

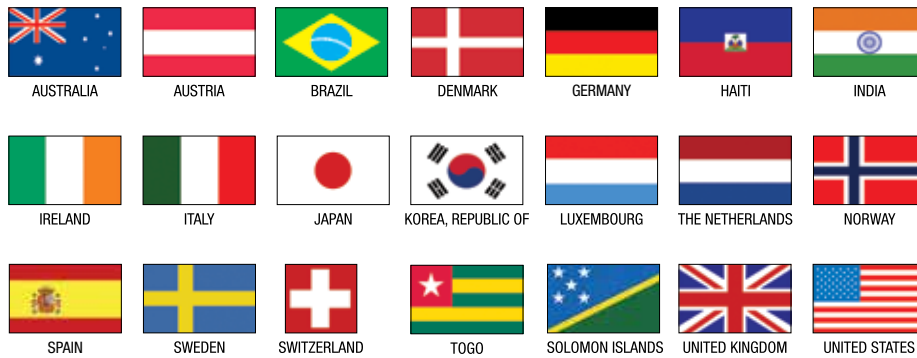
INROADS TO RESILIENCE



“GFDRR is committed to creating a world where resilient societies manage and adapt to emerging disaster risks and the human and economic impacts of disasters are reduced.”

– GFDRR’s Vision Statement, 2013-15 Partnership Strategy

GFDRR MEMBERS



GFDRR OBSERVERS



Table of Contents

Foreword	ii
Executive Summary	iv
A Transition Year for GFDRR	1
Results across the Five Pillars of Action	4
Strengthening Disaster Risk Management in African, Caribbean, and Pacific Countries	32
Regional Challenges and Opportunities	35
Advancing Disaster Risk Management through Outreach and Partnerships	40
Financial Reporting	48

Acronyms

ACP	African, Caribbean, and Pacific
AusAID	Australian Agency for International Development
DFID	Department for International Development, United Kingdom
DGF	Development Grant Facility
EU	European Union
FY	Fiscal Year
GDP	Gross domestic product
GEF	Global Environmental Facility
GFDRR	Global Facility for Disaster Risk Reduction and Recovery
GIS	Geographic information systems
IDA	International Development Association
IMF	International Monetary Fund
MDTF	Multi-Donor Trust Fund
NASA	National Aeronautics and Space Administration
NGO	Nongovernmental organization
OpenDRI	Open Data for Resilience Initiative
SDTF	Single-Donor Trust Fund
WMO	World Meteorological Organization
UN	United Nations
UNDP	United Nations Development Programme
UN-HABITAT	United Nations Human Settlements Programme
UNISDR	United Nations Office for Disaster Risk Reduction
USAID	United States Agency for International Development

Forewords

The growing impact of natural disasters poses an increasingly significant threat to development gains around the world. Each year, disasters like November's Typhoon Haiyan in the Philippines bring more grim reminders of the devastation and destruction that they can cause. Investing in resilience and integrating risk management into economic planning is now mainstream development.

Over the last 30 years, the world has lost an estimated \$3.8 trillion to natural disaster. Developing countries bear the brunt of both economic and human losses. Since 1980, low-income countries have accounted for only 9 percent of disaster events but 48 percent of fatalities. Climate change only compounds the problem, creating an urgent need for the international community to align disaster risk management and climate change agendas, integrating both into all aspects of development planning. This year's annual report highlights significant achievements made in this direction. GFDRR is mainstreaming risk considerations into development programs and scaling up action, and the new strategy that was adopted by its Consultative Group in December 2012 is starting to bear fruit.

In fiscal year 2012-13 (FY13), GFDRR-supported initiatives in weather and climate forecasting and monitoring in half a dozen low-income countries brought an additional \$129.7 million in investments from national governments and international organizations. More than one million farmers in India received insurance last year through the newly reformed National Agricultural Insurance Scheme, which GFDRR supports through ongoing technical assistance. And, when Nigeria was hit by severe flooding in November 2012, GFDRR supported a post-disaster needs assessment that served as the foundation for a \$500 million program funded by the International Development Association (IDA) to address flood risk in that country.

FY13 also brought new momentum to GFDRR's effort to place disaster risk management on the international development agenda at high-level meetings such

as during the Mexican 2012 Presidency of the G20, the Annual Meetings of the World Bank Group and International Monetary Fund (IMF), and the United Nations' (UN) Global Platform for Disaster Risk Reduction. Through its partnerships with the World Bank Group, UN agencies, regional organizations, academic institutions, the private sector, and civil society, GFDRR is stepping up its efforts at the national and international levels to influence policy dialogue on disaster risk management and development.

Going forward, GFDRR's new programmatic framework, organized around "Five Pillars of Action" as set forth in its strategy, will strengthen its engagement with partner countries. The new framework also provides systematic monitoring of the work GFDRR supports—measuring impact and documenting lessons learned—so future interventions are efficient and effective.

As I step down as Vice President of the Sustainable Development Network, I would like to commend GFDRR and its partners for ensuring that disaster risk management is a central element of country development strategies. In my new role as the Vice President and Special Envoy on Climate Change, I will continue to emphasize the urgent need for action to reduce disaster and climate risks.

The *GFDRR Annual Report 2013* showcases both the small steps and big results. Disaster risk and its management is a global challenge requiring a global coalition. Thanks to the financial support and guidance of its donors and partners, GFDRR will continue to make inroads to a future where the world's poorest countries and most vulnerable people have the resilience to recover quickly from disasters.

Rachel Kyte

Chair, GFDRR Consultative Group
World Bank Group Vice President and Special Envoy
on Climate Change

It has been a privilege for me to co-chair GFDRR's Consultative Group over the past 12 months. I have immensely enjoyed working with all the Consultative Group members in helping to shape GFDRR's future direction and I have been impressed by the progress that has been made.

The United Kingdom's objectives for this role have been modest in FY13, including the development of a GFDRR work plan that is backed by a robust monitoring, evaluation, and reporting framework. We see these as the necessary building blocks to allow GFDRR's program to grow and to give donors the confidence to make new investments.

GFDRR has delivered on both these goals, and in May 2013 the Consultative Group endorsed both the work plan and its new monitoring and evaluation framework during a meeting we held in Exeter. I was also pleased that the core theme of the informal Consultative Group in Washington, DC, was monitoring and evaluation. This was a good opportunity for GFDRR to provide an update on the roll out of their monitoring and evaluation framework and the preliminary findings from country impact evaluations. I hope the benefits of this will be evident in next year's annual report.

With the recent devastation caused by Cyclone Phailin and Typhoon Haiyan, we have seen yet again the importance of investing in disaster risk management. Looking ahead, international discussions will increasingly focus on disaster risk management, from negotiations for a new international development framework to replace the Millennium Development Goals to a successor for the Hyogo Framework for Action. Disaster risk management will also have an important role to play in the upcoming international climate change negotiations in 2015 and the World Humanitarian Summit in 2016. Throughout, it will be critical for GFDRR and the World Bank to set a clear and ambitious vision for their role in helping countries to manage their risks and recover quickly from disaster.

The United Kingdom now passes the co-chair of the Consultative Group into Norway's capable hands. We will remain an active partner for GFDRR in the Group and as chair of the Technical Advisory Group on Monitoring and Evaluation until April 2014. We wish GFDRR every success for the future.

Jo Moir

Co-Chair, GFDRR Consultative Group 2012-2013
Deputy Head, Conflict, Humanitarian and Security
Department, Department for International
Development (DFID)

Executive Summary

The GFDRR Annual Report 2013: Inroads to Resilience covers the period July 2012 to June 2013, and has two objectives: to summarize progress achieved in the GFDRR's transition process started in fiscal year 2011-12 (FY12); and to present results according to its new results framework.

A Transition Year for GFDRR

Fiscal year 2012-13 (FY13) was a transition year for GFDRR. In December 2013, its Consultative Group of donors adopted a new three-year strategy. To implement it, GFDRR reorganized the way it provides support and measures impact. In May 2013, GFDRR presented a work plan in support of the new strategy, including details on how it would monitor and evaluate results.

The GFDRR Grant Program

At the same time, GFDRR continued its grant and operational support to disaster risk management and resilient recovery across the world. GFDRR's portfolio continued to grow, with 56 new projects launched during the year. The number of GFDRR projects closing also reached an all-time high, with 75 projects reaching completion during the same period. By June 30, 2013, GFDRR had 229 active projects, with the majority of resources going to 21 priority countries.

GFDRR Outreach

In FY13, GFDRR continued to help shape the global dialogue on disaster risk management. In July 2012, at the request of the government of Mexico, GFDRR prepared a report on its experiences in disaster risk assessment and financing, which was presented at the 2012 G20 Summit. That same month, GFDRR organized the second Understanding Risk Forum. The event took place in Cape Town, South Africa, and brought together experts in risk assessment from more than 80 countries. In October, GFDRR co-organized the Sendai Dialogue, a feature event of the 2012 Annual Meetings of the World Bank and International Monetary Fund (IMF).

Along with the G20 report, and another in preparation for the Sendai Dialogue, GFDRR made substantial

contributions to major publications like the United Nations Office for Disaster Risk Reduction's (UNISDR) *2013 Global Assessment Report on Disaster Risk Reduction* and the World Bank's *Turn Down the Heat* report, which provides a snapshot of the latest climate science and its implications.

GFDRR's longstanding partnership with the UN is growing stronger. GFDRR and UNISDR are collaborating on a number of new initiatives, including the development of country risk profiles, and a proposal to the Organisation for Economic Co-operation and Development on how to more accurately track international donor spending on disaster risk management through official reporting channels. GFDRR is also working closely with the United Nations Development Programme (UNDP) on the development of the *Disaster Recovery Framework Guide* to guide recovery after major disasters, and with the World Meteorological Organization (WMO) on various hydrometeorological programs around the world.

GFDRR continued its partnership with the European Union (EU) in the implementation of a US\$75.6¹ million EU-funded program called the African, Caribbean, and Pacific (ACP)-EU Natural Disaster Risk Reduction Program. The ACP-EU program is currently the largest single-donor trust fund supporting GFDRR's work across its five pillars. In FY13 the program approved 26 initiatives worth \$20 million.

Finally, FY13 saw GFDRR continue to implement the pilot phase of its civil society strategy. In partnership with the Global Network for Disaster Reduction, GFDRR launched a new online platform that allows civil society organizations in selected countries to map activities related to disaster risk management and resilience building. Together with the Community Practitioners Platform for Resilience, GFDRR also supported a Community Practitioners Academy in preparation for the Global Platform for Disaster Risk Reduction in Geneva, Switzerland, in May 2013.

¹ All currency is in US\$ unless otherwise noted.

A Growing Partnership

In FY13, GFDRR received \$47.8 million from its contributing members. This amount was less than the contributions received in FY12, which included a large transfer of funds from the EU at the end of FY12 on behalf of the ACP-EU program. In FY13, funding for GFDRR grants grew to a total amount of \$93 million.

In April 2013, Japan announced it would contribute \$100 million to GFDRR for the launch of a new program


in FY14 that will capitalize both on Japan's experience in disaster risk management and GFDRR's work over the past seven years.

The number of GFDRR donors rose to 21 by the end of FY13, with India as the newest member. The EU, United Kingdom, Australia, Sweden, and Germany remained the largest contributors to GFDRR, representing two-thirds of total contributions since its inception.


Summary of FY13 Portfolio as of June 30, 2013

GFDRR programs involved more than 300 government entities, international organizations, civil society organizations, universities, and private businesses to support disaster risk management in developing countries.

 **Pillar 1: Risk Identification**
78 grants are helping over 55 countries to improve their ability to identify and understand disaster risk. The grants go towards building country capacity to conduct and develop risk assessments, including programs to improve data management and sharing systems. Sub-Saharan Africa received the highest number, 34, of GFDRR grants supporting risk identification activities. Latin America and the Caribbean had the second highest number, a trend consistent with previous years and the region's focus on using risk information to guide public infrastructure investments.

 **Pillar 2: Risk Reduction**
90 grants in over 60 countries are making disaster risk reduction a key component of governance at both the national and regional levels. Consistently across regions, more grants support risk reduction activities than any

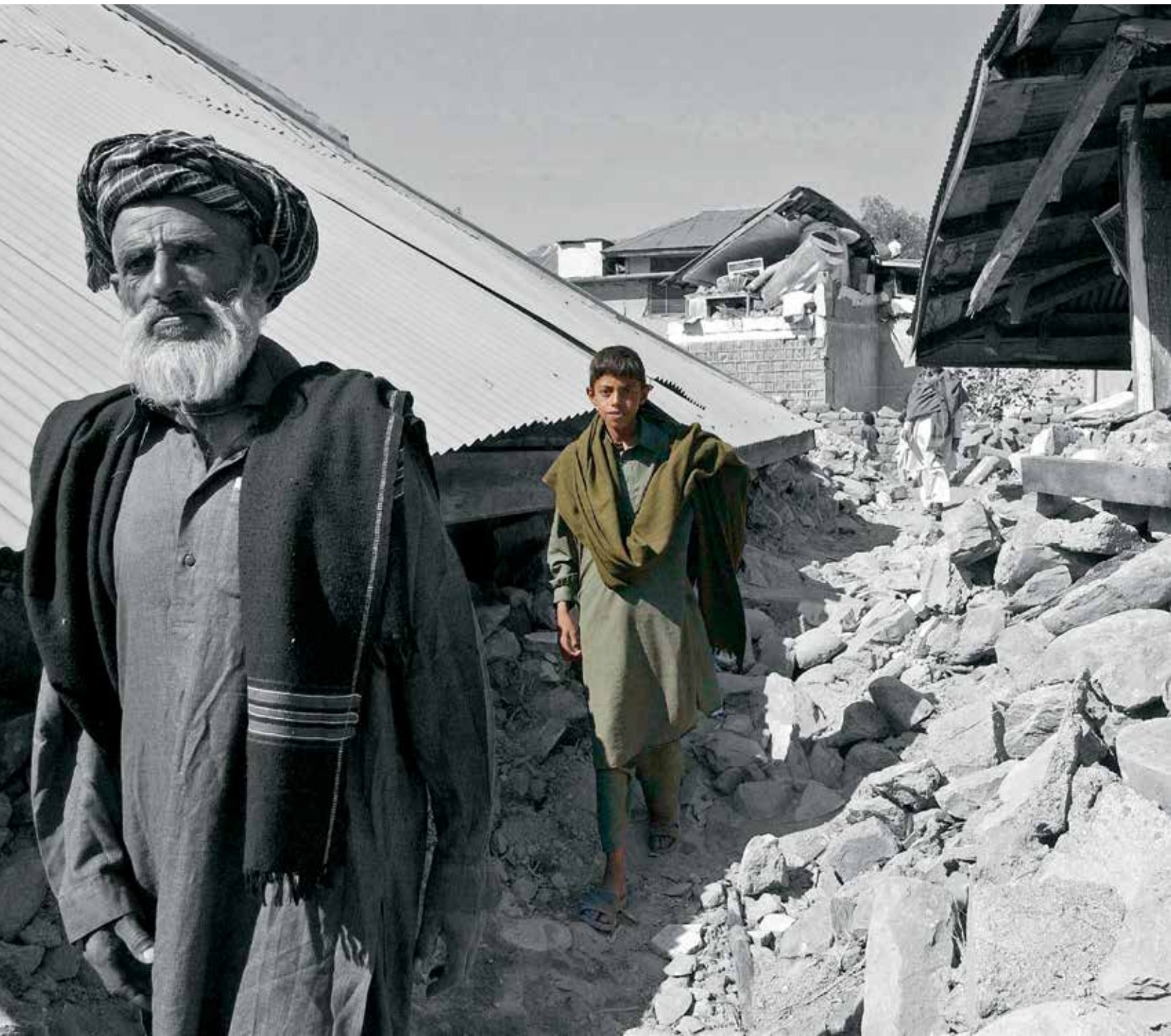
other pillar of action. In South Asia, for example, nearly half of the region's grant portfolio supports governments with implementing risk reduction measures. Here again, Sub-Saharan Africa received the largest number of grants.

 **Pillar 3: Preparedness**
66 grants in more than 50 countries are enabling government institutions and communities to better design and put into practice early warning and emergency response systems. Over one-third of GFDRR grants in Eastern Europe and Central Asia supported disaster preparedness, more than any other region.

 **Pillar 4: Financial Protection**
33 grants in 29 countries are helping to strengthen the financial resilience of governments, the private sector, and households. While the focus on financial protection within regional grant

portfolios is similar, the East Asia and Pacific region made substantial advances with the launch of GFDRR's Pacific Catastrophe Risk Insurance Pilot, which allowed five Pacific island countries to access market-based catastrophic risk insurance solutions for the first time.

 **Pillar 5: Resilient Recovery**
55 grants in over 40 countries are supporting reconstruction planning that is more resilient. Many of these projects are taking place in the Horn of Africa and the Sahel, Central America, East Asia, and the Caucasus. FY13 saw GFDRR begin to shift its focus away from providing assistance solely with post-disaster needs assessments. Instead, it is increasingly supporting pre-disaster activities; rapid assessments; and detailed recovery planning that allow for quicker and more effective disaster recovery.



The 2005 magnitude 7.6 earthquake that struck northern Pakistan killed an estimated 19,000 children, mostly from collapsed school buildings. Over 87,000 people died, 3.5 million lost their homes, and more than 780,000 buildings were destroyed or damaged beyond repair. In FY13, GFDRR continued to work closely with the government of Pakistan to significantly improve its ability to produce, manage, communicate, and use data information on natural hazard risks, including earthquakes. Photo credit: Evan Schneider/UN Photo

A Transition Year for GFDRR

In December 2012 GFDRR adopted its second partnership strategy, covering 2013-2015. GFDRR also established a work plan (2014-2016) to implement it. The work plan responds to priorities articulated by disaster-prone countries, and the plans that GFDRR's implementing partners have in place to scale up efforts in building resilience in these countries.

The successful implementation of this plan will mean that at least 34 highly vulnerable countries—representing a total population of over one billion people—will be better able to cope with and adapt to the effects of natural hazards and climate risks. With sustained investments in disaster risk management, these countries should see a long-term reduction in disaster losses.

The achievement of this goal requires that GFDRR prioritize two actions. First, GFDRR must realign its working structure and grant-making system around the strategy's Five Pillars of Action: risk identification, risk reduction, preparedness, financial protection, and resilient recovery. Secondly, GFDRR must overhaul its monitoring and evaluation system to better evaluate the impact of its interventions, a major focus according to the new work plan.

In this context, FY13 became an important transition year for GFDRR. During FY13, GFDRR laid the foundation for operationalizing the new strategy, work plan, and monitoring and evaluation framework. This included an extensive analysis and re-categorization of its portfolio to create a baseline against which to measure progress over the next three years. GFDRR also began the overhauling of its web-based results management system to ensure new projects are designed with clearer results frameworks, including standard indicators that will enable better results tracking.

These actions, to be continued and completed in FY14, will ensure that the grants and operational support provided by GFDRR is actually achieving what its partner countries are demanding assistance with, which is the improved capacity and know-how to bring about real policy reform of and investment in disaster risk management.

Going forward, GFDRR's ability to assess the impact of its work and the programs it supports will quickly expand beyond initial results—such as meetings, workshops, and new policies—towards measuring real, concrete improvements in the resilience of people and countries to natural disasters, the overall goal of the GFDRR program.

GFDRR Program Logic

	What we do	What we deliver
PILLAR 1 Risk Identification	<p>Provide capacity development to better collect, share, and manage data; create hazard and exposure models and maps; and complete risk assessments and then communicate those risks.</p> <p>Assist in implementing risk assessments; developing and using open source software and open data practices; improving satellite imagery; and building stronger disaster risk institutions.</p> <p>Create or share knowledge or tools for improved risk assessment, open source software, open data platforms, and satellite imagery.</p>	<ul style="list-style-type: none"> • People in disaster prone countries have access to comprehensive information about physical and societal exposure to disaster risk. • National and city agencies are equipped with improved means to assess and communicate disaster risks.
PILLAR 2 Risk Reduction	<p>Provide capacity development to better draft risk reduction policies, land use plans, building standards, and overall risk reduction plans and investments.</p> <p>Assist in implementing investments or reforms based on new risk reduction policies, including land use plans and building standards.</p> <p>Create or share new knowledge related to risk reduction including guidelines, policy analysis, and information on sector-specific norms.</p>	<ul style="list-style-type: none"> • Disaster-prone countries and their development partners are better able to make decisions on where and how to reduce disaster risks in society.
PILLAR 3 Preparedness	<p>Provide capacity development to better use disaster risk information for early warning measures, search and rescue operations, and contingency planning.</p> <p>Assist in implementing investments or reforms in emergency management, public awareness campaigns, early warning systems, and national hydrometeorological services.</p> <p>Create or share new knowledge on preparedness, including policy analysis, hydrometeorological feasibility studies for improved weather forecasting, and operational guidelines.</p>	<ul style="list-style-type: none"> • National and local agencies and civil society organizations are better able to provide early warning of disasters and to respond more effectively when disasters occur.
PILLAR 4 Financial Protection	<p>Provide capacity development in developing and securing national disaster risk financing measures; agricultural insurance programs; and individual property risk insurance and micro-insurance schemes.</p> <p>Assist in implementing investments or reforms to secure national, agricultural, and individual disaster risk financing and insurance schemes.</p> <p>Create or share new knowledge on national and individual financial protection from disaster, including policy analysis, strategy reviews, feasibility studies, fiscal risk assessments, and financial analysis tools.</p>	<ul style="list-style-type: none"> • Disaster prone countries have better access to comprehensive information on their financial exposure to disaster risks. • National and city agencies are equipped with improved means to assess and manage fiscal and other financial risks.
PILLAR 5 Resilient Recovery	<p>Provide capacity development in conducting recovery assessments and planning that follow good practice, and putting those standards into place in existing government systems.</p> <p>Assist in conducting post-disaster assessments and in developing post-disaster recovery frameworks to guide and streamline governments' recovery responses.</p> <p>Create or share new knowledge on disaster recovery.</p>	<ul style="list-style-type: none"> • Disaster-affected countries have enhanced capacity and improved plans for financing and implementing resilient recovery.

What this leads to

Improved identification and understanding of disaster risks.

Avoiding creation of new risks and reduced existing risks in society.

Improved warning and management of disasters at all levels of government and society.

Increased financial resilience of governments, people, and business.

Quicker, more resilient recovery.

Increased resilience of people to natural disasters.

A world where resilient societies manage and adapt to emerging disaster risks and the human and economic impacts of disasters are reduced.

Results across the Five Pillars of Action

GFDRR's primary mandate is to provide grant funding and advisory services to:

- ▣ **Support developing countries to design and implement disaster risk management strategies and policies;**
- ▣ **Create or improve country capabilities around disaster risk management, including physical infrastructure and human resources; and**
- ▣ **Help countries access information on international best practices.**



Risk Identification



Risk Reduction



Preparedness



Financial Protection



Resilient Recovery

Pillar 1: Risk Identification

59 single-country, 17 multi-country, and 2 global grants are helping over 55 countries improve their ability to identify and understand disaster risk. The grants go towards building country capacity to conduct and develop detailed risk assessments, and toward developing open data systems that create, share, and use the information collected.

Pillar 2: Risk Reduction

75 single-country, 13 multi-country, and 2 global grants in over 60 countries are making reducing risk to disasters a key component of governance at both the national and regional levels. They do this by improving land use planning and new building standards and by developing and putting into place risk reduction plans, policies, and investment strategies.

Pillar 3: Preparedness

52 single-country and 13 multi-country grants, and 1 global grant in more than 50 countries are enabling government institutions to better design and put into practice forecasting and early warning systems, emergency response plans, and emergency training and simulation exercises.

Pillar 4: Financial Protection

28 single-country, 3 multi-country, and 2 global grants in 29 countries are helping to strengthen the financial resilience of governments, the private sector, and households. Examples include the design of risk insurance strategies to protect governments' fiscal balance following a disaster; the promotion of insurance markets at the national and household levels; and the implementation of social safety net programs for the poorest and most vulnerable.

Pillar 5: Resilient Recovery

45 single-country, 6 multi-country, and 4 global grants in over 40 countries are supporting reconstruction planning that is faster and more resilient. The grants go towards initiatives that provide reliable and internationally-accepted damage, loss, and needs assessments following major disasters and toward creating solutions and training for better post-disaster recovery planning and financing.

More details on GFDRR's Five Pillars of Action can be found from pages 12–31.

GFDRR-Supported Activities by Region and Country, FY13

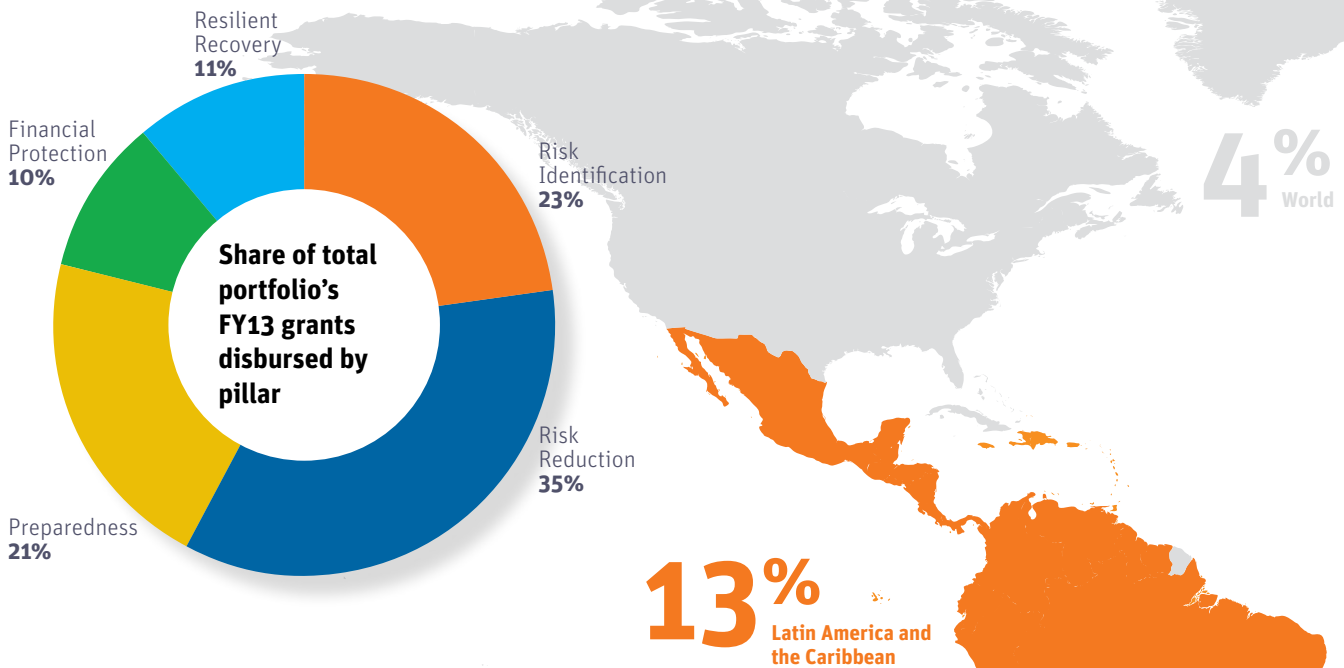
GFDRR grants go toward three main activities: capacity building (CB), analytical work (AW), and technical assistance (TA).

	Pillar 1 Risk Identification			Pillar 2 Risk Reduction			Pillar 3 Preparedness			Pillar 4 Financial Protection			Pillar 5 Resilient Recovery			
	Activities															
	CB	AW	TA	CB	AW	TA	CB	AW	TA	CB	AW	TA	CB	AW	TA	
AFRICA																
Single-Country Grants																
Burkina Faso				1	2	1	1									
Cameroon		1			1	1	1		1				1			
Comoros			1	1		1	1	1	1			1	2		1	
Ethiopia			1	1			1	1	1	1			1	2		
Gambia, The		1		1		1			1							
Ghana		1	1	2	1	1	1	2	1							
Kenya													2	1	2	
Lesotho	1			1		1	1	1	1							
Liberia		1	1	1		1	1		1	1	1		1	1		
Madagascar	2			2		2	2		2			1	1	1	1	
Malawi	2	1	2	1	2	2	2	2	2	2	2		2	2	1	
Mali			1	2	2	2	2	2	2					1		
Mozambique	2		2	2	3	3	2		2	2		2	2			
Namibia	1		1		1			1								
Niger	1		1	1	1	1	1	1					1	1		
Nigeria	1	1	1	1	1	1						1	4	4	3	
Rwanda	1		1													
Senegal	1	1	1	2	2	2	2	2	2	1			1	1		
Seychelles							1		1				2	1		
Sierra Leone	1		1	1		1	1		1							
Somalia													2	2	2	
Tanzania	1	1	1	1	1											
Togo	3	3	3	3	3	3	3	3	3			1				
Regional and Multi-Country Grants																
Africa Region	2		1			1							1			
Horn of Africa	2		4	5	1	2	4	1					2	1	1	
Sahel				1			1						1	1		
Southern Africa	1			1									1			
EAST ASIA AND PACIFIC																
Single-Country Grants																
Fiji														1	1	1
Indonesia	1	1	1	1		1	2	1	1	2	1	2	2	2	1	
Kiribati																
Korea, Rep.																
Lao PDR		1	1	1		1	1		1							
Myanmar														1		1
Papua New Guinea					2							2				
Philippines	1		2		1	2				2	1	2	1		1	
Samoa														1	1	1
Thailand														2	2	1
Vanuatu				1		1		1	1							
Vietnam				2	2	3	2		2			2				
Regional and Multi-Country Grants																
East Asia and Pacific Region				1		1										
Pacific Islands	1							1	3	1					1	

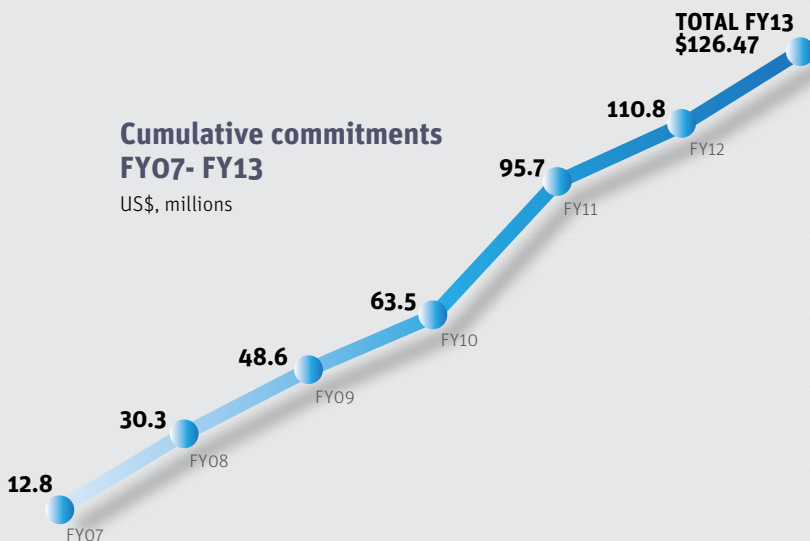
	Pillar 1 Risk Identification			Pillar 2 Risk Reduction			Pillar 3 Preparedness			Pillar 4 Financial Protection			Pillar 5 Resilient Recovery		
	Activities														
	CB	AW	TA	CB	AW	TA	CB	AW	TA	CB	AW	TA	CB	AW	TA
EUROPE AND CENTRAL ASIA															
Single-Country Grants															
Albania	2			2											
Georgia													1	1	
Kyrgyz Republic				3	1	1	3	3	3						
Moldova							1	1	1						
Serbia										1	1	1			
Turkey				2	2	2	2	2	2						
Regional and Multi-Country															
Kyrgyz Republic and Tajikistan							3	3	3						
LATIN AMERICA AND THE CARIBBEAN															
Single-Country Grants															
Belize	1	1				1									
Bolivia		1	1		1	1		1	1						
Brazil	1					2									
Chile	1		1		1										
Colombia	1		2	3	2	1	2			2					
Costa Rica			2				2			2			1		
Dominican Republic			1	1	1										
Ecuador			2	2	1	1	2	1	2						
El Salvador						1									1
Guatemala				1		1				1		1	1	1	1
Guyana	1	1		1											
Haiti	1			2	2	3	2	1	2			1			2
Panama	1		1	1		1									
St. Lucia			1												
Regional and Multi-Country Grants															
Latin America and the Caribbean				1			1					1			
Caribbean	3	1	2	1			1			1			1		
Central America	1		1												
MIDDLE EAST AND NORTH AFRICA															
Single-Country Grants															
Djibouti	2		1	1			2			2			4		3
Morocco	1														
Saudi Arabia	1														
SOUTH ASIA															
Single-Country Grants															
Bangladesh		1		1	1										1
Bhutan	1			1											
India				2	2	1				1	1	1	1	1	1
Nepal	2		1		1				1	1					
Pakistan	2	1	1							1		1	1	1	1
Sri Lanka	1	1	1	1	1										
Regional and Multi-Country Grants															
South Asia Region	1		3	1		1				1	1	1	2	3	1
GLOBAL															
			2	1		1				1	1	1	2	3	1

FY13 Key Operational Indicators

At the beginning of FY13, GFDRR’s portfolio consisted of 160 country projects financed with \$94.3 million in grants. Throughout the year, 75 GFDRR-financed projects—more than in any other year—reached completion, disbursing a total of \$33.4 million. In addition, GFDRR approved 56 new grants worth \$32.2 million.

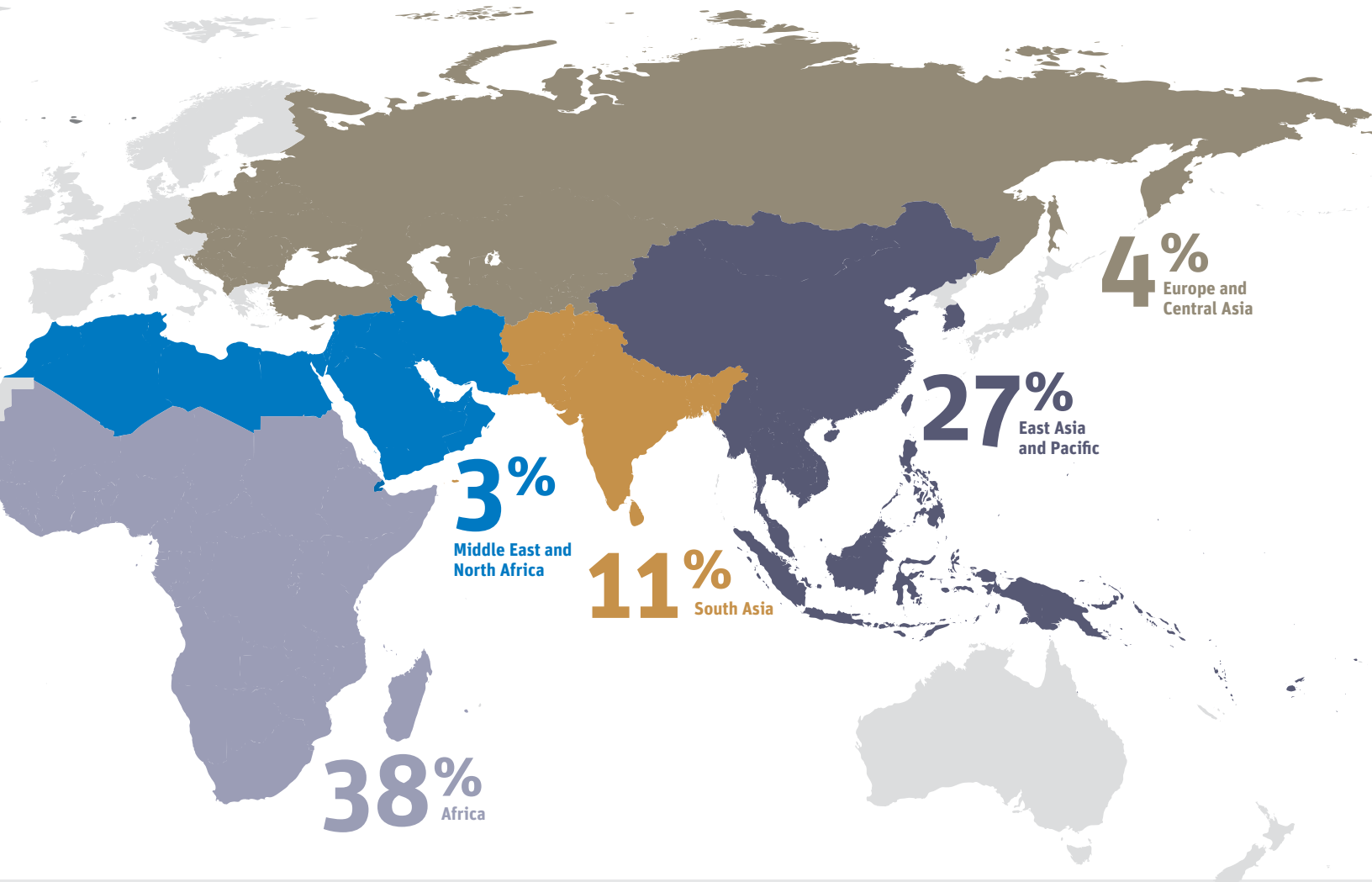


Last year, GFDRR provided grants to more than 80 countries to implement reform and investment programs for disaster risk management across its Five Pillars of Action.

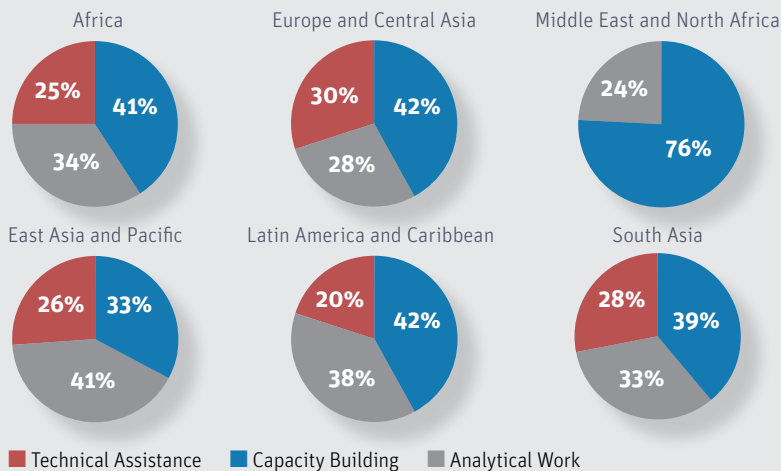


FY13 followed a trend consistent with prior years: GFDRR investments have more than doubled in regions relatively new to disaster risk management such as Africa, the Middle East and North Africa, Eastern Europe and Central Asia, and South Asia; and remained constant in those regions for which disaster risk management has historically been a focus, including Latin America and the Caribbean, and East Asia and the Pacific.

FY13 Share of Financing by Region The region with the largest proportion of active projects is Sub-Saharan Africa, which received 38 percent of grant financing in FY13; most of this grant financing went to projects in GFDRR focus countries. By the end of FY13, GFDRR’s portfolio consisted of 141 grants worth \$93.25 million.



By Region:



GFDRR grants delivered support in the form of **capacity building, analytical work, and technical assistance**. Capacity building activities accounted for the largest share of support across five of the six regions. In East Asia and the Pacific, analytical work accounted for the larger share at 41 percent compared to capacity building at 33 percent.



10 Caribbean countries are now sharing disaster risk data online as a result of an FY13 GFDRR regional training.

30 countries are using GeoNode, a GFDRR-supported open source software that allows users to create, share, and organize geospatial information.

2,800 professionals belong to GFDRR's Understanding Risk online global community.

A satellite image of the Ukraine's southern coastline. Maps like this one are important for identifying areas that are vulnerable to disaster risk.
Photo credit: European Space Agency (ESA)

An aerial photograph showing a coastal area with a large body of water in the foreground and a grid of agricultural fields in various shades of green and brown in the background. The fields are separated by thin lines, likely roads or irrigation canals. The water is a deep blue color.

30,000 buildings in Sri Lanka were mapped by volunteers in FY13, part of GFDRR's Open Cities project.

1.1 million farmers in India accessed insurance in FY13 through the newly reformed National Agricultural Insurance Scheme.

\$129.7 million of investment has been leveraged from GFDRR grants on forecasting and monitoring weather and climate hazards in half a dozen low-income countries.



Pillar 1 Risk Identification

Authorities and residents of a village hit by a volcanic eruption in Yogyakarta, Indonesia, meet to discuss its reconstruction. Photo credit: Nugroho Nurdikiawan Sunjojo/World Bank

In FY13, GFDRR provided 78 grants reaching 55 countries under this pillar. Sub-Saharan Africa received the highest number, 34, of GFDRR grants supporting risk identification activities. Latin America and the Caribbean had the second highest number, a trend consistent with previous years and the region's focus on using risk information to drive public infrastructure investments.

GFDRR's goal under this pillar is to enable risk-sensitive decision making by providing people in vulnerable countries with access to better information about natural disaster risks, including those caused by the effects of climate change and rapid urbanization. For example, GFDRR grant and advisory support helps governments understand and identify their risk through maps that illustrate where a city or region is most vulnerable to one or more hazards.

GFDRR also helps communities and governments create such information on their own, manage it, share it with others, and use it. Risk information can enable governments to improve and enforce land use planning and building codes, change laws, and set aside or raise the funds needed for disaster risk management efforts.



Integrating Risk Identification for Sustainable Development

Building capacity to create risk assessments like hazard maps, or to use risk information as an evidence base for public investments, requires a long-term commitment. Doing so, however, has consistently proven to be worth the time and resources invested, especially when the results inform policies and lead to investments that reduce disaster risk. As a result, risk information produced under GFDRR's first pillar is used as a foundation to help make disaster risk management sustainable.

Below are two FY13 examples of how risk identification results enabled decision makers to avoid creating new risk and reduce existing risk.

In **Colombia**, GFDRR-funded risk assessments in two cities successfully produced exposure maps for schools, hospitals, and homes that are vulnerable to volcanic eruptions and earthquakes. The information produced by this initiative will be used to inform \$100 million in government disaster risk management programming over the next several years, with World Bank support.

Morocco is particularly prone to damaging seismic activity, with an estimated one-third of both its population and gross domestic product (GDP) at risk. GFDRR, through technical advice and a grant, supported the Moroccan government in completing a multi-hazard risk assessment involving all ministries that laid out the costs and benefits of different risk reduction solutions. The assessment is helping authorities understand vulnerabilities within each sector—from health and education to housing and transportation—which in turn is informing better recovery strategies. The analysis is also being used for a \$75 million World Bank initiative to reduce risk from floods and earthquakes.

Risk identification activities also helped countries better prepare for disaster. For example:

In **Indonesia**, a successful GFDRR-supported community-mapping project in Jakarta that mapped more than 250,000 buildings helped to create an award-winning open source software program that is changing the way the world plans ahead for disaster. (See page 21 for more information about this new tool, called InaSAFE.)

Risk identification activities also led to more robust financial protection strategies for individuals, countries, and even regions. For example:

The Pacific Catastrophe Risk Assessment and Financing Pilot—a joint program with GFDRR and other partners—helped improve access to risk information in the Pacific, resulting in \$45 million in risk coverage from international insurance markets. (See page 25 for more information.)

Finally, risk identification activities contributed to improved post-disaster reconstruction and recovery efforts. For example:

Following the November 2012 earthquake in **Guatemala**, GFDRR and the United States-based Earthquake Engineering Research Institute fielded a team of Guatemalan and international experts to assess damages to inform new seismic building norms. (See page 30 for more information.)

\$100 million in planned disaster risk management programming in Colombia is informed by GFDRR-supported studies.

A \$75 million World Bank initiative to reduce risk from floods and earthquakes in Morocco is based on a GFDRR analysis.

250,000 buildings in Indonesia were mapped using InaSAFE, an award-winning open source program GFDRR helped create.



Building a Global Community to Understand Risk

GFDRR-sponsored events are bringing together experts and practitioners from government authorities, development agencies, the private sector, and community-based organizations to advance risk assessment at national and international levels.

- In July 2012, GFDRR convened its biennial Understanding Risk Forum in **South Africa**, with approximately 500 practitioners and experts participating from over 80 countries. Four months later, GFDRR supported a national-level Understanding Risk Forum in **Brazil** attended by 600 officials, experts, and practitioners that focused on identifying and reducing risk from floods and landslides. In the last five years, recurrent disasters have cost Brazil more than \$9 billion. The Understanding Risk online community has also grown to 2,800 members from approximately 130 countries who share knowledge, collaborate, and discuss best practices in risk assessment.
- GFDRR brought together 50 government geographic information systems (GIS) data managers and information technology specialists from 10 Caribbean countries, 7 regional development agencies, the World Bank, and the **United States'** National Aeronautics and Space Administration (NASA) to share disaster risk information with each other. The weeklong training on gathering, using, and sharing advanced GIS data was conducted in partnership with the University of the West Indies at St. Augustine, **Trinidad and Tobago**. Participants learned how to customize programs that use open source data management, as well as the uploading, management, and sharing of data used in disaster risk management decision making. The training has resulted in a new, region-wide community of practice made up of 150 active participants who regularly share data and experiences with each other.

Using Open Data to Communicate and Use Risk Information Effectively

GFDRR is providing technical advice and grant financing to support innovative methods to engage government agencies and communities alike to collaborate, analyze, communicate, and use risk information effectively. For example:

- Since 2010 GFDRR has supported the creation and use of an open source content management system for developing GIS called GeoNode [①http://geonode.org](http://geonode.org). Today, people in more than 30 countries use GeoNode to create, share, manage, and publish geospatial data. Even users with little training are now able to collaborate in making interactive maps. In FY13, **Malawi**, **Mozambique**, and **Sri Lanka** began using the system, which avoids the prohibitive costs associated with proprietary geospatial software.

Crowdsourcing Risk Information

GFDRR grants support communities to quickly and accurately map critical public infrastructure as a way to create much-needed risk analyses for vulnerable countries. For example, GFDRR's flagship Open Data for Resilience Initiative (OpenDRI), underway in 20 countries, is an ambitious and innovative program that seeks to develop inexpensive open data systems in developing countries. It also ensures that information is properly stored and can be shared.

In FY13, OpenDRI and partners launched the Open Cities project in **Bangladesh, Nepal, and Sri Lanka**. The project enlists the voluntary help of ordinary citizens, academics, and people with experience in software and online data tools in an effort to create cities that are more resilient to the disasters that plague them <http://opencitiesproject.com>. In FY13, GFDRR-trained Open Cities volunteers mapped more than 30,000 buildings in Sri Lanka alone.

Open Cities is also advancing quickly in Nepal, demonstrating the power of partnership. Nepal's Kathmandu Valley is one of the most seismically at-risk places in the world, due to a combination of poor construction practices and a history of governance challenges. At the same time

there is strong capacity within the university system, government ministries, and civil society organizations like the National Society for Earthquake Technology and the International Centre for Integrated Mountain Development to champion Open Data efforts and to provide technical assistance related to data management.

In February 2013, GFDRR took advantage of these valuable resources and, with the Mozilla Foundation, Wikimedia Nepal, and software companies in both Nepal and the **United States**, hosted a community-mapping day. Over 400 students, technology professionals, and the general public teamed up to map over 8,000 buildings in Kathmandu using satellite imagery provided by the U.S. State Department. Since then, Open Cities Kathmandu has organized 22 mapping parties, trained 600 participants, and uploaded approximately 340,000 data nodes to the Nepal map on Open Street Maps www.openstreetmap.org, including ones pinpointing roads, public buildings, and other points of infrastructure. The data collected is made freely available via the Open Street Maps website, a global online database with over one million users, and has enormous potential to empower citizens to address urban sustainability from the ground up.



People from all walks of life participated in GFDRR's community-mapping day in Kathmandu, Nepal, in February 2013. Photo credit: www.osmnepal.org



Pillar 2 Risk Reduction

Neighborhoods built on steep hillsides, like this one in Rio de Janeiro, Brazil, are vulnerable to deadly landslides. To better protect these communities, the city government has been investing in risk mapping, improvements to the early warning system against landslides (called Alerta Rio), and an extensive program of public works aimed at stabilizing the densely occupied slopes prone to landslides.

Photo credit: © luoman

In FY13, GFDRR's program included 90 grants that contributed to making disaster risk reduction a key component of governance at both the national and subnational levels in 60 countries. In all, 38 grants supporting risk reduction went to the Africa region, followed by the Latin America and Caribbean region with 21.

Under this pillar, GFDRR technical advice and grants to countries focus on: developing and institutionalizing new policies that lead to risk reduction, in particular to stem the creation of new risks; and on developing and supporting the implementation of risk reduction programs.

Improving Public Policy to Guide Risk Reduction

GFDRR worked with countries to create or improve the public policies and legislation needed for better governance and land use planning, and to drive effective risk reduction.

In the Europe and Central Asia region, GFDRR supported countries to review policies, legislation, and institutional arrangements with the goal of improving government capacity and interagency cooperation for risk reduction. For example, GFDRR's engagement in **Albania** is not only helping restore important infrastructure like dikes that were damaged by recent flooding, but also to set up national medium- and long-term comprehensive flood risk reduction plans for the Drini-Buna River Basin. GFDRR and the World Bank also assisted the Albanian government in developing a five-year disaster risk management strategy that improves cooperation between agencies like Civil Protection and the National Hydrometeorological Service; institutes the legal and policy framework needed for the introduction of



a catastrophic risk insurance facility; and adopts Euro Zone-approved building codes, which are the best building norms in the region and bring Albania one step closer to accession in the EU.

In **Vietnam**, a country where typhoons can affect up to 90 percent of its population, a GFDRR grant was used to create new, disaster resilient policies in infrastructure and land use. A GFDRR-funded assessment of Vietnam's rural roads and national highways suggested climate change-resilient road designs that are now being used in a World Bank nationwide rural transport project. Additionally, the Ministry of Agriculture is using GFDRR-supported studies of damaged irrigation systems to develop a nationwide irrigation improvement project. These assessments are helping the government to take concrete action in response to the effects of climate change, in a country where sea level rise could flood up to five percent of arable land, much of it used for farming.

In **Madagascar**, a GFDRR grant assisted the government in developing cyclone-proof norms and standards for key

public infrastructure like roads, health centers, and schools in high-risk areas. GFDRR then fostered peer-to-peer learning and collaboration by sending a Madagascar expert in building codes along with a United Nations Human Settlements (UN-HABITAT) team to assist **Mozambique** in conducting a damage assessment in the aftermath of 2012 cyclones Dando and Funso, which damaged or destroyed 531 schools in Gaza and Zambezia provinces. These recommendations on cyclone-proof schools also include budget estimates and will be used in a nationwide reconstruction and retrofitting strategy for schools.

In **Indonesia**, GFDRR worked with the Ministry of Education and Culture and the National Agency for Disaster Management to make earthquake-resistant standards part of all school rehabilitation. As a result of this project the government has now issued safe school construction guidelines for both new schools as well as schools being rehabilitated. In collaboration with the World Bank, GFDRR helped implement these guidelines in 180 schools located in three high-risk provinces.

Guiding Investments that Reduce Risk to Natural Hazards

Over the last year, GFDRR technical advice and grants have supported dozens of national agencies and local governments from over 25 countries and over 10 regional and international organizations—including regional development banks such as the Asian Development Bank—to prepare major risk reduction investments. These investments are being made in improving and disaster-proofing critical infrastructure like transportation networks, housing, agriculture, and water and sanitation. GFDRR has also been informing a growing number of World Bank-financed projects that use risk assessments to plan and design large infrastructure projects. For example:

In **Belize**, GFDRR supported the government through an inclusive process in which 35 different national and international organizations, nongovernmental organizations (NGOs), line ministries, and civil society organizations came together to analyze risk information. As a result, they decided which parts of the Belize road network needed immediate investment before the next disaster hits, especially flooding. This project is financed through the

African, Caribbean, and Pacific and European Union (ACP-EU) Natural Disaster Risk Reduction Program. (See page 32 for more information.)

In **Costa Rica, El Salvador, and Panama**, risk assessments are providing the needed basis for governments to plan future investments in risk reduction measures. For example, with the World Bank as an implementing partner, a GFDRR grant allowed the governments of El Salvador and Panama to conduct critical seismic risk assessments of schools, hospitals, and government buildings in selected cities. GFDRR funding in Costa Rica enabled the government to conduct a seismic risk assessment of Costa Rica's water and sanitation network infrastructure. In Quito, **Ecuador**, a seismic micro-zoning study was produced in 2012 with GFDRR support, providing the necessary information to redraw local building codes.

A GFDRR-conducted flood and earthquake risk assessment for Manila has led to **the Philippines** government's endorsement of and investment in a flood risk reduction plan worth upwards of \$9 billion. (See page 18.)

Bringing Together the Five Pillars of Action in the Philippines

In the greater metropolitan Manila area, around 12 million people—accounting for a fifth of the country’s total population—fuel the country’s economy, generating close to 40 percent of its GDP. Despite its role as **the Philippines’** economic engine, Manila lacks sufficient plans and infrastructure to protect the people and assets that are perennially affected by flooding.

In response, the Philippines government and GFDRR put in place a flood risk management master plan that prioritizes policy reform and investments costing approximately \$9 billion. The government has approved the plan and its price tag, with an initial allocation of \$120 million for immediate and critical investments. Studies have begun on a plan that proposes structural—or engineered—changes in the Upper Marikina River catchment area, upstream of Metro Manila, and the Laguna Lakeshore, and the government is in discussions with nearby communities on new housing and resettlement options. GFDRR’s improvements to risk assessments are informing new land use regulations, watershed conservation, and reforestation, and are improving the Philippines’ flood forecasting and warning system.

While floods are the primary threat, Manila also lies near seismic fault lines, so GFDRR conducted a flood and earthquake risk assessment to help the government make smarter investments in public infrastructure. As a result, this study is informing the design and construction of the government’s new wastewater treatment plants in Manila. The Department of Public Works and Highways, the Department of Health, and the Department of Education have partnered with GFDRR and the World Bank to make 200 critical public buildings like schools and hospitals in Manila safer and more resistant to multiple hazards.

Meanwhile, the Philippines continues to suffer from the financial shocks that disasters can cause. In order to reduce the government’s fiscal burden, GFDRR is supporting the Department of Finance to develop a national risk financing strategy. In FY13, a catastrophe risk modeling produced a historical catalog of natural

disasters for the country, including the metropolitan Manila area, as well as a database of their consequences to people, infrastructure, and the economy.

This important momentum created by the Philippines’ commitment to disaster risk management has also meant that the country is struggling to meet new, legislated requirements. For example, there is an urgent need to increase human and financial resources dedicated to disaster risk management. With GFDRR support, the country’s Earthquake Megacities Initiative, a nonprofit organization, offered a series of courses on the latest innovations in disaster risk reduction. In 2012 alone 500 disaster risk management practitioners took the course. Other countries are now emulating and scaling up this training.

GFDRR’s work in the Philippines provides an example of what can be accomplished when government, partners, financing, and a necessary sense of urgency all come together. The Philippines has made real progress in integrating disaster risk management into its national development plan, resulting in prioritized investments as well as policy and institutional reforms to reduce future risk. Most importantly, the country has recognized that disaster risk reduction entails the whole of government and society in order to protect precious development gains.



A little girl does her schoolwork in a Philippines evacuation center set up following the devastation caused by Typhoon Ketsana, which made landfall there on September 25, 2009. In FY13, GFDRR and the government made solid advances in disaster risk management and recovery measures. Photo credit: Jerome Ascano/World Bank



In August 2012, heavy monsoon rain pounded the Philippines and paralyzed schools, government offices, and financial sectors in Manila, its capital city. Several thousand people were forced to flee their homes. Photo credit: © Herman Lumanog/Dreamstime.com



3

Pillar 3 Preparedness

In FY13, GFDRR-supported projects helped countries to improve national services that monitor and forecast hydrometeorological hazards. Photo credit: Thinkstock.com

Last year, GFDRR provided 66 grants that contributed to improvements in forecasting and early warning systems, contingency and emergency response plans and protocols, and training and simulation exercises. These reached 50 countries, many of them in Africa.

GFDRR grants under this pillar seek to improve the ability of institutions and communities to anticipate, prepare for, and respond to disasters. Partnership is key, and GFDRR collaborates closely on this issue with the World Meteorological Organization, for example, to help governments better forecast and respond rapidly to impending climate- and weather-related hazards.

GFDRR also partners with UNDP and the national societies of the International Federation of Red Cross and Red Crescent to improve the status, capacity, and mandate of national disaster risk management organizations.

Forecasting Natural Hazards to Prevent Loss

In FY13, GFDRR worked with various partners, including industrialized countries' hydrometeorological agencies, to help developing countries modernize and strengthen national services that monitor and forecast hazards like heavy rainfall, floods, tropical cyclones, heat waves, and droughts. GFDRR's grant support is enabling the World Bank to meet rapidly rising client country demand in this area.



In **Mozambique, Nepal, Vietnam, the Republic of Yemen**, and in **Central Asia**, GFDRR's grants are leading to significant investment and reforms on a range of initiatives totaling more than \$129.7 million. These projects are helping countries to access more consistent and useful weather- and other hazard-related information. More specifically, in Nepal and Yemen, both fragile and conflict-affected countries, GFDRR has been supporting the design of the Pilot Program for Climate Resilience.

In **Nepal**, GFDRR technical and financial support is allowing the government to create a modern hydrometeorological system and establish an early warning system for floods, droughts, and landslides. The pilot project will also help improve transportation safety and water resource management, and increase food security by producing and communicating the type of information farmers need to protect and increase crop yield. This is a critical advance in a country where the vast majority of the population is rural and depends on farming for a living.

In **the Kyrgyz Republic**, a country that faces risks caused by earthquakes, floods, droughts, landslides, and avalanches, a GFDRR-supported needs assessment produced recommendations to improve the accuracy and timeliness of weather forecasts. The World Bank used GFDRR's recommendations to design an investment program to modernize the country's hydrometeorological system. This is being undertaken as part of the World Bank's Central Asia Hydrometeorology Modernization Project, which is building regional cooperation and establishing trans-boundary weather, climate, and hydrological services.

GFDRR's preparedness projects are also helping people and institutions to anticipate, prepare for, and respond to disaster. For example, a GFDRR grant led to the development of district-level risk profiles for **Ethiopia**, which are providing the basis for preparing local contingency plans against drought, floods, earthquakes, and other hazards. These plans include earmarking resources for disaster response, and ensuring the provision of food, water, medicine, and shelter.

Strengthening Linkages between Early Warning Systems and Disaster Response

Last year, GFDRR helped national disaster risk management agencies become better equipped to respond to disasters through trainings, simulations, and capacity assessments. As a result:

A GFDRR and WMO pilot project in **Costa Rica** is helping emergency committees in five towns to use and rapidly respond to flash flooding information generated by a modernized and accurate early warning system. A January 2009 earthquake of 6.3 magnitude in Costa Rica's Sarapiquí River Basin significantly changed drainage patterns in the region, introducing new flooding risks to the people living there. In 2012 the committees successfully coordinated an emergency simulation involving hundreds of volunteers and representatives from national and provincial disaster risk management agencies and civil society organizations.

GFDRR also assists governments to develop new approaches and tools for contingency planning. In October 2012, GFDRR—in partnership with **Indonesia's** National Agency for Disaster Management, the World

Bank, the Australia-Indonesia Facility for Disaster Reduction, and the Australian Agency for International Development (AusAID)—launched version 1.0 of the Indonesia Scenario Assessment for Emergencies (InaSAFE). This is a free, open source, and publicly available desktop and web-based GIS software that produces realistic natural hazard impact scenarios for events like floods and earthquakes. InaSAFE produces the kind of information needed by governments and the people they serve, allowing them to put contingency plans into place to prepare communities against disasters. InaSAFE received "Rookie Open Source Project of the Year Award" in 2013 from Black Duck, a company that tracks and rates open source projects around the world.

Indonesian President Susilo Bambang Yudhoyono being introduced to InaSafe. Photo credit: Clare Price/AusAID





16 projects receiving GFDRR grants provided hazard and exposure mapping or risk assessments to developing countries.

86 GFDRR-financed projects included a training component.

9 countries have improved building codes and norms for infrastructure like schools and health centers as a result of GFDRR-supported initiatives.

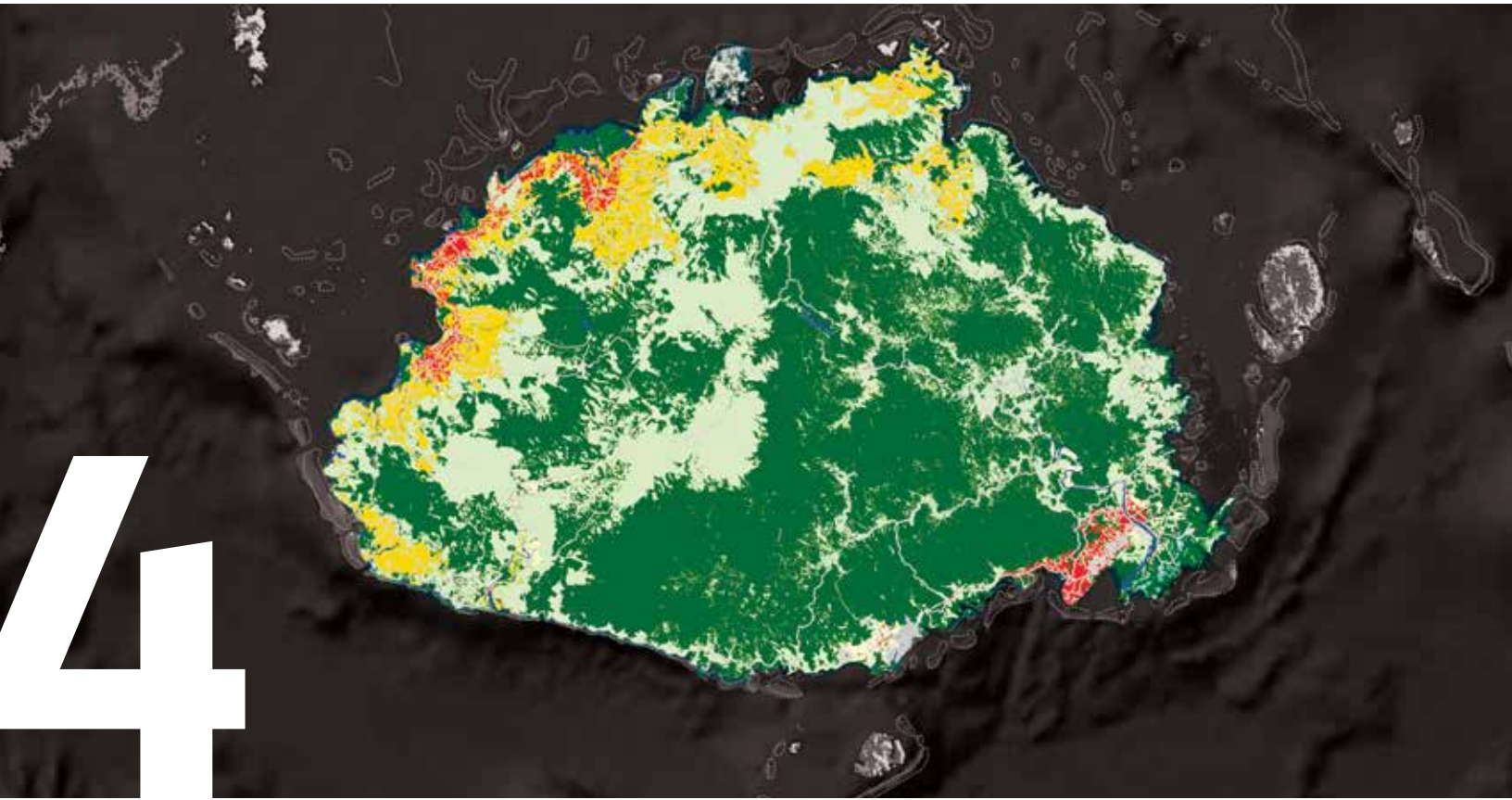
Village leaders, government officials, and World Bank staff assess a dike at risk of collapsing in northern Cameroon following heavy rainfall and flooding that began in August 2012. GFDRR-supported assessments of hydraulic infrastructure in Cameroon resulted in \$108 million of IDA financing to rehabilitate existing dams and dikes and to develop emergency preparedness plans. Photo credit: GFDRR



\$250 million of approved International Development Association (IDA) reconstruction projects in the Indian state of Uttarakhand were informed by a GFDRR rapid assessment following June 2013 flooding there.

\$500 million worth of IDA disaster risk and regional water use projects are based on a GFDRR and World Bank needs assessment following Nigeria's November 2012 severe flooding.

250 government ministries from over 80 countries partnered with GFDRR.



Pillar 4 Financial Protection

A September 2013 exposure map of Fiji shows regions that are particularly prone to damages from tropical cyclones. Maps like this are helping countries in the Pacific to access risk insurance through the GFDRR-supported Pacific Catastrophe Risk Assessment and Financing Initiative.

In FY13, GFDRR's program included 33 grants supporting the development of financial protection strategies in 29 countries. These projects included analyses of countries' financial exposure to disaster risk, the design of programs to increase the financial resilience of governments following major disasters, and the deepening of insurance markets for households, farmers, and businesses.

GFDRR's goal under this pillar is to help countries respond more effectively to natural disasters, while buffering the impact these disasters have on their budget and ability to manage debts. GFDRR regularly engages with private re-insurers, investment banks, and capital market to advance this line of work.

GFDRR also supports the development of competitive catastrophic risk insurance markets to help homeowners, farmers, and small businesses better protect their properties and livelihoods when disaster strikes. Studies have shown that private insurance, including micro-insurance, can provide a cost-effective mechanism to protect economies from the financial impact of disasters.



Insuring Businesses, Homes, and Farmers

In FY13, GFDRR through grants and advisory support helped countries strengthen their insurance sector to better protect businesses, homes, and livelihoods.

GFDRR contributed to improving domestic insurance markets in a number of countries. **Albania** now has earthquake and flood insurance risk models and hazard maps that will help the government better regulate insurance companies and banks. Similarly, GFDRR funding and technical advice is helping the governments of **the former Yugoslav Republic of Macedonia** and **Serbia** to improve the financial resilience of local insurance markets in response to catastrophic events.

Agricultural insurance has also been a focus for GFDRR. In **Guatemala**, weather and agricultural statistics are now available to insurance companies as a result of GFDRR support. In addition, the government is creating a public and private sector strategy for agriculture insurance that aligns the Ministry of Agriculture's policies with that of insurance companies and rural banks.

GFDRR provides continued technical support to reform the National Agricultural Insurance Scheme in **India**, which, together with its successor schemes, has insured more than 29 million farmers. In FY13 alone, the scheme covered more than 1.1 million farmers while another 11.6 million farmers and \$370 million worth of crops were covered through the Weather-Based Crop Insurance Scheme.

\$45 million of earthquake, tsunami, and tropical cyclone risk coverage was accessed by five Pacific island countries, thanks in part to GFDRR support.

Protecting National Economies

Last year, GFDRR—through grants and its Disaster Risk Financing and Insurance Program, which provides advisory support—continued working with governments to accurately assess their disaster exposure and set up systems to protect their fiscal balance in times of crisis.

This past year saw the launch of GFDRR's Pacific Catastrophe Risk Insurance Pilot, which allowed five Pacific island states to access market-based catastrophic risk insurance solutions for the first time. With grant funding for premium subsidies and technical assistance from the government of Japan, the **Marshall Islands**, **Samoa**, **the Solomon Islands**, **Tonga**, and **Vanuatu** have secured \$45 million of earthquake, tsunami, and tropical cyclone risk coverage from international insurance markets for the 2013 pilot period. The pilot is an important part of the Pacific Catastrophe Risk Assessment and Financing Initiative, a broader GFDRR-supported effort to help the Pacific region develop a comprehensive program on disaster risk management and climate change adaptation.

GFDRR also worked with **Pakistan's** Ministry of Finance and its National Disaster Management Agency to develop a preliminary country disaster risk profile needed to create a national disaster risk financing strategy. This work represents an unprecedented level of government interest and action on financial protection.

The World Bank completed a feasibility study—supported by a GFDRR grant—on the establishment of a pan-African facility to financially manage drought risk in a region that is debilitated year after year by this natural hazard. The study takes into account the potential legal and financial structures for a facility allowing countries to pool and manage drought risk regionally. It also included financial modeling of various proposed scenarios of country participation and risk financing strategies, and helped support dialogue among stakeholders during the early design stages of the facility.

GFDRR and World Bank support led to the FY13 establishment of the African Risk Capacity, which allows Sub-Saharan countries to pool risk and receive emergency funding when the next regional drought hits.

Following the study, the African Union established the African Risk Capacity in November 2012 to provide participating country governments with timely, reliable, and cost-effective contingency funding in the event of a severe drought by pooling risk across the continent. As of October 2013, nine countries had signed pre-participation agreements for the program. Initially, the new organization will use advanced satellite weather surveillance and software developed by the World Food Programme to estimate and disburse immediate funds to African countries hit by severe drought, with other hazards to follow in the coming years.

GFDRR has also helped middle-income countries develop legal instruments to better protect their economies from the shocks of disasters. In **Colombia**, GFDRR through

its Disaster Risk Financing and Insurance Program is helping the government transfer risk to investors, through the World Bank Treasury. Together, GFDRR and the World Bank provided expertise and legal support to the Ministry of Finance and Public Credit in seeking ways to better manage budgets during a natural disaster. The Ministry is also preparing a catastrophe swap to protect Colombia's existing debt portfolio against the impact of a major earthquake. GFDRR is providing advisory services, including a prototype financial risk management decision tool allowing policy makers to design and evaluate different catastrophe options. Catastrophe swaps help risk holders to transfer some of the risk they have assumed should a large natural disaster hit.

With both financial and technical support from GFDRR, **the Philippines** has also made headway in developing a first generation catastrophe risk model and a disaster risk financing and insurance policy strategy. The Philippines is one of the most disaster-prone countries in the world, with damages from typhoons, earthquakes, floods, volcanic eruptions, droughts, and other natural hazards amounting to 0.7 percent of its annual GDP. At this stage, the GFDRR-supported strategy focuses on the financing of government response systems, including how to lessen the economic impact on the poor and most vulnerable, who cannot afford insurance.

GFDRR helps countries make important investments to reduce risk.

180 schools in three Indonesian provinces were brought up to new, seismic-proofing standards with GFDRR support in FY13.

\$180 million worth of IDA projects in Ethiopia, Kenya, and Uganda are using GFDRR data gathered in response to a drought emergency in the Horn of Africa.

\$9 billion was pledged by the Philippines government for investment in flood risk reduction following a GFDRR risk assessment of Manila.



A little boy peers out of his new house in northern Pakistan, rebuilt according to seismic-proof building codes following the widespread destruction wrought by a magnitude 7.6 earthquake in 2005. Photo credit: Earthquake Reconstruction and Rehabilitation Authority (ERRA)



Pillar 5 Resilient Recovery

Reconstruction and recovery efforts in Haiti's capital city of Port-au-Prince continue following the January 2010 earthquake. In FY13, GFDRR supported the design and launch of a university course in Haiti on disaster recovery that is preparing the country's next generation of reconstruction and development practitioners.
Photo credit: Francis Ghesquiere/GFDRR

In FY13, GFDRR's program provided 55 grants aimed at meeting the growing demand by governments for assistance with recovery and reconstruction planning, including 11 post-disaster needs assessments. Many of these projects are taking place in the Horn of Africa and the Sahel, Central America, East Asia, and the Caucasus. For example, GFDRR provided financial and technical support for 11 post-disaster assessments helping governments prepare for recovery, mostly as a result of persistent flooding or droughts. Many of these assessments were done in partnership with UN agencies, the EU, other international and regional organizations, and donors.

Additionally, FY13 saw GFDRR begin to shift its focus away from providing assistance solely with post-disaster needs assessments. Instead, it is increasingly supporting rapid assessments of damage and need; detailed recovery planning; and pre-disaster activities that allow for quicker and more effective disaster recovery.

GFDRR has multiple areas of focus under this pillar: developing and sharing knowledge and training on damage assessments and disaster recovery; supporting countries to conduct reliable post-disaster needs assessments after natural disasters strike; and providing solutions for better post-disaster recovery planning and financing. With the risk awareness of governments and people



at its highest in the aftermath of disaster, recovery and reconstruction planning presents an important opportunity to change practices that have led to underlying vulnerabilities.

Helping Countries Prepare for Recovery

GFDRR provides grants and organizes trainings to provide government officials and disaster risk management practitioners with the necessary skills to conduct their own post-disaster assessments.

In FY13, GFDRR offered 14 basic training programs in post-disaster needs assessments for more than 500 government officials in **Comoros, the Republic of Korea, the Kyrgyz Republic, Malawi, Nepal, Nigeria, the Seychelles, and Turkey**. Through GFDRR academic partnership programs and online training in damage and loss assessments, an additional 1,000 government officials and staff from organizations working in the field of disaster risk received basic training on disaster risk management and recovery operations.

GFDRR grants also go to leadership training. Together with the Bill and Melinda Gates Foundation and Tulane University, GFDRR launched the Strengthening Leadership in Disaster Resilience Program. More than 50 disaster risk management practitioners and over 30 university faculty members from **Djibouti, Ghana, Rwanda, Tanzania, and Uganda** participated in workshops on identifying weaknesses and opportunities to improve disaster risk management in the region. The program's graduates, called Resilience Fellows, have tailored action plans they are using to improve disaster risk management in their home countries.

Increasing the number of professional courses at universities is another GFDRR priority. In **Nigeria**, GFDRR is supporting the development of a Masters-level course on post-disaster needs assessments and the methodology behind creating successful recovery strategies. This project is financed through the ACP-EU Program. (See page 32 for more information.) In **Haiti**, a GFDRR grant supported the World Bank and the International University Center Haiti to design and launch a university course on disaster recovery that prepares students—the next generation of reconstruction and development practitioners and professors—to contribute to current and future recovery efforts.

GFDRR is supporting a project in **the Kyrgyz Republic** that is evaluating and improving government standard operating procedures for post-disaster needs assessments, damage assessments, the methodology behind these assessments, and recovery planning. The Ministry of Emergency Situations and the National Platform Secretariat for Disaster Risk Reduction are leading the new agenda, which has already resulted in a published guidebook for government authorities laying out how to do needs assessments. The new procedures and standards will be piloted in FY14.

GFDRR recognizes that it is not only government officials, disaster experts, and academics who need to be involved in the process of rebuilding in a more resilient way. A GFDRR grant in **Indonesia** provided training and mentoring to leaders in 10 villages on resilient reconstruction methods in FY13. The training introduced community members to earthquake construction building standards as well as resettlement plans for people vulnerable to flooding and landslides. The initiative resulted in 2,600 homes being built in 21 new settlements set up on land deemed safer from these natural hazards. This type of initiative allows communities to take disaster resiliency into their own hands and is easily replicated in other countries.

GFDRR also launched a global initiative in partnership with the UN and EU to develop the *Disaster Recovery Framework Guide*, which governments can use to improve the way recovery is planned and managed. Through research and consultations at international forums like UNISDR's Global Platform for Disaster Risk Reduction and the International Recovery Platform, the project is systematically consolidating best practices from around the world that can then be shared with and used by countries.

GFDRR believes post-disaster reconstruction efforts provide a rare window of opportunity to make fundamental changes in a country's disaster risk management strategies.

Preparing Post-Disaster Assessments

In FY13, GFDRR provided post-disaster support to countries in the form of rapid needs assessments. These assessments provide an analysis of the damages and losses created by the disaster, as well as concrete recommendations for building more resilient infrastructure and communities. This past year, GFDRR, in partnership with the World Bank, UNDP, the EU, and the Luxembourg government conducted 11 post-disaster assessments, 7 of them in Sub-Saharan Africa: **Cameroon, Comoros, Fiji, Georgia, Guatemala, Malawi, Mozambique, Niger, Nigeria, Samoa, and the Seychelles.**

Following severe floods in **Nigeria** in November 2012, GFDRR and the World Bank supported a post-disaster needs assessment that, in turn, is being used as the foundation of a \$500 million IDA project on disaster risk and regional water use.

In **Mozambique**, using satellite imagery and spatial datasets, GFDRR funded a rapid impact assessment of the January 2013 floods that displaced 185,000 people. This, in combination with the results from a GFDRR-supported post-disaster needs assessment, resulted in a restructuring of the World Bank's involvement in Mozambique and an additional \$70 million earmarked for rehabilitation and recovery.

The November 2012 7.2 magnitude earthquake in **Guatemala** killed almost 50 people and displaced more than 118,000. A GFDRR grant—along with financial and technical support from the Inter-American Development Bank and the UN—assisted the government to conduct a damage and loss assessment. Through its partnership with the U.S.-based Earthquake Engineering Research

Institute, GFDRR was also able to bring in a team of 10 experts from other countries to collaborate with Guatemala's own national association of earthquake engineers. The visiting team produced a report on the causes of the earthquake damage and provided potential solutions, enabling Guatemala's earthquake engineers to develop better seismic building norms for the country.

GFDRR also supports the provision of emergency expert support for countries affected by disasters. In **Cameroon**, GFDRR quickly brought together hydraulic infrastructure experts to assess the likelihood of dam and dike collapse during severe flooding that began in August 2012. The assessment determined immediate interventions needed to prevent collapse, as well as providing longer-term recommendations for rehabilitation to prevent future flooding. The assessment leveraged \$108 million from the IDA to rehabilitate existing hydraulic infrastructure and develop emergency preparedness plans.

GFDRR continued to seize opportunities to help governments change policies and practices and access financial resources in the aftermath of disaster. In **Djibouti**, the government used the findings from a 2011 GFDRR-supported disaster assessment of an ongoing drought to raise over \$40 million in new funding. The money will go toward reducing the long-term effects of the 2008-2011 drought that affected more than 120,000 people and caused an estimated economic loss of \$96 million. Through new World Bank financing, Djibouti now has a \$5 million national safety net program that will provide employment opportunities to make up for the loss of people's livelihoods and purchasing power in the event of another disaster. An additional \$3 million rural water project is making water more readily available and improving people's ability to manage water and other resources needed by farmers and herders in drought-affected areas.

1,000 government officials and disaster risk professionals received GFDRR training in post-disaster assessments in FY13.

65,000 homes in India's Bihar state rebuilt according to more disaster-resilient designs following devastating flooding in 2008.

\$70 million earmarked by the World Bank for additional recovery work in Mozambique following a GFDRR rapid impact assessment of the January 2013 floods.

Transforming Adversity into Opportunity through Resilient Reconstruction



Amirka Devi is a widow with no family support whose house was damaged in the 2008 Kosi River flood in India. A GFDRR-supported initiative in cooperation with the World Bank and the government of Bihar state rebuilt her home according to updated building codes. She is pictured here with Pankaj, a social worker who helped her throughout the process. Photo credit: Peeyush Sekhsaria/The World Bank

Post-disaster reconstruction efforts provide a window of opportunity to make fundamental changes in a country's disaster risk management strategies. In the Kosi Basin in northern **India**, a \$220 million IDA project is helping the government of Bihar—India's third most populous state—to reconstruct homes, critical infrastructure, and flood management systems following the 2008 Kosi River flood. In FY13, GFDRR provided the expertise needed to review the design of homes, bridges, and roads, as well as systems for making embankments stronger and more resilient to devastating and unpredictable floods. As a result, the reconstruction of 65,000 homes, 70 bridges, and over 250 kilometers of roads is now underway, as well as an embankment reinforcement project. The goal is to restore the lives and livelihoods of over three million people who are severely impacted by massive floods on a regular basis.

GFDRR's work in **Kenya** is a prime example of its shift from immediate disaster response to building more long-term resilience. After helping the government complete a post-disaster needs assessment in response to a drought emergency that devastated much of the Horn of Africa, GFDRR supported the design of a livelihoods resilience project for livestock herders in **Ethiopia, Kenya, and Uganda**. This \$180 million IDA project uses GFDRR information gathered during the needs assessment.

GFDRR is also supporting the World Bank as it re-engages in **Somalia** by providing technical guidance on policy notes on drought management to help the government sustain improvements in the recovery of people's livelihoods.

Strengthening Disaster Risk Management in African, Caribbean, and Pacific Countries

ACP-EU Natural Disaster Risk Reduction Program



A large number of countries in Africa, the Caribbean, and the Pacific are highly vulnerable to natural hazards, a trend exacerbated by demographic pressure, unplanned urbanization, environmental degradation, overexploitation of natural resources, and climate change. Many of these countries are exposed to multiple hazards including geological and extreme weather events. Overall, the level of prevention, mitigation, and preparedness in these regions remains relatively low, while the need for the international community to take action is increasing.

The African, Caribbean, and Pacific (ACP)-European Union (EU) Natural Disaster Risk Reduction Program was launched in 2011 as an initiative of the ACP Group of States. The GFDRR-managed program is funded by a EUR 54.5 million (\$75.6 million) EU grant and covers a period of six years. It is the largest single-donor trust fund supporting GFDRR's work across the five pillars.

The program provides prevention, mitigation, and preparedness support to ACP countries at regional and national levels. It also supports requests from countries for post-disaster needs assessments in the aftermath of a disaster, with the aim of leveraging additional investments by international partners. This partnership contributes to

ensuring aid effectiveness and harmonization by bringing together diverse players such as governments, regional organizations, civil society organizations, and UN agencies.

In FY13, 51 percent of committed funds supported initiatives in Africa, while the Caribbean and Pacific regions received 21 percent and 28 percent respectively. Almost two-thirds (65 percent) of committed funds went to country-level projects, while a quarter (27 percent) supported projects at the regional level, with the remaining 8 percent going to post-disaster response. The program approved 26 initiatives worth \$20 million in FY13.

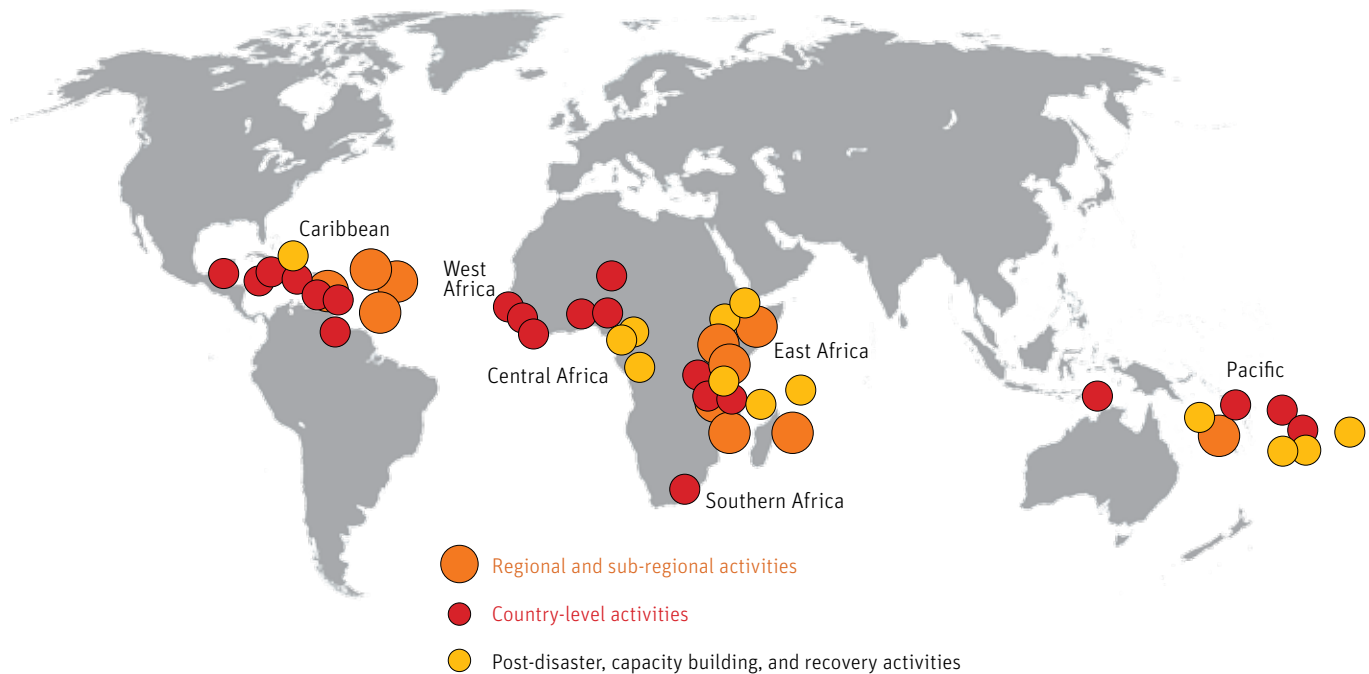
Select FY13 Results from ACP-EU Natural Disaster Risk Reduction Program

At the regional level, the Pacific Catastrophe Risk Assessment and Financing Initiative developed a way to rapidly appraise damages caused by tropical cyclones in **Pacific island** countries based on modeled losses. In Southern Africa, a new regional center for disaster risk reduction and climate change adaptation was established in partnership with the governments of **Comoros, Madagascar, Malawi, and Mozambique**, together with UNISDR and UN-HABITAT.

Portfolio Snapshot

45 activities financed by \$30.9 million, of which 26 were approved during FY13 worth \$20 million; of those, 10 are completed, 25 ongoing, and 10 under preparation.

11 regional activities; 21 country activities; and 13 post-disaster, capacity building, and recovery activities in FY13.



At the country level, the ACP-EU program supported a community flood preparedness and land degradation project in **Togo** that helped bring about an additional \$18 million in financing from several funders, including Togo's government, GFDRR, Terrafrica, the Least Developed Countries Fund, and the Global Environment Facility (GEF). In **Haiti**, a disaster risk management capacity building program helped establish a policy dialogue on the subject among the Ministries of Public Works, Housing, and Education. A \$3 million ACP-EU program contribution to improving crop resilience and rural water access in the archipelago nation of **Vanuatu** led, together with a \$3 million grant from the EU-funded Global Climate Change Alliance, to an additional \$6 million GEF grant.

The program funded a total of five post-disaster assessments undertaken in close collaboration with the EU, the UN, and other development partners in response to floods (**Nigeria, the Seychelles**); cyclones (**Fiji, Samoa**);

and dike breakage (**Cameroon**). Recommendations from these assessments contributed to a decision by the IDA—a special World Bank fund—to set aside \$106 million for dike rehabilitation and flood management in Cameroon. The one for Samoa led to a World Bank contribution of \$20 million for road rehabilitation.

Going forward, the ACP-EU Natural Disaster Risk Reduction Program will work to meet high demand from the countries it supports, ensuring the use of best practices, while fostering learning and replicable results for initiatives that reduce risks related to natural hazards and climate change.

For more information, please visit www.drrinacp.org or email infoacpeu@worldbank.org.

The ACP-EU program funded a wide spectrum of disaster risk reduction activities, including risk assessments; community-based resilience; land use planning; risk financing; and technical assistance to support slope stabilization.

Improved coordination grew between the EU, World Bank, and GFDRR on disaster risk reduction initiatives and post-disaster response planning.

Projects leveraged substantial investment funding following post-disaster needs assessments, including \$12 million in Djibouti and \$20 million in Samoa.

Recognizing the Role Women Play in Managing Risk



Participants in a GFDRR-supported civil society organization initiative in Guatemala. Photo credit: Maite Rodriguez Blandon/Huairou Commission

When disaster strikes, women suffer more. For example, a staggering 91 percent of fatalities as a result of 1991's Cyclone Gorky in **Bangladesh** were women, and women accounted for 70 percent of deaths in Banda Aceh following the 2004 Indian Ocean Tsunami. Making gender equality a main part of any disaster risk management measures is fundamental to reducing loss of life, livelihoods, and economic development.

More importantly, empowering women is key to building longer-term resilience. Women are often the organizers of relief and recovery efforts in their communities, and there is mounting evidence that women develop more effective adaptive strategies than men in response to increasing disaster and climate risk.

In FY13, GFDRR supported initiatives to make gender a key part of disaster risk management efforts and improve existing knowledge and outreach on how to do this. A \$300,000 GFDRR grant awarded to three women-led civil society organizations in **Guatemala, Honduras, and India** brought together women leaders and policy makers from their countries to share experience and knowledge on community-led disaster risk management.

By the end of FY13, the three groups had used the grant money to help more than 3,500 community leaders and 30,000 community members map their risks and resources in relation to disaster and climate risk, and to establish partnerships with both local and national disaster management authorities. As a result, participating communities significantly reduced their households' food insecurity, pioneered innovative projects for predicting and protecting assets from drought and flash floods, and led natural resource management initiatives including ones on reforestation, rainwater harvesting, and riverbank protection. Several of the participating women's groups in Guatemala became certified by the country's national disaster agency as public disaster risk reduction trainers and experts. Finally, the governments of Guatemala and Honduras both included grassroots women activists on their official national delegations to UNISDR's Global Platform for Disaster Reduction in May 2013.

In terms of international policy, GFDRR partnered with the **United States'** George Washington University in October 2012 to host an event on the role women and girls can play in creating more disaster-resilient communities. Speakers and participants representing a range of high-profile international organizations—including the International Rescue Committee, Save the Children, and the World Bank—shared stories of action in disaster risk reduction and recovery efforts by women and girls across the world.

Regional Challenges and Opportunities

GFDRR tailors its grants and advisory support to address individual country priorities. However, many of the countries where GFDRR is engaged share regional characteristics, not only in the kind of natural hazards they face but also in terms of where countries are at in their development trajectory. These regional characteristics present countries with challenges and opportunities for GFDRR engagement and support.

Photo: Scott Wallace / World Bank

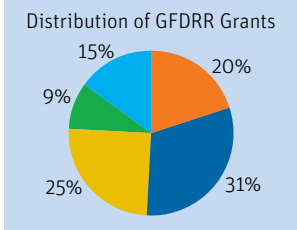


Sub-Saharan Africa

GFDRR focus countries: Burkina Faso, Ethiopia, Ghana, Madagascar, Malawi, Mali, Mozambique, Senegal, and Togo.

In recent years, most of Sub-Saharan Africa has experienced sustained and robust economic growth. A quarter of the countries in the region registered a GDP growth rate of seven percent or higher going into 2013. However, just one major natural disaster, such as a drought or widespread flooding, can greatly affect a country's growth rate.

In many parts of Sub-Saharan Africa, the economy is based on rain-fed agriculture, which is easily damaged by the effects of climate change. Aging or badly maintained infrastructure such as roads, power lines, and irrigation systems; a lack of basic data on weather patterns and hazards; and weak government institutions also make the region vulnerable to disaster. By 2050, an estimated 60 percent of the population will live in cities, making rapid urbanization along with land degradation another major challenge.



Fortunately, political commitment to disaster risk management in Sub-Saharan African countries is growing, creating opportunities for engagement. FY13 saw new areas of focus for GFDRR in the region, including efforts to establish open data access and sharing of disaster-related information. GFDRR is also working with governments to develop financial protection mechanisms. These initiatives are helping the region to build the long-term resilience to natural disasters needed to sustain countries' economic growth.

Photo: Tran Thi Hoa / World Bank

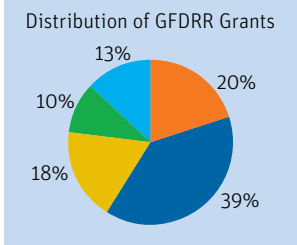


East Asia and Pacific

GFDRR focus countries: Indonesia, Lao PDR, Marshall Islands, Mongolia, Papua New Guinea, the Philippines, the Solomon Islands, Vanuatu, and Vietnam.

Between 1980 and 2012, the number of people living in cities in East Asia and the Pacific increased by over one billion, more than all other regions combined. Another billion are expected to move to these cities by 2040. Poorly planned development creates disaster hot spots. Asia's growing concentrations of people and assets is likely to make matters worse. Presently, East Asia and the Pacific is the most disaster-affected region in the world. Without action, multi-billion dollar disasters could become increasingly common.

To address this trend, there is an urgent need to invest in risk analysis that can inform urban planning and development. Preventive investments can be cost-effective and can greatly reduce the impact of natural hazards. Investments are also needed for better hazard forecasting, information systems, and emergency response. More needs to be done to better understand the fiscal impact of disasters, and how to guide recovery planning in a way to



build back communities that are safer and stronger.

In East Asia and the Pacific, GFDRR has been deeply engaged in developing comprehensive disaster risk management programs: in **the Philippines**, for instance, through risk-financing mechanisms, and in **Indonesia** through technical assistance supporting innovative approaches to disaster preparedness. In the Pacific's small island states, GFDRR has focused on institution and capacity building, and supported governments through post-disaster assessments and risk financing. Overall, as shown above, almost 40 percent of GFDRR grants went toward risk reduction efforts, with approximately a fifth focused on risk identification and preparedness.



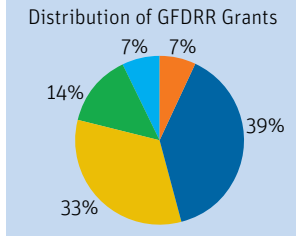
Photo: World Bank

Europe and Central Asia

GFDRR's focus country: the Kyrgyz Republic.

In Europe and Central Asia, disaster risks are mainly due to poorly maintained public infrastructure such as roads, schools, and hospitals as well as the ongoing effects of climate change. Floods and landslides are a significant problem in almost all countries in the region. Earthquakes are also a threat to **Turkey** and countries in the **Balkans, Caucasus, and Central Asia**.

Old building stock create a particular challenge, especially in crowded cities exposed to seismic risk, while poorly maintained flood protection infrastructure and insufficient weather forecasting systems mean that even small events can lead to major disasters. On the plus side, risk awareness is gaining a foothold in the region. Flood protection in particular is receiving attention due to the growing impacts of hydrometeorological events, as witnessed during the 2013 floods in the Elbe and Danube drainage basins and tributaries.



GFDRR's primary focus in Europe and Central Asia is providing governments with the financial and advisory help needed to promote and expand comprehensive risk reduction systems and policies to meet the challenges of rapid urbanization and climate change. GFDRR's grant resources went primarily into risk reduction efforts and preparedness, especially at the level of government institutions. In particular, GFDRR is working to modernize early warning and weather forecasting systems in **the Kyrgyz Republic** and **Moldova**; provide post-disaster needs assessments to enable better decision making by high-risk countries; and establish regional risk financing initiatives like catastrophic insurance for both countries and people.



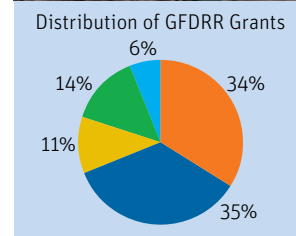
Photo: Tran Thi Hoa / World Bank

Latin America and the Caribbean

GFDRR's focus countries: Colombia, Costa Rica, Ecuador, Guatemala, Haiti, and Panama.

In Latin America and the Caribbean where and how people build is leading to a rise in economic losses caused by natural disasters. Urbanization and population increase means a growing number of people, homes, and public infrastructure are exposed to natural hazards. More than half of the region's GDP is exposed to the effects of two or more natural hazards.

Many countries in Latin America and the Caribbean are gradually shifting from a post-disaster focus to proactive risk management, supported by improved risk assessments and a renewed focus on land use planning and building codes. They are also designing risk-financing strategies to better absorb the financial shocks of natural hazards.



As a result, the majority of GFDRR grants went to risk assessments to inform future large-scale investments. **Haiti** continues to be the largest recipient of GFDRR support in the region, with most grants going toward helping the government to better identify and reduce risks and to prepare it for future disasters. GFDRR also assisted **Guatemala** with rapid recovery from a 7.2 magnitude earthquake in November 2012. GFDRR is currently helping governments develop risk-financing initiatives in **Colombia, Costa Rica, Guatemala, and Mexico**.

Photo: Dominic Sansoni / World Bank



Middle East and North Africa

GFDRR focus countries: Djibouti and the Republic of Yemen.

In the Middle East and North Africa, drought and flooding continue to threaten the economies and people of many countries. Droughts have caused severe damage to livestock, natural vegetation, and water supply systems for farming and human consumption. Seasonal flooding poses a serious risk of damage to property and loss of life. With the growing pace of urbanization and the potential worsening of climate change-related weather events, many of the economies of this region are increasingly vulnerable.

Historically, most countries in the Middle East and North Africa have approached disaster risk management reactively, focusing on post-disaster relief and recovery activities. Governments across the region are trying to change that, and recent years have seen the creation of a number of national-level disaster risk management units, early warning systems, preparedness plans, and national risk assessments. When developing these policies and plans, governments rarely have access to reliable information and often

depend on the international community for the resources required to move initiatives forward. Dependable early warning systems do not exist in many of these countries.

GFDRR works to improve public understanding of hazard risks while ensuring that ministries of finance are part of the discussion on growing national disaster risk management needs. It is also stepping up its work in this region by expanding preparedness, risk assessment, and risk reduction efforts in **Djibouti, Kuwait, Morocco, Saudi Arabia, and Yemen**. Close to 60 percent of GFDRR grants went to risk reduction and risk identification efforts, an area that partner countries are increasingly interested in pursuing.

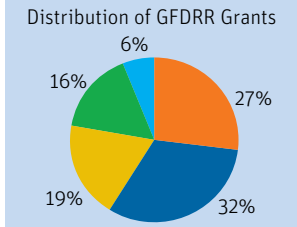


Photo: Scott Wallace / World Bank



South Asia

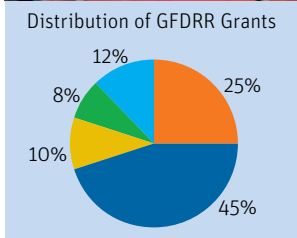
GFDRR Focus Countries: Bangladesh, Nepal, Pakistan, and Sri Lanka.

Major population centers such as Kathmandu, Karachi, and Dhaka lie on key seismic fault lines or along coastal areas constantly buffeted by cyclones, floods, and storm surges. The latter extreme weather events will only increase in number and intensity over the next 40 years as the effects of climate change continue to take their toll. By 2050 an estimated 246 million city dwellers in the region will be living in cyclone-prone areas in South Asia. Population exposure to earthquakes is increasing quickly as well in the region, faster than any other region in the world.

Despite increasing disaster risks, awareness and understanding among people and governments remains low, and reducing these risks is rarely recognized as a major priority in development agendas. Unplanned human settlements, unsafe building practices, and high population densities have further compounded the exposure and vulnerability of people and economies. As a result, earthquakes, cyclones, floods, tsunamis, droughts, and other disasters of every type and magnitude continue to consume lives, property, and

livelihoods across the region. Nevertheless, policy makers are increasingly aware of the disaster risks their countries face, and are beginning to take more proactive approaches to managing disaster.

GFDRR is working in South Asia to improve government and societal understanding of the vulnerabilities faced by its growing urban population and economies, and to support efforts to make disaster risk management a centerpiece of planning and development processes. GFDRR is also assisting with efforts to develop comprehensive risk financing strategies, such as setting aside reserves for post-disaster recovery and reconstruction work, and introducing financing models such as contingent credit and insurance mechanisms. In FY13, 45 percent of GFDRR grants went to risk reduction efforts, while a quarter went to risk assessment initiatives.



Rising to the Challenge

In FY13, the main challenges to GFDRR achieving desired results in partner countries and regions were due to a variety of external and internal dynamics.

Recurrent disasters affect progress. Because much of GFDRR's work is in countries that are particularly vulnerable to the effects of natural disaster, every year some GFDRR-supported projects face critical delays as partner governments and organizations scramble to respond to the next disaster. This past year, for example, cyclones in the Philippines, floods in Mozambique, and Hurricane Sandy in Haiti temporarily diverted government resources to immediate emergency response measures and away from longer-term risk reduction and recovery efforts.

Political instability, crises, and strikes can affect the continuity and pace of GFDRR-financed projects. In FY13, for example, continued political turmoil in Burkina Faso, Madagascar, Mali, and Yemen slowed the pace of dialogue and frequency of meetings with the government, which was often unable or unwilling to focus on implementing any kind of disaster risk management measures. Ongoing strikes in Bangladesh in FY13 meant that a series of focus groups for a GFDRR-supported project on building resilience to earthquakes had to repeatedly be canceled and rescheduled.

Building country capacity requires long-term commitments and a dependence on government resources and cooperation. For many countries where GFDRR works, integrating disaster risk management into government development planning requires not only improvements in human, financial, and technological resources but also a significant change in culture.

Indeed, many GFDRR projects are predicated on a solid collaboration between different government agencies.

In Guatemala, an effort to standardize data to improve agricultural insurance moved slower than anticipated due to the challenges of coordinating the many public and private sector partners involved. In Sri Lanka, the unwillingness by some agencies to share data has impacted GFDRR's OpenDRI project there. To address this, the project is creating a risk data-sharing protocol. In Malawi and in some eastern Caribbean countries, the GIS capabilities of country partners were weaker than expected, requiring additional technical assistance.

GFDRR projects often rely on local experts to conduct assessments, provide technical assistance, and otherwise help implement programming, presenting a human resources challenge in countries just beginning to develop disaster risk management capabilities. For example, this past year in Ethiopia, GFDRR-supported work has slowed due mainly to delays in recruiting key project staff and in filling seats on required project-steering and technical committees. For a disaster risk management and climate adaptation project in Senegal, no local firm could be found to put into place the early warning component of the project, resulting in the cancellation and restart of the selection process.

GFDRR also saw a rise in the number of projects being implemented by UN agencies, governments, and other new partners that are unfamiliar with GFDRR and World Bank procedures. While GFDRR and the World Bank have increased their support to these new grantees as they strive to comply with procurement, legal, and other administrative requirements, some projects are starting later than planned.

→ **Burkina Faso** National Council for Emergency Relief & Rehabilitation (CONASUR) / National Department of Meteorology / National Hydrological Services / Ministry of Housing / Ministry of Health Services / Burkinaabe General Directorate for Civil Protection (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 / Ministry of Finance / Ministry of Housing / Ministry of Transport / Ministry of Education and Scientific Research → **Malawi** Department of Disaster Management Affairs (DODMA) / Ministry of Irrigation and Water Development / Ministry of Education, 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 Services / Environment and Sustainable Development Agency (AEDD) / Ministry of Housing / Ministry of Agriculture / Ministry of Finance → **Mozambique** National Disasters Management Institute (INGC) / Ministry of Public Works and Housing (MOPH) / 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 Services / Hydrological and Meteorological Services / → **Togo** Ministry of Security and Civil Protection / National Meteorological and Hydrological Services / White Volta Water Resource Commission / Ministry of Finance and Economic Planning / Ministry 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 and Culture (MOEC) / National Development Planning / Chambers of Commerce (KADIN) / Urban Community-Driven Development (PNPM) / Australia-Indonesia Facility for Disaster Reduction (AIFDR) / → **Australia** AusAID → **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 Town and Country Planning / → **Laos** PDR Ministry of Education / Ministry of Natural Resources and Environment (MoNRE) / Department of Meteorology and Hydrology (DMH) / Water Resources and Environment Administration (WREA) / National Disaster 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 / Department of Irrigation of Ministry of Agriculture and Forestry (MAF) / Department of Roads and Department of Housing and Urban Planning of Ministry of Public Works and Transport (MPWT) / Department of Planning of Ministry of Planning and 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) / National Disaster Risk Reduction and Management Council (NDRRMC) / Office of Civil Defense (NDRRMC- OCD) / Department of Public Works and Highways (DPWH) / Department of Interior and Local Government (DILG) / Department of Health (DoH) / 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 (NDMO) → **Samoa** Planning and Urban Management Agency (PUMA) → **Solomon Islands** Ministry of Environment and Climate Change / Ministry of Development Planning and Aid Coordination (DPAC) / Ministry of Disaster Management and Meteorology (MECDM) / 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** Ministry of Finance and National Planning / Ministry of Infrastructure / National Disaster Management Office (NDMO) / Ministry of Lands, Survey and Natural Resources / Ministry of Lands, Environment, Climate Change and Natural Resources (MLCCENR) → **Vanuatu** Vanuatu Meteorological and Geohazards Department (VMGD) / National Disaster Management Office (NDMO) / Department of Local Authorities (DLA) / Vanuatu Agriculture and Research Technical Centre (VARTC) / Department of Agriculture and Rural Development (DARD) / Department of Geology, Mines and Water Resources (DGMWR) / Ministry of Lands and Natural Resources (MoL) / Ministry of Finance and Economic Management (MoF) → **Vietnam** Vietnam Women's Union / Vietnam Central Committee for Flood and Storm Control (CCFSC) / Ministry of Finance / Ministry of Agriculture and Rural Development (MARD) / Ministry of Information and Communication / Ministry of Nature Resources and Environment (MONRE) / Ministry of Transport / Ministry of Planning and Investment / Ministry of Construction / Ho Chi Minh City → **Global** United Nations Office for Disaster Risk Reduction (UNISDR) / World Meteorological Organization (WMO) / Food and Agriculture Organization (FAO) / European Commission (EC) / CARE International / Centre for International Studies and Cooperation (CECI) / Christian Aid / Plan International / Oxfam / Save the Children / World Vision / Action Aid → **Papua New Guinea** Department of Agriculture and Livestock (DAL) / Department of Transport / Office of Climate Change and Development (OCCD) → **EAP** Secretariat of the Pacific Community (SPC) → **Australia** Geoscience Australia / Department of Environment Australia → **Global** UN-OCHA → **EAP** Pacific Islands Forum Secretariat (PIFS) → **Kyrgyz Republic** Ministry of Emergency Situations / Ministry of Public Works / Ministry of Health / Ministry of Education and Science / Institute of Seismology / Agency on Hydrometeorology / Kyrgyz Scientific Research Institute / Seismic-Resistant Construction Institute → **Global** United Nations Children's Fund (UNICEF) / World Bank → **ECA** North Atlantic Treaty Organization (NATO) / Disaster Preparedness Program of the Humanitarian Aid and Civil Protection Department of the European Community Humanitarian Office (DIPECHO) → **Global** International Federation of Red Cross and Red Crescent Societies (IFRC) → **Regional** Caribbean Disaster Emergency Management Agency (CDEMA) → **Haiti** Haiti Ministry of Public Works (MTPTC) / Housing and Public Building Construction Unit (UCLBP) / Ministry of Interior- Directorate of Civil Protection (DPC) / Pan-American Development Foundation (PADF) / International University Center / Inter-Ministerial Committee for Territorial Management / Coordination Unit for Housing and Public Buildings / HaitiData.org / Ministry of Education / Ministry of Finance / Ministry of Planning / Ministry of Health / Community OpenStreetMap Haiti (COSMHA) / National Center for Geospatial Information (CNIGS) → **Global** United Nations Office of Project Services (UNOPS) / UN Habitat → **United States** USAID → **Jamaica** University of the West Indies → **St. Lucia** Ministry of Physical Development, Housing and Urban Renewal / Ministry of Infrastructure, Port Services and Transport (MISPT) / Ministry of Finance, Economic Affairs, Planning and Social Security → **Trinidad and Tobago** University of the West Indies - Trinidad and Tobago → **Panama** Ministry of Housing and Territorial Planning (MIVIOT) / Ministry of Finance / Ministry of Education (MEDUCA) / Ministry of Health (Minsa) / Directorate of Public Credit (DCP) / Hydro-Meteorological Service / Directorate of National Budget (DIPRENA) / Technical Secretariat of the Sovereign Fund (FAP) / Directorate of Concessions and Risk (DICRE) / National System for Civil Protection (SINAPROC) / University of Panama / Governor of Chiriqui Province / Mayor of City of David, Chiriqui / Municipality of Boquete, Chiriqui / ETESA Hydromet / National Environmental Authority (ANAM) / National Authority of the Panama Canal of Panama / Panama Canal Authority (ACP) / National Platform for Disaster Risk Management / Technical University of Panama / Geosciences Institute of the University of Panama → **El Salvador** Ministry of Environment and Natural Resources / Ministry of Public Works / Municipality of Santa Tecla / Department of Education / Municipality of Tepetitán / University of El Salvador → **Ecuador** Municipality of Quito / CORPOSEGURIDAD / Empresa Pública Metropolitana de Agua Potable y Saneamiento de Quito / Empresa Pública Metropolitana de Movilidad u Obras Públicas / Secretariat of Disaster Risk Management (SNGR) / Secretariat of Security and Governance / Ministry of Education / Ministry of Agriculture / Instituto Geofísico de la Escuela Politécnica Nacional (Politechnic Institute) / Facultad Latinoamericana de Ciencias Sociales (FLACSO) / Universidad San Francisco de Quito → **LAC** Caribbean Catastrophe Risk Insurance Facility / Seismic Research Center / Caribbean Development Bank → **Global** The Nature Conservancy → **LAC** National GeoNode Community → **Inter-American** Development Bank (IADB) → **Costa Rica** Superintendence of Insurance (SUGESE) / Ministry of Finance / National Insurance Institute / Ministry of Environment and Energy / Ministry of National Planning and Economic Policy / National Risk Prevention and Emergency Management Commission (CNE) / National Meteorological Institute (IMN) / Costa Rican Electricity Institute (ICE) → **Guatemala** Ministry of Planning (SEGEPLAN) / Ministry of Planning (DIPLAN-MAGA) / Geographic Information System Unit / Ministry of Agriculture's GIS and Risk Management Directorate (SIG-MAGA) / Disaster Reduction Institution / Secretaría de Coordinación Ejecutiva de la Presidencia de la República de Guatemala (SCEP) / Secretariat of Security and Governance → **Bolivia** Ministry of Agriculture / Ministry of Education / Ministry of Health / Ministry of Public Works / Ministry of Environment and Water / Ministry of Civil Protection / Public Security / Ministry of Development Planning / Risk Reduction and Emergency Attention System (SISRADE) → **Netherlands** Embassy of Netherlands → **Brazil** Ministry of Integration / National Agency of Water (ANA) / Ministry of Science and Technology → **Chile** Geological Department, University of Atacama / Civil Construction Department / Regional Government of Atacama / University of Diego Portales / Sub-secretariat of Regional Development and Administration of the Ministry of the Interior (SUBDERE) → **Regional** United Nations Economic Commission for Latin America and the Caribbean (UN ECLAC) → **Colombia** Universidad del Norte / Secretary of Planning for Baranquilla / Local government of Pereira / Local government of Manizales / National Planning Department (DNP) / Colombian Geological Survey / Regional Autonomous Corporations (CAR) / Rio Bogotá Hydrologic Committee / Ministry of Environment and Sustainable Development (MADS) / National Unit for Disaster Risk Management (UNGRD) / Ministry of Finance and Public Credit (MHCP) / Ministerio de Vivienda, Ciudad y Territorio (MVCT) / Instituto Geográfico Agustín Codazzi (IGAC) / Departamento Administrativo Nacional de Estadísticas (DANE) / Ministries of Environment and Agriculture / National Geological Service (SGC) / Externado University / Ministry of Housing / Autonomous Regional Corporations Association (ASOCARS) / Colombian Chamber of Construction (Camacol) / National Business Association of Colombia (ANDI) / Colombian Chambers of Infrastructure / National Hydro-Meteorological Agency (IDEAM) / The Colombian Federation of Municipalities / The Colombian Society of Farmers (SAC) → **Regional** Pan American Health Organization (PAHO) / Andean Committee for Disaster Prevention and Response (CAPRADE) → **Spain** Spanish Government (TF SFLAC) for CEPREDENAC → **Djibouti** University of Djibouti / Ministry of Interior / Ministry of Environment / Ministry of Water Resources / Ministry of Health / Ministry of Agriculture / Ministry of Social Development and Energy / Ministry of Higher Education and Research / Djibouti Center for Research Studies (CERD) → **Switzerland** Swiss Agency for Development and Cooperation (SDC) → **German** Agency for International Cooperation (GIZ) → **Morocco** Red Crescent Society / Trust Fund for Environmentally and Socially Sustainable Development (TFESSD) → **International Federation of Red Cross and Red Crescent Societies** → **European Union** → **Intergovernmental** Authority on development (IGAD) → **Bangladesh** Ministry of Finance / Ministry of Planning / Ministry of Disaster Management and Relief / Ministry of Housing and Public Works / Ministry of Local Government / Rural Development and Cooperative Division / Ministry of Water Resources / Ministry of Agriculture → **World Food Programme (WFP)** → **South Asian Association for Regional Cooperation (SAARC)** → **Heart of Asia** Countries Forum under the Istanbul Process → **Sri Lanka** Ministry of Disaster Management / Ministry of Irrigation and Water Management / Ministry of Finance / Ministry of Agriculture / Ministry of Health / Agencies responsible for land use planning, urban development, and food security / Sri Lanka Red Cross Society / National Building Research Organization / Office of United States Foreign Disaster Assistance (OFDA) → **United Nations** Environment Programme (UNEP) → **International Labour Organization (ILO)** → **Inter-agency** Standing Committee (IASC) → **UN** Institute for Training and Research Operational Satellite Applications Programme (UNOSAT) → **EU's** Joint Research Center (JRC) → **EU-funded** ACP-EU Natural Disaster Risk Reduction Program → **Secretariat of the Pacific Community (SOPAC)** → **Tulane University** → **Ghana** Higher Education Alliance for Leadership Training in Health (HEALTH) → **United States** Earthquake Engineering Research Institute → **Haiti** State University of Haiti (UEH) → **Ghana** Housner Fellow Program → **Philippines** Earthquake Megacities Initiative (EMI) → **Turkey** Middle East Technical University (METU) → **Global** International Recovery Platform → **Stanford University** → **Germany** Karlsruhe Institute of Technology → **LAC** University of the West Indies (UWI) → **Netherlands** VU University → **Global** Humanitarian OpenStreet Map Team / MapAction / Munich Re / Willis Re / Willis Research Network / Swiss Re / Global Earthquake Model / GeoNode → **Harvard University** → **Global** GROOTS International / Huairou Commission / Act Alliance / Japan NGO Center for International Cooperation (JANIC) → **Netherlands** Cordaid → **Community** Practitioners Academy → **Massachusetts** Institute of Technology (MIT) → **Global** UNDP CADRI → **Regional** Organisation of Eastern Caribbean States (OECS) / Arab Academy / The Arab Administrative Development Organization (ARADO) → **India** National Institute of Disaster Management → **Global** International Telecommunications Union (ITU) → **Catholic** University of Peru → **Switzerland** University of Geneva → **Italy** Pavia University → **Global** International Institute of Applied Systems Analysis (IIASA) → **Global** Deltares → **LAC** Evaluation of Natural Hazards-Latin America (ERN) → **European Space Agency (ESA)** → **Agencia Spaziale Italiana (ASI)** → **Japan** Japan Aerospace Exploration Agency (JAXA) → **University** College London → **Kenya** Red Cross → **The** Technical Consortium for Resilience in the Horn of Africa → **USAID**/GeoCenter → **U.S.** Department of State → **Community** Applied Geosciences and Technology Division (SOPAC) → **OpenGeo** Regional Mapping Centre for Mapping Resources (RMCMR) → **Global** Pilot Program for Climate Resilience (PPCR) / Global Framework for Climate Services (GFCS) / China Meteorological Administration (CMA) → **Finnish** Meteorological Institute (FMI) → **Korean** Meteorological Administration (KMA) → **MeteoSwiss** → **UK** Met Service / US National Weather Service (NWS) → **Regional** Permanent Interstate Committee for Drought Control in the Sahel (CILSS) / ECOWAS → **NASA** → **Regional** World Bank SDN / World Bank PREM / World Bank Regional Vice Presidency / World Bank Treasury → **UK** Department for International Development (DFID) → **Switzerland** State Secretariat for Economic Affairs of Switzerland (SECO) → **Ministry** of Foreign Affairs for the Netherlands → **Mexico** G20 → **Association** of South East Asian Nations (ASEAN) → **Geneva** Association → **University** of Pennsylvania - Wharton School of Business → **Singapore** Nanyang Technological University (NTU) → **Egypt** Regional Center for Disaster Risk Reduction in Egypt (RCDRR) / Istanbul Technical University / Istanbul University / Marmara University / Gazi University → **Yemen** Prime Minister's Office / Ministry of Interior / Ministry of Public Works and Highway / Ministry of Water and Environment / Ministry of Energy / Ministry of Education / Ministry of International Cooperation and Development / Department of Geology

Advancing Disaster Risk Management through Outreach and Partnerships

Over the course of FY13 GFDRR grants and technical assistance engaged over 300 government entities, international organizations, civil society organizations, universities, and private business and organizations to support disaster risk management in developing countries. These partners turned to GFDRR for two reasons: to roll out projects that better manage disaster risk, or to advance the integration of disaster risk management into national and international development agendas. This section provides an overview of the global partnerships that are advancing these priorities.

Global Forums to Advance Resilient Development

At the request of its members, GFDRR is supporting major international forums to shape global discussions and make disaster risk management an integral part of social and economic development. Last year saw important achievements in this area.

G20 Summit

For the first time, the leaders of the world's largest economies discussed disaster risk management at a G20 Summit. During the July 2012 Summit, held in Mexico, the government of **Mexico**, **the World Bank**, and GFDRR helped document the experience of 15 countries and international organizations in disaster risk assessment and financing. The findings were published in a joint report that then served as a basis for discussions at the G20 Summit [ⓘ www.gfdr.org/g20drm](http://www.gfdr.org/g20drm).

Sendai Dialogue

The Sendai Dialogue marked an important step in international recognition of disaster risk management as a necessary ingredient for sustainable development. This feature event was part of the 2012 Annual Meetings of the World Bank and the **IMF**, which were held in Tokyo, **Japan**. The event marked the first time the IMF engaged on the issue at its highest level. Later, during the Annual Meetings, the Governors of the World Bank called on the institution to increase efforts at integrating disaster risk management and climate change adaptation into its programming. The Governors also endorsed *The Sendai Report*, a joint publication of GFDRR, the World Bank, and Japan that provides a blueprint for making disaster risk management a central part of development planning.

Fifth Tokyo International Conference on African Development

In June 2013, as part of the Fifth Tokyo International Conference on African Development, GFDRR worked with the World Bank and **UNDP** to convene an unprecedented gathering of African and international leaders on the topic of disaster and climate resilience for inclusive economic growth. The UN Secretary-General Ban Ki-moon and the World Bank Group President Jim Yong Kim joined Japanese Prime Minister Shinzo Abe and African leaders to encourage more support for Africa's development goals and to bring about an international consensus on making disaster and climate risk considerations a key part of development policy and programs [ⓘ http://www.gfdr.org/sites/gfdr.org/files/Sendai_Report_051012.pdf](http://www.gfdr.org/sites/gfdr.org/files/Sendai_Report_051012.pdf).

Learning from Tragedy: The Great East Japan Earthquake and Tsunami



World Bank Group President Jim Yong Kim speaks at the closing session of the Sendai Dialogue, on October 10, 2012. The conference took place in Sendai, the largest city in the Tohoku Region along the Pacific coast of Japan, which bore the brunt of the 2011 Great East Japan Earthquake and Tsunami. Photo credit: Simone D. McCourtie/World Bank

Following the 2011 Great East Japan Earthquake and Tsunami, GFDRR, the World Bank, and Japan co-organized the Sendai Dialogue to share lessons learned from the Japanese tragedy with developing countries. Sendai—the region’s largest city and one that bore the brunt of the 2011 earthquake and tsunami—hosted the event, part of the joint World Bank and GFDRR semi-annual Resilience Dialogues. Disaster experts joined leaders from the Japanese government and international organizations including the World Bank, the IMF, the **EU**, the **Asian Development Bank**, and several bilateral donors and partners, including the **United States Agency for International Development (USAID)**, **DFID**, and the **Japan International Cooperation Agency**, to discuss and push forward efforts to make disaster and climate change resilience front and center in national and international development planning.

The Sendai Dialogue was informed by careful documentation of the Japanese experience following the 2011 earthquake and tsunami. Through a GFDRR-supported project funded by the Japan government, 32 “knowledge notes” were developed ahead of time that documented Japan’s experience in disaster risk management and post-disaster recovery <http://wbi.worldbank.org/wbi/megadisasters>.

In an effort to engage a broader audience, GFDRR and its partners produced a TEDx event on the theme of disaster resilience. TEDxSendai brought together some of the most inspiring thinkers in business, art, politics, and science to share innovative messages about disaster recovery, resilience, and hope. Sendai participants, for example, heard from a University of Pennsylvania professor who is building small, aerial, independent robots that can sense each other, form ad-hoc teams, and be used in a number of ways, including for reconstruction and disaster surveys.

From left to right: Japan’s Finance Minister Koriki Jojima, World Bank President Jim Yong Kim, IMF Managing Director Christine Lagarde, and Kristalina Georgieva, the European Commissioner for International Cooperation, Humanitarian Aid and Crisis Response, visiting areas of Sendai ravaged by the Great East Japan Earthquake. Photo credit: Simone D. McCourtie/World Bank



Facing page: Rina Iwamoto and Risa Shibahara, high school students in Sendai City, address participants of the October 2012 Sendai Dialogue. Photo credit: Christopher Jue/World Bank

Most important



Building our relationships Informing the world

**SENDAI
DIALOGUE**

Disaster Risk Management in a Changing World
October 9-10, 2012

Partnerships for Resilient Development

GFDRR's partnerships are growing stronger with longstanding partners like the World Bank, the UN, and the EU even as it forges new kinds of partnerships with civil society and the private sector. The breadth and depth of these partnerships are integral to achieving GFDRR's mission.

World Bank

GFDRR sits within the World Bank and leverages its role in two main ways: by representing the World Bank at the global policy level on issues related to disaster risk management; and at the country level, through its work with World Bank project teams.

In support of World Bank project teams, GFDRR acts as the World Bank's knowledge center on disaster risk management, providing both operational support and advice to disaster risk management projects. For example, GFDRR provided analytical inputs to the *World Development Report 2014: Managing Risk for Development* www.worldbank.org/wdr; and to the *Turn Down the Heat* report, which provides a snapshot of the latest climate science and the implications of changing climate.

GFDRR coordinated the World Bank's engagement in UNISDR's 2013 Global Platform for Disaster Risk Reduction, actively promoting country experience and expertise in making disaster risk management and climate change adaptation a key part of sustainable development.

The joint GFDRR-World Bank initiatives on hydrometeorology and disaster risk financing are growing stronger, with three new initiatives launched in FY13. They focus on building resilience to climate change; managing

risk in cities; and promoting community-based disaster risk management. GFDRR carried out portfolio reviews of existing World Bank projects to better understand country and community needs and lessons learned.

United Nations

GFDRR deepened its cooperation in FY13 with a number of UN agencies by collaborating on disaster risk management initiatives at the global and country levels, and by coordinating programs to improve results. GFDRR has a strong partnership with **UNISDR** on all international policy discussions, in addition to working with the agency to develop risk profiles for countries around the world. It also works closely with the **WMO** on disaster preparedness and with UNDP across all Five Pillars of Action. Some highlights include:

GFDRR provided empirical research for UNISDR's 2013 *Global Assessment Report on Disaster Risk Reduction* www.unisdr.org/we/inform/publications/33013, a biennial review and analysis of the natural hazards that are affecting humanity and what is being done about it. This third edition takes a look at how disasters are hurting business and economic opportunities, and offers guidelines for how business and investors can reduce their losses as a result of disaster, including an investment in disaster risk management.

With the Millennium Development Goals due for renewal in 2015, GFDRR is supporting the UN System to make disaster risk management an integral part of post-2015 development goals. In 2013, GFDRR, UNDP, and UNISDR circulated a paper laying out options for including disaster risk management in any new global development framework.

In FY13 GFDRR engaged:

- over 10 UN agencies;
- 15 technical agencies from donor countries;
- 20 regional organizations;
- 40 local and regional governments;
- 45 universities; and
- 50 civil society organizations.



GFDRR, EU, and the UN discuss the need for a global framework to guide disaster recovery with international policy leaders at UNISDR's 2013 Global Platform for Disaster Risk Reduction in May 2013. Photo credit: GFDRR

European Union

The EU is a major player in supporting disaster risk management in developing countries, and has been a key partner of GFDRR since 2006. In addition to partnering with GFDRR and UNDP to support countries in conducting post-disaster assessments, in FY13:

EU leadership championed resilience in almost all major international forums co-organized by GFDRR (including the Resilience and Sendai Dialogues and the UNISDR Global Platform for Disaster Risk Reduction).

GFDRR contributed to several discussions on the EU's strategy and action plan for supporting disaster risk reduction in developing countries, as well as to consultations on the EU's Communication on Resilience and its action plan for countries that are particularly prone to crisis.

GFDRR provided research for an initial EU "green paper" on insurance against natural and man-made disasters, which sought stakeholders' feedback on actions that could be taken at the EU level.

GFDRR continued to implement the ACP-EU Natural Disaster Risk Reduction Program.

Finally, the EU, the UN, and GFDRR are working closely together on the development of the *Disaster Recovery Framework Guide*, a best practice publication for achieving resilient recovery.

Private Sector

GFDRR is increasingly engaging private business, especially for disaster risk financing and to complete risk assessments. In FY13, GFDRR partnered with experts from the global reinsurance company **Munich Re**, the World Bank, and the UN to standardize approaches in

the areas of risk profiles, risk assessments, and disaster-loss databases. This effort included a two-day workshop bringing together representatives from the different organizations. GFDRR technical advice also enabled a group of **Pacific island countries** to transfer their risk from certain disasters to four reinsurers: **Sompo Japan Insurance**, the initiative's lead reinsurer; **Mitsui Sumitomo Insurance Group**; **Tokio Marine and Nichido Fire Insurance**; and **Swiss Reinsurance Company**.

In **Guatemala**, as part of a GFDRR-supported project, public and private sector partners agreed to form an agricultural insurance committee. Upon approval of the Presidency, it will create a space where interested parties can come together to discuss and coordinate activities for development of a sustainable agriculture and livestock insurance program. The committee includes several private insurance companies and **AGIS**, the country's private insurance association.

As part of a GFDRR-supported national disaster risk management analysis in **Colombia**, private companies are taking stock of actions that may have contributed to increasing disaster risk in the past, as well as those that helped reduce risk. Contributing organizations include the **Colombian Agrarian Society**, the **Colombian Chamber of Construction**, the **Colombian Federation of Insurers**, and the **Colombian Chamber of Infrastructure**, all of who helped collect data or otherwise actively participated in the study.

As part of its ongoing OpenDRI initiative, GFDRR teamed up with students, computer programmers, civil society organizations, **Wikimedia Nepal**, software companies in both Nepal and the United States, and the **Mozilla Foundation** for a community mapping initiative that resulted in over 8,000 buildings being mapped in a single day in Kathmandu.

Growing Partnerships with Civil Society

GFDRR continued to implement the pilot phase of its civil society strategy. Some FY13 examples of support to civil society:

GFDRR is supporting the **Global Network of Civil Society Organisations for Disasters Reduction** to create an online platform that maps civil society engagement in disaster risk management across the world. This tool will create a clear picture of civil society engagement with a map that pinpoints specific regional and country activities.

The new strategy has led to GFDRR pilot country engagements in **Nepal** and **Papua New Guinea**. The former is building flood resilience using a community-based approach to build flood resilience in the Kosi Basin, while the latter launched an agricultural technical assistance project to improve farmers' resilience to natural disasters and climate change. One component of the Papua New Guinea project—the Small Grants Pilot—is bringing together the national **Office of Climate Change and Development, the Department of Agriculture and Livestock**, and civil society organizations, including **Women in Agriculture**, farmer cooperatives, and faith-based organizations.

In May 2013, GFDRR supported the first Community Practitioners' Academy in preparation for UNISDR's Fourth Session of the Global Platform for Disaster Risk Reduction in Geneva, Switzerland. In all, 45 community practitioners from 17 countries came together over the course of two days to share their experiences with each other and to strategize on their upcoming engagement in the Global Platform. The Academy participants issued a statement that fed into the Platform's outcome documents, including conclusions emphasizing the role communities and, in particular, women can play.

GFDRR undertook an analysis of the World Bank's Community Driven Development portfolio—worth over \$2 billion annually—which provides direct support to community-level development through community groups, civil society organizations, and local governments. The portfolio assessed lessons on how to support community-level disaster risk management, and identified opportunities for the Bank to leverage climate- and disaster resilience building going forward.

GFDRR grants support communities to quickly and accurately map critical public infrastructure as a way to create much-needed risk analyses for vulnerable countries. In FY13, GFDRR and partners launched the Open Cities project in **Bangladesh, Nepal, and Sri Lanka**. The project enlists the voluntary help of ordinary citizens, academics, and people with experience in software and online data tools in an effort to create cities that are more resilient to the disasters that plague them. (See page 15 for more information.)

Sharing Good Practices and Lessons Learned

At the Fourth Global Platform for Disaster Risk Reduction, GFDRR launched an online database <http://gfdr.aiddata.org> documenting the flows of international development aid related to disaster risk management over the last 20 years. This database enables governments to better track international aid for disaster risk management. GFDRR and UNISDR also organized a featured event on financing disaster risk management, as well as one on disaster recovery with the EU and UNDP. The latter helped solidify international consensus on the need for the *Disaster Recovery Framework Guide*, which can be used by government officials to manage and plan for recovery after disasters.

At the 5th Asian Ministerial Conference on Disaster Risk Reduction, held in October 2012 in Indonesia, GFDRR hosted workshops and sessions on creating safer schools, building financial resilience, understanding risk, mapping for disasters and development, and engaging women and girls in forming disaster-resilient societies.

GFDRR collaborated with several universities and research institutions to tap academic resources and establish training courses in disaster risk management. GFDRR's online learning program is now partnering with the **Arab Administrative Development Organization** to offer professional training in 20 countries in the Middle East and North Africa. GFDRR has become the largest provider of disaster risk management learning and training events in the world.



Key International Events in FY13

June 2012

- Understanding Risk is a global community of more than 2,600 experts and practitioners in disaster risk assessment. Organized in partnership with South Africa and the EU, GFDRR's Understanding Risk Forum 2012 was held in Cape Town, South Africa, from July 2-6, 2012, bringing together 500 risk assessment experts from more than 86 countries.

July 2012

- For the first time the leaders of the world's largest economies discussed disaster risk management as part of 2012's G20 Summit, thanks to a side event organized by GFDRR and the World Bank at the invitation of Mexico, a leader in disaster risk management.

October 2012

- On October 9-10, along with Japan and the World Bank, GFDRR hosted the Sendai Dialogue, a feature event of the 2012 Annual Meetings of the World Bank and the IMF. The event marked the first time the IMF engaged on the issue of disaster risk management at its highest level.
- Also during the 2012 Annual Meetings of the World Bank and the IMF, the World Bank Board of Governors discussed GFDRR-prepared background papers on disaster risk reduction.

- GFDRR supported the government of Indonesia in hosting the Fifth Asian Ministerial Conference on Disaster Risk Reduction in Yogyakarta, Indonesia, on October 22-25, 2012. The event represents a unique opportunity for ministers in charge of disaster management from the region to reaffirm their commitment to the Hyogo Framework for Action.

- On October 11-14, GFDRR with the World Bank and George Washington University hosted the Fourth International Conference of Crisis Mappers in Washington, DC, bringing together more than 400 people from over 20 countries and representing hundreds of different organizations and institutional affiliations, with another 900 people participating online.

November 2012

- The 13th GFDRR Consultative Group Meeting took place from November 13-14, 2012, in the Netherlands. GFDRR's Consultative Group endorsed a new operational strategy as set forth in *Managing Disaster Risks for a Resilient Future: A Strategy for the Global Facility for Disaster Reduction and Recovery 2013-2015* www.gfdr.org/gfdrstrategy2013-2015.

March 2013

- On March 11, 2013, the second anniversary of the Great East Japan Earthquake and Tsunami, GFDRR and the government of Japan hosted a discussion at the World Bank in Washington, DC, to take stock of the World Bank's Sendai Dialogue commitments to incorporate disaster risk management measures in the Bank's initiatives and planning.

April 2013

- The World Bank, GFDRR, Japan, USAID, and the EU hosted the Fourth Resilience Dialogue in Washington, DC. The event focused on positioning disaster and climate resilience within the post-2015 development framework.

May 2013

- The 14th GFDRR Consultative Group Meeting took place in Exeter, the United Kingdom, on May 16-17, 2013. The Consultative Group adopted a new work plan that provides the basis for a new monitoring and evaluation framework.
- GFDRR coordinated the World Bank's engagement in the Fourth Global Platform for Disaster Risk Reduction. GFDRR and UNISDR also organized a featured event on financing disaster risk management, as well as one on disaster recovery with the EU and UNDP.

June 2013

- From June 1-3, 2013, as part of the Fifth Tokyo International Conference on African Development in Yokohama, Japan, GFDRR worked with the World Bank and UNDP to convene an unprecedented gathering of African and international leaders on the topic of disaster and climate resilience for inclusive economic growth.

Financial Reporting

GFDRR Trust Fund Architecture

Track 1 Development Grant Facility (DGF) Grants are received from the World Bank Group and are disbursed directly to UNISDR.

Track 2 Multi-Donor Trust Funds (MDTFs) primarily go to GFDRR priority countries (70%), leaving 30% for flexible financing decisions. The MDTF for Mainstreaming Disaster

Risk Reduction in Country Strategies
South-South Cooperation Grants

Provides GFDRR’s “core” financing.

Earmarked for activities to strengthen the leadership role of developing countries in finding risk reduction and climate change adaptation solutions.

Track 2 Single-Donor Trust Funds (SDTFs) are “non-core” funds for earmarked recipient countries.

Australia SDTF

Bangladesh, Mongolia, the Philippines, and Vanuatu.

Japan SDTF

Lao PDR, Pakistan, and Sri Lanka.

Spain SDTF

Colombia, Costa Rica, and Sri Lanka.

Track 3 MDTFs are aimed at early, post-disaster recovery in low-income countries through its Standby Recovery Financing Facility.

The Technical Assistance Fund

Supports damage, loss, and needs assessments, and develops national capacity for recovery planning and implementation.

The Callable Fund for Accelerated Recovery

Provides speedy access to financial resources for disaster recovery and reconstruction.

Track 3 SDTF is the Standby Recovery Financing Facility earmarked for Tropical Storm Gustav recovery.

ACP-EU Natural Disaster Risk Reduction Program is an EU-financed SDTF. The program supports activities in African, Caribbean, and Pacific countries through three separate windows.

Window 1

Technical assistance, capacity building, and analytical work at the regional level.

Window 2

Technical assistance, capacity building, and analytical work at the country level.

Window 3

Accelerated recovery activities.

Table 1. Sources and Uses of Funds (US\$, millions)

	Cumulative FY07-FY13	FY13	FY12	Change FY13-FY12
Opening Balance		117.4	63.7	
Contributions Received (Track 2, 3, ACP/EU)	274.2	47.8	91.9	
World Bank Administration Fees	(11.5)	(2.0)	(3.3)	
Development Grant Facility (DGF) (Track 1)	30.5	2.0	4.3	
Investment Income	3.5	0.4	0.4	
Net Sources of Funds ⁽¹⁾	296.8	48.1	93.3	-48%
Project Disbursements (Track 2, 3, ACP/EU, DGF)	154.9	31.4	37.4	
Secretariat Expenditure (Administration, Program Management)	11.5	3.7	2.2	
Total Uses of Funds	166.4	35.1	39.6	-11%
Ending Balance	130.3	130.3	117.4	
Cumulative Undisbursed Grant Commitment ⁽²⁾	75.4	75.4	57.3	
Fund Availability (All Tracks) ⁽³⁾	54.9	54.9	60.1	-9%
Of which:				
ACP/EU	28.6			
Track 2 Multi-Donor Trust Fund (MDTFs)	15.2			
Track 2 Single-Donor Trust Fund (SDTFs)	4.6			
Track 3 MDTFs	6.4			
Track 3 SDTFs	0.1			

⁽¹⁾ Net Sources of Funds = Total Contribution Received - World Bank Administration Fee (5%) + Investment Income.

⁽²⁾ Undisbursed Grant Commitment is the difference between Total Grant Approved and Total Grant Disbursement.

⁽³⁾ Fund Availability refers to the uncommitted resources available for GFDRR to finance new grants and is the difference between the Net Resources and the Total Grant Commitment.

Table 2. Annual Contributions Received and Receivable by Donor, FY07-FY13 (US\$, millions)

Donor	FY07-FY12	FY13	Contribution Received	% Share of Contribution Received	FY14-FY16 Contribution Receivable (Est)	Total Pledged Contribution
European Union	47.1	17.0	64.1	23.4%	22.0	86.1
United Kingdom	29.5	3.7	33.1	12.1%	4.7	37.8
Australia	32.2		32.2	11.7%	–	32.2
Sweden	23.1	8.7	31.9	11.6%	–	31.9
Germany	12.6	6.0	18.6	6.8%	3.3	21.9
Denmark	9.2	3.4	12.7	4.6%	–	12.7
Japan	12.0		12.0	4.4%	–	12.0
Norway	10.6	1.1	11.6	4.2%	–	11.6
Spain	10.0		10.0	3.6%	–	10.0
Netherlands	6.6	2.1	8.7	3.2%	–	8.7
Switzerland	6.5	1.1	7.6	2.8%	0.5	8.1
Luxembourg	6.9	0.5	7.4	2.7%	–	7.4
Italy	6.8		6.8	2.5%	–	6.8
United States	3.0	2.0	5.0	1.8%	–	5.0
Canada	3.1		3.1	1.1%	–	3.1
Austria	2.5	0.6	3.1	1.1%	–	3.1
Brazil	1.7		1.7	0.6%	–	1.7
Ireland	1.1	0.7	1.7	0.6%	–	1.7
France	1.6	0.0	1.6	0.6%	–	1.6
Republic of Korea	0.3	0.6	0.9	0.3%	–	0.9
India	–	0.2	0.2	0.1%	0.3	0.5
Total Member Contributions	226.5	47.8	274.2	100.0%	30.8	305.0
World Bank Group to DGF	28.5	2.0	30.5		–	30.5
Grant Total	255.0	49.8	304.7		30.8	335.5

Table 3. GFDRR Secretariat Expenditures, FY07-FY13 (US\$, millions)

Expense Type	FY07	FY08	FY09	FY10	FY11	FY12	FY13	Total
Staff Cost ⁽¹⁾	0.2	1.0	0.7	0.8	1.2	1.8	3.4	9.3
Travel ⁽²⁾	0.1	0.3	0.1	0.3	0.3	0.3	0.1	1.4
Other Expenses ⁽³⁾	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.8
Grand Total	0.4	1.4	1.0	1.2	1.6	2.2	3.7^(a)	11.5

⁽¹⁾ Staff Costs includes headquarters staff salaries and benefits. Staff costs increased substantially between FY12 and FY13 because of a change in how program support activities are funded. Before FY13, these activities—including partnerships and governance activities, evaluation of proposals, and impact evaluation and result framework monitoring—were funded by GFDRR's operational budget; beginning in FY13 they started to be funded by GFDRR's program management and administration budget, which includes Staff Cost.

⁽²⁾ Travel includes travel expenses for headquarters staff, candidates/interviewees for GFDRR positions, World Bank and IMF Annual Meetings participants, and other participants in GFDRR-sponsored events.

⁽³⁾ Other Expenses includes overhead expenses and the use of short-term consultants and other contractual services.

^(a) In FY13, the GFDRR Secretariat increased its partnerships and governance activities by \$800,000 and its impact evaluation and result framework monitoring by \$600,000. ACP-EU management costs grew by \$220,000 in its second year of operations to manage the increase in grants.

Table 4. GFDRR Grant Commitment for Program Activities,⁽¹⁾ DGF Grant, and Secretariat Program Management and Administration, FY07-FY13 (US\$, millions)

EXPENSE CATEGORY	FY07-FY09	FY10	FY11	FY12	FY13	Cumulative FY07-FY13
Program Activities	45.8	19.8	46.8	36.9	40.5	189.8
ACP/EU	–	–	–	2.2	19.1	21.4
Track 2 MDTF	35.3	14.7	36.3	27.2	16.5	130.0
Track 2 SDTF	5.1	0.3	2.3	5.6	3.2	16.5
Track 3 MDTF	5.3	4.8	5.8	2.2	1.7	19.9
Track 3 SDTF	–	0.0	2.3	(0.3)	–	2.0
Track 1 DGF Grant	15.0	5.0	4.3	4.3	2.0	30.5
Secretariat Program Management and Administration	3.1	1.5	1.5	4.6	10.7	21.5
TOTAL	63.9	26.3	52.5	45.8	53.2	241.8

⁽¹⁾ Grant Commitment for Program Activities refers to grants awarded to GFDRR implementing partners, including World Bank operational task teams and recipient countries, after GFDRR review and subsequent completion of World Bank's grant funding request process.

Table 5. GFDRR Grant Disbursement⁽¹⁾ for Program Activities, DGF Grant, and Secretariat Program Management and Administration, FY07-FY13 (US\$, millions)

EXPENSE CATEGORY	FY07-FY09	FY10	FY11	FY12	FY13	Cumulative FY07-FY13
Program Activities	17.9	19.5	24.5	33.1	29.4	124.4
ACP/EU	–	–	–	0.6	2.9	3.5
Track 2 MDTF	14.4	13.7	17.1	25.7	20.7	91.6
Track 2 SDTF	1.0	1.4	1.4	1.8	3.2	8.9
Track 3 MDTF	2.5	4.3	5.8	3.3	2.5	18.5
Track 3 SDTF	–	–	0.2	1.8	–	2.0
Track 1 DGF Grant	15.0	5.0	4.3	4.3	2.0	30.5
Secretariat Program Management and Administration	2.8	1.2	1.6	2.2	3.7	11.5
TOTAL	35.8	25.6	30.3	39.6	35.1	166.4

⁽¹⁾ Grant Disbursement refers to the actual expenditure incurred by implementing partners to deliver the agreed outputs and outcomes.

© 2013 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 non-profit uses, without special permission, provided acknowledgement of the source is made. The GFDRR Secretariat would appreciate receiving a copy of any publication that uses this report as a source. Copies may be sent to the GFDRR Secretariat at the above address.

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

Notes: Fiscal Year (FY) runs from July 1 to June 30; the financial contributions and expenditures reported are reflected up to June 30, 2013; all dollar amounts are in US dollars (\$) unless otherwise indicated.

Project team: Victoria Salinas, Megan Cossey, Luis Tineo, Shaela Rahman, Christina Irene, Tafadzwa Dube, Kim Van Nguyen, with contributions from numerous GFDRR and World Bank disaster risk management staff.

Design: Miki Fernández/ULTRAdesigns, Inc.

Cover photo: Cyclist crossing the U Bein Bridge in Myanmar, Burma.

Photo credit: © Dirk Ott



GFDRR
Global Facility for Disaster Reduction and Recovery

www.gfdr.org

About GFDRR The Global Facility for Disaster Reduction and Recovery (GFDRR) helps high-risk, low-income developing countries better understand and reduce their vulnerabilities to natural hazards, and adapt to climate change. Working with over 300 national, community level, and international partners GFDRR provides grant financing, on-the-ground technical assistance helping mainstream disaster mitigation policies into country-level strategies, and thought leadership on disaster and climate resilience issues through a range of knowledge sharing activities. GFDRR is managed by the World Bank and funded by 21 donor partners.

