | Urban Resilience | Small Island States Resilience Initiative | Resilient Recovery

## CROSS-CUTTING THEMES

Two Cross-Cutting themes are mainstreamed throughout the Country Program:

Empowering Women | Resilience to Climate Change

MDTF Multi Donor Trust Fund | ACP-EU Africa Caribbean and Pacific-European Union Programs

Japan Japan-World Bank Program for Mainstreaming Disaster Risk Management

CREWS Climate Risk and Early Warning Systems (A new financing window that will start operating in FY17)

# GFDRR's Contribution to FY16 International Events

**JULY**

## Third Conference of Financing for Development, Addis Ababa, Ethiopia

Launched the ACP-EU Program Building Disaster Resilience in Sub-Saharan Africa with the program partners, namely the Africa Union, UNISDR, and the African Development Bank.

**OCTOBER**

## Central Asia Earthquake Risk Reduction Forum, Almaty, Kazakhstan

Showcased risk profiles of 32 ECA countries.

**SEPTEMBER**

## Sustainable Development Goals, New York, U.S.A.

Supported a technical meeting of the Insurance Development Forum, formed by private and mutual insurance companies, as well as international organizations.

**NOVEMBER**

## Understanding Risk and Finance, Addis Ababa, Ethiopia

Launched the EU-funded Africa Disaster Risk Financing initiative.

**DECEMBER**

## Twenty-first Conference of Parties, Paris, France

Jointly launched the French-led initiative on Climate Risk and Early Warning Systems, implemented in collaboration with the World Bank, World Meteorological Organization, and United Nations Office of Disaster Reduction.

Released two flagship publications titled *Shockwaves: Managing the Impacts of Climate Change on Poverty* and *The Triple Dividend of Resilience*.

2015

2016

JANUARY

International Conference on Sustainable Development through Quality Infrastructure Investment, Tokyo, Japan

Organized an interactive panel including experts from the World Bank, Japan's Urban Renaissance Agency, New York's Regional Planning Association, and Japanese Broadcaster NHK.

APRIL

World Bank-IMF Spring Meetings, Washington D.C., U.S.A.

Released a second progress report on mainstreaming disaster risk management into World Bank operations.

Organized the first-ever Development Partners Roundtable in Geneva bringing together 37 development partners to coordinate global action on hydromet services.

JUNE

European Development Days, Brussels, Belgium

Organized a resilience dialogue that focused on local action to address fragility and protracted displacement.

MARCH

Fragility Forum, Washington D.C., U.S.A.

Organized a Resilience Dialogue on Fragility, Conflict, and Disaster Risk: Connecting the Dots, bringing together humanitarian and development actors.

MAY

Understanding Risk 2016, Venice, Italy

Launched ThinkHazard!, a free, open-source, online tool and released a flagship publication titled: The Making of a Riskier Future.

World Humanitarian Summit, Istanbul, Turkey

Released a publication on Disasters, Conflict, and Fragility: A Joint Agenda, which informed a side event.

Supported the launch of the Global Preparedness Partnership led by the V20 countries.





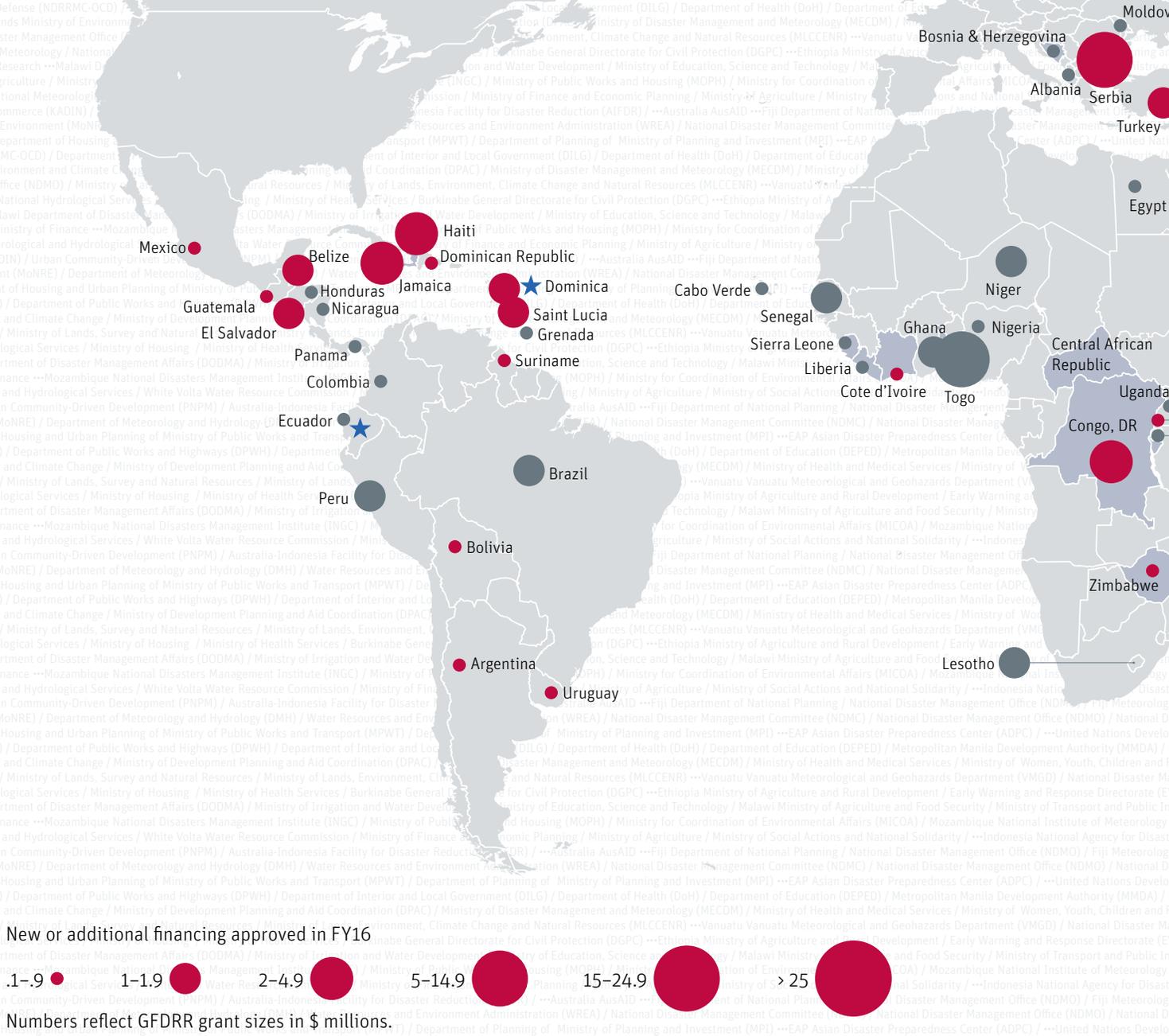
# THE COUNTRY PROGRAM

GFDRR implements the majority of its program through the World Bank in partnership with national, regional, and other international agencies. Activities financed must: (i) respond to a request from a vulnerable country; (ii) contribute to the goal of the Sendai Framework; (iii) ensure technical soundness in their design; and / or (iv) demonstrate high potential for impact either because they inform development financing or support policy change.



## 2 / Global Facility for Disaster Reduction and Recovery (GFDRR)

# Where We Work



New or additional financing approved in FY16

Numbers reflect GFDRR grant sizes in \$ millions.



# Africa

Africa faces a fundamental challenge of minimal availability of data on climate and weather risks, which is essential to achieving resilience. Gathering, analyzing, and communicating risk information, with a focus on hydromet, is therefore important in the region. In addition, building government capacity is critical for public officials to be able to glean the greatest value from the information once they have it in hand. Post-disaster needs assessments (PDNAs) continue to remain key to mobilizing financing and engaging larger programs for disaster risk management (DRM).

## Africa at-a-glance

Development finance informed

**\$169m**

More than 23 countries engaged

## Gathering, analyzing, and communicating risk information

Generating and communicating risk information has been central to GFDRR's engagements in Africa. In FY16, as a follow-up to the Southwest Indian Ocean Risk Assessment and Financing

Initiative (SWIO RAFI), GFDRR provided \$3.5 million for the development of risk assessments in Ethiopia, Kenya, Niger, Senegal, and Uganda, with assessments underway in Cabo Verde, Malawi, Mali, and Mozambique. GFDRR financing is expected to support a total of 15 country risk profiles, which will inform national disaster risk financing strategies for these countries.

## Hydromet is a key priority for the region

In partnership with the African Development Bank and the World Meteorological Organization (WMO), the World Bank and GFDRR launched the Africa Hydromet Program with the goal of modernizing hydromet services and promoting collaboration across borders. Subsequently, the United Nations Development Programme (UNDP), World Food Program (WFP), and Agence Française de Développement (AFD), have also joined the partnership. Working nationally and regionally, the initiative aims to raise up to \$600 million in funding to modernize, build, monitor, and forecast technologies that can generate weather information. In Mali, for example, GFDRR helped secure \$22.75 million from the Green Climate Fund and assisted in mobilizing approximately \$10 million in related investments in the Democratic Republic of Congo.

## Building capacity for better-informed policies

Building capacity to better plan for natural disasters is a priority for GFDRR and its partners in Africa. As of FY16, an Africa Caribbean and Pacific-European Union Natural Disaster Risk Reduction (ACP-EU NDRR) financed program in

Tanzania trained over 130 government officials, which helped improve their capacity to manage disaster resilience initiatives. This engagement, which came to a close in FY16, benefitted over 2,500 people from 433 households as a result of better access to drought-resistant seeds, tools, and knowledge, and provided better access to drinking water to over 8,000 people. As part of this work, 100 women's groups were able to strengthen their food security against climate variability and shocks. Today, local communities are far better able to identify, address, and cope with risks.

## Enabling development investments

DRM projects in Africa have helped mobilize additional development investments. After the 2015 floods in Mozambique, GFDRR provided financial and technical support for a rapid assessment of disaster impacts and recovery needs. This assessment identified recovery and reconstruction needs and justified the mobilization of \$40 million for a resilient recovery project. This project is now supporting reconstruction of dikes, irrigation, and drinking water supply infrastructure, as well as education infrastructure. GFDRR's financial assistance is complementing the work of this project for recovery planning at the national level.

## Going forward

The World Bank and GFDRR supported the development of a strategic framework 2016-2020: "Strengthening Climate and Disaster Resilience in Sub-Saharan Africa" which outlines future engagements and systematic investments in long-term DRM, including enhancing knowledge and fostering partnerships.

## In Focus Understanding Risk and Finance (UR&f)

The Understanding Risk and Finance conference (UR&f), held in Ethiopia on November 17–20, 2015, is a best-practice example of GFDRR’s commitment to innovation, diverse perspectives, and multi-disciplinary approaches to delivering solutions for clients. GFDRR worked in close collaboration with several teams within the World Bank, the African Union Commission, the Government of Ethiopia, and the EU, a partnership that was essential to the success of this event.

The event attracted 450 participants and a wide range of African partners including the African Development Bank, Addis Ababa University, African Risk Capacity, and the United Nations Office for Disaster Risk Reduction (UNISDR), along with 20 additional organizations, including private sector firms and insurance companies. Out of 95 speakers in total, 65 percent were from the region and 33 percent were women. The following on social media was strong, with over

950 tweets which reached 34,000 impressions. The UR&f conference also conducted several half-day training courses at the event. A total of 230 participants were trained through 16 sessions.

The conference also launched the EU-financed Africa Disaster Risk Financing (ADRF) initiative. The ADRF, a five-year initiative funded by the EU, aims to (i) strengthen the capacity to generate, access, and use information on disaster risk, (ii) enhance capacities to incorporate disaster and climate risk information in decision-making, (iii) develop strategies to increase financial resilience, and (iv) facilitate sharing of knowledge and best practices.

UR&f served as a platform for African policy makers and technical experts to discuss strategies for quantifying and managing financial risk at regional, national and local levels, including those associated with natural hazards and climate change.

## East Asia and Pacific

East Asia and Pacific (EAP) faces a variety of hazards, with countries that have different capacities and institutional arrangements to mitigate, prepare for, and respond to disasters. To help countries address these challenges, GFDRR works alongside the World Bank and government counterparts to provide customized solutions that take into consideration countries' unique economic and operational context.

### *EAP at-a-glance*

Development finance informed

**\$760m**

More than 18 countries engaged

### Mobilizing additional financing from different financial instruments

In Myanmar, following the devastating floods and landslides in 2015, which affected over 1.6 million people, the World Bank and GFDRR, together with partners, supported the Government of Myanmar in conducting a PDNA. Building on the PDNA and the financial resources provided by GFDRR, a \$200 million Myanmar Floods and Landslides Emergency Recovery Project was approved. Of the \$200 million, \$100 million will be financed from International Development Association (IDA) allocations and \$100 million from the IDA Crisis Response Window, a World Bank instrument that provides additional resources for severe economic crises and major natural disasters. An additional \$32 million was approved from the Immediate Response Mechanism (IRM), which allows IDA countries to access a portion of the undisbursed lending portfolio for recovery and reconstruction in the transport and agricultural sectors.

### Consolidating engagements within the region for greater impact

Consolidating existing engagements helps to improve coordination and increase scale and impact of DRM interventions. To that end, in FY16, GFDRR facilitated the preparation of the Pacific Resilience Program (PREP), a regional operation intended to strengthen early warning and preparedness, enhance public infrastructure, and improve post-disaster response capacity of participating countries. Four countries participated in the program's first phase, including the Republic of Marshall Islands, Samoa,

Tonga, and Vanuatu; while Fiji, Federal States of Micronesia, and the Solomon Islands are expected to join in the future. The first phase leveraged \$45 million to build better preparedness systems in the region.

### Advancing engagement through innovative measures and good practice

GFDRR's support has helped bring innovative approaches and good practices to operational engagements at the sub-regional level, particularly in disaster risk financing and flood risk management. Cambodia, Lao PDR, and Myanmar face high disaster risks, particularly flooding. Technical assistance is ongoing to help identify risk reduction investments across the three countries, as well as strengthen regional coordination on financial protection. One such effort is support for the Southeast Asia Disaster Resilience Insurance Fund to provide participating governments with immediate financial resources to support response and early recovery. With GFDRR's support, a draft legal hydro-meteorological framework was prepared in Lao PDR. Drawing on international good practice and standards as well as extensive stakeholder consultations, the law will help guide modernization and upgrading of Lao PDR's hydromet and early warning systems.

### Going forward

GFDRR will continue to build on its existing engagements in the region. In addition to ongoing efforts, GFDRR will support knowledge transfer on emerging topics such as coastal resilience, resilient cultural heritage, and urban resilience and flood risk management.

## In Focus Philippines builds a comprehensive disaster risk management program

Since 1990, the Philippines has been affected by 565 natural disaster events, claiming nearly 70,000 lives and an estimated \$23 billion in damages. Comprehensive DRM legislation in 2010 positioned the Philippines as the first country in the Asia-Pacific region to secure a \$500 million DRM Development Policy Loan (DPL) with a Catastrophe Deferred Drawdown Option (Cat-DDO), which provides immediate access to recovery funding after a disaster. In December 2015, the Philippines secured a second DRM DPL with a Cat-DDO, providing access to another emergency credit line of \$500 million.

GFDRR has been engaged in the Philippines since 2009, supporting coordination efforts among various partners—including the Asian Development Bank, the Japan International Cooperation Agency (JICA), the government of Japan, and the UK Department for International Development to support the Philippines to scale up its engagement in DRM. This has resulted in increasing efforts to mainstream disaster resilience, strengthen ex-ante planning and risk reduction interventions, and develop a comprehensive disaster risk financing strategy, which have delivered an effective platform of tools to strengthen risk-informed investment planning and regulations.

Building on the results achieved to date, GFDRR is now supporting a broader agenda of risk across different sectors. Working with the Department of Public Works and Highways, for example, DRM standards will be integrated into the first revision of the Philippines' National Building Code; engaging with the Department of Tourism to address risk reduction for cultural heritage assets and with the Department of Education to develop retrofitting solutions for at-risk schools in metro Manila; and supporting the Department of Finance to implement a comprehensive protection strategy. These efforts will help the Philippines address disaster risks in the medium and long-term, and advance its commitment to the Sendai Framework in the years to come.

*“The Philippines is among the most vulnerable countries in the world. Together, the 20 most vulnerable countries face escalating losses of \$44.9 billion due to climate-related natural disasters alone. Inaction is set to cost us even more. With the number set to multiply almost ten-fold by 2030, amounting to \$418 billion, we turn to innovative financing mechanisms to boost our resilience.”*

—**Cesar V. Purisima**, Secretary the Philippines Department of Finance (2016)

At the local level, GFDRR funds accelerate implementation of DRM reforms by building technical and institutional capacity. As a result, approximately 90 percent of provinces have now mainstreamed resilience measures into their development plans, which are expected to result in investments that are selected, located, and designed to standards minimizing the vulnerability of communities. A joint disaster resilience insurance facility is also being set up by local governments to provide immediate payouts to provinces after disasters, improving the financial response capacity at the local level.

# Europe and Central Asia

Recent events such as the flooding in Serbia, Bosnia and Herzegovina, Georgia, and Tajikistan have made government officials throughout the region keenly aware of the need to invest in building a more stable future. To that end, with GFDRR's support, countries are putting in place building blocks for comprehensive DRM plans, investing in risk analytics, and building institutional capacity. Efforts to integrate risk considerations in ongoing and planned investment processes, for example in the education and transport sectors, are underway.

## *ECA at-a-glance*

Development finance informed

**\$395m**

More than 11 countries engaged

## Establishing the building blocks for DRM

Knowledge is an essential building block for a comprehensive approach to DRM. In FY16, GFDRR invested in risk analytics to support countries in building a long-term foundation for investments in resilience, facilitating knowledge exchange throughout the region, and helping to build capacity across all levels of government. GFDRR supported the development of Earthquakes and Floods risk profiles, which improves the country's understanding of its own risk and vulnerability. This has been done for 32 countries in the region as of FY16. Such information will help inform government officials of existing risk and enable them to make more informed decisions.

The Central Asia Earthquake Risk Reduction Forum held in Almaty, Kazakhstan, in October 2015, convened decision makers from relevant ministries, as well as practitioners from the scientific community from the five Central Asia countries, to share experiences and mobilize support for investments to build resilience. The Forum, as well as other previous and ongoing engagement, encouraged the Republic of Tajikistan and the Kyrgyz Republic to prepare their multi-hazard DRM projects and programs, which could serve as the foundation of countries' long-term and proactive DRM program.

## Integrating risk into ongoing, cross-sector planning efforts

GFDRR's support to integrate risk into investment decision-making helps countries in the region to save social as well as economic costs by building safer and more resilient infrastructure,

lowering losses in the aftermath of disasters. In the Kyrgyz Republic, GFDRR supported a Probabilistic Seismic Risk Assessment to develop a macro-level analysis of the highest risks to settlements, including government assets such as schools and infrastructure. This will help strategize and inform the DRM investment program of the country.

GFDRR also helped update Armenia's probabilistic seismic hazard map to help determine minimum accepted levels of safety for all buildings in the country, and Armenia is also considering reviewing and updating its seismic code. Vulnerability assessments have been conducted for roads in central areas, often inhabited by tourists and cultural heritage buildings, to prioritize and inform the design of investments targeting regional tourism.

## Going forward

Based on agreements in the Central Asia Earthquake Risk Reduction Forum, the Kyrgyz Republic, Tajikistan and Uzbekistan have requested GFDRR support to develop projects that help reduce their risk—with a focus on infrastructure and transportation. GFDRR's regional support to strengthen risk assessments will benefit National Meteorological and Hydrological Services (NMHSs) of all Central Asian countries, enhancing quality and delivery of information—to help countries better prepare and plan for disasters.

## In Focus Serbia's efforts to build disaster resilience set an example for its neighbors

Over the last 15 years, Serbia has been affected by recurrent floods and landslides, most recently in 2014. Floods in 2014 imposed large financial costs, totaling nearly \$1.5 billion in recovery needs, contributing to the onset of a recession. While the energy and agriculture sectors were especially impacted, the flood protection infrastructure suffered as well, leaving the country more exposed to subsequent flooding. Following the 2014 floods, GFDRR provided resources to the government to establish the National Disaster Risk Management Program (NDRMP).

The NDRMP is the first national plan that aims to protect Serbia's development by reducing the existing risk, avoiding new risk, and responding more efficiently to disasters. It creates a common platform for managing risks associated with various types of disasters by identifying potential hazard risks and reducing them in the long term. The NDRMP also allows various stakeholders to coordinate DRM efforts in order to avoid replication of similar activities.

In FY16, Serbia developed a new legal framework for DRM with the intention of being the first country in the world to fully align its legislation with the Sendai Framework. GFDRR and the World Bank have provided guidance to the Serbian government in drafting the legislation, which provides the legal basis for the implementation of the NDRMP. Its implementation is currently funded by the European Union, the United Nations, Switzerland, Austria, GFDRR, and the World Bank.

*"With the National Disaster Risk Management program, Serbia is moving from a response-focused approach to disasters to a more proactive risk reduction way of securing the country's sustainable development."*

—**Marko Blagojevic**, Director of the Public Investment Management Office

GFDRR's technical assistance in Serbia focuses on building government capacity in sectors such as water, agriculture, and environment, which is essential to the success of the NDRMP. As part of this, GFDRR, the World Bank, and the EU have agreed to provide financial and technical support to the Ministry of Agriculture and Environmental Protection in developing high resolution flood risk maps, which will be integrated in the Serbian National Water Information System. This financial and technical support will also aim at rehabilitating and improving the hydro-meteorological monitoring network which was damaged during the 2014 floods.

Additionally, the Serbian government has significantly enhanced its fiscal resilience. A comprehensive financial protection strategy was developed, with potential for a Catastrophe Deferred Drawdown Option (Cat-DDO), providing up to \$100 million in rapid liquidity in the event of disaster. Furthermore, after the floods in March 2016, GFDRR provided post disaster needs assessment training, after which, new funds are being identified to support the Serbian government to update the current damage assessment methodology and align it with GFDRR's Disaster Recovery Framework.

# Latin America and the Caribbean

With the evolution of DRM in the region, GFDRR has adapted its assistance to respond to its changing needs. In GFDRR's earlier years of operation, it supported country needs by providing assistance to build early warning systems and emergency operations centers. Over the past few years, the demand for sophisticated solutions in the region has progressed, with requests for advanced risk assessments and modeling to inform policy and investment decision-making, with a focus on integration of risk management principles into development planning.

## LAC at-a-glance

Development finance informed

**\$324m**

More than 22 countries engaged

## Implementing sophisticated financial solutions

Since 2007, GFDRR has helped countries in Latin America and the Caribbean (LAC) create risk financing mechanisms and take advantage of still more sophisticated risk financing instruments. In the last two years, the Caribbean Catastrophe Risk Insurance Facility (CCRIF), which pools risk among 16 countries to provide rapid liquidity in the wake of an earthquake, heavy rainfall, or a hurricane, has been expanded to offer coverage for seven additional LAC countries. In 2015, Nicaragua became the first Central American country to join the CCRIF, purchasing coverage against earthquake and cyclone damage.

Countries within the region are also increasingly working together to better identify solutions for managing disaster-related financial losses. For instance, knowledge generated in Mexico related to risk layering strategies is being applied in Belize, the Dominican Republic, Grenada, Guatemala, Haiti, and Saint Lucia.

## Planning for a safer and more resilient future

The Peruvian Ministry of Education (MINEDU), with technical assistance from GFDRR, evaluated the physical condition of approximately 50,000 public schools and assessed seismic risk of 2,000 schools in Lima. In 2015, these results informed Plan Lima, a short-term national strategy to reduce critical risk in school infrastructure in Peru. In the first phase, 373 school facilities received an investment of \$20 million, benefitting 278,000 students. MINEDU is also leading the formulation

of a national school infrastructure plan to guide investments strategically. With GFDRR's financial support, a countrywide risk assessment will inform a structural retrofitting program, directly benefiting 2.5 million students.

Increasingly, cities in LAC are requesting support from the World Bank to strengthen resilience to natural hazards. To meet this demand, the World Bank is helping to integrate risk management into financing and technical assistance in city level investment and territorial planning—for instance, in Guatemala. In addition, cities like Medellín, Porto Alegre, and Mexico City have asked for World Bank and GFDRR assistance to explore options for transferring some of its catastrophe risk to capital markets.

Financed by the ACP-EU NDRR window, the Caribbean Risk Information Program has strengthened the quality of national data on hazards for Belize, Grenada, Dominica, Saint Lucia, and Saint Vincent and the Grenadines. In FY16, the Program published the Handbook for Risk Information Management (CHaRIM), which will enable risk-information on landslides and flood hazard to inform infrastructure projects across the region.

## Going forward

In the region, demand for integration of resilience across sectors is increasing at the city level. Efforts will also assist cities to increase revenue from land value captured from successful disaster risk reduction (DRR) investments—something currently being explored in Buenos Aires—or through issuing bonds, which are under consideration in select cities in Brazil, Mexico, and Peru.

## **In Focus** Financing instruments in Ecuador readily respond to a variety of disasters

Approximately 96 percent of Ecuador's population lives in areas exposed to seismic, volcanic, flood, landslide, and El Niño hazards. In 2008, the country transitioned from emergency response and management to risk-integrated territorial and sectoral planning. As a result, Ecuador now has a stronger national DRM system, led by the National Secretariat of Disaster Risk Management, and integrated into activities of the Autonomous Decentralized Governments, which are provincial governance bodies, also equipped with scientific and technical capacity in hydrometeorology and seismic and oceanographic monitoring. This robust science-policy interaction has allowed experts to inform and develop policy decisions on DRM.

In FY16, assistance from GFDRR led to the development of a \$150 million risk mitigation and emergency recovery project financed by the World Bank, to help the country prepare for rapid response to contingencies and the reconstruction process. This World Bank project has two major components: (i) ex-ante disaster preparation and risk mitigation; and (ii) post-disaster recovery and reconstruction.

Although the project was initially designed for the anticipated impacts of the El Niño phenomenon and a possible eruption of the Cotopaxi volcano, the latter component included an innovative trigger to allow for the rapid access of funds after defined national disaster alerts are issued. This was activated following El Niño-related heavy rains as well as floods and landslides.

*“To mitigate the impact on public finances and as part of its fiscal strategy to confront the possible natural events against which it is subjected, Ecuador negotiated a loan with the World Bank in the amount of \$150 million for the Risk Mitigation and Emergency Recovery Project (ERL). The approval of the ERL by the World Bank was done in record time and allows us to deal with natural disasters and above all ensure a timely response to the affected population.”*

—**Luis Eduardo Carrión**, Project Coordinator, Ecuador Risk Mitigation and Emergency Recovery Project

In April 2016, a devastating 7.8 magnitude earthquake struck the northwest coast of Ecuador. Availability of this instrument has initially allowed for a programmed response focused on the health and transport sector, with resources earmarked to support the reconstruction of an international airport and the rehabilitation and reconstruction of two hospitals. In addition, financing from GFDRR has also been secured to deepen the integration of DRM in sectoral planning, which includes diagnostic analysis for the national emergency response plan; a strategic approach to develop the national emergency plan; and mainstreaming DRR into other sectors including health, water, agriculture, transport, and public works.

# Middle East and North Africa

The Middle East and North Africa (MNA) region is faced with intersecting risks of natural hazards, rapid urban growth, and conflict. Over the past two years the risk landscape of the region has become more complex due to the aggravation of conflict. The resulting influx of refugees and internally displaced populations has increased pressure on natural resources and existing infrastructure. To holistically address the multiple dimensions of risk, GFDRR provides strategic financial and technical support to strengthen resilience by adopting an inclusive and a participatory approach.

*MNA at-a-glance*  
Development finance informed

**\$200m**

More than 5 countries engaged

## Integrating risk management as a cross-cutting issue

DRM engagements with local governments have proven to be a key entry point for discussions on building urban resilience in MNA. Lebanon, for example, is a country undergoing extensive urbanization while exposed to a range of severe risks. In the capital city of Beirut, the World Bank, with support from GFDRR, began working with the local government in December 2015 on the development of a comprehensive urban resilience master plan.

In Morocco as well, by engaging the government on DRM, GFDRR is supporting the design of a \$200 million project, which will develop an innovative Integrated Disaster Risk Management and Resilience Program. The government implemented its new approach of proactively investing in risk reduction and shared the Morocco experience in the region to improve the application and use of existing disaster risk models.

GFDRR has also provided technical assistance to adapt post-disaster methodologies to post-conflict and in-conflict situations. In Syria, GFDRR led an assessment intended to break silos and bring together a multitude of sector specialists. These specialists verified data, analyzed damage characterization, identified impact on service delivery, and made sector-specific recommendations. A data platform was developed that converts large data sets into easily understandable visuals over the base map of each city. The technique and methodology has been scaled up, with similar assessments underway in Iraq and Yemen.

## Women as resilience champions

In an effort to empower women as leaders of the resilience agenda, GFDRR launched the Women for Resilience (W4R) Program. The program, designed as a competition, seeks to increase resilience through investments in women-led enterprises. In September 2015, W4R awarded three female-run initiatives focused on improving resilience in Cairo and Beirut. The W4R winners included:

- HandOver, a social enterprise offering resilient housing in informal settlements in Cairo;
- e-Tobb, a for-profit online platform that links patients to doctors and contributes to the resiliency of the health system in Beirut; and
- Transi.to, a crowd-sourcing mobile app that streamlines the public transportation system in Cairo.

Building on the initial results, the team will scale up activities in the coming year, targeting other MNA cities and fostering the inclusion of other vulnerable groups, especially youth and refugees. The goal is to support the creation of up to 20 resilience-focused medium and small enterprises in three or more countries in the region.

## Going forward

A focus going forward is developing and strengthening capacity to understand risk. In addition, it will be important to build institutional frameworks for investments, particularly in risk assessments, early warning systems, urban resilience, and infrastructure. GFDRR support will also help bridge DRM and conflict dimensions, helping to build resilience in fragile settings.

## **In Focus** In Lebanon, risk management paves the way for a larger urban resilience program

Beirut, the highly urbanized economic and political capital of Lebanon, faces an increasing spectrum and severity of risks, ranging from earthquake and tsunami threats, waste management challenges, security incidents such as terrorist attacks, and increasing stress on infrastructure and resources as a result of the influx of refugees from neighboring Syria. Proactively preparing for the future requires the city to comprehensively target this multitude of risks.

In May 2015, GFDRR provided technical and financial assistance that helped start a dialogue on DRM and city resilience. A key outcome of the conversation was a comprehensive urban resilience master plan, a multi-phased technical assistance program, financed by the World Bank and launched on December 9, 2015.

The program includes an assessment of Beirut's capability to mitigate, prepare for, respond to, and recover from adverse events. Based on this assessment, the city will then develop an integrated, multi-sectoral resilience strategy to reduce vulnerabilities and enhance the delivery and implementation capacity of local agencies and

other stakeholders. The plan will also identify potential infrastructure investment opportunities aligned with Beirut's priority development needs.

GFDRR is bringing global knowledge to this effort by identifying and sharing best practices. For example, based on lessons learned from a similar exercise in Dhaka, Bangladesh, the planning process was designed as highly participatory. A range of government, business and community stakeholders were involved in identifying the key risk and stress factors (both natural and man-made) that currently affect the city. To implement the technical work, GFDRR is working alongside many partners in both the private and public sectors. For example, the international firm Buro Happold Engineering, a global leader in urban planning and infrastructure development, has been actively involved in project implementation.

The work in Beirut is a best-practice-in-the-making; it is a prime example of GFDRR's technical assistance generating and leveraging World Bank lending in a fragile context, and advancing city resilience.

## South Asia

In South Asia, countries are faced with a variety of natural hazards—from floods to earthquakes and cyclones—while at the same time addressing additional risks such as conflict. To tackle the challenges that these interrelated risks pose, GFDRR has played a pivotal role in the growth of DRM in the region by initiating and maintaining country level dialogue on DRM, and by strengthening engagement between key stakeholders.

### *SAR at-a-glance*

Development finance informed

**\$1bn**

More than 7 countries engaged

### Initiating country-level dialogue to scale up engagement

Strengthening weather and climate information is particularly important in South Asia, where cyclones, floods and droughts are pervasive. Regular engagement with government stakeholders in the region, driven by GFDRR financing, has resulted in a call for better hydrometeorological services including development of end-to-end early warning systems.

In FY16, GFDRR's technical support informed the design of a \$150 million project in Bangladesh that will support modernizations of hydromet systems. Furthermore, a new \$11 million program financed by the European Union was launched to address issues on hydromet service delivery and focus on enhancing capacity among regional bodies and the national disaster management centers, agencies, or appropriate disaster-focused counterparts of member states of the South Asia Association for Regional Cooperation (SAARC).

Risk assessment continues to inform the design of larger DRM programs within the region. In FY16, GFDRR began supporting a nationwide, multi-hazard and climate risk assessment in Afghanistan. This project is helping to inform the preparation of a \$628 million investment project to improve the delivery of core infrastructure and social services through strengthened community development councils. Engagement in this project has resulted in an increased interest by government counterparts to strengthen the country's capacity to manage disaster risk.

### Strengthening engagement between key stakeholders

GFDRR engagements are helping to strengthen multi-stakeholder partnerships across the region. Following the April 2015 earthquake in Nepal, GFDRR and the World Bank supported the national government in developing the post-disaster recovery framework (PDRF) completed in May 2016. The PDRF brought together development partners—including the Asian Development Bank, the Department for International Development, the European Union, JICA,

and the UN—raising \$4.3 billion, which was informed by the PDNA to promote resilient reconstruction and recovery planning. With support from GFDRR, a national reconstruction authority was set up to take a centralized approach to recovery efforts.

GFDRR has helped bridge several critical knowledge gaps by, for example, facilitating exchange of innovative methodologies on landslide risk management between stakeholders in Japan and India, as well as DRM systems between Peru and Bangladesh.

### Going Forward

GFDRR will continue to support the region in improving project design, providing policy advice, mobilizing technical inputs and innovative solutions for planned or ongoing investments, and fostering partnerships between donors. Building on the current progress in knowledge exchange between countries in the region, GFDRR will work to strengthen internal collaboration and engage key stakeholders. The objectives include strengthening investment planning in urban, coastal, and infrastructure resilience; strengthening of government capacity programs; and enabling policies for geo-hazard risk management.

## In Focus India invests in protecting its coastal communities

India's vast geographic and climatic diversity makes it vulnerable to all major natural hazards, particularly to cyclones, with devastating impacts. Beginning with Bhola, which struck the eastern coast of India in 1970, a series of cyclones have regularly beset India's coastline—most recently, Hudhud, in 2014.

GFDRR has been engaged with the government of India since 2012 to help build the evidence base necessary to scale up support for DRM and help India be better prepared for and recover from cyclones. This engagement has driven two large projects financed by the World Bank—a \$359 million National Cyclone Risk Mitigation Project and a \$236 million Coastal Disaster Risk Reduction Project, supporting high-risk cyclone prone states in eastern India to better prepare for future disasters.

Through these projects, GFDRR has helped reduce the vulnerability of coastal communities by supporting the development of 270 cyclone shelters, 87 in FY16 alone. These facilities are developed with multiple uses, providing shelter in the event of a disaster, to over 280,000 people living on the coast. GFDRR supported the incorporation of community inputs in the design of the multi-purpose shelter and also the development of programs to train communities to manage the shelters.

In FY16, GFDRR contributed to ongoing efforts to modernize early warning systems to ensure last-mile connectivity of

*“Community-Based Disaster Risk Management is a process through which the entire society within each habitation is being prepared to face disasters and it will reap huge benefits in the future.”*

—**Gagandeep Singh Bedi**, IAS – Secretary to Government, Rural Development and Panchayat Raj Department, Tamil Nadu

rural and remote villages. A total of 1,740 villages will benefit from warnings customized by the state and district emergency centers. These will reach a much broader audience as they are broadcast through public address systems in coastal villages, through speakers, televisions, and radios. Approximately 2,100 mobile phones with special SIM cards and customized applications will be provided to officials and villagers, allowing local leaders and communities to receive customized warnings. Feedback on these systems will be collected from beneficiaries across all levels to assess and improve effectiveness.

Over the last year, GFDRR also engaged 600 communities to develop hazards, risk, and vulnerability assessments. These assessments have enabled the development of village DRM plans that have information on vulnerable communities and their respective exposure to risk. Communities are now able to activate local disaster management plans and stage appropriate response in close coordination with local authorities.

# Informing Development Finance

(million \$)

- JAMAICA**  
IBRD \$37
- COLOMBIA**  
IBRD \$117
- ECUADOR**  
IBRD \$150
- PERU**  
GOVERNMENT \$20

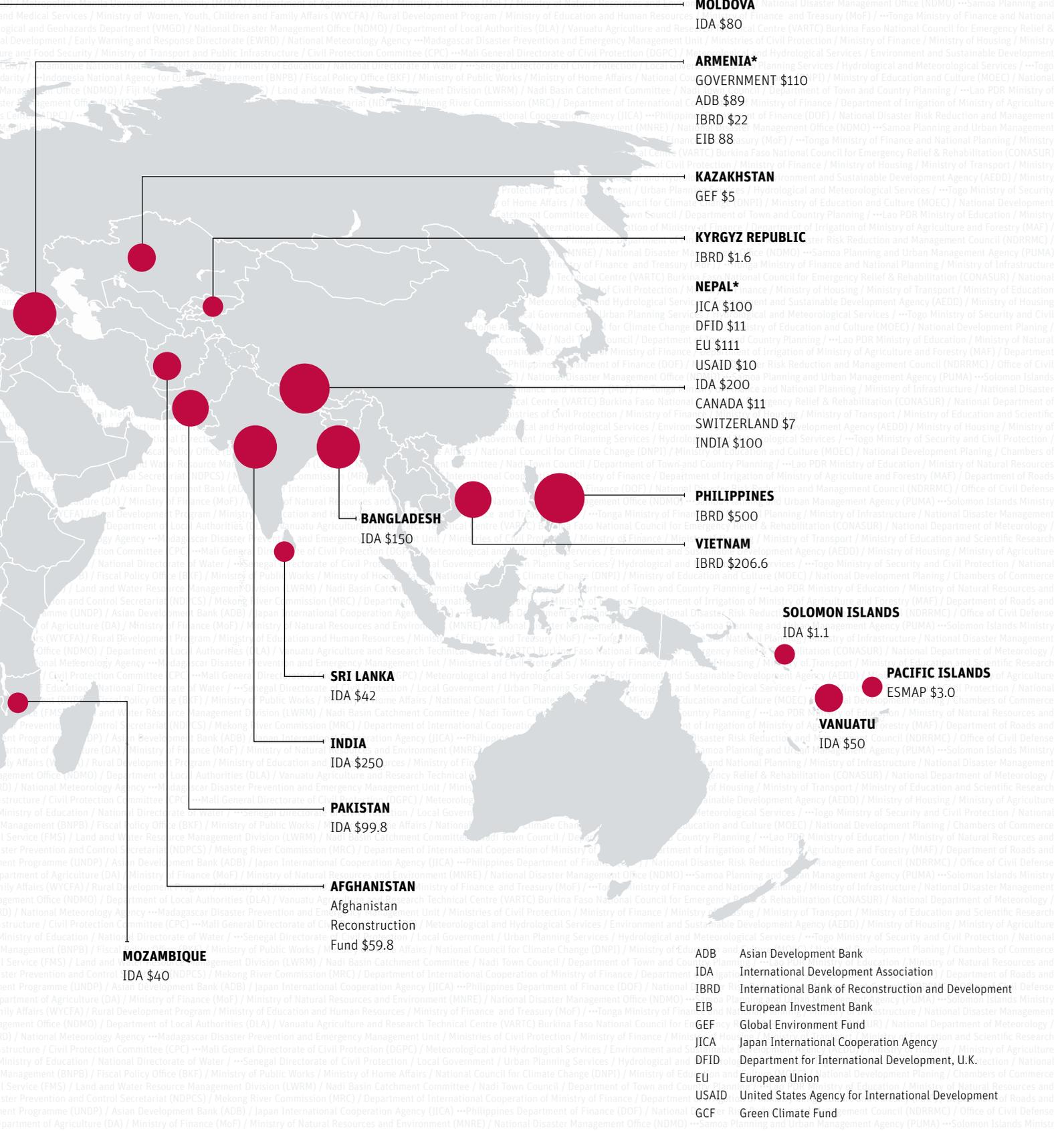
- MOROCCO\***  
IBRD \$200
- NIGER**  
IDA \$101.2
- MALI\***  
GCF \$27.5
- NIGERIA**  
IDA \$7

Numbers reflect FY16 development financing informed in \$ millions.



\*These investments are in the pipeline for FY17.

...ion (DGPC) ---Ethiopia Ministry of Agriculture and Rural Development / Early Warning and Response Directorate (EWRD) / National Meteorology Agency ---Madagascar Disaster Prevention and Emergency Management Unit / Ministries of Civil Protection  
 Science and Technology / Malawi Ministry of Agriculture and Food Security / Ministry of Transport and Public Infrastructure / Civil Protection Committee (CPC) ---Mali General Directorate of Civil Protection (DGPC) / Meteorological and Hydrological  
 (H) / Ministry for Coordination of Environmental Affairs (MICOA) / Mozambique National Institute of Meteorology / Ministry of Education / National Directorate of Water / ---Senegal Directorate of Civil Protection / Local Government / Urban Planning  
 y of Agriculture / Ministry of Social Actions and National Solidarity / ---Indonesia National Agency for Disaster Management (BNPB) / Fiscal Policy Office (BKF) / Ministry of Public Works / Ministry of Home Affairs / National Council for Climate Change (DNPI) / Ministry of Education  
 ---Fiji Department of National Planning / National Disaster Management Office (NDMO) / Fiji Meteorological Service (FMS) / Land and Water Resource Management Division (LWRM) / Nadi Basin Catchment Committee / Nadi Town Council / Department of  
 ster Management Committee (NDMC) / National Disaster Management Office (NDMO) / National Disaster Prevention and Control Secretariat (NDPCS) / Mekong River Commission (MRC) / Department of International Cooperation of Ministry of Finance  
 Investment (MPI) ---EAP Asian Disaster Preparedness Center (ADPC) / ---United Nations Development Programme (UNDP) / Asian Development Bank (ADB) / Japan International Cooperation Agency (JICA) ---Philippines Department of Finance (DOF) /  
 / Department of Education (DEPED) / Metropolitan Manila Development Authority (MMDA) / Department of Agriculture (DA) / Ministry of Finance (MoF) / Ministry of Natural Resources and Environment (MNRE) / National Disaster Management Office  
 (NDRM) / Ministry of Health and Medical Services / Ministry of Women, Youth, Children and Family Affairs (WYCA) / Rural Development Program / Ministry of Education and Human Resources / Ministry of Finance and Treasury (MoF) / ---Tonga  
 ---Vanuatu Vanuatu Meteorological and Geohazards Department (VMGD) / National Disaster Management Office (NDMO) / Department of Local Authorities (DLA) / Vanuatu Agriculture and Research Technical Centre (VARTC) Burkina Faso National  
 Ministry of Agriculture and Rural Development / Early Warning and Response Directorate (EWRD) / National Meteorology Agency ---Madagascar Disaster Prevention and Emergency Management Unit / Ministries of Civil Protection / Ministry of Finance  
 y / Malawi Ministry of Agriculture and Food Security / Ministry of Transport and Public Infrastructure / Civil Protection Committee (CPC) ---Mali General Directorate of Civil Protection (DGPC) / Meteorological and Hydrological Services / Environment and  
 of Environmental Affairs (MICOA) / Mozambique National Institute of Meteorology / Ministry of Education / National Directorate of Water / ---Senegal Directorate of Civil Protection / Local Government / Urban Planning Services / Hydrological and  
 Social Actions and National Solidarity / ---Indonesia National Agency for Disaster Management (BNPB) / Fiscal Policy Office (BKF) / Ministry of Public Works / Ministry of Home Affairs / National Council for Climate Change (DNPI) / Ministry of Education  
 Planning / National Disaster Management Office (NDMO) / Fiji Meteorological Service (FMS) / Land and Water Resource Management Division (LWRM) / Nadi Basin Catchment Committee / Nadi Town Council / Department of Town and Country Planning  
 (NDMC) / National Disaster Management Office (NDMO) / National Disaster Prevention and Control Secretariat (NDPCS) / Mekong River Commission (MRC) / Department of International Cooperation of Ministry of Finance / Department of Irrigation of  
 Disaster Preparedness Center (ADPC) / ---United Nations Development Programme (UNDP) / Asian Development Bank (ADB) / Japan International Cooperation Agency (JICA) ---Philippines Department of Finance (DOF) / National Disaster Risk Reduction



- MOLDOVA**  
IDA \$80
- ARMENIA\***  
**GOVERNMENT \$110**  
ADB \$89  
IBRD \$22  
EIB \$88
- KAZAKHSTAN**  
GEF \$5
- KYRGYZ REPUBLIC**  
IBRD \$1.6
- NEPAL\***  
JICA \$100  
DFID \$11  
EU \$111  
USAID \$10  
IDA \$200  
CANADA \$11  
SWITZERLAND \$7  
INDIA \$100
- PHILIPPINES**  
IBRD \$500
- VIETNAM**  
IBRD \$206.6
- SOLOMON ISLANDS**  
IDA \$1.1
- PACIFIC ISLANDS**  
ESMAP \$3.0
- VANUATU**  
IDA \$50
- MOZAMBIQUE**  
IDA \$40
- BANGLADESH**  
IDA \$150
- SRI LANKA**  
IDA \$42
- INDIA**  
IDA \$250
- PAKISTAN**  
IDA \$99.8
- AFGHANISTAN**  
Afghanistan  
Reconstruction  
Fund \$59.8
- ADB** Asian Development Bank
- IDA** International Development Association
- IBRD** International Bank of Reconstruction and Development
- EIB** European Investment Bank
- GEF** Global Environment Fund
- JICA** Japan International Cooperation Agency
- DFID** Department for International Development, U.K.
- EU** European Union
- USAID** United States Agency for International Development
- GCF** Green Climate Fund





# THEMATIC INITIATIVES

To support the Country Program, GFDRR maintains eight Thematic Initiatives that support grant recipients with specialized knowledge and quality assurance in the design and implementation of activities. They also allow GFDRR to collaborate with a broad array of partners, facilitate global engagements and capacity building, and produce innovative knowledge. They are: the Innovation Lab, Hydromet, Disaster Risk Financing and Insurance (DRFI), Resilient Recovery, Inclusive Community Resilience, Urban Resilience, Safer Schools, and the Small Island States Resilience Initiative (SISRI).

# Innovation Lab

## Fast Facts

37

countries have access to better risk information

UR2016

Fourth biennial global Understanding Risk Forum held in Venice, Italy; over 100 countries; 350 institutions

New open risk information

in FY16 for Ethiopia, Kenya, Niger, Senegal, and Uganda

Access to information is the first step toward saving lives and livelihoods and to reducing losses caused by disasters. Having the ability to manage and use information is critical to helping countries and individuals better prepare for—or recover from—disasters. GFDRR’s Innovation Lab creates, cultivates, and communicates risk information through the use of science, technology, and open data to promote new ideas and develop original tools that help countries understand disaster risk.

## Creating risk information

By aggregating existing data or creating new information, Innovation Lab helps countries understand their risks. In the last year, Innovation Lab pioneered a new risk assessment approach to develop multi-hazard risk profiles for five countries—Ethiopia, Kenya, Niger, Senegal, and Uganda—which provide information on earthquake, flood, drought, volcano, and landslide under current and future climate and socioeconomic conditions. This standardized approach will enable countries to understand the many hazards that they face and encourage risk-sensitive development.

Tools developed by Innovation Lab are open-source, easy-to-use and customized based on needs, without ongoing costs. In May, Innovation Lab launched *ThinkHazard!*, the first free, open-source, online tool to help countries identify natural hazards in an easy-to-understand manner. The tool illustrates how eight different kinds of hazards—earthquakes, landslides, cyclones, volcanic eruptions, water scarcity, river floods, coastal floods, and tsunamis—might affect every country in the world.

## Cultivating capacity through local and global partnerships

For risk information to inform development projects, it is important to engage national and local stakeholders and build their capacity to use and develop risk information. The Open Data for Resilience Initiative (OpenDRI) strives to develop long-term ownership of open-data projects with partner countries. In partnership with a local innovation hub in Madagascar, OpenDRI supported the government to create a geospatial platform that stores information essential to DRM, urban planning, etc. In FY16, this hub trained 42 local representatives from DRM and mapping government agencies. This platform allows important data to be easily used, updated, and shared across ministries so that decision makers have a better understanding of Madagascar’s risk.

## Communicating risk information to a broader audience

Because information is only useful if it is understood and used across multiple stakeholders, it must be communicated and delivered in a way that can resonate effectively with various audiences. To that end, Innovation Lab focuses on delivering quicker, high-quality, understandable risk information to more users.

In Sri Lanka, reservoir managers who make decisions on water level and water release downstream often lack the information necessary to reduce flood risk. Using mobile weather stations supported by Innovation Lab and the local irrigation department, managers now have real-time information distributed through text messages on rainfall intensity and other weather parameters. These low-cost weather stations are enabling more-informed decision-making in times of flood and drought.

## Going forward

Innovation Lab will continue to support the creation of robust, yet simple tools, data and information until all countries have adequate information for decision-making. Through partnerships and community networks, Innovation Lab will continue to enhance risk assessment and risk communication, while supporting local initiatives to encourage buy-in on the ground.

## In Focus 2016 Understanding Risk Forum (UR2016)

The Understanding Risk (UR) community was born in 2010 out of the need for disaster risk assessment and identification to cut across sectors and specialties. What began with just five founding partners—the World Bank, the United Nations Office for Disaster Recovery (UNISDR), infoDev, the Knowledge Strategy Group, and the Global Earthquake Model Foundation—has grown into a community of over 6,500 experts and practitioners. This vibrant community meets every two years, bringing together a diverse group of people. Every iteration of the Forum brings new ideas and partnerships that have proven useful in improving and integrating risk assessments into policy and development planning.

In May 2016, GFDRR organized the fourth global UR Forum in Venice, Italy. Hosting the event in Venice, a city struggling to stay ahead of growing climate risk, offered a unique opportunity to integrate civil society and government efforts with advances in technology to solve critical challenges in developing countries. Attended by participants from more than 100 countries and 350 institutions, this was the most global Forum to date. Over five days, a unique combination of partners from international and technical organizations, the private sector, academic institutions, nonprofits and community-based groups worked to share ideas, drive innovation and build partnerships in the field of risk identification. At

*“UR has helped expand the space of possibility in how we design and facilitate sessions and context for meetings. I would recommend this conference to others, as UR cares for the importance of informal interactions—fun, cool, vibrant events enable new relationships.”*

—Pablo Suarez, Red Cross Red Crescent Climate Center

UR2016, GFDRR provided a total of 106 hours in training to over 430 participants through 34 side events.

The 2016 Forum illustrated powerful impact of the community’s efforts. In 2012, a delegation from the Nepalese government attended the UR Forum and learned about community mapping methods. In response, authorities launched a mapping project, which helped provide information during the devastating 2015 earthquakes. In 2016, Nepal’s project leader attended the UR Forum in Venice, sharing their own experiences and bringing the learning process “full circle.”

The UR community’s approach of connecting people and groups across the spectrum of DRM exemplifies the power of partnerships. It has been, and will continue to be, the preeminent platform for identification of cutting-edge technologies and best practices related to disaster risk assessment globally.

### **Making information available, accessible, and easy to use—*ThinkHazard!***

Without reliable and understandable information about the potential for disasters in a region, it is difficult for non-experts to incorporate DRM into development.

In FY16, Innovation Lab team in partnership with the World Bank, the Bureau de Recherches Geologiques et Minieres (BRGM), Camptocamp, Deltares, and many other partners developed *ThinkHazard!*, which is an open-source tool providing data on eight types of natural hazards across 196 countries.

Presented in a visual, user-friendly format, *ThinkHazard!* has already helped thousands of non-experts consider disaster risk during the design of development projects. Within the first month after its launch, the platform received 42,000 page views and 6,700 user sessions.

Visit: [www.thinkhazard.org](http://www.thinkhazard.org)

# Disaster Risk Financing and Insurance

37

countries received support on financial protection strategies

## Fast Facts

### Capacity building program

reached over 200 government officials in 15 countries

### National financing strategies

developed in Colombia, Panama, Peru, and the Philippines

When disaster strikes, costs are incurred in many ways. There are social costs, related to both loss of life and caring for the injured, as well as costs from overall economic instability. There are also costs associated with rebuilding infrastructure. Established in 2010, GFDRR and the World Bank's partnership on the Disaster Risk Financing and Insurance (DRFI) initiative helps countries develop systems to lower the socio-economic costs related to disasters.

## Creating comprehensive financial solutions

DRFI continues to support an increasing number of countries to build comprehensive financial protection strategies by linking together different financial instruments. Over the past year, technical experts from GFDRR worked along with the Government of the Philippines to implement its DRFI strategy by linking it with a second \$500 million World Bank Catastrophe Deferred Drawdown Option (Cat-DDO). In Morocco, DRFI worked toward integrating an innovative insurance scheme to provide payouts to citizens after floods and earthquakes as part of the World Bank's \$200 million Program-for-Results operation, where the national government is developing a comprehensive approach to risk management.

## Developing analytical solutions for better decision-making

Analytics enable financial decision-makers to interpret and use risk data; appraise, monitor, and evaluate financial instruments that will best provide post-disaster resources; and inform better policy decisions. In December 2015, a global disaster risk financing analytics project, financed by the EU, was established to improve understanding and increase government capacity to make informed decisions on disaster risk finance based on sound financial analysis. This project is developing a suite of "parent" analytics decision-making tools, which will be customized to selected pilot countries.

## Thought leadership enables learning through training and peer-exchange

Training public officials and informing policy discussions to scale-up the reach and scope of the disaster risk finance agenda. In FY16, a training program was rolled out, reaching over 200 government officials in 15 countries. This has directly influenced project preparation in Serbia that is exploring the development of a Cat-DDO Option. Peer-exchange in South-East Asia is also informing the preparation of a regional risk financing facility in Cambodia, Lao, and Myanmar.

## Adapting existing solutions across many crises

Over the past several years, DRFI has been applying disaster risk financing principles to other kinds of risks. For instance, enabling safety net programs to respond to other crisis in addition to natural hazards. For example, during a drought in northern Kenya, the Kenyan Hunger Safety Net Program quickly scaled up, reaching roughly 165,000 households, 90,000 more than those who had been receiving regular cash assistance previously. In May 2016, the program subsequently delivered cash transfers to an additional 40,000 households.

## Going forward

DRFI will further develop its approach of adapting financial solutions to crises beyond those driven by natural causes. This will, for instance, include developing crisis responsive safety net mechanisms, building on its success to date in countries such as Kenya and Uganda and applying lessons learned in new countries and contexts such as Niger and the Philippines.

## **In Focus** Integrating insurance principles into social protection in Uganda

Uganda's government has been actively working toward managing its natural hazard risk. GFDRR and the World Bank have been working collaboratively to strengthen the financial resilience of the poorest in Uganda through integrating risk financing principles into a large social protection project, for example, through the Disaster Risk Finance for Resilient Livelihoods initiative.

The Government of Uganda strategically targets investments in areas with high poverty rates, poor socioeconomic indicators, and high exposure to disasters. This is reflected in the draft Second National Development Plan, as well as the Peace, Recovery, and Development Plan. Furthermore, the National Policy for Disaster Preparedness and Management seeks to ensure that, in times of disaster, appropriate systems are in place to assist those afflicted and enable them to cope.

To support these policies, a \$130 million World Bank project was established with the objective of providing effective income support to, and building the resilience of, poor and vulnerable households in northern Uganda. The project employs target households in labor intensive public works projects, as well as provides direct cash transfers to households without able-bodied members.

To protect the poor and vulnerable from disasters, the Government of Uganda allocated \$12 million of the World Bank's financing to develop a crisis response mechanism. GFDRR supported the government to design and implement this crisis response mechanism through: (i) conducting an analysis to assess costs of risks and their impacts on the poor so the government could prioritize its efforts appropriately; (ii) developing a financial cost tool to help decision-makers understand the financial implications and trade-offs of the rules for when to trigger a response through the EU financed Disaster Risk Financing and Analytics project; (iii) developing an operations manual for implementing the crisis response mechanism; and (iv) performing an information technology systems design assessment to understand the current state of its early warning systems and to identify necessary investments to ensure high quality timely data is provided to decision-makers.

The mechanism will automatically scale-up assistance through public works following drought events. The scale-up mechanism will allow for the rapid, transparent, predictable, and evidence-based provision of additional assistance to households affected by disasters. It is estimated that approximately 84,000 drought-affected households (420,000 people) will be supported over the next five years.

# Inclusive Community Resilience

## Fast Facts

40

development professionals trained on social dimensions of disasters and recovery

59

percent of GFDRR projects approved in FY16 included components of citizen engagements

7

countries received support to build disaster-responsive social protection systems

More often than not, community-led resilience initiatives are financed through small-scale, fragmented projects, often with minimal lasting impact once funding ceases. GFDRR integrates local-level resilience into large-scale country programs to put funding and decision-making power directly into the hands of poor communities and households, hence investing in communities, through communities. This community-driven approach is being spearheaded by the Inclusive Community Resilience (ICR) initiative, launched as a full-scale thematic initiative in 2015.

## Protecting the poor and marginalized and enabling empowerment

Several activities initiated in FY16 focus on building disaster-responsive social protection systems, which provide cash transfers and other support to poor households. In Dominica, Fiji, Grenada, Jamaica, the Philippines, Tonga and Vanuatu, for example, the initiative is helping to assess the readiness and improve the design of existing social protection programs. This is so that social protection programs can more effectively, rapidly, and transparently scale up before a shock hits, and forces vulnerable populations to maladaptive

coping mechanisms such as selling off assets or pulling children out of school after a disaster strikes.

To enable large-scale support to households and communities, ICR promotes gender equality, social inclusion, and citizen engagement in DRM investments. Curricula has been developed on conducting post-disaster social impact assessments to better address the social dimensions of disasters and recovery, and how to identify and address gender dimensions of disaster and climate risk activities, with pilot trainings for both topics delivered to about 40 professionals implementing GFDRR programs this past fiscal year. In addition, ICR led the drafting of GFDRR's Gender Action Plan, which aims to ensure that DRM investments support actions and outcomes addressing gender dimensions and empowering women.

## Bringing local level resilience to scale

The Community Resilience to Climate and Disaster Risk Project (CRISP) in the Solomon Islands was set up in 2014, financed by the EU. This project revived the water supply system in the Solomon Islands, which was destroyed by Tropical Cyclone Nina. In collaboration with Nanngu community members, project engineers successfully installed a comprehensive water supply system, where water pipes are buried underground and out of reach of storm surges or tsunamis – reducing

disruption of lives and livelihoods of communities from these disasters. As of FY16, this community-driven initiative has directly benefited 700 households and is projected to scale up to four provinces, reaching about 79,000 people.

Similarly, the National Community Driven Development project (NCDDP) in the Philippines empowers 847 targeted municipalities to participate in local governance. Communities receive block grants and vote on financing sub-projects to improve their municipalities. Because risk information and the ability to interpret is difficult to access at the local level, ICR is supporting the NCDDP to test and scale up the integration of participatory risk mapping to inform the design and implementation of these sub-projects, greatly improving their quality, and as a result, the community's resilience to disasters.

## Going forward

The ICR initiative will focus on demonstrating on-the-ground results and rolling out the Gender Action Plan. Operational demand is rising rapidly, particularly in Africa where countries are dealing with inter-related risks of disasters, conflict, and violence. The initiative will continue to build its network of civil society to integrate the voice communities into the broader global dialogue on DRM.

## In Focus Communities in Vietnam are better prepared for disasters

In the past two decades, typhoons, floods, and landslides have caused more than 13,000 deaths and damage to property in excess of \$6.4 billion in Vietnam. The country's central region is its most vulnerable. Around 65 percent of all recorded storms occur in this area, which is already marked by higher-than-average poverty rates. Floods in 2010 destroyed 350,000 houses and caused disruption to telecommunications, irrigation systems, energy supplies, and transport networks.

To strengthen disaster and climate resilience, GFDRR provided technical assistance for the preparation and implementation a \$150 million project on “managing natural hazards” to help integrate global best practices on DRM. Of this large engagement, the Government of Vietnam is using \$18.5 million to support community-based disaster risk management across 100 communes in 10 central provinces.

Working closely with local government and communities, the project is helping communes prepare for and manage disaster risks through community, cultural, and school activities, workshops, training and small-scale infrastructure investments. As part of the community-based approach, villagers choose physical structures that would be most helpful to them in the event of disasters. They are then involved in the supervision of construction and are responsible for operating and maintaining these structures. In this way, local ownership is encouraged.

The first phase of the project, which spanned from 2013 to 2016, provided training for over 10,600 villagers across the region, focusing mostly on vulnerable groups that included women and children. Fourteen disaster drills were conducted involving 2,500 participants, and all communes developed disaster risk preparedness plans. The construction of small-scale infrastructure such as roads or storm shelters that were proposed by the communities is nearing completion.

Based on the success of the project's first phase, community-based disaster risk management activities will be rolled out across the remaining 73 communes using project funding, and may be expanded to other provinces in the future if it is institutionalized at the national level as part of the Government of Vietnam's National Community-Based Disaster Risk Management Program.

*“In the past, there was nowhere to go when a storm or flood hit. Now we can go to the community shelter, built with funding from the project. When storms and floods come, trees and even houses are uprooted. People have been killed by lightning. From the training, we know how to protect ourselves when storms and floods come. We know how to strengthen our houses, and how to avoid getting struck by lightning.”*

—**Tran Thi Duong**, chairperson of the Women's Union of Duy Phu commune, Quang Nam province, Vietnam

---

# Safer Schools

## Fast Facts

**3 million**

schools located as part of a risk-benchmarking initiative of the global platform

**Peru**

373 schools and 278,000 students will be protected from disasters

**13**

countries supported to make schools and communities resilient to disaster risk

Natural disasters can have a devastating effect on children's education. Evidence suggests that the direct impact of disasters, such as loss of lives of school children and destruction of school infrastructure, can translate into extensive indirect impacts, such as threat to future educational opportunities. The Safer Schools initiative strives to make schools and the communities they serve more resilient to natural hazards, reducing the physical impact on school infrastructure, minimizing disruption in education, and, most importantly, protecting lives.

## Providing specialized support to influence the design of schools

Over the last year, Safer Schools has developed guidance material to inform investments that help improve the safety of new and existing school infrastructure. In addition, technical support has enabled an initial dialogue with ministries of finance, public works, and education to integrate risk considerations into new and existing educational investments, thereby increasing resilience on a large scale. Engagements have started in 13 countries across five regions, including in Armenia, El Salvador, Indonesia,

Jamaica, Mongolia, Mozambique, Nepal, Peru, Philippines, Turkey, Samoa, Tonga, and Vanuatu.

## Grant resources help make the case for building safer schools

GFDRR engagements in Armenia, Nepal, Peru, and Turkey are making the case for greater investment from development partners. In Peru, GFDRR supported a nationwide risk assessment for the education sector, the development of a National Plan and a Seismic Retrofitting Program for School Infrastructure. In its first phase, implementation will begin with 373 schools benefiting 278,000 students, with a target of 12,000 schools over the next couple of years. In December, GFDRR, the World Bank and Arup, an engineering firm, conducted a technical review of school safety in Armenia to identify priority areas of additional support to the national Safe School Improvement Program (SSIP).

The Safer Schools initiative is providing technical advice and support to Nepal's Department of Education to inform the reconstruction process after the 2015 earthquakes. Following a rapid visual damage assessment, GFDRR conducted a comprehensive structural integrity and damage assessment of more than 6,000 school buildings to inform a prioritized investment plan from partners including the Asian Development Bank and JICA for reconstruction and retrofitting.

## Sharing knowledge and best practices

Safer Schools operates in collaboration with civil society, academia, and the private sector to develop guidance material and best practices to build resilient schools. Formal partnerships with technical organizations such as Arup, Applied Technology Council, and Save the Children, and academic institutes such as Universidad de los Andes, University College London, and the Swiss Federal Institute of Technology Zurich, enable quality knowledge exchange across different actors in this space. Working in close coordination with the Global Alliance, which brings together a range of UN agencies and international non-governmental organizations (NGOs) working on this topic, ensures the use of best practices for projects being implementing in countries.

## Going forward

Safer Schools is monitoring global progress by creating a platform to establish a global baseline for school infrastructure. This information will inform future policies and identify actions to mitigate risk. Though in early stages, this effort has already yielded information about the location of over three million schools. Other organizations, such as Save the Children, have formally committed to use the platform to share and visualize progress in other areas of school safety, such as contingency planning at the school level.

## **In Focus** Armenia makes strides to protect its future

Armenia has a large number of school buildings that are highly vulnerable to seismic hazards. Of its nearly 1,440 registered schools, 90 percent were built prior to the adoption of the first Seismic Code in 1994.

In December 2015, GFDRR, in collaboration with the World Bank and Arup, conducted a technical review of school safety in Armenia to identify priority areas of additional support to the national Safe School Improvement Program (SSIP). Estimated to cost \$620 million, SSIP seeks to improve safety of 25 percent of all Armenian schools. The government has already committed to provide \$110 million for this effort; the Asian Development Bank is contributing \$88.5 million; the World Bank is providing \$22 million; and the European Investment Bank will potentially allocate \$88.5 million.

Importantly, with support from GFDRR, Armenia has formally committed to initiating regulatory reform. As part of a formal agreement with the Asian Development Bank, the national government has committed to use GFDRR's guidelines to update its Building Code and its Retrofitting Code.

With these efforts underway, Armenia is better positioned to ensure that investments in strengthening infrastructure will help protect students and reduce potential damages and loss in school facilities located in high and medium seismic hazard zones. The country has also reduced potential education service disruption due to repair of affected school facilities in case of an earthquake.

# Hydromet

## Fast Facts

37

partners attended the First Development Partners roundtable

\$73m

in investments supported through partners

30+

countries engaged through the Hydromet Initiative

Extreme weather and hydrological events, including hurricanes, windstorms, floods, and droughts, can cause tremendous economic damage and loss of life. In many cases, by preparing for these events through systematic institutional strengthening and capacity building of National Meteorological and Hydrological Services (NMHSs), countries can save lives and minimize their impact on citizens and economies.

## Strengthening the hydromet knowledge base

The Hydromet initiative works to continually build the global knowledge base needed to support the strengthening of hydromet systems. In an effort to share best practices and build the capacity of developing country partners, for example, the Hydromet initiative partnered with the Water Partnership Program to prepare an “Assessment on the State of National Hydrological Services in Developing Countries” and develop recommendations for improvement of hydrological service delivery.

## Coordinating global financing for hydromet services

Funding for hydromet modernization programs has traditionally been quite fragmented. To address this, GFDRR has been working to bring stakeholders together to ensure that available resources to maximize positive impacts. In collaboration with the World Meteorological Organization (WMO), GFDRR co-organized the First Development Partners Roundtable in April in Geneva, which brought together 37 development partners to increase international support and improve efficiency of hydromet investments. By all accounts, the conference was successful. The Roundtable led to agreements on guiding principles, good practices, and future actions. Importantly, regular information exchange and annual meetings to coordinate activities and further scale up engagements were established, ensuring the dialogue will continue.

## Supporting hydromet modernization operations in vulnerable countries

GFDRR helps to mainstream hydromet services into broader economic sectors, such as agriculture and water resources management, by advising partners and government on design of projects. Since 2013, alongside water experts from the World Bank, GFDRR provided support to the Government of Myanmar’s Department of Meteorology and Hydrology to support a \$30.15

million investment for Ayeyarwady Integrated River Basin Management Project. GFDRR was instrumental in bringing key expertise from the WMO as well as coordinating financing from the Japan International Cooperation Agency and other development partners. Due in large part to GFDRR’s technical support and donor coordination, efforts have been positively received by IDA deputies and the World Bank management, both of which visited Myanmar to assess progress in June.

## Going forward

GFDRR, along with the WMO and the United Nations Office for Disaster Risk Reduction (UNISDR), will be an implementing partner of the French-led Climate Risk and Early Warning Systems (CREWS) initiative, which seeks to effectively support Least Developed Countries (LDCs) and Small Island Developing States (SIDs) in adapting to climate change and reducing disaster risks. Building on the progress made to date, Africa will continue to be an area of focus for the Hydromet initiative through active participation in the Sub-Saharan Africa Regional Hydromet Program which is fully aligned with the Global Framework for Climate Services.

## In Focus Mali mobilizes additional resources for hydromet from multiple partners

In FY16, GFDRR, helped mobilize \$27.5 million in funding, including \$22.75 million from the Green Climate Fund, to support Mali's modernization of NMHS, as well as civil protection and food security services. Funding will also support a national operational center for crisis monitoring and management for rapid-onset disasters, and an early warning system for food security.

Mali, a large but sparsely populated country, prone to drought, flooding, and locusts, was among the first countries to prepare an integrated, and strategic hydromet modernization plan in the region. Optimizing the use of hydromet information and services will help to ensure coordination in the country by enabling clear operational procedures among institutions dealing with hydrological, meteorological, civil protection, humanitarian and DRM services. Decision-makers and implementers will be able to access more accurate information more quickly, and will be able to more effectively manage disasters through the use of remote sensing and data management.

Most importantly, the project will deliver better hydromet information to those who need it most. Through modernized equipment and the engagement of civil society, the local communities of Mali and West Africa will gain better services and information. Flood-prone populations such as farmers, women, livestock herders, and food-insecure

*"The government and GFDRR have been working with the objective to strengthen early warning systems with a multi-hazard approach in Mali since 2011. The \$2.5 million grants from GFDRR are leveraging \$22.75 million in grant financing from the Green Climate Fund. This will enable our national hydromet and early warning authorities to deliver public services to 5.3 million people in flood-prone areas and 2 million farmers regularly affected by droughts."*

—Col Seydou Doumbia, Director General, Civil Protection

households, will be able to make more-informed decisions to cope with exposure to climate variability and natural hazards.

The Africa Hydromet Program, through financial and technical support of the program partners, supports comprehensive modernization and strengthening of hydromet services. GFDRR, through the Hydromet initiative's technical guidance and additional financial resources, will continue to support the development of modern hydromet and early warning services in Sub-Saharan African countries including in Burkina Faso, Democratic Republic of Congo, Chad, Cote d'Ivoire, Niger, and Zambia.

# Urban Resilience

## Fast Facts

**\$250m**

mobilized for  
Can Tho, Vietnam

**9**

partner organizations  
work together  
through the  
Medellin Collaboration

**Building codes  
pilots**

in Armenia, Ethiopia,  
India, and Jamaica

As the world urbanizes, cities, their citizens, and their assets are increasingly vulnerable to natural hazards and other shocks. As a result, mayors and city administrations request enhanced support that cuts across multiple sectors. To meet this need, GFDRR works with World Bank teams to help cities understand, prepare for, adapt to, and recover from disasters. By developing approaches for building safer cities, and influencing the design of World Bank projects, this initiative helps cities better understand their risks and the performance of urban systems.

## Promoting safer building practices

In FY16, GFDRR released *Building Regulations for Resilience*, a flagship report launched at the World Bank-IMF Spring Meetings in April 2016. The report highlights the importance of integrating good practices in building code regulation as an effective DRR strategy for existing and new infrastructure. With multiple actors subsequently seeking out GFDRR's expertise in building regulations, pilots are currently in progress in Armenia, India, and Jamaica, as well as one in Ethiopia, which is already completed.

## Tools to strengthen the resilience of cities

Through consultations with experts from international organizations including UN-Habitat, UNISDR, the Rockefeller Foundation, and the World Bank, as well as the private sector, in 2014, GFDRR developed the CityStrength rapid diagnostic tool to facilitate risk-informed development in urban environments. Since its development, city leaders have effectively used the tool to identify gaps in resilience to systems, services, infrastructure, and vulnerable populations.

FY16 saw the first concrete application of the tool, which informed the dialogue on preparing a \$250 million World Bank investment in urban resilience in Can Tho, Vietnam. In FY16, a similar effort was undertaken in Accra, Ghana in collaboration with several international partners. In Ethiopia, consultations with ten capital cities identified regulatory issues and options. New opportunities for using the tool were initiated in Central America and South Asia.

## Working with partners on the global urban agenda

In FY16, the Medellin Collaboration on Urban Resilience (MUR), adopted and financed its work plan with support from the Cities Alliance. The MUR stakeholders include UN-Habitat, UNISDR, the Inter-American Development Bank, the Rockefeller Foundation, ICLEI, 100 Resilient Cities, C40 Cities, the World Bank, and GFDRR.

The initiative facilitates knowledge sharing and financial resources that promote sustainable urbanization. The work plan is currently supporting the C40 Cities and the World Bank to develop and apply the Climate Action for Urban Sustainability tool.

## Going forward

GFDRR is supporting the development of the World Bank's City Resilience Program, which will be designed to better integrate risk management in territorial planning. This will help drive investment in resilient infrastructure and systems, and enable cities to access credit more easily. These activities will be directly linked to ongoing and planned infrastructure investment programs or regulatory reforms, ensuring scale and long-term impact. In addition, they will help prepare attractive, resilience-boosting private sector investment opportunities.

The Urban Resilience program will seek to facilitate knowledge sharing in a number of ways. This includes providing technical and operational experience, and developing tools and materials, which will ultimately shape and define how the World Bank supports cities to build resilience.

## **In Focus** Building a safer world for the future

One billion new dwelling units will be built by 2050 in low- and middle-income countries alone. Most of this growth is expected to occur in cities with weak capacity to ensure risk-sensitive development and construction. In the last 30 years, over 80 percent of the lives lost due to disasters were in low- and middle-income countries. There is evidence that the impact of disasters on GDP in these countries is 20 times higher than in industrialized countries. These impacts pose a fundamental threat to the goals of eradicating poverty and boosting shared prosperity.

Unfortunately, there has been no robust and concerted effort in the international arena to address the challenge posed by the absence of effective and enforced building regulatory frameworks in low- and middle-income countries. There exists therefore, a significant window of opportunity to ensure that new developments are safe from disaster risks. GFDRR is, therefore, trying to bring together partner organizations to address this challenge.

GFDRR's new Building Regulation for Resilience Program outlines the benefits of strong and effective building regulatory frameworks. The program supports a shift from managing disaster response to reducing underlying risks. It aims to do so by establishing a global partnership and focusing on the role of building regulation in protecting lives and property from disaster losses.

By implementing building regulation and supporting active compliance, the proposed program can serve to accelerate the application of current scientific and engineering knowledge to a safer built environment. To this end, the program seeks to leverage good-practice in building code regulation into effective DRR strategies, thereby setting developing countries on track toward effective reform and long-term resilience.

# Small Island States Resilience Initiative

## Fast Facts

22

countries participated in the first SISRI workshop

19

Small Island States supported with more than \$43 million in grants

Analysis of financial landscape

on climate and disaster resilience in Small Island States

Faced with geographic isolation, limited resources, funding fragmentation, and lacking economies of scale, most Small Island States experience difficulties in managing climate and disaster risks. The Small Island States Resilience Initiative (SISRI) was created in 2014 in an effort to create more efficient and accessible support for climate and disaster resilience. SISRI provides institutional, technical, and operational support to investment projects implemented by GFDRR's country partners, which, in turn, are helping to reduce climate and disaster risks.

## Strengthening institutional, technical, and operational support

SISRI works to drive development investment to vulnerable Small Island States, with a focus on building resilience to disaster and climate change. For example, since FY16, the initiative has helped plan and develop a scalable pipeline of projects in the African and Indian Oceans and the Caribbean and Pacific region. In so doing, the initiative is enabling the possibility for two positive outcomes: (i) continue the World Bank's financing at present levels of about \$200 million a year; and (ii) scale-up operations to provide more streamlined and efficient

support through combined resources of other interested partners. The Marshall Islands received global expert support to model the impacts of sea level rise on its coast.

## Promoting knowledge and tools for resilience

As part of SISRI's knowledge and outreach strategy, the initiative produced a Knowledge Note based on the SISRI Building Blocks Framework, highlighting the range of financing and technical solutions available to Small Island States, and describing how investments in resilience can be scaled up for reducing climate and disaster risk. Knowledge Notes were also published on resilient social protection in Small Island States, and on how to manage effective and participatory population retreat from at-risk coastal area, which included examples from Jamaica, Samoa, and São Tomé and Príncipe, among others.

## Improving Investment Flows

SISRI is helping Small Island States map the complex landscape of climate finance assistance and increase both the scale and efficiency of their investments. A joint SISRI-Organization for Economic Co-operation and Development (OECD) analysis found that though donor funding for resilience nearly doubled from 2011 to 2014, reaching \$1.01 billion, it remained highly fragmented with high transaction costs. SISRI is helping Small Island

States to scale up and consolidate their resilience investments, moving from less significant, isolated projects toward national programs that deliver results at scale.

## Building a community of practice

By harnessing the power of available expertise, SISRI established an internal group at the World Bank to capture and disseminate global knowledge on how to build resilience in Small Island States. In the past year, working groups were held on critical topics such as social protection, financial management, procurement, population retreat, and coastal protection, which helped with sharing lessons learned across these topics. SISRI is also coordinating an external Community of Practice, by bringing together practitioners from 22 Small Island States, and centers of international expertise. The first meeting of this community took place at the UR Forum in May 2016.

## Going forward

Over the next few years, SISRI will provide increased technical, and operational assistance to more countries in the Pacific, Africa and Indian Oceans, and Caribbean regions. It will build on the financial landscape of climate and disaster resilience, try to address knowledge gaps and facilitate sharing of lessons learned among the small island countries.

## **In Focus** Building a strong community of practice for Small Island States

At the UR Forum in May 2016 in Venice, Italy, SISRI hosted a workshop focused on “Building a Community of Practice for Resilience to Small Island States to Climate and Disaster Risk,” intended to support and accelerate sharing of solutions and challenges.

At the workshop, 50 decision-makers from 22 Small Island States discussed challenges faced by their countries and how they can work together to address these challenges. Attendees included government officials with policy, finance, technical, and implementation responsibilities from Offices of the President and Vice President, Ministries of Finance, Planning, and Environment, and Project Management Units from relevant line ministries.

Participants engaged in a robust exchange of best practices and took part in peer-to-peer learning to support effective design and implementation of climate- and disaster-resilient development. Session topics were based on a number of knowledge notes developed for the workshop. Experts from the Small Island States, the World Bank, and other institutions presented on key institutional, operational, and

technical challenges. Discussions touched on practices and solutions related to investment planning and institutional coordination, risk-informed land-use planning, and developing resilient infrastructure, coastal protection, social protection, and risk financing.

Participants exchanged ideas and solutions implemented by other Small Island States, and how these could be applied to their own national policy and projects. The discussion revealed several practical solutions, largely because the workshop brought together experts from finance, policy and planning as well as technical practitioners, which enabled a more holistic and integrated discussion. For example, Guinea-Bissau described successful initiatives to protect coastal ecosystems, as well as the use of innovative, low-cost approaches such as simple kites with built-in cameras to monitor areas at-risk from climate and disaster hazards. Key themes of interest among the different stakeholders were social protection models, disaster relief funds, and the importance of integrating resilience across sectors and line ministries.

# Resilient Recovery

## Fast Facts

10

post-disaster needs assessments and post-disaster recovery frameworks

350

officials trained in post-disaster assessments and disaster recovery frameworks

Global Preparedness Partnership

led by the V20, and partners like FAO, OCHA, UNDP, and WFP

The growing incidence and intensity of losses from recurring and high-impact disasters in recent years has prompted countries to place greater emphasis on rebuilding for longer-term resilience. After a disaster, GFDRR’s Resilience Recovery initiative helps to assess damages and economic loss through post-disaster needs assessment (PDNA). Once the immediate crisis is addressed, experts also help countries plan, mobilize finance, and manage recovery, coordinating a range of interventions on the ground. This also provides an entry-point for GFDRR to work with countries on strengthening recovery systems.

In FY16, PDNAs were conducted in seven countries, including Ecuador after the 7.2 magnitude earthquake in April 2016; Myanmar following the flooding in August 2015; and Malawi after the drought in June 2016. Together, these six interventions have mobilized over \$650 million of the World Bank’s development assistance, in addition to investments made by other partners. The PDNA methodology is also being applied in other contexts, such as post-conflict and in-conflict situations. In collaboration with the World Bank, two assessments were undertaken in Syria, with an update anticipated every six months to ensure the analysis remains relevant. In Yemen, an assessment was developed by using satellite imagery, social media analytics, and field reports.

### Planning in the aftermath of a disaster

A disaster often serves as an entry point for discussions on planning for future shocks. GFDRR works with countries to develop post-disaster recovery frameworks as an essential step to post-disaster recovery. This has been a core focus of the initiative in FY16. For example, alongside the World Bank regional teams and other partners, GFDRR engaged the governments of Fiji, Malawi, and Nepal to put frameworks in place to strengthen their respective systems for resilient recovery and planning.

### Strengthening recovery systems

GFDRR supports vulnerable countries before disasters to enhance their readiness for post-disaster recovery and build institutional capacities for efficiently addressing post-disaster challenges. It runs capacity-building programs for target countries and regional organizations on conducting post-disaster assessments, developing recovery frameworks and planning recovery. In response to a request from the Vulnerable 20 (Finance Ministers of 43 countries vulnerable to climate change), GFDRR worked with the UN to develop the Global Preparedness Partnership (GPP) to help countries attain a basic level of readiness by 2020 to respond to future disasters and other risks. The GPP, announced at the World Humanitarian Summit (WHS) in May 2016, further reinforces GFDRR’s mission to strengthen recovery systems before disaster strikes.

### Going forward

GFDRR will continue to support governments in recovery following disasters with increased engagements to help countries be better prepared to respond to emergencies. In addition, the Facility will continue to advance the global dialogue through International Recovery Platform. GFDRR is co-organizing the third edition of the World Reconstruction Conference (WRC3) with the EU and the UNDP in Brussels on June 6-8, 2017.

### Assessing damage and loss when disaster strikes

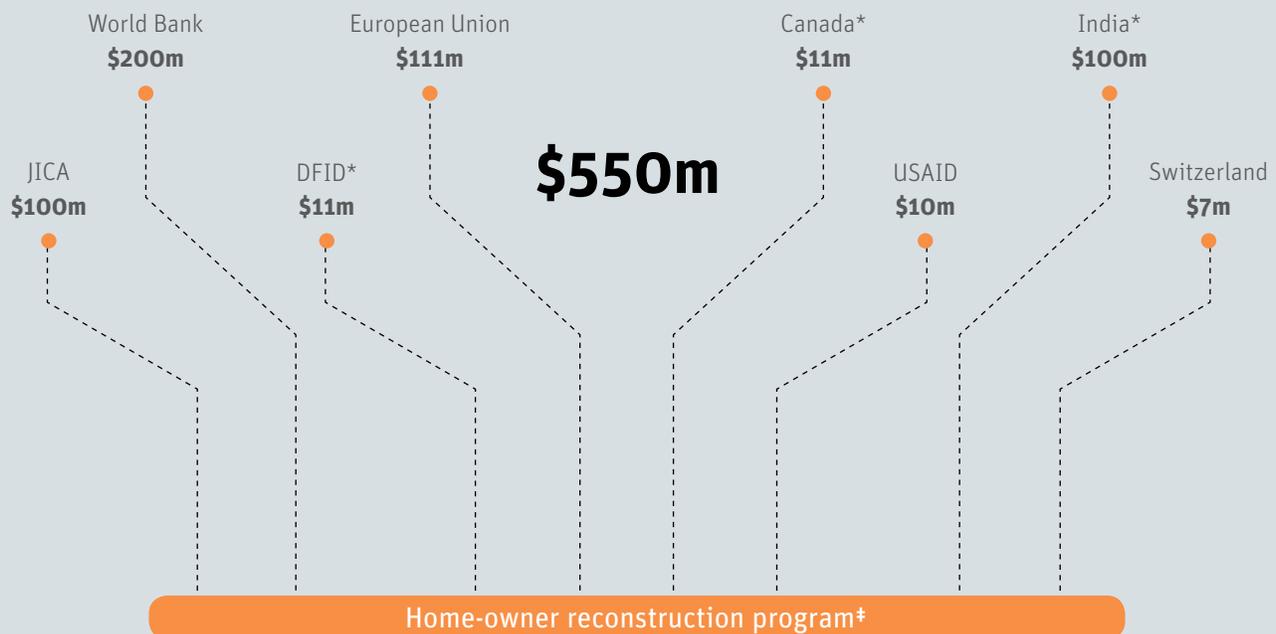
When countries request assistance after being hit by natural disasters or other shocks through protocols such as the tri-partite agreement, GFDRR and the World Bank—in partnership with the European Union and the United Nations—conduct a PDNA to assess the damage, loss, and recovery needs. A common, pre-agreed approach enables coordination among a range of partners including international organizations, government agencies within the country, and other relevant entities.

## In Focus Bringing donors together for Nepal’s reconstruction efforts

Since the devastating earthquakes that hit Nepal in 2015, GFDRR has continued to support the country’s recovery. GFDRR helped coordinate the findings of the PDNA, which led to \$4.4 billion in donor pledges, and provided technical support for the development of the post-disaster recovery framework, which was published in May 2016. These efforts supported the establishment of the National Reconstruction Authority, which was set up in December 2015.

GFDRR also informed the design of a large homeowner reconstruction program and provided financing for innovative solutions, which helped the government collect information for rebuilding houses in 14 of the most affected districts. Over the last year, GFDRR has played an instrumental role in coordinating over \$550 million in pledges for this program from a range of different partners, including JICA, the World Bank, Canada, Switzerland, and others.

This homeowner reconstruction program aims to rebuild multi-hazard resistant housing units to enhance the government’s ability to improve long-term disaster resilience. Through the program, the government is channeling housing grants to allow owner-driven housing reconstruction in target areas. The result of this effort has been impressive in its reach and scope. At present, over 400,000 beneficiaries have enrolled in the housing program, receiving over \$190 million in housing grants, with additional financing expected to be transferred to more participants in the coming months. Furthermore, 55,000 people now have a strong understanding of earthquake resilient reconstruction and 160,000 people have information on the ongoing project and investments, half of which are women. This will greatly improve rebuilding and reconstruction practices.



\*Donor pledges total \$1.5 billion

\*Some of this financing is forthcoming

# Empowering Women

Women typically outnumber men as victims of natural disasters, often because of cultural and behavioral restrictions on women's mobility and socially ascribed roles and responsibilities. Women are also less likely to benefit from relief and recovery efforts due to overall lower access to assets, services, and limited voice in policy and decision-making.

## At-a-glance

63

percent of FY16 approved grants were found to be gender-informed

40+

of FY16 approved grants had gender actions

Training on gender

for implementing partners being rolled-out

## Gender within GFDRR's portfolio

Over the past several years, GFDRR has increasingly emphasized the importance of gender dimensions in its activities. Through analytical and knowledge-sharing initiatives, GFDRR has strengthened the evidence base and promoted policy dialogue on gender and DRM. The Facility is also actively supporting a number of activities that seek to empower women to take an active role in protecting their communities.

In FY16, all projects were screened regarding whether they include gender as a cross-cutting theme, and 63 percent (67 out of 107) of grants approved were found to be gender-informed. Additionally, of these gender-informed projects, two-thirds included specific actions to address gender equality and women's empowerment in their design.

## Challenge

Over the last few years, a number of important analytical products that strengthen the evidence base have been developed. GFDRR supported the development of a series of guidance notes focusing on integrating gender considerations into DRM investments in the East Asia and Pacific Region. This included a publication on *Building Social Resilience: Protecting and Empowering those Most at Risk*, which highlights the benefits of increasing the role of women and other marginalized groups, in decision-making as a vehicle to strengthen broader community resilience.

While efforts to mainstream gender considerations into GFDRR operations are ongoing, a comprehensive strategy to increase awareness and build capacity of operational staff and government partners to understand and systematically address the gender aspects of disaster and climate risk management interventions has been lacking.

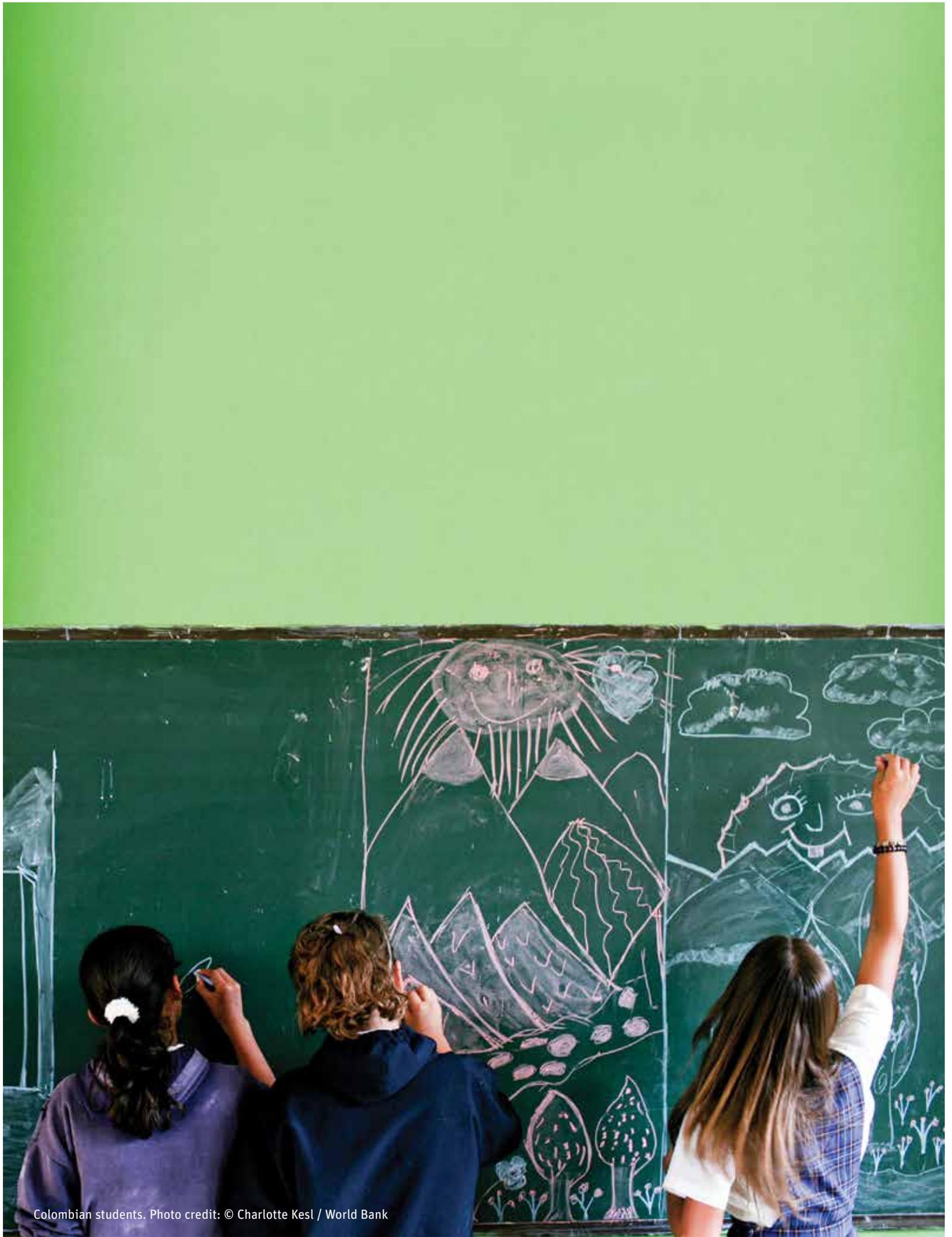
## GFDRR's Action Plan

To address this issue, in FY16, GFDRR assessed its efforts with respect to gender, evaluating achievements to date, identifying challenges and opportunities, and developing a strategic approach to address gaps. This exercise resulted in the *Gender Action Plan*, which was endorsed by the Consultative Group (CG) at its spring meeting in April. The plan establishes a baseline of current GFDRR investments on gender issues, identifies resource needs, and proposes a measurable path to achieve its goals.

A key objective of the *Gender Action Plan* is ensuring that disaster and climate risk management investments go beyond "gender screening," articulating specific actions and outcomes that address the differential vulnerabilities of women and men to hazards of DRM and empower women for broader resilience strengthening.

## Going forward

To monitor progress made on the Gender Action Plan, indicators to systematically report on gender will be introduced in GFDRR's M&E Framework. Investments in women's empowerment are underway, including a project in Somalia on Community Resilience and Gender-Based Violence and a project in Nepal and the Philippines to empower women, elders, and persons with disabilities in disaster recovery.



Colombian students. Photo credit: © Charlotte Kesl / World Bank

# Resilience to Climate Change

Building resilience to climate change is central to GFDRR's mandate to mainstream DRM into development operations and investment strategies. The Resilience to Climate Change (RCC) cross-cutting theme responds to increasing demand from countries to address both climate and disaster risks. There is growing international consensus that adaptation and DRM share many common solutions.

## At-a-glance

30

technical and implementation assistance grants approved

Scale-up strategy developed

to inform \$1b in additional financing

52 percent

of active grants contribute to climate resilience

## Climate within GFDRR's Portfolio

The growing importance of resilience to climate change is evident across GFDRR's portfolio. In FY16, 52 percent of the cumulative portfolio of active GFDRR grants—175 grants totaling \$144 million—included components relevant to climate resilience. This reflects a modest but steady increase from FY15, where the proportion was 49 percent (137 grants). GFDRR supports grants in countries that are vulnerable and exposed to climate-related hazards. Examples include technical assistance to national hydrological services, integration of DRR and climate change adaptation in development strategies, assessments of socio-economic impacts of disasters among vulnerable people, and rapid damage assessments of El Niño effects.

As a cross-cutting theme, grants support for climate resilience is embedded in activities across all geographic regions and thematic areas through: technical and implementation assistance; just-in-time support for demand-based capacity building; and analytical work.

## Technical and implementation assistance

In FY16, GFDRR approved over 30 technical and implementation assistance grants for climate resilience. For example, GFDRR provided support to reduce the impact of climate change on critical transport infrastructure for communication, connectivity and livelihoods in Bhutan and Nepal.

## Just-in time support for capacity building

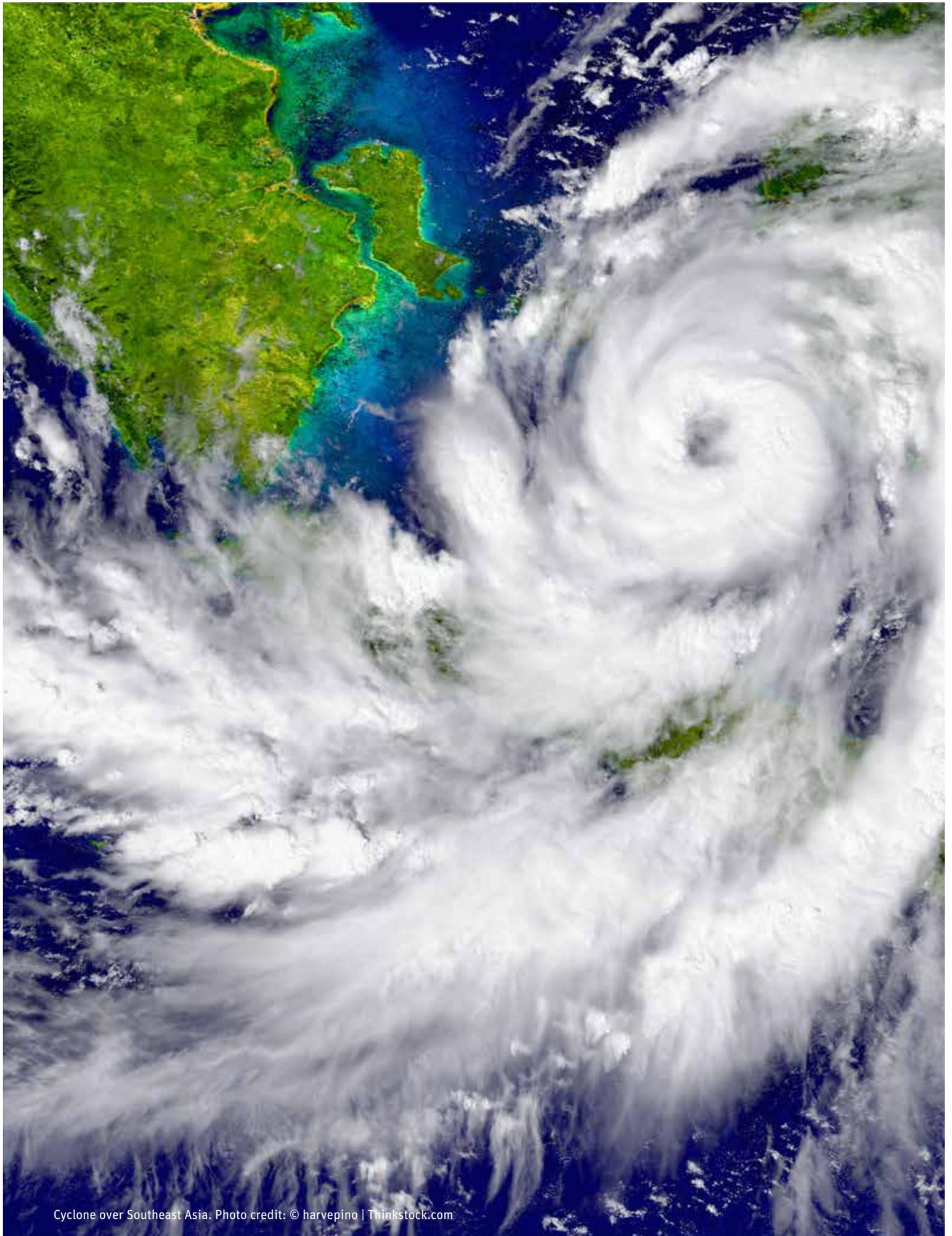
Six just-in-time grants were awarded for capacity building and advice activities on climate resilience in a number of countries in FY16. A GFDRR grant supported the government of Paraguay with financial assistance for El Niño Emergency Technical Assistance for Transport Infrastructure. This funding helped the Ministry of Public Works conduct an infrastructure damage assessment, which will enable integration of climate and disaster risk reduction measures in the transport sector.

## Analytical work

GFDRR supported the development of a qualitative and a quantitative study to develop socio-economic impact assessments on vulnerable groups exposed to natural disasters in Bolivia. The objective of the studies was to gain better knowledge of the linkages among DRM, climate change and poverty alleviation policies. A gender perspective has also been included by assessing whether/how women are disproportionately affected by flood and droughts. Both of the studies are informing and influencing the World Bank's Bolivia's Disaster Risk Management Development Policy Loan Program.

## Going forward

The Paris Climate Agreement of December 2015 created a major opportunity to scale up climate action. GFDRR aims to significantly scale up its support to climate resilience and help by influencing the design of larger development investments to target the most vulnerable countries.



Cyclone over Southeast Asia. Photo credit: © harvepino | Thinkstock.com





# FINANCING WINDOWS

GFDRR finances demand-driven technical assistance through a number of implementing partners. Financing Windows include a multi-donor trust fund (MDTF) funded by all donor members of GFDRR and two special programs financed by the European Union and Japan.

## Multi-Donor Trust Fund

68

new projects  
across 50 countries

## FY16 Overview

196

grants total  
\$140m

60

new publications  
and policy notes

The Multi-Donor Trust Fund (MDTF) is the central vehicle through which GFDRR achieves its ambition. The MDTF finances the implementation of GFDRR's mission to help build resilient societies that manage and adapt to emerging disaster and climate risks, and contribute to the substantial reduction of disaster risk and losses. It implements activities as outlined in the annual Work Plan and approved by the CG, which provides strategic direction to the Facility. As a result, the program funded through the MDTF is reflective of the full scope of expertise that GFDRR offers.

The MDTF pools funding from all of GFDRR's donors, enabling a coordinated approach for scaling up disaster resilience and reducing fragmentation of financing that often is detrimental to achieving large-scale impact. The MDTF continues to finance activities that mainstream DRM into national as

well as global development priorities. For example, in addition to the Country Program, the MDTF finances GFDRR's efforts to promote global dialogues and initiatives, as well as develop knowledge products and innovative tools.

*The Country Program:* As described earlier in the report, GFDRR implements the majority of its activities through the Country Program. In FY16, grants from the MDTF supported over 50 countries to mainstream DRM in their investment strategies. With financing from the MDTF, GFDRR supports countries to implement policies and activities that target coherence across development. Additionally, financing from the MDTF allows GFDRR to maintain thematic initiatives that provide specialized technical support to the Country Program.

*Global Dialogues and Initiatives:* Through the MDTF, GFDRR engages actively in the global resilience agenda, and convenes stakeholders to scale up global action on resilience. In FY16, the MDTF financed GFDRR's engagement in a number of international events that included the Sustainable Development Goals (SDGs), 21st Conference of Parties, etc.

*Knowledge Products and Innovative Tools:* GFDRR strives to remain a global leader in convening and sharing knowledge and best practices within the DRM community. In FY16, the MDTF financed the production of over 60 publications such as *Shockwaves: Managing the Impacts of Climate Change on Poverty*, as well as new innovative tools such as *ThinkHazard!*, among others.

### THE MDTF AS A STRATEGIC FINANCING INSTRUMENT

GFDRR has effectively utilized the MDTF as a strategic tool to explore new initiatives and promote global dialogue and knowledge exchanges while maintaining its support for country programs. In the first five years of the MDTF, support for global dialogue and the development of knowledge products and tools averaged 18 percent of MDTF financing. Over the last five years, this average increased to 33 percent of MDTF financing. Over the same period of time, financing for country programs through the MDTF remained relatively stable.

GFDRR has supported an increasingly diverse number of projects for the past ten years, which has been critical to meeting its strategic agenda. Through these projects, GFDRR has been able to facilitate knowledge exchanges by organizing and hosting events such as Understanding Risk and the World Reconstruction Conference (WRC); promote the disaster risk management agenda at the international level by supporting events such as the Resilience Dialogue Series, the Asian Ministerial Conference on DRR, and the World Conference on Disaster Risk Reduction (WCDRR) in Sendai, and exploring new initiatives such as strengthened civil society partnerships, the Global Program for Safe Schools, the Open Data for Resilience Initiative (OpenDRI), and the Building Regulations for Resilience Program.

## The Consultative Group

The Consultative Group (CG) is GFDRR's primary decision-making and advisory body. It is composed of Members and Observers.

GFDRR's members include countries, intergovernmental organizations, international financial institutions, and UN agencies that commit to contributing at least \$3 million or an equivalent amount over a three-year period to the MDTF. To encourage the participation of developing countries as Members, the threshold for contribution is much lower, equivalent to \$500,000 over a three-year period. Similarly, developing countries that receive GFDRR support can be invited to serve as non-contributing members, when invited by the CG for a one-year renewable term.

GFDRR's Observers include prospective Members for the CG as well as intergovernmental organizations, international

financial institutions, and UN agencies whose activities complement GFDRR's mission. Additionally, developing countries, civil society organizations, private sector organizations and foundations are also invited as observers as agreed by the CG.

The CG meets twice a year to ensure coherence in discussion regarding current and future directions of the Facility's work program. The meetings are often accompanied by a Knowledge Partnership Day, which provides a platform for GFDRR's extensive network of partners to showcase their work and draw on synergies with the engagements of different players in the DRM community. Each year, a co-chair is selected by consensus among Members for a one-year term. In FY16, Germany served as the co-chair of the CG and Switzerland was appointed to succeed Germany for a one-year term in FY17.

## ACP-EU

The Africa Caribbean and Pacific–European Union Programs

The Africa Caribbean and Pacific Program (ACP)-European Union (EU) Natural Disaster Risk Reduction (NDRR) was launched in 2011 to support DRR and climate change adaptation activities. With \$75.6 million in contributions from the EU, the Program is managed by GFDRR in close collaboration with the ACP Secretariat.

The Program’s objective is to strengthen climate and disaster resilience in ACP countries by focusing on GFDRR’s priorities: (i) mainstreaming DRR; (ii) risk identification and risk reduction; (iii) early warning systems and communication; and (iv) risk transfer

**9**  
new projects in Côte d’Ivoire, Dominica, DR Congo, Fiji, Lesotho, Saint Lucia, Seychelles, Suriname, and one ACP-EU-wide project

and integration of DRR and recovery. The ACP-EU program also supports knowledge-sharing activities and targeted analytical work. As of FY16, projects are active in more than 40 countries.

*Regional-level* projects strengthen regional and sub-regional cooperation to advance ACP countries’ national disaster risk reduction agendas.

*Country-level* projects provide demand-driven technical assistance for DRR and climate adaptation policy development and implementation. This helps strengthen the technical advisory capacity in ACP countries.

## FY16 Overview

**80**  
ongoing projects in 40 countries equivalent to \$53 million

**3**  
PDNAs supported in Dominica, Fiji, and Seychelles

*Post-disaster and capacity-building* activities offer quick support to ACP countries after a disaster strikes. With rapid technical assistance, GFDRR supports countries to build back better, strengthen ex-ante capacity for PDNAs, and foster mainstreaming of DRR in recovery planning. In FY16, three post-disaster assessments were financed under the ACP-EU NDRR Program in Dominica after Tropical Storm Erika, in Fiji after Tropical cyclone Winston and in Seychelles post Tropical Cyclone Fantala. In Fiji, the World Bank provided the Government with a \$50 million emergency development policy operation following the PDNA.

### GFDRR’S PARTNERSHIP WITH THE EUROPEAN UNION

The EU is a key partner to GFDRR as well as its single largest donor. The largest part of this collaboration focuses on improving climate and disaster resilience through various programs in the Africa, Caribbean and Pacific (ACP). Collaboration with the EU has expanded since 2014, with new programs launched to support DRM activities in South Asia and Serbia, as well as support for thematic initiatives such as disaster risk financing.

Alongside GFDRR and other key partners, the EU has also played an active role in supporting the partnership of GFDRR, the World Bank, the EU, USAID and Japan, which has focused on local action to address fragility and disaster resilience. The EU and GFDRR jointly push for effective integration of DRM into the global development agenda and links among DRM, poverty reduction, and climate change adaptation.

The tripartite agreement, which is a joint declaration by the EU, the UN, and the World Bank, on Post-Crisis Assessments and Recovery Planning, aims to mobilize partners and their resources to harmonize and better coordinate post-crisis frameworks. GFDRR plays a key role on coordinating action across the three actors, as well as with other international and domestic actors. These institutions have collaborated on more than 40 post-disaster assessments since 2008, and more recently, jointly issued a PDNA Guide and a Recovery Framework in 2015 at the World Conference on Disaster Risk Reduction.

# Building Disaster Resilience in Sub-Saharan Africa

*Building Disaster Resilience to Natural Hazards in Sub-Saharan African Regions, Countries and Communities* was launched at the Financing for Development Conference in Addis Ababa in July 2015. The overall objective of this initiative is to strengthen the resilience of sub-Saharan African regions. To achieve this objective, five Result Areas were identified and are being implemented by several partners, including the African Development Bank (AfDB), African Union Commission (AUC), United Nations Office for Disaster Risk Reduction (UNISDR) and the World Bank. GFDRR helped coordinate the World Bank's engagement in two of the result areas—Result 2 (\$24 million) and Result 5 (\$24 million).

*The African Regional Economic Communities Program (RECs) (Result 2)* contributes to developing the coordination capacity of RECs by enhancing their coordination, planning, and policy advisory capacities. Participating RECs include the Economic Community for Central African States (ECCAS), the Economic Community of West African States (ECOWAS), the Intergovernmental Authority on Development (IGAD), and the Southern African Development Community (SADC).

As of FY16, activities implemented focused on policy dialogue, flood management, risk management, preparedness, and capacity building:

- ECCAS established a new DRR unit and launched the Central Africa Parliamentarians Network for Natural Disasters Resilience
- The ECOWAS DRR Plan of Action 2015-2030 in line with Sendai framework was drafted.
- IGAD signed the grant agreement for the IGAD - Building Disaster Resilience through Risk Management and Climate Change Adaptation Project.
- SADC formulated a comprehensive work program for 2016 and 2017.

*The Africa Disaster Risk Financing (ADRF) initiative (Result 5)*, structured along three components, aims to support the development of multi-risk financing strategies at regional, national, and local levels to help countries make informed decisions. In FY16, about 800 people were trained on DRM and a number of outputs were delivered: five risk profiles, two studies, four diagnostic reports, and one conference.

- *Component 1: Creating the enabling data environment for risk financing.* Multi-hazard risk profiles were developed for Ethiopia, Kenya, Niger, Senegal, and Uganda.
- *Component 2: Supporting countries in developing risk financing strategies.* Engagement began with 11 countries on identifying countries' need and priorities in risk financing.
- *Component 3: Facilitating regional risk financing and knowledge sharing initiatives.* The UR&F Conference attracted 450 participants and a wide range of African partners including AfDB, Addis Ababa University, African Risk Capacity (ARC) and others.

# Japan-World Bank Program

for Mainstreaming Disaster Risk Management in Developing Countries

The Japan-World Bank Program for Mainstreaming DRM in Developing Countries was launched in 2014 to help developing countries integrate DRM into national development planning and investment programs. Managed by GFDRR, this technical assistance program is financed by a \$100 million contribution from the Ministry of Finance, Japan (MoF).

24  
projects in  
37 countries, of which  
11 started in FY16

As of FY16, the Japan-World Bank Program has supported activities in over 37 countries. It has also enabled knowledge activities that build country capacity through documenting and sharing best practices in DRM. The Japan Program supports a DRM Hub, Tokyo, which enhances GFDRR's activities by connecting Japanese expertise and knowledge in DRM to

## FY16 Overview

33  
events that reached  
over 2,000 people

9  
new projects started  
to facilitate knowledge  
exchanges

country demand on the ground. Specific areas of focus include: (i) resilient infrastructure; (ii) resilient cities; (iii) science and technology for resilience; and (iv) inclusive resilience.

### GFDRR'S PARTNERSHIP WITH JAPAN

Japan has been a member of GFDRR and a strong partner of the Facility since its inception in 2007. The partnership between GFDRR and Japan expanded after the devastating 2011 Great East Japan Earthquake. As a result, in 2014, Japan launched the Japan-World Bank Program for Mainstreaming DRM in Developing Countries.

The program has facilitated a number of partnerships with Japanese counterparts from government. This includes the Japan International Cooperation Agency (JICA), MoF, the Ministry of Land, Infrastructure, and Transport, and the Ministry of Education, academia and research institutes, and the private sector through platforms like the Japan Bosai Platform.

Through the Japan Program, in FY16, GFDRR has fostered collaboration with JICA on the ground. This includes operational coordination and financing for resilience investments in Bangladesh and Nepal; training for better hydromet services in the Pacific; and coordinating dialogue on risk-reduction and risk-financing investments in the Philippines.

## Sharing Japanese Expertise with Partners

One important aspect of the partnership with Japan is to provide developing country DRM practitioners with a better understanding of how to integrate and apply DRM lessons and approaches in domestic policies and contexts. In FY16, the DRM Hub, Tokyo developed and organized Technical Deep Dives (TDD) in partnership with the World Bank's Tokyo Development Learning Center (TDLC). Intensive multi-day knowledge exchanges, TDDs are designed to bring public officials and teams from developing countries to Japan to share relevant experience and solutions applicable to project design and implementation.

The first TDD was held in April 2016 and focused on integrated urban flood risk management. This TDD provided partners from Argentina, Ghana, Indonesia, Lao PDR, Madagascar, Nigeria, Solomon Islands, and Vietnam first-hand knowledge on this topic, and also engaged Government of Japan counterparts and the World Bank's Urban Floods Community of Practice.

Participants strengthened their knowledge of the challenges faced within their home countries and learned from the experiences of others, including Japan. They gained practical lessons on topics including the importance of institutional and legal reforms, stakeholder coordination, integration of structural and non-structural measures, and risk-informed land-use planning.

TDDs have proved to be an important way to connect the ongoing operational needs of countries with experts. Following their participation in the April TDD, government officials and teams working in Ho Chi Minh City, Vietnam requested support to enhance the quality of a planned flood control center as part of a larger-scale investment in flood risk management. GFDRR and TDLC worked together to connect them with experts from MLIT, JICA, the University of Tokyo, and Tokyo University. They also brought officials from the City of Yokohama, Japan, which faces tremendous river and flooding hazards, to inform a workshop on next steps for the project in Ho Chi Minh.





# INTERNATIONAL EVENTS

GFDRR actively engages in global dialogue and works with partners to ensure that the resilience agenda remains central to global policy discussions.

# Paris Agreement

In December 2015, the international community made great advances by placing the climate agenda at the center of national priorities for 157 countries, which signed the Paris Agreement at the 21st Conference of Parties in Paris (COP 21). The Paris Agreement is the first of its kind, marking global recognition of the disastrous effects of climate change on sustainable development and indicating a serious commitment to limiting the temperature increase to an ambitious goal of 2 degrees, or even 1.5 degrees celsius.

A key component of the climate agreements is that all countries should report on their emissions and implementation efforts, including adaptation priorities through the development of Nationally Determined Contributions (NDCs), where countries determine their contributions in the context of their national priorities, circumstances, and capabilities. Over

160 countries prepared their NDCs outlining their priorities for the next fifteen years. A significant percentage of NDCs prioritize adaptation and resilience, placing an emphasis, for example, on investments in the development of early warning systems. This is a clear indication that countries recognize climate change exacerbates disaster risk.

Given the importance of this agenda—and the inter-related risks associated with climate change, disasters, and poverty—building resilience to climate change is central to GFDRR’s mandate of mainstreaming DRM into countries’ development planning and investments.

At COP21, GFDRR led several successful campaigns to strongly position the climate change adaptation and DRM within the global arena. At the event, GFDRR helped facilitate participation of several high-level delegates from international institutions to further

advance the resilience agenda.

GFDRR also launched several flagship reports on DRM including *Shockwaves: Managing the Impacts of Climate Change and Poverty and the Triple Dividend of Resilience*.

Additionally, GFDRR also engaged in several events within the risk financing and insurance industry. In partnership with JICA, GFDRR was involved in an event that shared a scientific evidence-based approach in bringing about effective policy investments in hydro-related areas. Furthermore, GFDRR is a partner of the Insurance Development Forum (IDF), which was announced at the Opening Ceremony of COP21. The IDF aims to incorporate insurance industry know-how into existing governmental DRR and resilience and build a more resilient global insurance market in a world facing growing natural disaster and climate risk.

## CREWS: UNISDR, World Bank, and WMO Coordinate Efforts on Early Warning Systems

Lack of effective early warning systems in low-income countries is well recognized as an important issue. International attention toward the need for strengthened early warning increased significantly after the Indian Ocean Tsunami in December 2004, as well as following the adoption of the Sendai Framework, which highlighted the need for multi-hazard early warning systems.

At the Sendai Conference, France announced a target to mobilize the international community to support early warning systems in the most vulnerable countries, targeting least developed countries and Small Island States, which became the basis for the Climate Risk and Early Warning Systems (CREWS) initiative. The initiative was launched at COP21 in December the same year.

GFDRR was an active contributor to the establishment of CREWS. Program funding from CREWS will contribute to

narrowing the gap between priority needs in developing countries and available funding. The implementing partners include UNISDR, WBG/GFDRR, WMO, given their complementary strengths and breadth of analytical, technical, and operational knowledge. The proposed integrated approach of focusing on multi-hazard early warning systems will help to address key systemic deficiencies, including building long-term capacity and sustainability.

By bringing together three of the leading global actors for early warning, which serve as coordination mechanisms between DRM and hydrometeorological services, CREWS will formalize donor and agency coordination for early warning systems. CREWS will leverage the broader coordination mandates of implementing partners to provide a formal process and space for focused discussions, planning, and reporting specifically on early warning systems.

# World Humanitarian Summit

In May 2016, the international community convened for the first-ever World Humanitarian Summit (WHS) in Istanbul, Turkey. The summit brought together 9,000 participants from 173 Member States, including 55 Heads of State and Government, and strong representation from private sector, civil society and non-governmental organizations. In its 70 years, this was the first time that the United Nations came with as many different stakeholders to discuss the pressing challenges that are resulting in so much suffering today. This is a recognition that today's challenges can only be adequately addressed through the collaboration of national governments, civil society, people affected by crises, the private sector, national and international organizations, and others.

Given the interrelation between conflict, fragility, and disasters, GFDRR closely followed discussions leading up to the WHS and supported dialogue on the three elements. Furthermore, GFDRR actively participated at WHS, supporting and organizing several events, including high-level round tables on “Humanitarian Financing” and “Managing and Preparing for Disasters Differently.” At the summit, GFDRR partnered with the Government of Germany to release a report on “Disaster, Conflict, and Fragility: A Joint Agenda,” to develop a better understanding of this space and identify ways in which GFDRR can strengthen its engagement in adopting a more holistic approach to address multiple risks.

A key announcement at WHS was the launch of the Global Preparedness Partnership. GFDRR played a key role in formalizing this partnership, which is led by the Vulnerable Twenty Group of Ministers of Finance (V20) of the Climate Vulnerable Forum, representing 43 high-risk developing nations, in collaboration with the World Bank, GFDRR and a number of UN agencies including the Food and Agriculture Organization (FAO), the Office for the Coordination of Humanitarian Affairs (UNOCHA), the United Nations Development Programme (UNDP), and the World Food Programme (WFP). The partnership will strengthen preparedness capacities initially in 20 countries, so they attain a minimum level of readiness by 2020 for future disaster risks mainly caused by climate change.

## BRIDGING THE FRAGILE, CONFLICT, AND DISASTERS NEXUS

Conflict in Nigeria has claimed over 20,000 lives and displaced nearly two million people since 2014. In FY16, GFDRR responded to the government's request for an assessment of the needs associated with peacebuilding and crisis recovery. To conduct the assessment, GFDRR, in collaboration with the World Bank, organized and coordinated international experts from the European Union and the United Nations, as well as national experts from six northeastern state and federal line departments. Part of this effort included using satellite-imagery-based technology and social media analytics, making this the largest-scale assessment to use this technology, which helped to fill information gaps and validate baseline and damage data. The completed assessment has been instrumental in informing the priorities of all projects in the country.

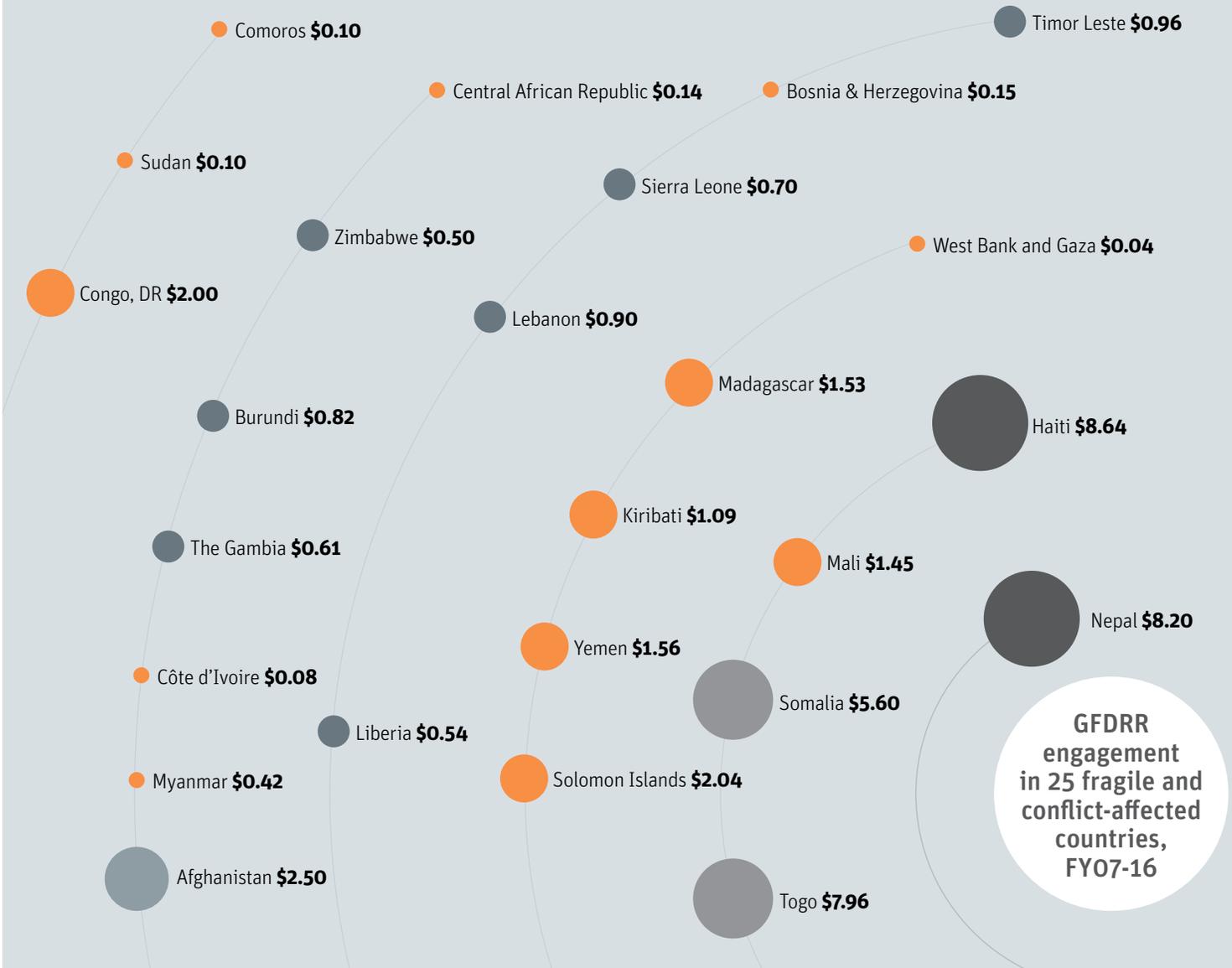
# GFDRR's Support in Fragile and Conflict-affected States

Over the years, GFDRR has continued to support engagements in fragile and conflict-affected states\*. More recently, these engagements, however, have evolved with the changing needs of countries by adapting post-disaster methodologies to post-conflict scenarios. In FY16, GFDRR supported 17 fragile and

conflict affected countries' efforts to build resilience through 35 grants worth \$29 million. Demand for GFDRR's expertise is growing, due to increased need, but also GFDRR's timely response to post-disaster needs in fragile and conflict-affected contexts, as well as being able to apply its methodologies to areas where access

is not possible. Since 2007, GFDRR has mobilized \$48.6 million in investments to support 25 fragile and conflict-affected countries, including Afghanistan, Central African Republic, the Democratic Republic of the Congo, Haiti, Lebanon, Madagascar, Mali, Nepal, Sudan, Syria, Timor-Leste, Togo, and Yemen.

\* Each year, The World Bank Group's (WBG) Fragile, Conflict and Violence Group (formally the Center on Conflict, Security and Development CCSD) releases the Harmonized List of Fragile Situations. For the most up-to-date information, please see: <http://www.worldbank.org/en/topic/fragilityconflictviolence/brief/harmonized-list-of-fragile-situations>







# CAPACITY BUILDING AND ANALYTICAL WORK

GFDRR continues to generate knowledge and promote efforts to share best practices among partners and recipient countries. GFDRR also strives to build the capacity of developing countries to be able to use and apply best practices for implementing DRM solutions.

Vivien Deparday, part of GFDRR's OpenDRI team, trains UR2016 attendees on OpenStreetMap to assist in the response to the Sri Lanka floods that started on May 2016. Photo credit: Emanuele Basso

# Capacity Building

GFDRR's portfolio analysis indicates that a significant proportion of its resources—up to 24 percent annually—contributes to building the capacity of developing countries in order to help them better understand emerging disaster risks, reduce their vulnerabilities to natural hazards, and adapt to climate change.

In FY16, GFDRR developed a detailed stock-taking report to better understand the impact of its capacity-building activities. The effort evaluated FY14 and FY15 grants, focusing on “human” capacity building—developing and sharing knowledge and skills, as well as consensus and network building. The report outlines best practices, provides guidance on operational steps and considerations leading to the most effective activities, and provides recommendations as to how GFDRR can improve the value of its capacity building efforts.

The report findings show that the primary beneficiaries of GFDRR's capacity-building activities include government and institutional counterparts. Over the past few years, GFDRR capacity-building activities have reached 64 countries. Of the 300 grants analyzed, 109 included activities that reached government counterparts, while 191 grants targeted building capacity of institutional counterparts. A large number of resources are diverted toward short-term learning activities and knowledge products. Fifty-nine percent of the grants analyzed incorporated at least one short term learning activity and 31 percent reported at least one knowledge product. While capacity building remains an element of most of GFDRR's projects, it is rarely the sole focus; only a small portion of grants had as much as 50 percent of total resources allocated to capacity-building activities.

The analysis identified key areas for GFDRR to better track the impact capacity-building activities:

- Improving monitoring and evaluation at the project and portfolio level.
- Improving mechanisms for sharing knowledge, best practices and lessons learned.
- Coordinating and facilitating training and e-learning for developing country counterparts.
- Providing training and resources for project leaders to support well-designed approaches to capacity-building activities.

Capacity building remains a critical component of GFDRR's work. It is only through this transfer of knowledge and technical expertise that programs will be sustained, and ultimately, owned at the local level.

## CENTRAL AMERICA PROBABILISTIC RISK ASSESSMENT

The Central America Probabilistic Risk Assessment (CAPRA) Program began in 2008 to create a free and open-source probabilistic risk assessment platform. What started with engagements in five Central American countries rapidly expanded to three Latin American countries. The project effectively built long-term institutional capacity in disaster-prone countries to develop and communicate risk information. The initiative demonstrated that disaster risks can be quantified, understood, and ultimately integrated into policies and development planning. The CAPRA program supported the construction and consolidation of a community of experts in disaster risk assessment at both a country and regional level. Local CAPRA teams, often composed of experts from government, academia, and the private sector are now building upon the generated data, acquired skills, and impetus for action to integrate risk information into policies and investment programs. These groups of experts are now working independently, expanding studies initiated with GFDRR funding and providing training to other practitioners to continue growing the community. CAPRA was a true precursor initiative. It demonstrated the potential of risk-assessment platforms and inspired a number of similar programs that have been subsequently launched. GFDRR support to the program ended in FY16, when the Universidad de los Andes in Colombia was selected to take over the full management of the CAPRA initiative and community.

# Selected FY16 Capacity-building Engagements

**GUATEMALA, HONDURAS, INDIA**  
1500 women were trained to become community resilience leaders.

**ITALY**  
Understanding Risk  
431 participants were trained in 34 side events, with 106 total number of training hours.

**DJIBOUTI, EGYPT, LEBANON**  
Organized a multi-stakeholder Resilient Cities Forum to share knowledge and develop networks, and a Women Entrepreneurship Resilient Cities Competition strengthened donor cooperation for DRM.

**JAPAN**  
Developed and disseminated Knowledge Notes drawing lessons from the Great East Japan Earthquake for the benefit of developing countries.

**HAITI**  
Facilitated in-country dialogue and strengthened donor cooperation for DRM.

**EL SALVADOR, NICARAGUA**  
Trained local teams to generate and interpret risk data through local and regional workshops.

**ETHIOPIA**  
Understanding Risk & Finance  
230 participants were trained in 16 sessions, with a total of 56 hours of training provided.

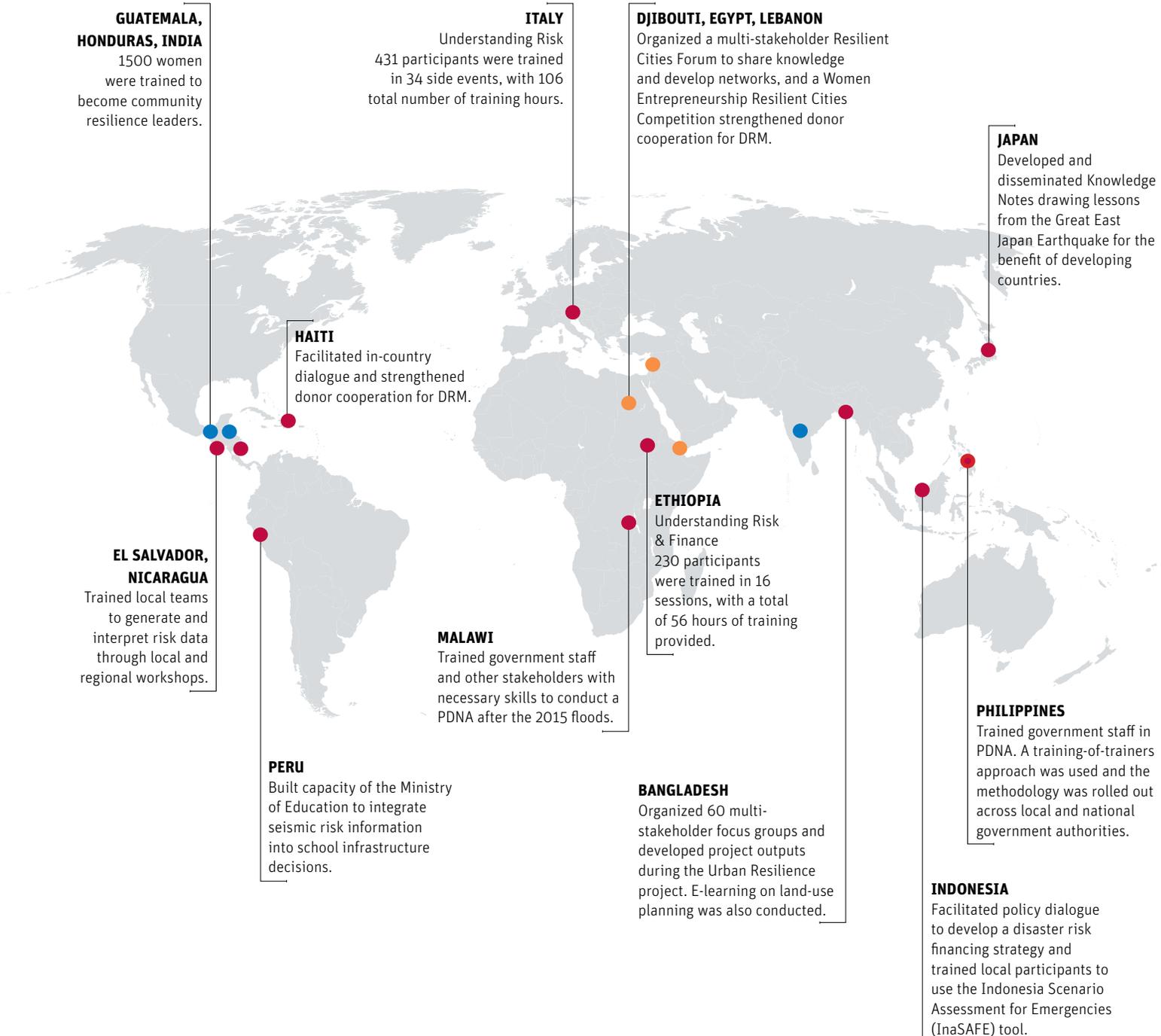
**MALAWI**  
Trained government staff and other stakeholders with necessary skills to conduct a PDNA after the 2015 floods.

**PERU**  
Built capacity of the Ministry of Education to integrate seismic risk information into school infrastructure decisions.

**BANGLADESH**  
Organized 60 multi-stakeholder focus groups and developed project outputs during the Urban Resilience project. E-learning on land-use planning was also conducted.

**PHILIPPINES**  
Trained government staff in PDNA. A training-of-trainers approach was used and the methodology was rolled out across local and national government authorities.

**INDONESIA**  
Facilitated policy dialogue to develop a disaster risk financing strategy and trained local participants to use the Indonesia Scenario Assessment for Emergencies (InaSAFE) tool.



# Measuring Resilience

GFDRR remains a leader in developing knowledge, and convening, and sharing best practices within the DRM community. Strides are being made to develop analytical tools to evaluate the benefits of investing in disaster resilience and measure its impacts, and ensure sustainability of development projects.

## Engaging financial institutions on dialogue on socio-economic benefits of DRM

To incentivize greater investment in resilience interventions, GFDRR has been working with partners to strengthen the business case of DRM and climate adaptation. In December, GFDRR launched the The Triple Dividend of Resilience, which outlines a framework around benefits from resilience by: (i) avoiding disaster losses; (ii) stimulating economic activity; and (iii) capturing multi-purpose benefits of resilience interventions. Efforts are underway to help build the evidence base for benefits from DRM through case studies to measure—for example, impact on investments and savings due to change in behavior. To scale up this effort, and identify quantitative ways to capture these benefits, GFDRR is facilitating dialogue with multilateral development banks to improve and align practices in economic evaluation of benefits from DRM.

## Helping countries measure their resilience to natural hazards

With technical and financial assistance from GFDRR, the World Bank has developed a resilience indicator tool that combines data on hazard, exposure, and vulnerability with data on poverty incidence, household-level income diversification, and institutional and financial preparedness. This tool allows decision-makers to compare a wide range of policies, which helps facilitate dialogue across a range of key stakeholders. So far, the tool has been applied at the country level in 120 countries, with a few pilots starting at the sub-national level in Bolivia, the Philippines, and Vietnam. At the subnational level, the tool will support decision-making regarding priority areas for intervention. In the Philippines, National Economic Development Authority (NEDA), the economic planning agenda is considering use of this tool to update their list of provinces considered to be priorities for disaster risk interventions.

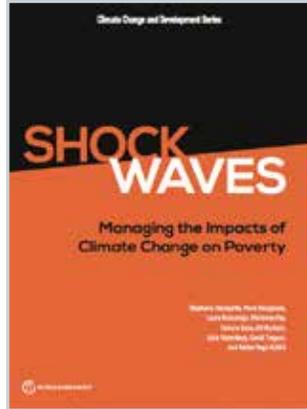
## Improving the resilience of development projects through Robust Decision-Making (RDM)

RDM techniques embrace uncertainty about socio-economic and natural uncertainties and identify projects that perform well under a wide range of possible futures. In FY16, a few pilot projects already demonstrated successful results, while work is underway in Bangladesh and Mozambique. For instance, the World Bank worked with the water utility serving Lima, *Servicio de Agua Potable y Alcantarillado de Lima* (SEDAPAL), to ensure long-term water reliability in the face of drought, climate change, and population growth by drawing on methods for decision-making under uncertainty. The study helped SEDAPAL realize that not all projects in its master plan needed to achieve water reliability, and this could save over \$600 million. GFDRR will continue to scale up financial and technical support to influence the World Bank's project selection and design, ensuring sustainability of projects.



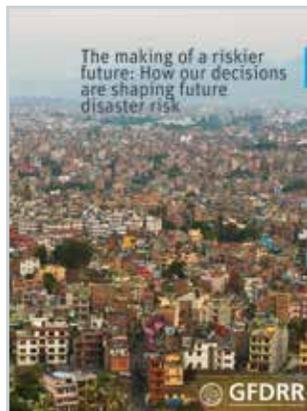
# Publications

In FY16, GFDRR released over 60 new publications and policy notes, continuing to play a leading role in generating new and innovative knowledge. This section showcases a select number of flagship reports. All FY16 GFDRR publications are available at: <https://www.gfdr.org/sites/default/files/GFDRR-PUB-CAT-FALL2016.pdf>



## Shock Waves

This report brings together two overarching objectives of ending poverty and addressing climate change, and explores how they can be more easily achieved if considered together.



## The Making of a Riskier Future: How our decisions are shaping future disaster risk

Most disaster risk assessment today is static, focusing only on understanding current risks. A paradigm shift is needed toward dynamic risk assessments, which reveal the drivers of risk and the effectiveness of policies focused on reducing risk. Accurate assessment and continuous reevaluation of risk

are required to enable effective risk reduction and prevent drastic increases in future losses.



## Building Regulation for Resilience

This publication focuses on how the building regulation process can be enhanced in order to save lives and reduce destruction from disaster and chronic risks.

## Fiscal Disaster Risk Assessment and Risk Financing Options

The objective of this report is to raise awareness of the fiscal impacts that natural disasters have on the budget of the Government of Sri Lanka.





## Disasters, Conflict, and Fragility: A Joint Agenda

At the Fall 2015 meeting of GFDRR's Consultative Group (Berlin, 28-29 October, 2015), the Secretariat was asked to prepare a discussion paper on the nexus between natural disasters, conflict, and fragility in order to guide GFDRR activities in the future. This version of the paper is jointly sponsored by GFDRR and the Government of Germany.



## Disaster Recovery in Conflict Contexts: Thematic Case Study for the Disaster Recovery Framework Guide

This document does not go into the detail of the DRF guide, but rather

focuses on how recovery frameworks must be informed within a disaster-conflict nexus. At a structural level, a recovery framework for disasters in a conflict context resembles other disaster recovery frameworks. However, that should not overshadow the critical need for conflict sensitivity through a nuanced consideration of the local political context, the two-way relationship between intervention/action and conflict, and how both will inform the recovery effort.



## SISRI Knowledge Notes: Managing Population Retreat from At-Risk Areas

Relocating populations away from at-risk areas is a challenging process, but increasingly necessary in Small Island States, where communities face imminent hazards to life and property due to factors such as sea-level rise, coastal erosion, and flood risks. A participatory process of population retreat can save lives and enhance the livelihoods of community members. São Tomé and Príncipe and Samoa offer valuable lessons on how to manage such a process.



## SISRI Knowledge Notes: Building Resilience through Social Protection

Small Island States can work toward adaptive and responsive Social Protection systems at varying levels of maturity and sophistication. By aligning Social Protection provision with resilience objectives, countries could more effectively help vulnerable households adapt to climate change, prepare for disasters, and restore livelihoods quickly should a disaster strike.

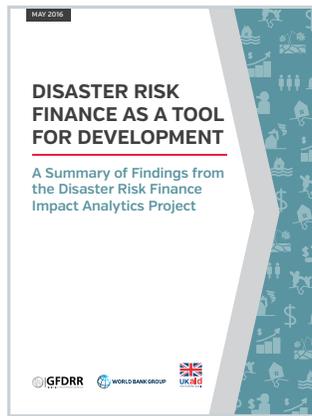


## Toward a Regional Approach to Disaster Risk Finance in Asia

Asia is at high risk of catastrophic disaster and climate shocks that cause damage and erode welfare and economic gains. Financial protection strategies have been recognized by

# Publications

countries and their development partners as important tools to protect countries from these effects and thereby support them in reducing poverty and increasing shared prosperity.

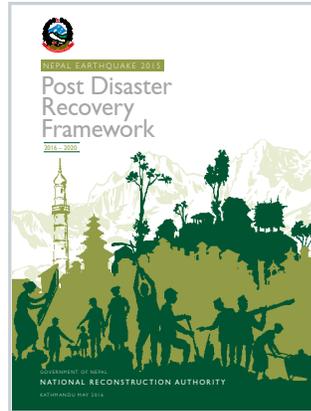


## Disaster Risk Finance as a Tool for Development: A Summary of Findings from the Disaster Risk Finance Impact Analytics Project

The Disaster Risk Finance Impact Analytics Project has made significant contributions to the understanding of how to monitor and evaluate existing or potential investments in disaster risk finance from a development perspective, and to the evidence base for where such investments have development impact. This note summarizes the findings of this project, presenting the key messages of a book, a technical report, and 14 research papers.

## Nepal Earthquake 2015: Post-Disaster Recovery Framework 2016-2020

The Post-Disaster Recovery Framework (PDRF) lays out strategic recovery objectives and summarizes in an integrated manner the policy decisions, institutional arrangements,



financing, and financial management strategies, as well as implementation and monitoring systems that are being put in place to plan and manage recovery and reconstruction. It also sets out sector priorities that will contribute to the achievement of the strategic recovery objectives.

## Disaster Risk Financing Country Note – Serbia

This Disaster Risk Financing Country Note is the first activity to take stock of existing mechanisms and instruments to finance disaster response and to lay the foundation for the development of a comprehensive disaster risk financing strategy in Serbia.

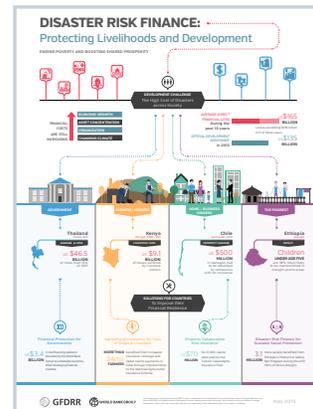


## Open Data for Resilience Initiative – Policy Note

The Open Data for Resilience Initiative (OpenDRI) was launched in 2011 to bring the policies and practices of the global open data movement to bear on the challenges of reducing vulnerability to natural hazards and the impacts of climate change. OpenDRI projects work to improve processes surrounding the sharing, creation, and communication of risk data.

## Disaster Risk Finance: Protecting Livelihoods and Development

This infographic shows how disaster risk financing can contribute to ending poverty and boosting shared prosperity.



## Review of InterMET Asia 2016

InterMET Asia 2016 was the third annual event in the series. The primary focus of the event is on those applications and areas which are likely to become more important users of meteorological technology and value added information as a result of the growing frequency of extreme weather events and climate change.



**Crisis Assessment Series**  
**GAZA STRIP**

**Context**  
In a workshop at the UN Office, West Bank, a number of high assessments were conducted to assess the impact of the conflict on the Gaza Strip. On 16 March 2016, these included: Infrastructure, Agriculture and services assessments, the Multi-Sector Needs Assessment (MSNA) and a multi-sectoral damage assessment conducted using before-and-after satellite imagery. These assessments led to the development of the Gaza Strip Recovery Plan (GSRP) and the Gaza Strip Recovery Framework (GSRF). The GSRF is a multi-sectoral recovery plan that aims to address the needs of the Gaza Strip and to support the reconstruction of the Gaza Strip. It is a key document for the reconstruction of the Gaza Strip.

**GFDRR's role**  
The Gaza Strip hosted the first government request to implement the Gaza in Developing Disaster Recovery Framework (GDDR) under a disaster or conflict. In collaboration with support from GFDRR, a multi-sectoral team led the damage assessment and recovery needs process on behalf of the PA. The international partners for all infrastructure sectors (Energy, water and services) engaged, energy and municipal infrastructure GFDRR also designed and provided guidance to implement the process to develop Gaza's recovery framework, ensuring a uniform approach across all sectors.

The infrastructure sector accounted for 64 percent of total estimated damage  
**US\$1.4 billion**  
and 60 percent of all estimated losses

Gaza's GDP was estimated by **15 percent** as a result of the conflict

Published April 2016

## Crisis Assessment Series: Gaza Strip

The Palestinian Authority (PA), with the support of key donors, requested the Gaza Detailed Needs Assessment (DNA). The DNA aimed to articulate the Gujarat Emergency Earthquake Reconstruction Project (GERRP) and develop a medium- to long-term recovery plan by formulating and prioritizing programming interventions across sectors, and guiding institutional and implementation arrangements.

## Crisis Assessment Series: Syria

The Syrian crisis has devastated the country and set it back decades in terms of development. The objective of this assessment was to estimate the effects of the crisis on the population, infrastructure, and service delivery, and understand the preliminary recovery needs.

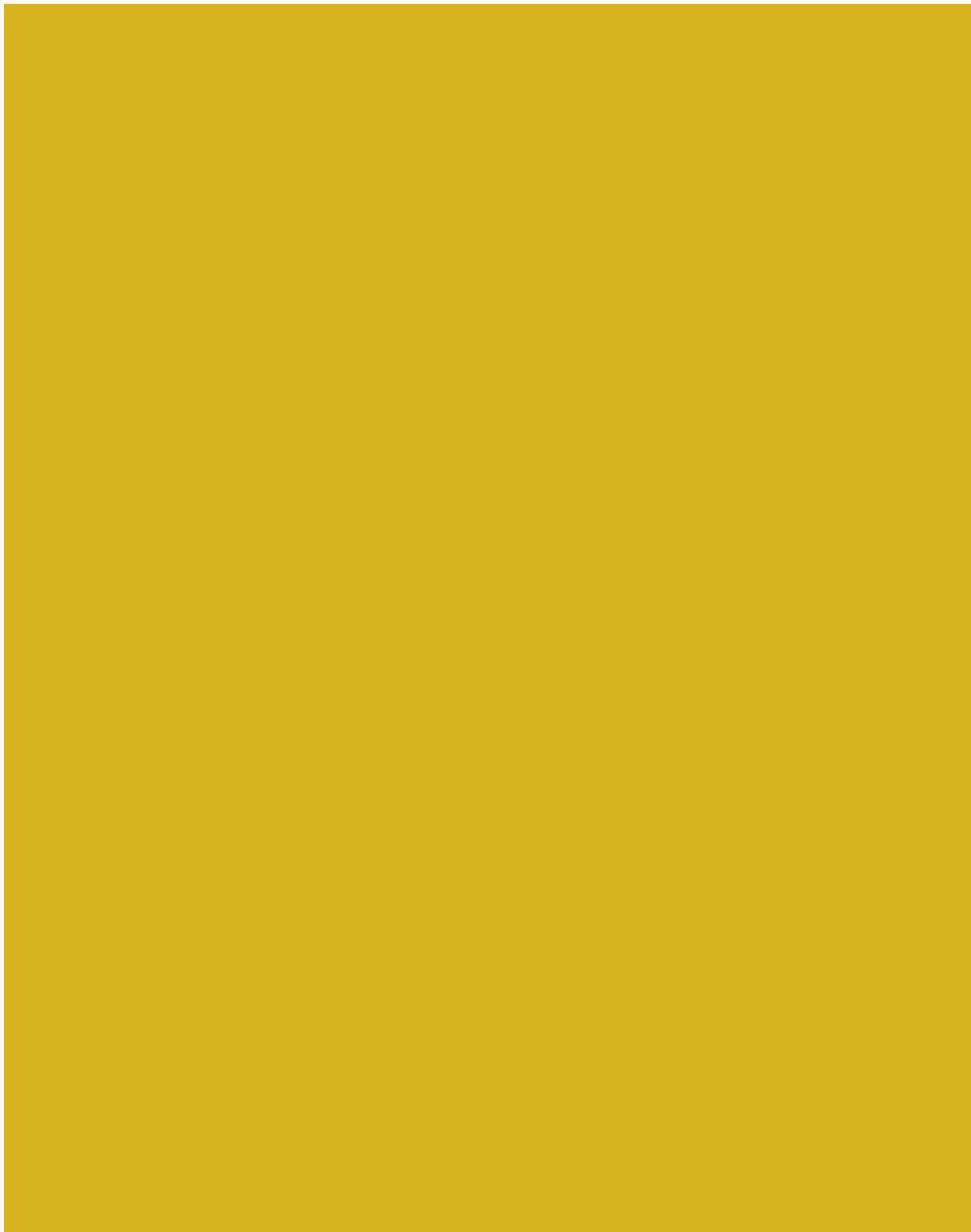
**Crisis Assessment Series**  
**SYRIA**

**Context**  
The Syrian crisis has devastated the country and set a stark divide in terms of development. The Syria Infrastructure and Recovery Initiative (SIRI) was designed to respond to the multi-challenge represented by the Syria conflict and offer an innovative solution to the problem of coordinating humanitarian and development efforts across World Bank Group (WBG) and other development partners. As part of this initiative, a damage assessment was conducted in the Golan Heights of Golan. Following the assessment the World Bank Group and other donors (WBG) regional team requested GFDRR support to conduct a damage and needs assessment for the Syrian crisis.

**GFDRR's role**  
The objective of this assessment was to estimate the effects of the crisis on the population, infrastructure, and service delivery, and understand the preliminary recovery needs.

Total damages for the infrastructure between **US\$5,962 million** and **US\$7,287 million**

Published April 2016



# ANNEXES

This Annex provides detailed information about GFDRR's portfolio and financial health. This includes information on donor resources available, commitments, disbursements, portfolio of projects, and progress. It also includes financial statements for the period of July 1, 2015 to June 30, 2016.

# Resources

## Core and Special Program Funding

In FY16, 15 GFDRR donors contributed a total of \$75.8 million (before trust fund administration fees of \$1.5 million), in support of GFDRR’s broad-based DRM investment program engaged through the annual work planning process<sup>1</sup>. The total contributions fulfilled the FY16 funding target of \$81 million across the three main funding sources: GFDRR’s Multi Donor Trust Fund (MDTF); the Japan-World Bank Program for Mainstreaming Disaster Risk Management in Developing Countries; and the ACP-European Union (EU) Natural Disaster Risk Reduction Program.

<sup>1</sup> Managing Disaster Risks for a Resilient Future: A Work Plan for the Global Facility for Disaster Reduction and Recovery, 2016 – 2018. [https://www.gfdr.org/sites/default/files/GFDRR\\_Work\\_Plan\\_2016-18.pdf](https://www.gfdr.org/sites/default/files/GFDRR_Work_Plan_2016-18.pdf)

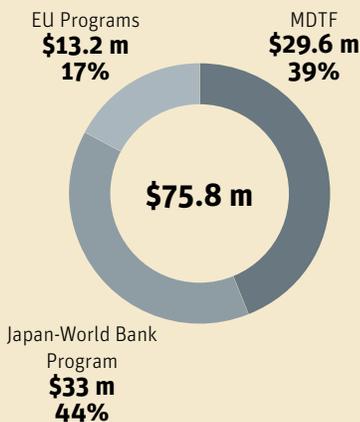
Core funding into the MDTF this fiscal year amounted to \$29.6 million, or 39 percent of the overall contributions, as compared to \$55.4 million in FY15. During the same period, contributions of \$46.2 million were received into the two special programs, representing 61 percent of contributions received in FY16. Overall, the total contributions of \$75 million were at approximately the same level as the average yearly contributions (\$76 million) received by GFDRR over the past five years, representing a stable resource mobilization landscape.

As of June 30, 2016, \$88 million had been pledged to GFDRR through 15 multi-year contribution arrangements. Of the 15 agreements signed, nine were new agreements and six were supplemental to existing agreements from the previous fiscal year.

## In-Kind Support via Staff Exchanges and Secondments

GFDRR’s program benefited from in-kind resources that several donors made available in the form of secondees and staff exchanges. In FY16, GFDRR hosted five staff members from the governments of Austria, France, Japan, Norway, and Switzerland. These staff exchanges help strengthen GFDRR’s technical expertise, particularly its thematic initiatives, and provides partners with opportunities to establish more direct connections with the Secretariat.

**Total contributions from GFDRR donors in FY16**



**Contributions to GFDRR, FY07-FY16**



# Commitments

Strengthening its support to vulnerable countries, GFDRR approved more than 100 projects for a total amount of \$62.6 million in FY16. This level of engagement was comparable to the \$70 million worth of approvals in the previous fiscal year, and was consistent with the \$62 million projected allocation under the three-year plan presented in GFDRR’s Work Plan 2016-18<sup>3</sup>.

About 96 percent (\$60 million) of FY16 approvals related broadly to mainstreaming *ex-ante* DRM activities; while approximately 4 percent (\$3 million) went to activities linked to post-disaster interventions.

The Africa region received the largest share of new financial support (20 percent), followed by Europe and Central Asia region (19 percent), Latin America and Caribbean (12 percent), South Asia (12 percent), East Asia and Pacific (8 percent), and Middle East and North Africa (2 percent).

The annual average activity size for projects approved in FY16 was approximately \$590,000 for both country-based activities and global engagements. Since 2009, the average activity size has been between \$450,000 and \$600,000, except for 2015 when GFDRR supported a large operation of \$15.6 million for immediate emergency repairs to roads and bridges in Mozambique following floods in 2014<sup>4</sup>.

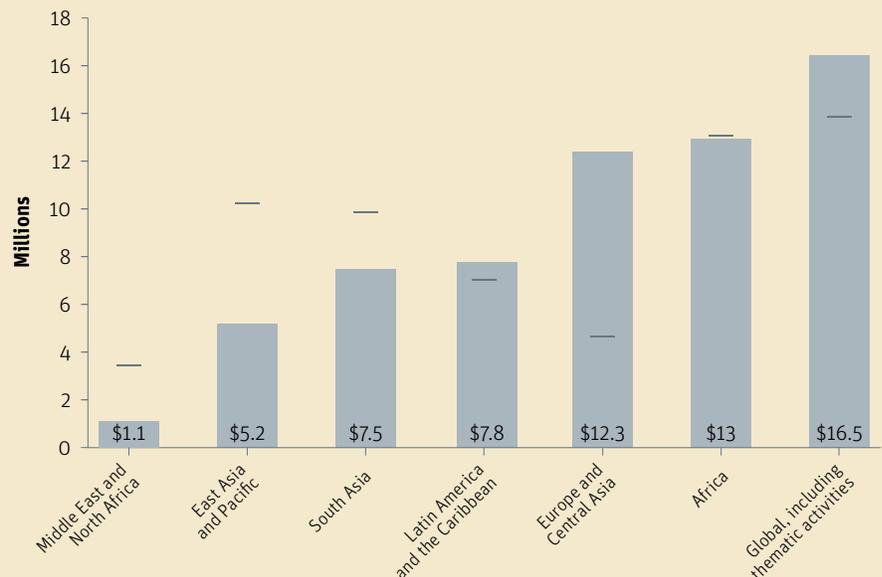
**New Operational Commitments, FY07-FY16**



**New commitments in FY16**



**Distribution of commitments by Region, FY16**



<sup>3</sup> GFDRR Annual Work Plan 2016-2018: [https://www.gfdr.org/sites/default/files/GFDRR\\_Work\\_Plan\\_2016-18.pdf](https://www.gfdr.org/sites/default/files/GFDRR_Work_Plan_2016-18.pdf)

<sup>4</sup> To date, 600 km of roads have been rehabilitated. See <https://www.gfdr.org/building-resilience-mozambique/%E2%80%99s-roads/%E2%80%94quickly>

— FY16 projected allocations as presented in GFDRR’s Work Plan 2016–2018<sup>3</sup>

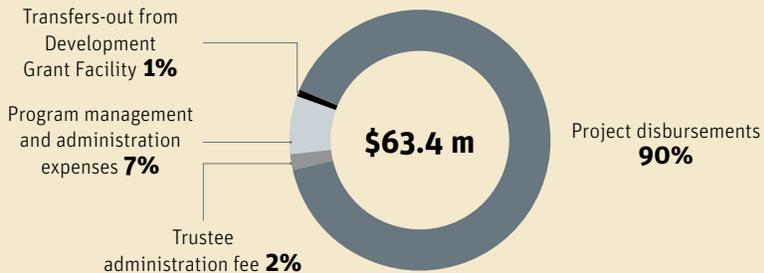
# Disbursements

In FY16, GFDRR trust fund expenditures, or disbursements, amounted to \$63.4 million. Approximately 90 percent of the disbursements were project-related, with the remaining 10 percent going toward general and administration costs as follows: (i) \$1.5 million (2 percent) in administration fees to the World Bank as GFDRR’s trustee<sup>2</sup>; (ii) \$0.5 million (1 percent) received through the Development Grant Facility and transferred directly to UNISDR; and (iii) \$4.5 million (7 percent) in program management and administration costs, which include staff, consultancy fees, travel, rent, communications, information technology, equipment, and other non-overhead costs (such as back-office support staff).

The FY16 expenditures represented a 17 percent increase when compared to FY15. This was driven by an overall strong portfolio performance coupled with proactive actions by the Secretariat to address slow disbursing activities. Specifically, disbursements from project-related activities rose 23 percent when compared to FY15 (\$56.8 million vs. \$46.4 million, respectively), allowing GFDRR to achieve its highest annual disbursements in the past three years. GFDRR’s annual disbursement rate, calculated as disbursements over undisbursed balance in a fiscal year, rose moderately from 28 percent to 31 percent, which is broadly indicative

<sup>2</sup> The World Bank Group collects trust fund administration fees from GFDRR donor contributions at the time of receipt.

Distribution of GFDRR expenditures, FY16



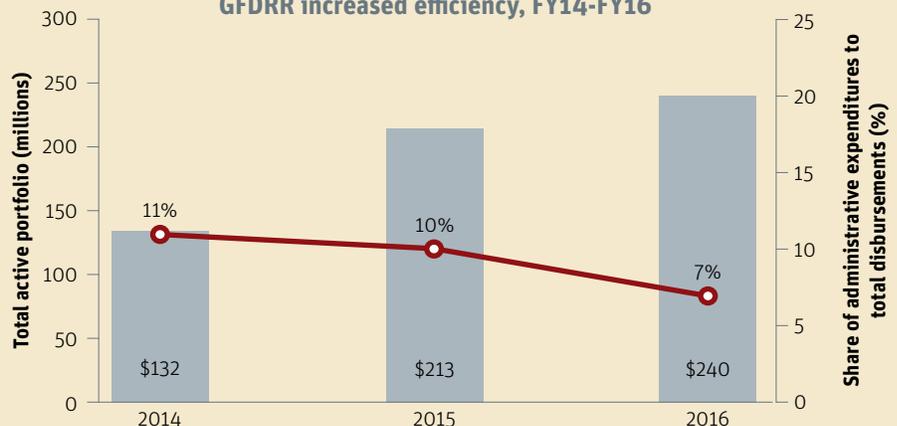
Project disbursements, FY14–FY16



of improved implementation performance within the portfolio in FY16. Additionally, since GFDRR’s grants typically disburse funds over a period of about two to three years on average, the FY16 disbursement ratio is within an acceptable range to the expected disbursement performance standard of around 33 percent each year.

At the same time, GFDRR’s program management and administration expenditures decreased by 16 percent from the prior fiscal year, indicative of greater economies of scale and efficiency. The share of GFDRR’s administrative expenditures has been declining steadily over the past three years, with FY16 being 7 percent.

GFDRR increased efficiency, FY14–FY16



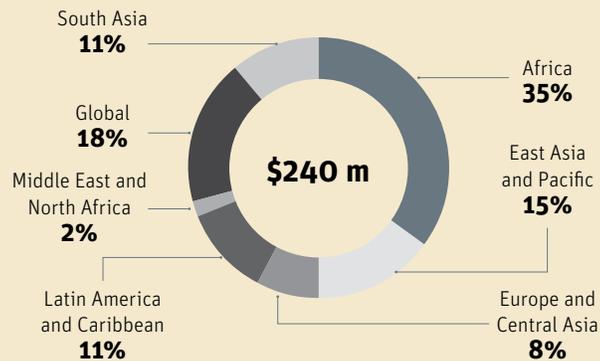
# Portfolio Summary

GFDRR's total portfolio during FY16 included 314 grants for a total commitment amount of \$240 million, representing an 11 percent increase when compared to FY15. This portfolio growth was driven by increased investments in some of the world's most vulnerable countries, such as Togo, Myanmar, Uzbekistan, and Dominica; new engagements in fragile and conflict-affected situations (e.g. Democratic Republic of Congo and Zimbabwe); and scaling up support to ongoing resilient recovery and preparedness efforts in Nepal and Serbia.

The largest share of financing was in Africa, representing 35 percent of the overall portfolio, followed by East Asia and Pacific (15 percent). Out of the 314 active grants in the fiscal year, 37 projects reached completion in FY16.

Since 2012, GFDRR's portfolio has grown by an average increasing rate of about 16 percent annually, from \$115 million in 2012 to \$240 million in 2016. Of the 314 grants supported through the \$240 million committed in FY16, 196 grants were financed through the MDTF, 77 through the ACP-EU programs, and 41 through the Japan-World Bank Program. The total commitments from the MDTF amounted to about \$140 million (58 percent of the portfolio), while ACP-EU programs accounted for \$65 million (27 percent), and the Japan-World Bank Program for \$37 million (15 percent).

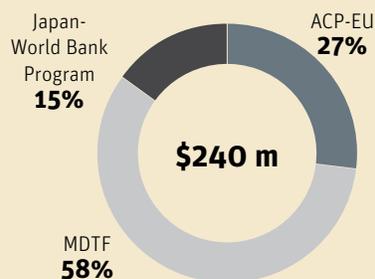
**Distribution of total active commitments by Region, FY16**



**Total active operational commitments, FY16 (millions)**

	Ongoing program	New approvals
Africa	70.3	13.0
Global	27.8	16.5
East Asia and Pacific	31.0	5.2
South Asia	19.2	7.5
Latin America and Caribbean	17.5	7.8
Europe and Central Asia	7.1	12.3
Middle East and North Africa	4.1	1.1
<b>Total</b>	<b>177</b>	<b>63</b>

**Distribution of total active commitments by funding mechanism, FY16**



**Top recipients of GFDRR resources, FY07-FY16 (millions)**



# Monitoring Progress

GFDRR collects data from grant proposal templates and progress reports completed during project implementation, allowing the monitoring and reporting of current and planned results. Every 6 months, GFDRR aggregates the direct outputs from ongoing activities—usually in the form of new or improved knowledge, capacity, or other enabling factors in vulnerable countries designed to stimulate behavioral change, reform, or investment in DRM. The monitoring system captures these outputs using a series of results indicators aligned with the Priority Areas of Action of the Sendai Framework for Disaster Risk Reduction 2015-2030.

GFDRR also monitors activities against two cross-cutting themes: gender and climate change. In FY16, all project proposals were screened as to whether they include gender considerations, and almost two-thirds (67 out of 107) of grants approved were found to be fully gender-informed. Additionally, of these projects, 67 percent included specific actions to address gender equality and women's empowerment in their design.

	Supporting large-scale investment for resilience	
	Development financing informed*	
	FY16	FY17 (Pipeline)
Africa	141.9	27.5
East Asia and Pacific	760.7	N/A
South Asia	564.5	550.3
Latin America and Caribbean	323.4	N/A
Europe and Central Asia	86.2	309.0
Middle East and North Africa	200.0	N/A
<b>Total</b>	<b>2,076.7</b>	<b>886.8</b>

\*Note: Estimate of large scale investments made possible by GFDRR support.

Similarly, all GFDRR projects are screened to assess whether they can be accounted as projects supporting resilience to climate change. 52 percent of the portfolio of active GFDRR grants (175 grants) included components relevant to climate resilience, totaling \$144 million. This reflects a modest but steady increase from FY15, where the proportion was 49 percent (137 grants).

Through its partnerships, GFDRR's targeted grants and technical assistance help bring scale to resilience interventions by influencing policies and supporting the design and implementation of large-scale investments. Over the

past three years, GFDRR activities have informed almost \$7 billion. In FY16, GFDRR's activities influenced \$2.1 billion in investments from multilateral institutions (e.g. ADB, EIB, IDA, and IBRD), bilateral donors (e.g. EU, JICA, and USAID), and other partners (e.g. GEF and GCF). Additionally, during the same period, GFDRR's activities informed almost \$1 billion in future investments currently under preparation for FY17 in Armenia, Mali, and Nepal.

**Summary of quantitative indicators monitored across GFDRR's portfolio**

<b>Sendai Priorities for Action</b>	<b>Results indicators</b>	<b>FY14</b>	<b>FY15</b>	<b>FY16</b>
Understanding Risk	Data platforms established (#)	11	30	41
	Risk assessments conducted (#)	12	27	22
	Hazard mapping conducted (#)	6	16	24
Strengthening disaster risk governance to manage disaster risk	Policies and legal frameworks strengthened (#)	22	36	25
	Building code implementation strengthened (#)	5	7	6
	Land use planning systems strengthened (#)	3	9	15
Investing in disaster risk reduction for resilience	Risk reduction investment strategies informed (#)	23	26	27
	Sovereign disaster risk financing strategies strengthened (#)	13	28	18
	Catastrophe risk markets strengthened (#)	8	12	14
Enhancing disaster preparedness for effective response and to “Build Back Better” in recovery, rehabilitation, and reconstruction	Forecasting services strengthened (#)	4	9	6
	Early warning systems strengthened (#)	8	17	10
	Contingency planning and emergency preparedness services strengthened (#)	6	26	9
	Post-disaster assessments conducted and recovery planning strengthened (#)	7	19	8
<b>Cross-cutting</b>	<b>Results indicators</b>	<b>FY14</b>	<b>FY15</b>	<b>FY16</b>
Gender	Percentage of approved projects gender-informed (%)	–	–	63
Resilience to climate change	Percentage of approved projects that included components relevant to climate resilience (%)	–	49	52
Enabling large-scale programs	Dollar value of investments supported or informed (\$ billions)*	2.3	3	1.9
	Number of investment projects informed or improved by GFDRR activities (#)	33	31	22

\*Note: Aggregates values from the World Bank alone.

# Financial Statements

## FINANCIAL SUMMARY OF RECEIPTS, DISBURSEMENTS, AND FUND BALANCE

All dollar amounts expressed in US dollars (\$) unless otherwise indicated.

	Notes*	Fiscal year ending June 30, 2016	Fiscal year ending June 30, 2015	Fiscal year ending June 30, 2014
<b>Opening Balance:</b>		<b>222,200,743</b>		
<b>Receipts:</b>				
Donor Contributions	1	75,811,441	98,766,363	95,217,814
Net Investment and Other Incomes	2	696,566	543,505	441,169
Transfers-in from Development Grant Facility	3	500,000	500,000	500,000
<b>Total Receipts</b>		<b>77,008,007</b>	<b>99,809,868</b>	<b>96,158,983</b>
<b>Disbursements:</b>				
Project Disbursements	4	56,804,842	46,362,026	32,503,477
World Bank Administration Fee	5	1,548,222	2,033,893	3,359,431
Program Management and Administration Expenses	6	4,508,630	5,395,535	4,654,750
Transfers-out from Development Grant Facility	7	500,000	500,000	50,000
<b>Total Disbursements</b>		<b>63,361,695</b>	<b>54,291,454</b>	<b>41,017,659</b>
Excess of (disbursements over receipts)/receipts over disbursements		13,646,312	45,518,414	55,141,324
<b>Ending Balance:</b>				
Ending Balance		<b>235,847,055</b>		
Less: Undisbursed Commitments	8	130,157,949		
Uncommitted Fund Balance	9	<b>105,689,106</b>		

\* See pages 69-73 for Notes 1-9.

**NOTE 1: DONOR CONTRIBUTIONS**

GFDRR received \$75,811,441 from 15 donors in the fiscal year that ended June 30, 2016. Commitments yet to be received in the amount of \$88,579,339 were outstanding as of June 30, 2016, which will be transferred to GFDRR as per the payment schedules in the signed Administration Agreements. The following table provides details of contributions received and contributions receivable by donor partner:

Donor	Fiscal year ending June 30, 2016		Fiscal year ending June 30, 2015		Fiscal year ending June 30, 2014		Contribution Receivable*	
	Contribution currency	Amount received in contribution currency	Amount received in contribution currency	Amount received in \$	Amount received in contribution currency	Amount received in \$	Amount received in contribution currency	Amount received in \$
Australia	AUD	4,128,000	2,978,641	4,000,000	3,188,800	4,360,000	4,055,552	
Austria	EUR			2,000,000	2,445,420			
Denmark	DKK	10,000,000	1,459,641	10,000,000	1,417,354	20,000,000	3,681,219	
European Union	EUR	11,980,422	13,227,023	20,000,000	25,377,000	10,900,000	15,028,920	36,119,578
Germany	EUR	590,697	664,368	2,253,337	2,617,249	4,000,000	5,437,300	16,000,000
India	USD			166,000	166,000	167,000	167,000	
Ireland	EUR					600,000	825,300	
Italy	EUR	2,000,000	2,186,796	2,000,000	2,315,200	500,000	678,450	
Japan	USD	3,000,000	33,000,000	30,000,000	30,000,000	20,000,000	20,000,000	22,000,000
Luxembourg	EUR	1,200,000	1,303,120	400,000	518,185	300,000	408,510	
Mexico	USD	361,760	361,760	138,240	138,240			
Nigeria	USD	149,238	149,238					
Norway	NOK	5,000,000	2,975,128	25,000,000	4,024,663	18,000,000	2,901,775	350,762
Saudi Arabia	USD			500,000	500,000			
Sweden	SEK	30,000,000	3,538,988					
Switzerland	CHF	4,600,000	4,691,350	9,300,000	9,592,628	800,000	878,966	6,433,637
United Kingdom	GBP	4,300,000	6,545,389	10,146,350	15,965,624	24,718,650	41,154,823	1,180,013
United States	USD	1,530,000	1,530,000	500,000	500,000			1,200,000
World Bank Group	USD	1,200,000	1,200,000					
<b>Total</b>			<b>75,811,441</b>	<b>98,766,363</b>	<b>98,766,363</b>	<b>95,217,814</b>	<b>88,579,339</b>	

\*The US dollar equivalent of Contributions Receivable is re-evaluated based on the exchange rate on July 21, 2016. The actual US dollar equivalent will be based on the exchange rate on the date of the fund transfer.

**NOTE 2: INVESTMENT AND OTHER INCOME**

Net investment and other income in the amount of \$696,566 for the fiscal year ending June 30, 2016 consisted of GFDRR's share in the interest income earned by the Bank's trust fund portfolio, including realized gains/losses from the sale of securities and other related income.

**NOTE 3 AND 7: TRANSFER IN AND TRANSFER OUT FROM DEVELOPMENT GRANT FACILITY (DGF)**

In fiscal year ending June 30, 2016, The World Bank's DGF provided grants of \$500,000 to the Overseas Development Institute (\$250,000) and Development Gateway (\$250,000) to implement activities related to partnership and outreach.

**NOTE 4: PROJECT DISBURSEMENTS**

The following table provides details of the project disbursements by main trust fund. Project disbursements are expenditures incurred in the execution of operational activities. Project disbursements in the amount of \$56,804,842 were made from the Program for the fiscal year ended June 30, 2016.

The following table provides details of the project disbursements by main trust fund:

Main trust fund	Fiscal year ending June 30, 2016	Fiscal year ending June 30, 2015	Fiscal year ending June 30, 2014
Track II-MDTF (TF070611)	19,856,999	19,375,189	20,342,506
Track II-SDTF-Spain (TF070806)	732,052	50,586	207,362
Track II-SDTF-Australia (TF070807)	1,221,418	1,518,116	2,483,086
Track II-SDTF-Japan (TF070809)	510,200	338,172	748,540
Track III-MDTF-Callable (TF070868)	6,100,374	14,309,095	459,023
Track III-MDTF-TA (TF070948)	922,118	1,954,389	2,198,689
Track II-MDTF-South South (TF070952)	-	-	17,887
ACP-EU NDRR (TF071630)	10,582,918	6,163,126	6,046,384
Japan-World Bank Program (TF072129)	8,058,687	1,726,555	-
Core MDTF (TF072236)	5,755,773	519,148	-
Africa DRF SDTF (TF072281)	3,062,970	407,650	-
EU-SERBIA NDRMP SDTF (TF072528)	1,334	-	-
<b>Total</b>	<b>56,804,842</b>	<b>46,362,026</b>	<b>32,503,477</b>

The following table provides details of the project disbursements by region:

Region	Fiscal year ending June 30, 2016	Fiscal year ending June 30, 2015	Fiscal year ending June 30, 2014
Africa	19,056,134	21,905,604	8,096,861
East Asia and Pacific	7,203,908	6,205,137	7,681,034
Europe and Central Asia	2,607,852	2,014,132	1,231,206
Latin America and Caribbean	6,349,495	3,467,791	3,811,255
Middle East and North Africa	1,090,804	1,321,073	1,530,308
South Asia	8,498,600	3,769,769	3,905,635
Global	11,998,050	7,678,520	6,247,179
<b>Total</b>	<b>56,804,842</b>	<b>46,362,026</b>	<b>32,503,477</b>

The following table provides details of project disbursements by implementing partner:

Execution Type	Fiscal year ending June 30, 2016	Fiscal year ending June 30, 2015	Fiscal year ending June 30, 2014
Bank Executed	44,962,584	25,522,545	24,681,429
Recipient Executed	11,842,258	20,839,481 *	7,822,048
<b>Total</b>	<b>56,804,842</b>	<b>46,362,026</b>	<b>32,503,477</b>

\* Includes disbursements from the callable fund to support recovery activities in Mozambique.

#### **NOTE 5: WORLD BANK ADMINISTRATION FEE**

In fiscal year ending June 30, 2016, The World Bank charged an administrative fee of \$1,548,222, as agreed in signed Administration Agreements.

#### **NOTE 6: PROGRAM MANAGEMENT AND ADMINISTRATION DISBURSEMENTS**

Program management and administration expenses for the year ending June 30, 2016 were in the amount of \$4,508,630. In addition to the administrative fee paid to the World Bank as Trustee also pays for costs incurred to support the GFDRR Secretariat's program management and administration.

The following table provides details of the program management and administration disbursement by expense category:

Expense Category		Fiscal year ending June 30, 2016	Fiscal year ending June 30, 2015	Fiscal year ending June 30, 2014
Staff Cost	(1)	3,620,035	4,243,240	3,120,199
Short Term Consultants/Temporary		350,051	567,940	854,002
Travel	(2)	195,276	313,746	502,030
Other Expenses	(3)	343,269	270,609	178,519
<b>Total</b>		<b>4,508,630</b>	<b>5,395,535</b>	<b>4,654,750</b>

(1) Staff Costs included salaries and benefits for GFDRR staff, Extended-term Consultants, and Extended-term Temporaries.

(2) Travel included travel expenses of GFDRR staff, candidates/interviewees for GFDRR positions, and participants in GFDRR- sponsored events.

(3) Other Expenses included overhead expenses, contractual services (e.g. editing, graphic design, translation, publishing and printing), representation, and hospitality.

**NOTE 8: UNDISBURSED COMMITMENTS**

Commitments in the amount of \$130,157,949 were outstanding as of June 30, 2016. These are the remaining balance of the funds that GFDRR has approved and committed to implementing units and recipients. The following table provides details of undisbursed commitments by main fund:

Main trust fund	Fiscal year ending June 30, 2016
Track II-MDTF (TF070611)	25,182,418
Track II- SDTF-Spain (TF070806)	258,443
Track II-SDTF-Australia (TF070807)	910,246
Track II-SDTF-Japan (TF070809)	1,171,107
Track III-MDTF-Callable (TF070868)	2,571,493
Track III-MDTF-TA (TF070948)	563,356
Track II-MDTF-South South (TF070952)	51,186
ACP-EU NDRR (TF071630)	25,504,105
Japan-World Bank Program (TF072129)	29,323,213
Core MDTF (TF072236)	28,395,986
Africa DRF SDTF (TF072281)	7,963,373
EU-SAR SDTF (TF072458)	2,007,012
EU-SERBIA NDRMP SDTF (TF072528)	4,586,883
EU-DRAF SDTF (TF072535)	1,669,130
<b>Total</b>	<b>130,157,949</b>

The following table provides details of undisbursed commitments by region:

Region	Fiscal year ending June 30, 2016
Africa	37,232,273
East Asia and Pacific	19,179,816
Europe and Central Asia	15,240,039
Latin America and Caribbean	11,870,268
Middle East and North Africa	2,396,673
South Asia	9,617,813
Global	34,621,066
<b>Total</b>	<b>130,157,949</b>

The following table provides details of undisbursed commitments by type of implementing partner:

Execution Type	Fiscal year ending June 30, 2016
Bank Executed Trust Fund	106,876,411
Recipient Executed Trust Fund	23,281,538
<b>Total</b>	<b>130,157,949</b>

**NOTE 9: UNCOMMITTED FUND BALANCE**

Uncommitted fund balance in the amount of \$106,412,731 are outstanding as of June 30, 2016, which can be used to finance new operational grants, and program management and administration activities. The following table provides details of the uncommitted funds by main trust fund:

Main trust fund	Fiscal year ending June 30, 2016
Track II-MDTF (TF070611)	2,168,105
Track II- SDTF-Spain (TF070806)	246,702
Track II-SDTF-Australia (TF070807)	162,825
Track II-SDTF-Japan (TF070809)	59,926
Track III-MDTF-Callable (TF070868)	1,356,742
Track III-MDTF-TA (TF070948)	1,310,018
Track II-MDTF-South South (TF070952)	56,392
ACP-EU NDRR (TF071630)	25,378,989
Japan-World Bank Program (TF072129)	35,337,874
Core MDTF (TF072236)	31,724,335
Africa DRF SDTF (TF072281)	582,707
EU-SAR SDTF (TF072458)	2,237,276
EU-SERBIA NDRMP SDTF (TF072528)	0
EU-DRAF SDTF (TF072535)	2,085,600
Parallel Core MDTF (TF072584)	2,981,614
<b>Total</b>	<b>105,689,106</b>



**Bringing resilience to scale**



**[www.gfdr.org](http://www.gfdr.org)** The Global Facility for Disaster Reduction and Recovery (GFDRR) is a global partnership that helps developing countries better understand and reduce their vulnerabilities to natural hazards and adapt to climate change. Working with over 400 local, national, regional, and international partners, GFDRR provides grant financing, technical assistance, training, and knowledge sharing activities to mainstream disaster and climate risk management in policies and strategies. Managed by the World Bank, GFDRR is supported by 36 countries and 10 international organizations.