#### **GLOBAL FACILITY FOR DISASTER REDUCTION AND RECOVERY**

### INTEGRATING DISASTER RISK REDUCTION AND CLIMATE ADAPTATION INTO THE FIGHT AGAINST POVERTY



### ANNUAL REPORT 2010







#### MEMBER PLEDGES/ CONTRIBUTIONS (IN US DOLLARS)

As of 11 November 2010, Global Facility for Disaster Reduction and Recovery (GFDRR) has received US\$244,310,387 in pledges and contributions from the following donors.

NORWAY 12,058,881



THE NETHERLANDS 6,600,000



LUXEMBOURG 7,166,591



SPAIN 12,234,733 EC 78,265,932

JAPAN 12,000,000

SWEDEN 20,260,734

### RIBUTE TO GFDRR MEMBERS

Since its establishment in September 2006, the Global Facility for Disaster Reduction and Recovery (GFDRR) has evolved into a partnership of 36 countries and 6 international organizations that are committed in helping developing countries reduce their vulnerability to natural hazards and adapt to climate change.

Special thanks and appreciation are extended to the partners who support GFDRR's work to protect livelihood and improve lives: ACP Secretariat, Australia, Bangladesh, Belgium, Brazil, Canada, China, Colombia, Denmark, Egypt, European Commission, Finland, France, Germany, Haiti, India, International Federation of Red Cross and Red Crescent Societies, Ireland, Italy, Japan, Luxembourg, Malawi, Mexico, the Netherlands, New Zealand, Norway, Portugal, Saudi Arabia, Senegal, South Africa, South Korea, Spain, Sweden, Switzerland, Turkey, United Kingdom, United Nations Development Programme, United States, UN International Strategy for Disaster Reduction, Vietnam, the World Bank, and Yemen.







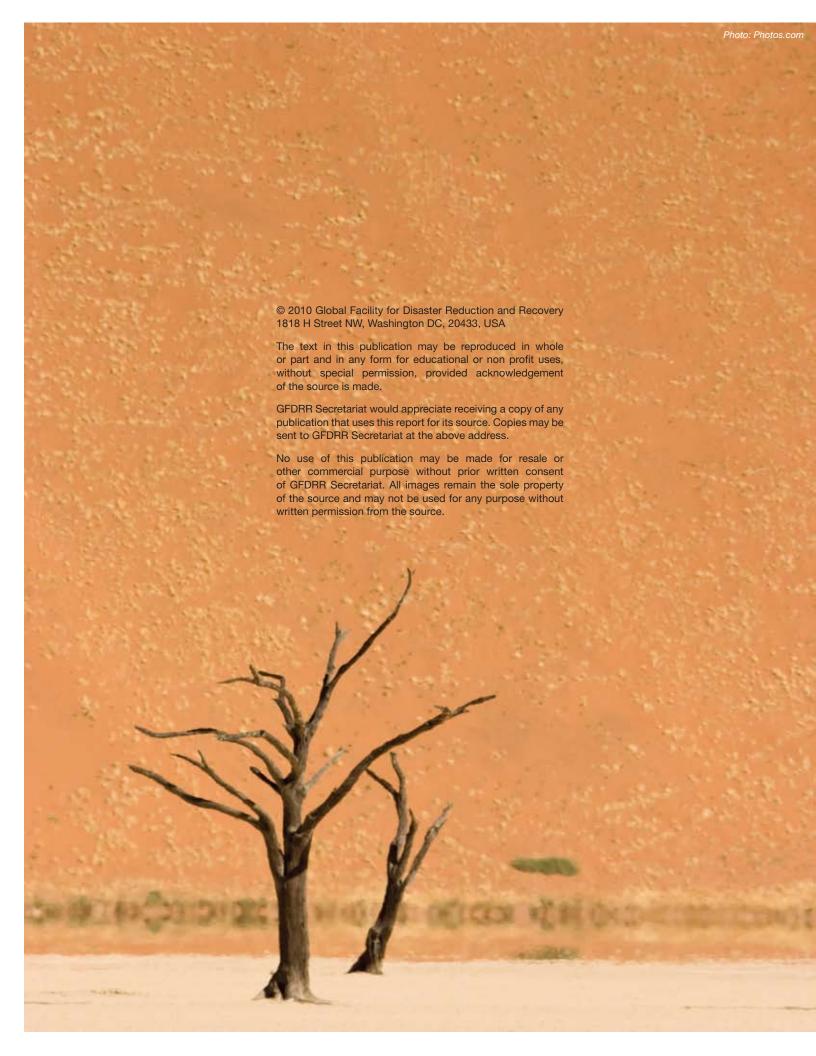








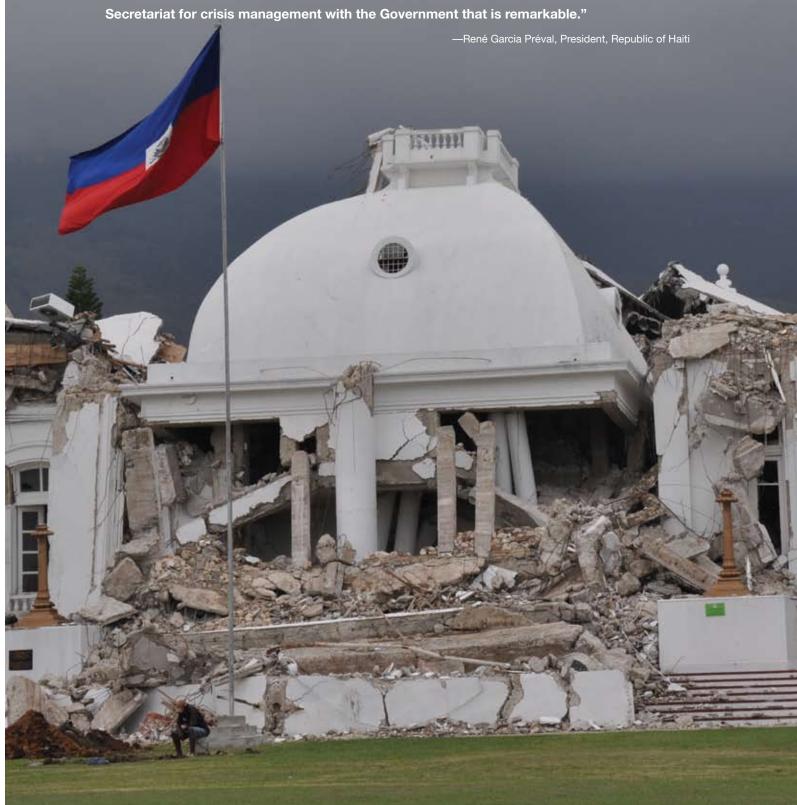




# CONTENTS

1.	Tribute to GFDRR members 01	10.	Achieving Resilience in Post-Disaster
2.	Foreword 05		Recovery 52
	Inger Andersen 05		Introduction to the Standby Recovery and
	Hiroki Owaki 07		Financing Facility 53
	Margareta Wahlström 09		Strengthening and Coordinating Disaster
3.	Statement of Results 10		Recovery Planning 58
4.	Introduction 16		Systematization of Disaster Recovery
	Fulfilling the Hyogo Framework for Action 17		Experiences 60
	Reducing Vulnerability to Natural Hazards 17		Building In-Country Capacities in Recovery
5.	The Way Forward 22		Preparedness and Response 62
6.	Measuring DRR Results at the Global Facility		Accelerated, Sustainable, and More Predictable
	for Disaster Reduction and Recovery 24		Recovery Financing 63
7.	Expanding Global and Regional Partnerships		Promotion of Greater Disaster Risk Reduction 64
	for Supporting National Disaster Risk		Looking Ahead-SRFF 65
	Reduction 28	11.	GFDRR Resource Management 66
	Stronger and More Inclusive Partnerships 30	12.	GFDRR Governance 76
	Aid Effectiveness and Coordination 31	13.	Annexes 82
	Expanding Regional and Sub regional		Annex I - Global and Regional Partnerships -
	cooperation 33		Activities under Track I 83
8.	Mainstreaming Disaster Risk Reduction-		Annex II - GFDRR Interventions in Natural Disaster
	Ensuring DRR as a Key Component of		Hotspot Countries – Activities under
	Sustainable Development 36		Track II 87
	Integration of Disaster Risk Reduction in		Annex III – Disaster Risk Reduction in Resilient
	Development 38		Recovery – Activities under Track III 94
	Adapting to Climate Change 39		Annex IV – Pipeline of Poverty Reduction
	Building Economic Evidence for Disaster Risk		Strategies, Country Assistance
	Reduction 42		Strategies, and UN Development
	Promoting Innovation in DRR 43		Frameworks in Natural Disaster Hotspo
	Advance Risk Financing and Insurance		Countries 96
	Mechanisms 44		Annex V – PDNA CASE STUDY – GFDRR
	Gender Equality 45		Supported Recovery Assessments
	Making Cities and Communities Safer 46		Leading to Strengthened Recovery
	Making Critical Infrastructure Resilient 47		Preparedness in Post-Disaster
	Bolstering National Capacities in Disaster Risk		Countries 103
	Reduction 49	14.	Abbreviations 105
9.	South-South Cooperation 50		

Immediately after the earthquake of January 12, 2010, the Global Facility for Disaster Reduction and Recovery (GFDRR) strengthened its support to Haiti, offering expeditious and flexible assistance instruments to the Haitian Government in its response to the impact of the disaster. The support provided by GFDRR in the assessment of post-disaster needs, the structural survey of buildings and multi-hazard rapid assessment is the basis of the Country's recovery strategy. But beyond this, it is GFDRR's support in the reconstruction of an appropriate framework within National Institutions and the establishment of a General Secretariat for crisis management with the Government that is remarkable."





### FOREWORD

Reducing disaster risks is an integral part of the World Bank's mission to alleviate poverty. Sensible and cost effective risk reduction programs like early warning systems, strengthened building codes, and emergency preparedness strategies are the best defense against future catastrophes.

With the growing frequency and the impact of natural hazards, the global demand for coherent and comprehensive efforts to Disaster Risk Reduction (DRR) is growing at a fast pace. Global Facility for Disaster Reduction and Recovery (GFDRR) has emerged as the premier global coordination mechanism to harmonize the DRR efforts of the international community through both ex ante and ex post support to high risk developing countries. In the four years of its existence, GFDRR has been very successful in building a platform for global actors to manage the disaster agenda, leveraging efforts for disaster risk reduction and to share disaster risk reduction knowledge to achieve the goals set forth in the Hyogo Framework for Action.

GFDRR's technical and financial assistance has transformed the DRR capacity, emergency preparedness and institution building of two-thirds of the world's least developed countries. GFDRR's rapid recovery team has worked alongside a number of Governments providing the support and technical assistance required to develop an all encompassing recovery and reconstruction work plan. Post Disaster Needs Assessment (PDNA) conducted in Haiti, Indonesia and the Philippines were internationally recognized as standards for government-led partnerships that laid the foundation for rapid and resilient recovery. The PDNA exercises are now recognized as best practice for interagency coordination and cooperation while leveraging considerable financing for recovery and reconstruction that integrate disaster risk reduction and climate adaptation.

During the past fiscal year, GFDRR stepped up its efforts to mainstream disaster risk reduction and climate change adaptation in country policy dialogue; the study on the Economics of Disaster Risk Reduction (EDRR), the "Safer homes, stronger Communities" report, the innovative risk financing tools, the piloting of the GFDRR labs or the Understanding Risk conference along with the development of the Urban Risk Assessment for cities, are but a few examples of the extensive efforts developed by GFDRR to help countries most at risk to achieve sustainable development. Regional organizations are increasingly empowered to play a key role in mainstreaming disaster risk reduction and address regional drivers of risk. Through its increased South-South knowledge sharing partnership efforts, GFDRR continues to look for



cross-boundary solutions to climate change adaptation and disaster related trans-boundary risks among countries operating under comparable financial, political and geographic constraints.

Over the past year, GFDRR has continued to grow into a genuine global partnership of the global ISDR system. The partnership of four has now grown to thirtynine members, and in line with its new Partnership Strategy, GFDRR has broadened its governance to include six developing Countries among its Consultative Group members. I would like to take this opportunity to thank GFDRR donors and partners for their con-

tinued support and generosity which has enabled the facility to continue its dedicated work to reduce the immediate and long-term risks of natural disasters on the vulnerable populations.

Inger Andersen

Chair, GFDRR and Vice President

Sustainable Development

The World Bank

As long as we, the human beings, wish to harmoniously coexist with nature, there is no way to avoid dealing with natural disasters. It is imperative for each country to accumulate expertise and technologies on disaster risk reduction.

Japan has fostered a 'culture of disaster risk reduction' based on our own experiences of being affected by a variety of disasters from ancient times. We strongly believe that those developing countries suffering from disasters should develop their own 'disaster-resilient culture' by mainstreaming disaster risk reduction in their longer-term development policies and plans.

Natural disasters pose a threat to sustainable development and human security. Furthermore, as a result of climate change, those threats of natural disasters have become even more diverse and serious in such forms as cyclones, floods and droughts. They cause tremendous damages especially to vulnerable countries including the least developed countries.

In order to deal with natural disasters, the international community adopted the "Hyogo Framework for Action" at the UN World Conference on Disaster Reduction held in Kobe in 2005. This framework is a guidance to systematically integrate disaster risk reduction into measures for sustainable development and poverty reduction, and compiles strategic goals and priority actions for disaster risk reduction to be undertaken by the international community by the year 2015. We need to collectively implement these actions on a global scale.

Japan has been actively supporting the activities of UNISDR to promote the implementation of the "Hyogo Framework for Action." GFDRR is an indispensable framework for partnership to support, in cooperation with UNISDR, developing countries that are susceptible to disasters. Japan highly appreciates this initiative led by the World Bank, and has closely cooperated with GFDRR since its establishment in 2006. A catalytic role the World Bank, as one of the major development organizations, plays through GFDRR in assisting developing countries' efforts in disaster risk reduction is crucial for making positive impacts on poverty reduction and sustainable development.

It was my great honor as Co-Chair of the Consultative Group of GFDRR to host the 8th Consultative Group meeting as well as the Policy Forum and other relevant events in Kyoto and Shizuoka in May, 2010, as the year marked the mid-term point of the "Hyogo Framework for Action" as well as the first step to broaden the GFDRR partnership beyond traditional contributing donors. At the Kyoto CG meeting, we invited three developing countries (Haiti, Senegal and Vietnam) to share their disaster risk reduction efforts and experiences, and to consolidate a broad partnership of GFDRR. We also welcomed the newest CG



partners such as Brazil, Colombia, India, Republic of Korea, Mexico, Saudi Arabia, and Republic of South Africa. I would like to thank the University of Kyoto for jointly organizing the "Kyoto Policy Forum – Sustainable Institutions and Infrastructure for Safe Communities" and Shizuoka Prefecture for having kindly hosted the "International Training Seminar and Field Visit on Disaster Prevention." These events provided unique opportunities for developing partners to learn and actually "touch upon" Japan's knowledge and good practices, in particular, those of local authorities.

Albeit its successful beginning, GFDRR will continue to face new and complex challenges such as the introduction of results framework. I would like to express my sincere appreciation to the Secretariat for their relentless efforts in addressing the challenges and also hope that partnership among the partners will be deepened further towards the effective reduction of disaster risk in developing countries.

Hiroki Owaki

Deputy Director-General of International Cooperation Bureau

Through programmes implemented under the Global Facility for Disaster Reduction and Recovery (GFDRR), the World Bank, with the support from Consultative Group member Governments, has provided sustained financial and analytical support to the implementation of the Hyogo Framework for Action and for strengthening the International Strategy for Disaster Reduction.

Ministry of Foreign Affairs of Japan GFDRR Co-Chair 2009-2010

The GFDRR's support through Track I funding has provided a fillip to the technical capacities of regional intergovernmental organizations. Through GFDRR Track II's upstream analysis, it is now possible to monitor the extent that disaster risk reduction is integrated into Poverty Reduction Strategy Papers and World Bank Country Assistance Strategies (CAS). This will lead to a significant realignment of development funds towards ex ante risk mitigation.

However, repeated disaster losses in countries like Haiti and Pakistan, which are also priority countries for the GFDRR, show that much remains to be done to turn policies into a significant reduction of disaster loss at the country level. As such, the World Bank / GFDRR and ISDR secretariat are now focusing their efforts on harmonizing divergent development planning frameworks, like the CAS and United Nations Development Assistance Framework, to promote coordinated investments in high-risk countries.

I hope this 2010 Annual Progress Report of the GFDRR will stimulate a reflection among Consultative Group members on the efficacy of investments and programmatic approaches undertaken under the various tracks of GFDRR in reducing disaster losses. Never has this been more important than for countries like Haiti, Pakistan, and other disaster-vulnerable nations.

Margareta Wahlström

Special Representative of the UN Secretary General & Assistant Secretary-General for Disaster Risk Reduction, United Nations



Global Facility for Disaster Reduction and Recovery (GFDRR) is meeting the world's increasing demand for urgent response to crises, recovery, reconstruction, prevention, and adaptation caused by natural hazards. GFDRR's role in providing technical and financial resources to low- and middle income, "mostat-risk" developing countries for the disaster risk management effort, is becoming very critical.

GFDRR is positioning itself as a global center of expertise in disaster risk management (DRM) knowledge and as a lead financing mechanism for disaster and climate risk management. GFDRR is embarking upon the second programming cycle with the end of fiscal year (FY) 2010. Considering, on one hand, the recent increase in frequency and intensity of natural disasters which are further exacerbated by climate change and the midterm review of the Hyogo Framework for Action (HFA) on the other, it is anticipated that the role of GFDRR will grow extensively in coming years.

GFDRR adopted a new partnership strategy in 2009— GFDRR Partnership Strategy—GPS, (2009-2012), which outlines a medium term strategic framework and provides strategic directions for GFDRR operations. The GPS (2009-2012) promotes increased focus, expanded governance, wider partnerships with

regional organizations and the private sector, and demonstrating and communicating results-based DRR on the major outcomes of GFDRR operations.

GFDRR has developed an improved approach to the efficient and effective monitoring and management of medium term strategic objectives and longer term goals set out in the GPS. This new results framework will allow GFDRR to more efficiently benchmark and monitor progress and impacts of its interventions at global, regional, and country levels toward implementation of the HFA.

GFDRR has made a concerted effort to enhance global and regional partnerships to promote the effective implementation of the HFA. The Facility has strengthened cooperation with significant regional inter-governmental organizations, international financial





institutions, academic institutions, civil societies, and the private sector. Furthermore, GFDRR continuously leverages the capacity of regional and subregional organizations to create awareness, improve cooperation, and transfer knowledge in risk assessments, risk pooling and insurance and more importantly, building global political commitment for DRR. Expanded, inclusive, and strong regional and global partnerships with the following organizations have helped GFDRR to increase its capacity to deliver technical and financial assistance to developing countries: Association of South-East Asian Nations (ASEAN), African Union (AU), Centro de Coordinación para la Prevención de los Desastres Naturales en América Central (CEPRE-DENAC), Economic Community of Central African States (ECCAS), Economic Community of West African States (ECOWAS), Intergovernmental Authority on Development (IGAD), South Asian Association of

Regional Cooperation (SAARC) and Southern African Development Community (SADC).

GFDRR is now supported by thirty-six countries and six international organizations, including emerging economies such as Brazil, China, Colombia, Egypt, India, Mexico, Saudi Arabia, South Africa, South Korea, and Turkey. Further, GFDRR demonstrated its inclusive development approach by inviting six developing countries (Bangladesh, Haiti, Malawi, Senegal, Vietnam, and Yemen) to be GFDRR Consultative Group members in this fiscal year.

GFDRR has proactively engaged in making disaster risk reduction and climate adaptation a strategic development priority. The Facility is effectively responding to the growing needs and demands of countries, currently funding more than 120 disaster risk reduc-

tion and inter-related climate risk management programs in many disaster prone low and middle income countries. To meet the expanding interventions, GFDRR's portfolio has grown to over \$240 million in four years. Although the donor support for DRM has been increasing, there are still challenges in meeting the growing demand for mitigating and preventing natural disasters.

Through upstream review of national development strategies, GFDRR is continuing to support mainstreaming disaster risk reduction and climate change adaptation into national development agendas across different sectors. Forty eight countries have identified 'natural disaster' as a challenge in development planning; twenty six countries have identified disaster risk reduction in various sectors as a cross-cutting issue. GFDRR is deepening its support in priority countries by helping prepare longer term country programs for DRR and climate adaptation. These inclusive and government-led country programs have made important shifts in GFDRR's interventions.

Increasingly, GFDRR is working to engage the private sector in DRM. The objective is to enhance the capacity of poor, vulnerable countries to reduce and respond to natural disaster risks by making available the most appropriate technologies and financial mechanisms. For example, through regional risk assessments and probabilistic modeling of disaster impacts, such as the Central American Probabilistic Risk Assessment in Central America and risk profiling in South Eastern Europe and Central Asia, national governments are now able to invest in efficient early warning systems using hydro-meteorological techniques and other infrastructure.

As part of the ex post support, GFDRR has tools such as the Post Disaster Needs Assessment (PDNA) and the Damage and Loss Assessment (DaLA). The Facility can also assist with policy inputs for recovery and reconstruction by deploying its global expertise in DRM, and by providing concessional financing for sustainable recovery and reconstruction. Rapid mobilization of experts through a Quick Response Team (QRT) mechanism in an emergency situation after a disaster has been very effective and appreciated by international actors. GFDRR's initiations on economic damage and loss assessments after disasters occur give a comprehensive picture of the economic situation in a particular country, and these assessments are the first step toward meaningful recovery and reconstruction. Using PDNA reports and DaLA tools, countries affected by major disaster now have a clear roadmap to rebuild in a more resilient and environmentally sound way.

To promote an innovative approach to reduce disaster risks, GFDRR has launched the GFDRR Laboratories team, whose mission is to foster innovation in DRM through partnerships and technology. The GFDRR Labs will focus on providing support with risk models, risk databases, understanding risk networks, and engaging the grassroots community. The GFDRR Lab will support the PDNA process using remote sensing initiatives such as the Global Earth Observation Catastrophe Assessment Network (GEO-CAN).

Demand for knowledge and expertise in disaster risk reduction and recovery is increasing tremendously, and GFDRR is seen as a source of information across the world. As a result of the experience sharing workshops organized in FY 2010 for different government partners and international organizations, an agreement was made to further strengthen the WB-EC (European Commission) collaboration to mainstream DRM in development strategy documents.

GFDRR has also supported the development of global knowledge products that have a high policy impact on disaster risk reduction such as the UN-World Bank Assessment of the Economics of Disaster Risk Reduction report which has been finalized. Several studies about disaster risk assessment, risk reduction, and Climate Change Adaptation (CCA) were conducted in different countries to support national and local capacity building on disaster prevention and CCA. In addition, the GFDRR's South-South Cooperation



Initiative contributes to increased knowledge sharing and ownership of the disaster risk reduction agenda among developing countries.

GFDRR has actively and successfully fostered linkages at the country level, within the World Bank Group, and with external partners by strategically leveraging just-in-time seed funding, targeted investments and expertise. A significant portion of all World Bank analytical and programming work on CCA at both country and regional levels continues to be either initiated or co-funded by GFDRR. Initiatives ranging from coastal adaptation in Senegal, Mozambique, and Yemen, to climate model downscaling and analysis of water sector adaptation options in Africa, to name but a few, have built on the GFDRR seed support and accessed related DRM expertise in the areas of geospa-

tial analysis, vulnerability mapping, risk analysis and stakeholder engagement.

GFDRR is also actively encouraging a global network of experts within different international non-governmental organizations and country governments to share coherent and comprehensive responses for disaster risk reduction. Through the expertise of its team members and by pulling together the resources of local players, from government experts to World Bank and donors' agencies, a more organized and competent response to disaster is in place.

Disaster risk financing is an essential component of GFDRR programs and GFDRR continues to support the development and application of unique risk financing instruments as well as insurance schemes

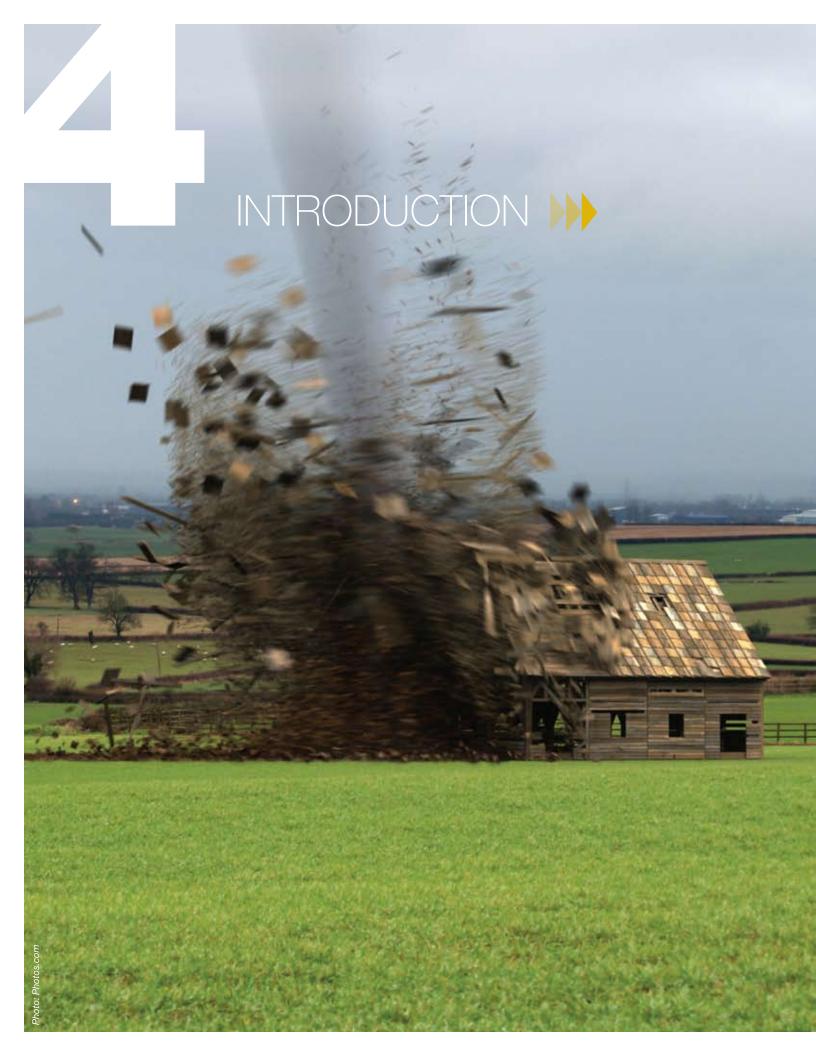




to vulnerable populations, such as farmers in disaster prone areas. GFDRR recognizes and supports strategies that aim at increasing resiliency of highly vulnerable groups, such as women, infrastructures, urban communities in disaster prone areas, and schools and hospitals.

Thanks to the generous contributions provided by its donors, the leadership of its Consultative Group, quality assurance by the members of its Results Management Council, and the passion and commitment of its staff, GFDRR is today the global reference for DRM. By providing a unique, open, and inclusive partnership for different development communities and stakeholders, GFDRR is able to help channel the wealth of Disaster Risk Reduction (DRR) knowledge, resources, and experiences toward the countries and

regions that need it the most. In doing so, we can make a concrete difference in the fight against poverty and in helping to build more resilient and sustainable communities throughout the world. GFDRR seeks to continue its support to disaster prone countries by offering knowledge sharing, capacity building of stakeholders, and mainstreaming disaster risk reduction into national planning.



#### Fulfilling the Hyogo Framework for Action

#### REDUCING VULNERABILITY TO NATURAL HAZARDS

This report summarizes GFDRR's areas of major impacts and use of resources from its inception until FY 2010, and indicates that coming years will be more promising. FY 2010 was a defining moment in the life of GFDRR in becoming a true global knowledge center for DRM and promoting a global partnership to mainstream disaster risk reduction and climate change adaptation for sustainable development. This annual report not only serves as the comprehensive overview of the impact of preceding GFDRR activities for FY 2010, but also serves as the benchmark for present and future role of GFDRR in global DRM and CCA

#### **OPERATING EFFECTIVELY IN A DYNAMIC ENVIRONMENT**

Natural disaster can undermine decades of investments and economic development in seconds. There is a global consensus that there can be no sustainable development without mainstreaming risk reduction in all sectors of development. Alleviating poverty and reducing disaster risk vulnerability are inextricably linked, as are the targets of the Millennium Development Goals and the HFA. The 2009 Global Assessment Report on Disaster Risk Reduction concludes that disaster risk is growing at a faster rate in lowmiddle income countries with rapidly growing economies, small island developing states, and land-locked developing countries.

Natural disasters are increasing in terms of frequency and impact as a result of climate change, population growth, rapid urbanization and environmental degradation. Earthquakes in Haiti, Sumatra, Indonesia, Samoa; typhoons in Lao PDR and Philippines; and floods in Senegal and Central African Republic are the major natural disasters of this reporting period. Damage and loss for these major disasters that occurred only between the period of July 2009 to June 2010 is estimated to be approximately US\$15 billion. More than 16 million people were affected with more than 200,000 deaths and 600,000 injuries. Disasters are occurring more often and becoming more intense, so disaster risk reduction has become one of the most important components of sustainable development. This demand has increased the importance of GFDRR role in DRM.



GFDRR offers global knowledge and technical assistance to disaster-prone developing countries (1) to build their comprehensive capabilities to reduce disaster risks and to recover quickly and *build back better* when disasters occur, while also strengthening their adaptation capacity, and (2) to assess damage, losses, and needs emanating from disasters, and to formulate post-disaster recovery and reconstruction strategies for accelerated and sustainable recovery.

GFDRR also assists developing countries to incorporate disaster risk financing into national DRM strategies by providing technical assistance for the design and implementation of affordable and cost-effective disaster risk financing and risk transfer programs. Such support covers sovereign disaster risk financing, property catastrophe risk insurance, and agricultural insurance. Since its inception, GFDRR has co-financed about twenty technical assistance projects or project components on disaster risk financing, benefiting thirty-three countries.



At present, GFDRR is focusing on twenty low-income countries that are most at risk to multiple natural hazards<sup>1</sup>, covering six geographical regions, in mainstreaming DRR and CCA into their development strategies. These countries were selected based on the hotspots study of 2005 and national ownership of DRR agenda. In addition, eleven countries have been earmarked based on the priorities of specific donor

partners. DRM profiles have been developed for all 31 countries. These profiles outline the main challenges for the country in question, recommending for action and identifying the ongoing disaster risk-related donor activities in the country to enhance donor coordination and effectiveness.

In countries such as Lao PDR, the Philippines, Yemen, Haiti, Moldova, and Pakistan, GFDRR provided vital assistance through PDNAs undertaken jointly by EC, the United Nations (UN), and the World Bank. The

<sup>1</sup> http://www.gfdrr.org/gfdrr/



"GFDRR has been instrumental in supporting the Government of Lao PDR to focus on the importance of disaster risk reduction in all phases from preparedness, response and relief, and post disaster recovery. In particular, the historical Mekong floods in 2008 and Damages of Typhoon Ketsana in 2009 has prompted the Government in reconfiguring the National Disaster Management Committee to strengthen the engagement of the Ministry of Planning and Investment (MPI) in mainstreaming the disaster management into public investment planning with support of the GFDRR. Built on lessons learned from Ketsana Post Disaster Need Assessment financed by GFDRR, MPI has launched an institutional strengthening program nationwide, aiming at establishing in- country capacity capable of carrying post disaster need assessment. We value GFDRR's support to build capacity in our line ministries"

—Dr. Kamlien Pholsena, Director General, Ministry of Planning and Investment, Planning Department, Lao PDR

PDNA is considered the global template for quantifying damage, loss, and needs; for formulating the post-disaster recovery and reconstruction strategy; and, increasingly, for leveraging additional post-disaster development assistance that integrates disaster risk reduction. It is recognized not only by the beneficiary governments, but also by GFDRR partner organizations and other development agencies as a crucial tool for calculating damage, losses, and needs, and identifying priority sectors and affected populations to better target recovery efforts.

GFDRR is pioneering the integration of DRM and CCA planning in PDNA. For example, the Yemen floods (2008), Haiti's earthquake (2010), the Moldova floods (2010), and the ongoing DNA for the Pakistan floods (2010) were unique windows of opportunity for promoting integration of adaptation considerations in major municipal and/or infrastructure (re)develop-

ment. GFDRR further invests in developing in-country capacity at federal, regional, and provincial levels for fostering better disaster response preparedness. It is also building capacity in regional organizations such as the ASEAN, Arab Academy, ECOWAS, ESCAP, SOPAC and SAARC to equip them with integrated disaster response capabilities.

GFDRR is playing a unique and commendable role in helping to bridge knowledge, policy, and practice in DRR. GFDRR efforts have contributed to developing countries' efforts to achieve priorities set forth in the Hyogo Framework for Action (HFA) The Facility has encouraged (a) mainstreaming DRR and CCA in highrisk countries; (b) aligning DRR with national priorities via Poverty Reduction Strategy Papers (PRSPs) and national development plans; and (c) building capacity for the resilience of nations to respond to natural disaster and the impact of climate change.

# GFDRR'S ACTIONS FOR HAITI EARTHQUAKE

On January 12, 2010, an earthquake of magnitude 7.3 on the Richter scale shook Haiti for 35 seconds, causing extensive damage and casualties. Being the worst to hit the country in 200 years, the earthquake caused over 200,000 deaths and over 300.000 injuries. Hundreds of thousands of Haitians have been left homeless and have fled the affected area to find refuge in the provinces, adding to an economic situation that was already critical. Some 105,000 homes have been completely destroyed and more than 208,000 damaged. Over 1,300 educational establishments, and over 50 hospitals and health centers, have collapsed or became unusable.

The scale of the catastrophic earthquake has required a unique mobilization of the human and financial resources of the GFDRR to respond to the immediate recovery needs. On February 18, 2010, a Post-Disaster Needs Assessment (PDNA) was launched to lay the foundations for a fresh start in the country's development efforts, as well as to reconstruct the damaged areas and contribute to a long-term national strategic development plan, in order to begin rebuilding a more disasterresilient Haiti. The PDNA has set the cost of the total value of damages and losses at US\$7.8 billion (or 120% of Haiti's 2009 GDP).

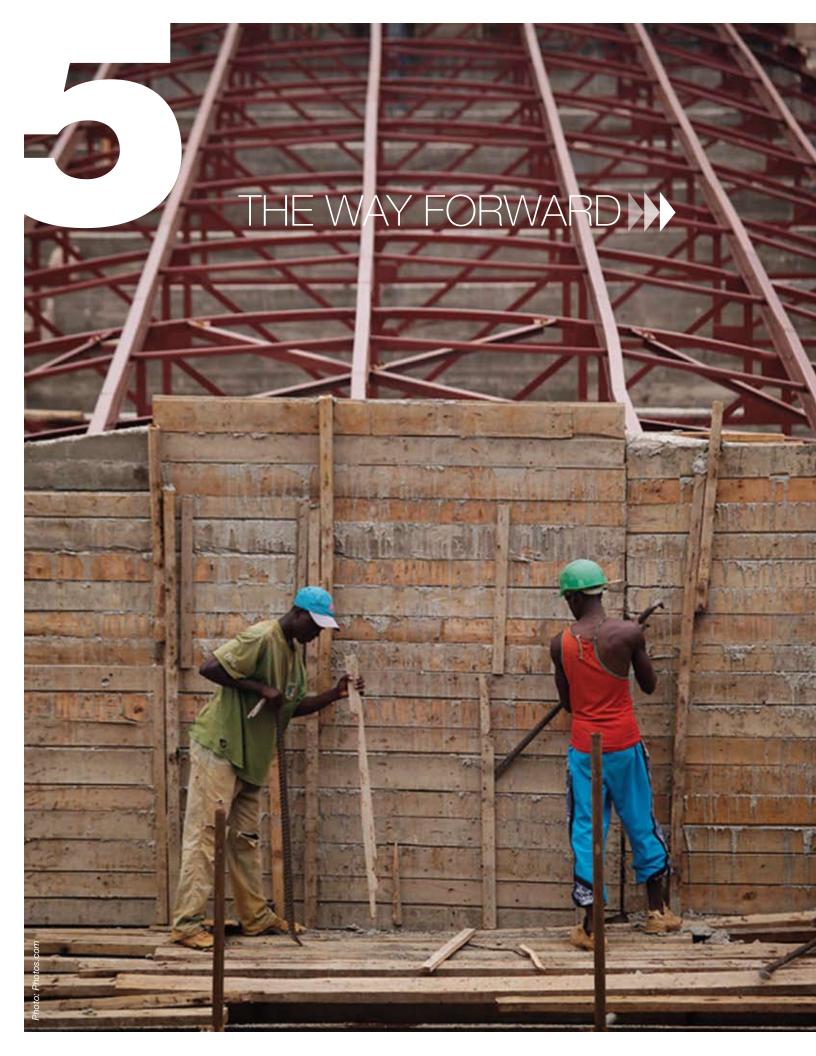
In addition to the PDNA, GFDRR has successfully supported i) the creation of a National Crisis Council and Technical Secretariat to strengthen the capacity of the Government of Haiti to expedite recovery and reconstruction efforts; ii) the preparation of a National Strategy for Recovery and Reconstruction; iii) the creation of a Building Assessment and Construction Norms technical unit within the Haitian Ministry of Public Works, to strengthen their capacity to coordinate the public infrastructure assessment campaign and mitigate the impact of collapsing building caused by repeated aftershocks; and iv) the implementation of a rapid multihazard risk assessment, which serves as a tool in the reconstruction planning and supports decision making on safe resettlement, land use planning, sustainable sectoral development strategies, and urban drainage programs.

To support the Government of Haiti's decision making on the recovery and reconstruction operations, GFDRR also decided to make available expert advice and global best practices to the Government by mobilizing



the World Bank Global Expert Team (GET) to prepare timely Knowledge/ Good Practice Notes on ten identified, 'burning' post-disaster recovery and reconstruction issues.

These knowledge notes covered a number of key sectors including: building seismic safety assessment; debris management; environmental and social assessment; experience with post-disaster income support programs; land tenure; management of recovery managing post-disaster aid; rebuild or relocate; transitional shelter, and; helping women and children to recover and build resilient communities. The notes provided just-in-time advice and options for Haiti's disaster recovery, making the state of-the-art expertise available through the GET-DRM.



In its four years of existence, GFDRR has proactively pursued a unique model of global partnership of donors, emerging economies, the United Nations, and the World Bank to enable developing countries to respond to the challenge of ever-increasing episodes of rapid- and slow-onset disasters. An independent evaluation of GFDRR completed in 2010 found the Facility to be relevant, efficient, and effective.

Recent catastrophes in Caribbean, East Asia, Pacific, South Asia and West Africa have demonstrated that the international community must address disaster and climatic risks in the context of green growth and sustainable development

- ▶ GFDRR will continue to make it a high priority to assist priority countries achieve resilient development inter alia, disaster risk assessments and mapping, risk-sensitive land use planning and building standards, well functioning early warning systems, strong DRR institutions at national and local levels, capacity to respond to recover from disasters, ensuring fiscal sustainability by integrating risk financing and risk transfer programs in the national DRR policies, and more important, pursuing a synergistic approach to DRR and CCA at country level.
- ▶ Little has been done to bring innovations in knowledge and technology into the realm of disaster risk reduction. Better use of remote sensing and open source web technologies can help developing countries to establish better evidence-based systems for disaster risk assessments and to under-

- take post-disaster needs assessments. Building on the successes after the Haiti earthquake and Pakistan's floods, GFDRR Labs will provide tools to developing countries to access new technologies for efficient disaster risk reduction and disaster recovery.
- ▶ GFDRR anticipates a major increase in the incidence of urban flood disasters in all regions of the world. In 2011 the Facility will publish a global handbook on urban flood management to provide comprehensive guidance to the policymakers on urban flood disaster risk reduction. Also during 2011, the GFDRR will organize a world conference on reducing the risk of disasters during reconstruction, based on lessons and experiences from major reconstruction programs during the last two decades.
- Finally, the coming year will witness greater harmonization of the disaster risk reduction agenda with climate adaptation in all tracks of GFDRR operations.



#### Results Based Management System

Soon after its inception, GFDRR developed a web-based Results Based Management System (RBMS) to measure its contribution towards mainstreaming disaster risk reduction in national development efforts. This web-based system allows for an interactive, up-to-date monitoring of GFDRR financed projects. Currently, the RBMS offers periodic reporting (bi-annually) on project progress in meeting largely output-based targets.

To an extent, such reporting helps in assessing GFDRR's performance in contributing to disaster risk reduction and in making progress towards meeting the HFA priority areas. It also captures the project management cycles for all GFDRR projects and keeps record of important communications, reports, field visits and all other relevant information related to GFDRR's portfolio.

The RBMS has proven successful in capturing essential descriptive information related to GFDRR's activities in its client countries, such as on individual project objectives and planned activities. The RBMS also monitors and reports on the financial and physical progress of GFDRR interventions. However the RBMS does not satisfy the need for results-based monitoring and evaluation of GFDRR's performance in meeting its medium-term goals and objectives. Current RBMS monitoring and reporting is restricted to deliverables or outputs only and does not capture information on project outcomes and impacts.

The GFDRR's Independent Evaluation of January 2010, which assessed the efficiency of GFDRR

performance management and reporting systems, identified and recommended a few key areas of improvement in its monitoring: (a) greater and more consistent use of core outcome/impact indicators beyond measuring and reporting on basic output performance; (b) strengthening and development of longer term evaluation plans and tools; (c) development of standardized and results-based reporting templates, and; (d) development and circulation of more formalized selection standards for portfolio expansion and program allocations consistent with the hierarchy of goals and strategic objectives that GFDRR has set out for itself.

# New GFDRR Approach to Results Management

The GFDRR has now formulated and embarked upon a comprehensive results-based M&E approach and methodology for the efficient and effective monitoring and management of its strategic progress in achieving the longer term goals, medium term objectives, and intermediate results set out under the GFDRR Part-





nership Strategy. The new approach for GFDRR results management is based on the development and operationalization of a central results framework (RF). The RF reflects the strategic goals/objectives set out in the GPS (2009–2012), and strategically harmonizes and integrates all three tracks of GFDRR operations.

The proposed RF, which is based on the latest resultsoriented management approach used by the World Bank and other agencies for monitoring and evaluating developmental operations and programs, is an improvement over conventional input- and outputbased management in the following ways:

- i. It establishes a clearer and much more streamlined results chain by focusing on key results/ outcomes and on the measurement of intermediate outcomes rather than outputs.
- It provides predetermined analysis plans for the use of the outcome and for intermediate outcome information generated through the results monitoring system.
- iii. The RF will maintain close strategic alignment with higher level goals, but the main focus will be on measuring and delineating GFDRR performance and contributions to the DRR agenda.

### GFDRR INDEPENDENT EVALUATION

GFDRR conducted the first independent evaluation since its establishment. The evaluation report was finalized in January 2010. The purpose of the evaluation was to provide the GFDRR and management with an independent assessment of GFDRR performance since inception in 2006 (i.e., its relevance, effectiveness and efficiency) in the context of reducing a country's vulnerability to natural hazards and climate variability. The evaluation also provided recommendations to improve the program approach and business model, and optimize its partnering arrangements in anticipation of future growth.

The report concluded a very thorough evaluation on GFDRR and revealed that that GFDRR has contributed tremendously to mainstreaming DRR at the national level via its country programming portfolio. Support for the building or strengthening of national capacity, such as national DRR focus agencies, has been a widespread and flagship initiative of the GFDRR. Overarching DRR considerations that have been integrated into World Bank country assistance strategies, Poverty Reduction Strategy Papers or national development plans have provided a basis and framework for national governments to take ownership of their DRR mainstreaming priorities. The evaluator's review of GFDRR funded projects combined with interviews of partner countries and other documentary resources showed that GFDRR has made contributions to the broadening of awareness, the integration of DRR into planning and the building or strengthening of networks and is viewed as a very effective development partner.

www.gfdrr.org/gfdrr/evaluation

- iv. The central RF will provide an umbrella framework and tools for greater oversight and provision of guidance to regional and country DRR programs sponsored by GFDRR. This will ensure greater synchronization and strategic consistency within and across such programs and countries. At the same time, the RF will progressively build an interface that will systematically link country-level results frameworks with the central framework.
- v. The RF emphasizes and introduces greater qualitative measurements of results, and the subsequent operationalization of qualitative indicators in many cases will require independent and semiindependent assessments of results

The GFDRR team has developed a preliminary RF based on the approach explained above. It was presented to the Consultative Group at the 8th CG meeting in Kyoto, in May 2010 and principally endorsed with a request to shorten and condense its program and intermediate outcome indicators. Along these lines, the RF is currently undergoing a process of refinement and rationalization. It is being peer-reviewed internally and externally by M&E experts and a final version ready for implementation is expected by fall of 2010.



GFDRR is promoting global and regional partnerships among different actors, linking low and middle income countries, international organizations, financial and academic institutions, civil society, and the private sector, to implement the HFA through the Track I business line.

Concerted efforts have promoted the acceleration of implementation of the Hyogo Framework for Action (HFA) priorities at the regional, global and country levels, in particular through advocacy and knowledge management, as well as improved coordination, harmonization and coherence of actions among International Strategy for Disaster Reduction (ISDR) partners.

The main purpose of these partnerships is to enhance global and regional advocacy for mainstreaming disaster risk reduction in high risk low and middle income countries; and to promote knowledge management and harmonization of hazard risk management tools, methodologies and practices to achieve goals set forth in the HFA. Track I bolsters global and regional partnerships to develop new tools, practical approaches and other instruments for disaster reduction and recovery, foster an enabling environment at the country level that can generate greater investment in disaster mitigation

practices within sustainable legal, policy, financial and regulatory framework, facilitate knowledge sharing about reducing disaster risks and sustainable disaster recovery, and create adaptive capacities for limiting the impact of climate change.

With funding from the World Bank's Development Grant Facility (DGF) through GFDRR, United Nations Secretariat International Strategy for Disaster Reduction (UNISDR) executes the Track I work program, responding to disaster risk reduction needs at global and regional levels in line with Hyogo Framework priorities. During this reporting period Track I contributed US \$5 million from the World Bank DGF to the UNISDR to leverage efforts for DRM. GFDRR has benefitted from the cooperation of different regional intergovernmental organizations and financial institutions to promote regional disaster risk assessment, risk reduction, and insurance financing in different regions.



# Stronger and More Inclusive Partnerships

GFDRR is a partnership of the ISDR system and it will continue to collaborate with the UNISDR Secretariat for a coherent and coordinated global disaster risk reduction system. GFDRR will strengthen its partnerships with UN agencies, the European Commission (EC), multilateral development banks (MDBs), the International Federation of Red Cross and Red Crescent Societies (IFRC) and other stakeholders. Through its partnership with IFRC, GFDRR will continue to strengthen its partnership with the civil society. —GPS, Strategic Direction (2009–2012)

Since its inception, GFDRR has become the specialized global instrument for advancing focused knowledge and financing to disaster-prone countries. GFDRR has developed a unique partnership with the UN and the World Bank (WB). The GFDRR works continuously to strengthen effective coordination and coherence with UN agencies, the EC, and other significant international organizations. In 2010, GFDRR demonstrated an innovative approach to inclusive development practices by including six developing countries (Malawi, Senegal, Bangladesh, Yemen, Haiti, and Vietnam) from five regions as members of the CG, on a two year staggered-rotation basis as noncontributing members. These new members of the GFDRR CG are drawn from among the least developed high-risk countries served by GFDRR interventions.

In this reporting period, significant support was provided globally in promoting effective early warning systems, with the partnership of the (ASEAN), the UNISDR, and the World Meteorological Organisation (WMO), particularly in Central Asia and South Asia.

GFDRR is also continuing to collaborate with UN agencies in mainstreaming DRR through Country Assistance Strategies (CASs) and United Nations Devel-

opment Assistance Frameworks (UNDAFs), a key goal of the GFDRR/UNISDR partnership, as exemplified in the Training of Trainers events organized within the UN system in November 2009, in Turin. Contribution of GFDRR for "Global Assessment Report on Disaster Risk Reduction" is another example of building a strong partnership with the United Nations.

As a demonstration of its commitment to strengthen partnerships, GFDRR deepened collaborative efforts among GFDRR members to make DRR a strategic priority. To further strengthen the EC and WB collaboration, GFDRR organized three experience-sharing workshops for EC desk officers in Brussels in September 2009, November 2009, and July 2010. The EC's Directorate General for Development and Directorate General for External Relations were particularly helpful with these workshops. GFDRR also presented its system of mainstreaming DRR in development strategies to the Australian Agency for International Development (AusAID) and French representatives.

GFDRR support has enabled technical assistance to improve global advocacy for urban risk reduction. The official launch of the 2010-2011 World Disaster Reduction campaign "Making Cities Resilient: My City is Getting Ready!" took place on 30 May 2010 at the First World Congress on Cities and Adaptation to Climate Change in Bonn. The mayor's declaration has been disseminated to more than 10,000 cities and, as of June 2010, approximately 60 cities of different sizes and risk scenarios signed up to the ten-point essentials checklist on how to make cities resilient. In addition, in the regions GFDRR supported the establishment of the Arab Resilient Cities Network to facilitate networking and engagement of experts on urban risk reduction issues. ECOWAS is supported to advocate urban risk reduction with strong links to climate change to mayors of selected cities, while technical assistance provided to the SAARC Disaster Management Centre has enabled the establishment of knowledge networking among eight South Asian countries to share national best practices, guidelines, and risk trends.



### Aid Effectiveness and Coordination

To fully benefit both its present contributors and beneficiaries, and more broadly to help the global disaster risk reduction network to achieve better aid effectiveness and donor coordination, GFDRR's governance structure will be broadened. The purpose is to include major economies and developing countries while providing a convenient global platform for information and knowledge sharing and convening opportunities in order to effectively address the needs of disaster-prone countries. The medium term goal of GFDRR will be to have a diverse group of countries bring different experiences from both the South and the North. A lon-

ger term goal will be to engage operational partner agencies and private sector representatives in its governance structure. GFDRR is already participating in the implementation of the Paris Declaration in order to enhance aid effectiveness in developing countries. —GPS, Strategic Direction (2009–2012)

Through an expanding and increasingly diverse range of donors and stakeholders, GFDRR has successfully enhanced aid effectiveness and donor coordination. GFDRR provides an effective and inclusive forum to share knowledge and enhance understanding of DRR to donors, emerging economies, vulnerable developing countries, civil societies, international financial institutions, and the private sector.



GFDRR is striving toward better aid effectiveness and donor coordination in helping the global disaster risk reduction network. The GFDRR Multi-Donor Trust Fund provides an effective tool for enhanced donor coordination. Donor support for the Trust Fund has continued to expand in 2010, with contributions and pledges of more than US\$240 million under different GFDRR service lines. This support includes a pledge from Brazil, and dialogue with other emerging economies is under way.

The following are some examples of how GFDRR actively leverages coordination, political commitments, and information exchange for achieving HFA priorities: regional workshops and conferences like the "Second Hemispheric Encounter on National Mechanisms and Networks for Disaster Risk Reduction" organized in April 2010 in Colombia for the Latin American and Caribbean region; the Second African Ministerial Conference on Disaster Risk Reduction held in April in Nairobi; the regional dialogue with the Arab League;



and The Pacific Platform for Disaster Risk Management held in August 2010 in Fiji.

# Expanding Regional and Subregional Cooperation

Strengthening regional networks of disaster risk reduction actors and building the capacities of regional inter-governmental organizations for disaster risk assessment, financing and adaptation will continue to be of high priority to GFDRR. Strengthening regional and sub-regional cooperation can help generate economies of scale and create an enabling environment to advance the national disaster risk reduction agenda. Going forward, GFDRR will deepen its engagement with selected strategic regional partners to strengthen their capacity, and expand their knowledge and expertise in disaster risk reduction with a view to facilitate an increased dialogue among the countries in the region that will ultimately benefit national disaster risk reduction efforts. —GPS, Strategic Direction (2009–2012)

Through the UNISDR partnership, GFDRR has continued to deepen its engagement with regional and subregional institutions. At the global level, GFDRR Track I supported technical assistance and capacity building to regional intergovernmental organizations and regional reporting focal points through a workshop organized in January 2010 in Bahrain.

GFDRR has supported strengthening the capacities of regional intergovernmental organizations to leverage disaster risk reduction efforts. These organizations include ASEAN, the African Union (AU), Caribbean Disaster Emergency Management Agency (CDEMA), CEPREDENAC, Economic Community of Central African States (ECCAS), ECOWAS, IGAD, SAARC, SADC, and South Pacific Applied Geosciences Commission (SOPAC).

In the Africa region, technical assistance under GFDRR Track I strengthened the capacity of ECOW-AS in DRR through training on "Systematic Inventory and Evaluation for Risk Assessment in West Africa" organized in July 2010 in Praia, Cape Verde. The training increased the ability of ECOWAS Member States such as Liberia, Ghana, Cape Verde, and Burkina Faso to undertake risk assessments and to integrate DRR into national development planning processes such as United Nations Development Assistance Framework (UNDAF).

In addition, technical assistance provided to SADC has enabled the organization to be proactive in providing the seasonal rainfall forecast in the region. The forecast will be used to prepare national and regional contingency plans for the coming seasons.

In Latin America and the Caribbean, technical assistance has been provided to the CEPREDENAC to promote the application of Central America Probabilistic Risk Assessment (CAPRA) methodology in the Central American States. This will enable the application of the CAPRA tool in risk management and mitigation with decision-makers at an operational level and also fosters public policies at the national level, linking these with the Central American Policy for Integral DRM.

Through an effective partnership between the Faculty of International Institution for Geo-Information Science and Earth Observation (ITC) of the University of Twente, based in the Netherlands, and the UNISDR, with GFDRR support, a two-week training program was conducted in Guatemala for participants from different NGOs and municipalities. The training aimed at strengthening Guatemalan institutions in terms of spatial data infrastructure and management.

In the Middle East and North Africa, the capacity of the Arab Center for the Studies of Arid Zones and Dry Land (ACSAD), an intergovernmental regional technical organization, is being enhanced. With support under GFDRR Track I, ACSAD is developing a regional



"The WB/GFDRR has become prominent in the last 2-3 years in helping to build the resilience of Pacific nations to disasters. An analysis of DRR and CCA interventions in 2008 has established the foundation for some meaningful investments for a number of countries such as Papua New Guinea, Solomon Islands, Vanuatu and the Marshall Islands. The GFDRR has also supported other DRM initiatives such as examining the feasibility of a Pacific Catastrophe Risk Financing Initiative; developing a integrated flood management project for Nadi in Fiji that can serve as a model for other countries prone to floods; investing in high level advocacy for DRM and capacity building to develop a stronger knowledge base in relation to establishing the economic impact of disasters, and; more recently the opportunity to strengthen regional capacity in DRR through the location of a resident TA position at SOPAC. SOPAC is a regional hub—a coordinator for DRM capacity building and the recognition of this role shows tremendous respect for the vision of Pacific leaders in giving this mandate to SOPAC. The support received through the strong partnership between UNISDR and the WB/GFDRR has contributed to the capacity of SOPAC to mainstream DRM and adaptation into development planning. A memorandum of agreement between SOPAC, the Secretariat of the Pacific Community, UNISDR and the WB is further proof of this partnership and instrumental as SOPAC transitions into the Secretariat of the Pacific Community from January 2011. We are encouraged by the support of the GFDRR and look forward to working closely and to jointly developing new initiatives as we move progress in 2011 and beyond".

—Russell Howorth, Director, South Pacific Applied Geosciences Commission (SOPAC)

drought risk assessment study based on scientific methodologies to identify vulnerability and risk concerns. A case study based on drought risk in Syria is also being developed by ACSAD as a contribution to the Global Assessment Report 2011 (GAR2011).

While engaging with League of Arab States (LAS), GFDRR is supporting a recently launched (March 2009) training and research center called "The Regional Centre for Disaster Risk Reduction" for compilation of data building an information resource center, and developing training and research capacity. In collaboration with UNISDR and LAS, a regional workshop on DRR and CCA was organized in November 2009,

which formed the basis of the WB/UNISDR partnership in 2010-2011 to support the region in addressing DRR in the context of CCA.

In South Asia, a study was carried out for the Himalayan/ Hindu Kush region to assess the transborder risk of Glacial Lakes Outburst Floods (GLOFs) affecting Afghanistan, Pakistan, China, Nepal, India and Bhutan as a result of climate change. In addition to developing a plan for remote sensing-based early-warning for GLOFs, the study sets key technical recommendations to promote regional collaboration and define the role of national governments to help them draw action plans for GLOF risk management.



The report identifies opportunities for risk mitigation in Nepal, a Track II priority country.

In Europe and Central Asia, technical assistance was also provided under GFDRR to the Disaster Prevention and Preparedness Initiative – South Eastern Europe (DPPI SEE) for the development of a webbased management information system. The DRR knowledge and capacity of regional governmental officers was enhanced through a Training of Trainers course organized by Capacity for Disaster Reduction Initiative and the Swedish Civil Contingencies Agency (MSB). GFDRR also supports media partnerships to

strengthen advocacy on DRR focused on raising the awareness of media, sensitizing journalists, and enhancing their knowledge base with respect to disaster risk reduction.

This regional support has helped to engage national governments in the DRR agenda at a policy level, thereby promoting national ownership and allowing for more targeted GFDRR country programs to be established, particularly in high-risk, low- and middle-income countries.



The DRR Mainstreaming Program, also known as Track II, provides ex ante assistance to developing countries to mainstream and expand DRR and CCA activities. Under this business line, the GFDRR works closely with the World Bank regional teams, UN agencies, and partners' governments to integrate DRR and CCA into national development strategies and to strengthen national capacity in DRR. Sub-business lines supporting ex ante programs include: Risk Governance, Risk Assessment, Risk Reduction, Risk Financing, and CCA.

GFDRR is actively engaged in making DRR a strategic priority through comprehensive Country Programs in 31 focus countries,2 which were chosen through inclusive consultation with governments, United Nations agencies, bilateral donors, and other partners. This multi-stakeholder planning process ensures that governments own their risk reduction agenda and the initiation of larger strategic partnerships and disaster risk reduction platforms.

Through these country programs, GFDRR supports mainstreaming DRR and CCA from national to community levels. All the regions have received an initial allocation to implement the country programs. The country program in Djibouti has made concrete progress; Haiti, Mali, Senegal, Vietnam, Indonesia, and Panama have been approved; Mozambique, Nepal, Togo, Yemen, and Ethiopia are in the process of approval.

On April 7, 2010, with the support of GFDRR, the government of Djibouti launched a three-year DRM program with the objective of establishing an information system and a platform for the assessment and communication of disaster risk and vulnerability. This instrument will strengthen national agencies' disaster prevention, assessment, and preparedness capacities, and thus start reducing the impacts of natural hazard and climate change on the country's population and economic activity. The technical assistance launch was successful and received full coverage by Djibouti TV. The main media presence was very encouraging for the five national institutions leading the DRM program.

<sup>&</sup>lt;sup>2</sup> Focus countries include 20 priority countries viz: Burkina Faso, Djibouti, Ethiopia, Ghana, Haiti, Indonesia, Kyrgyz Republic, Madagascar, Malawi, Mali, Marshall Islands, Mozambique, Nepal, Panama, Papua New Guinea, Senegal, Solomon Islands, Togo, Vietnam, and Republic of Yemen; and 11 donor earmarked countries viz Bangladesh, Cambodia, Co-Iombia, Costa Rica, Ecuador, Guatemala, Lao PDR, Pakistan, Philippines, Sri Lanka, and Vanuatu.

GFDRR's effort to mainstream DRR and to strengthen national DRM frameworks has enabled the World Bank to provide innovative risk financing products to high-risk countries. Connected with the lending program proposed in the new CASs on which GFDRR provided technical advice, the World Bank approved Catastrophe Risk Deferred Drawdown Option (CAT DDOs) in Costa Rica (US\$65 million) and Guatemala (US\$85 million). These risk financing products, which make financing immediately available after a natural disaster, build on GFDRR's achievements and ongoing DRM activities.

Following GFDRR's ongoing in-country engagement and mainstreaming dialogue, World Bank disasterrelated investments are building up in several highrisk countries. For example, the Country Partnership Strategy for Indonesia prioritized for the first time climate change adaptation and disaster mitigation (FY09-FY12). In line with the new strategy, disasterrelated investments in Indonesia (excluding emergency recovery investments) increased from US\$0 million (FY04-FY07) to US\$530 million (FY09-FY12). Recent projects include a US\$50 million Dam Operational Improvement and Safety Project, which substantially contributes to the mitigation of Indonesia's vulnerability to natural disasters, and a US\$200 million Climate Change Policy Development Project, which supports efforts to enhancing CCA and resiliency in key sectors.

In order to support policy dialogue on DRM issues at a country level, GFDRR is planning to deploy national DRM specialists in priority countries. The recruitment process has already begun for Djibouti, Haiti, Indonesia, Malawi, Mali, Mozambique, Pakistan, Senegal, Vanuatu, Vietnam, Yemen, and a Sydney-based position. Remaining specialists are expected to be recruited by the end of 2010. This will facilitate greater harmonization of the DRR agenda at the country level among all the key partners and a more effective implementation of the country program.

### Integration of Disaster Risk Reduction in Development

GFDRR will work closely with UN agencies, EC, particularly UNDP, MDBs and bilateral organizations to elevate and integrate the disaster risk reduction agenda in country level poverty reduction strategies, country assistance strategies, and sector strategies through upstream engagement with governments during formulation of new country development strategies as well as their mid-term reviews.

—GPS. Strategic Direction (2009–2012)

Since 2007, GFDRR has proactively mainstreamed DRR in strategic documents (primarily CASs, PRSPs, World Bank Lending Instruments, and several corporate strategies) by providing evidence-based technical advice during their preparation phase. GFDRR offers advice to strategy development teams through an upstream review of these documents to ensure that a country's underlying risks and vulnerabilities are well reflected, and policy actions to mitigate those risks are considered while formulating these strategies, plans, and investments. This exercise has been identified as a good practice by the Sustainable Development Network of the World Bank and disaster risk reduction continues to be one of the major strategic goals of the Network.

Past involvement (through in-country dialogue or providing technical advice on earlier strategies) with many of the countries reviewed has been fruitful from a DRR perspective. Overall DRR is increasingly mainstreamed into the World Bank's development strategies. By using a dynamic scoring system, GFDRR measured the level of mainstreaming DRR in the World Bank CASs of 62 countries. Natural disaster is recognized as a challenge and risk for the implementation strategy in 48 countries. In addition, 26 countries identify DRR in various sectors or as a crosscutting issue. Finally, DRR is recognized as one of the strategic pillars in 10 countries, namely Bangladesh, Guyana,



Haiti, Indonesia, Maldives, Mozambique, Philippines, Seychelles, Vietnam, Yemen, and the Pacific Region.

PDNAs in disaster-affected countries have established unique opportunities for mainstreaming the DRM agenda, such as in Bolivia, Haiti, Yemen, and most recently in Lao PDR. The finalization of the post-Ketsana assessment (November 2009) in Lao PDR coincided with the concept stage of the World Bank CAS as well as the Government's Socio Economic Development Plan, allowing GFDRR to engage early in the strategy formulation process. The assessment not only gave economic evidence of the impact of natural disasters on various sectors of the economy but also provided recommendations for institutionalizing DRR into the national strategies of Lao PDR, now a priority country for GFDRR.

GFDRR has successfully institutionalized the monitoring and evaluation of World Bank disaster lending. The portfolio provides a strategic overview on the current status of Bank disaster operations as well as detailed information about the trends in volume, substance, and geographic reach of Bank disaster lending. The findings of GFDRR's portfolio review have already been shared within the Bank. For example, the proposal for a permanent Crisis Response Window in International

Development Association (IDA) and the annual "IDA at Work" paper have benefited from GFDRR input.

### Adapting to Climate Change

Disaster risk reduction is also the first line of defense in adapting to climate change and therefore some programs supported by GFDRR will promote strategies and plans on climate adaptation. GFDRR will continue to finance disaster risk reduction programs that build adaptive capacities in its priority countries. GFDRR will also facilitate development of common approaches and coordinated implementation of national disaster risk reduction and climate change adaptation interventions. GFDRR will further strengthen its capacity to engage with climate change teams working on financing the climate mitigation and adaptation agenda, both within the World Bank and in close partnership with other key players in the ISDR system. -GPS, Strategic Direction (2009-2012)

GFDRR strategy and operations are informed by the clear understanding that integrating CCA analysis and measures in DRM interventions has become a basic

"No one can ignore that floods, seismic hazards, drought, salinization of water and soil, ground-water depletion, fires, pollution represent threats to Djibouti historical and cultural heritage and represents many constraints to the development of our country. However, thanks to the Djibouti government's commitment and support from the GFDRR, the Republic of Djibouti is starting to get better organized to overcome future challenges and better prepare the nation to manage risk and natural disasters".

—Dr. Jalludin Mohamed, Director General of Djibouti Centre for Research Studies, 2010

issue of due diligence, while CCA investments that do not simultaneously address current climate risks could fall short of meeting partner countries' developmental needs.

Climate change and extremes exacerbate the exposure of low- and middle-income countries to the risks of natural hazards. In reality, partner countries rarely focus on the distinction between developmental assistance targeting current climate variability and risk, versus longer-term climate variability and risk. In fact, the majority of CCA investments increase resilience to current climate variability, while preparing for future changes in overall climatic conditions and variability—and vice versa.

In FY 2010 GFDRR has actively and successfully continued to foster such linkages at the country level, within the World Bank Group (WBG), and with external partners by strategically leveraging just-in-time seed funding, targeted investments, and expertise:

Most World Bank analytical and programming work on adaptation at both country and regional levels has been either initiated or co-funded by GFDRR. Initiatives ranging from coastal adaptation in Senegal, Mozambique, and Yemen, to climate model downscaling and analysis of water sector adaptation options in Africa, to name but a few, have built on GFDRR seed support and accessed related DRM expertise in the area of geospatial analysis, vulnerability mapping, risk analysis, and stakeholder engagement.

- ▶ The DRM country programs supported by GFDRR and related analytical and capacity-building work have provided one of the cornerstones for the development of the Pilot Program for Climate Resilience in Bangladesh, the Caribbean and Pacific Islands, Mozambique and Zambia (among others).
- GFDRR has initiated the development of country adaptation profiles for the 31 GFDRR priority countries, in partnership with the WBG Climate Change Team. This product will provide DRM practitioners and the broader developmental community with a summary of the key climate risk and adaptation issues faced by those countries, and are intended as a quick input in highly dynamic operations (e.g. PDNA) or a basis for further specialized analysis.
- ▶ More recently, the preparation for the 4th Asian Ministerial Conference on "Disaster Risk Reduction for Climate Change Adaptation," held on October 25–28, 2010, in Korea, offers an example of the GFDRR reaching out and providing technical expertise and seed funding to support other partners in their effort to better link DRM and CCA.

The annual economic losses caused by weather hazards can be several percent of national GDPs, and climate change is expected to exacerbate the social and economic impacts in vulnerable countries. With more than 75 active GFDRR financed activities focusing primarily on CCA, GFDRR is building adaptive capabilities in priority countries and is promoting coherence and coordination in the implementation of national DRR and CCA interventions at the partner country level.

Climate change impact in the water–scarce Central Asia region is, for instance, likely to increase. In Kyrgyz Republic, Tajikistan, and Turkmenistan, GFDRR has supported a study on modernizing National Hydro Meteorological Services. The study identified possible modernization programs and assessed their economic benefits. GFDRR also supports follow-up actions in these countries to implement the proposed measures. In broader Europe and Central Asia, GFDRR is further supporting a number of studies that contribute to the development of a regional framework program for disaster risk mitigation and CCA, while serving as coordinating mechanisms for bilateral and multilateral DRR assistance.

In Malawi and Mozambique, GFDRR financed a study on economic vulnerability and disaster risk assessments to promote strategies and plans on CCA. These assessments will help the governments to develop strategies to adapt to drought and flood risks. GFDRR also provided inputs into the Mozambique study on the impact of climate change on disaster, led by the National Institute for Disaster Management.

In Bangladesh, GFDRR supported a study for assessing the impact and pattern of climate change on agriculture and food security due to an increase in monsoon flood risk. In conjunction with the ongoing Pilot Program for Climate Resilience, this support is an excellent example of leveraging DRM and CCA analytical work and follow up investment resources.

In Djibouti, GFDRR supported the assessment of the national institutional DRM setting and the establishment of the conceptual framework for Comprehensive Approach to Risk Assessment in extensive collaboration with five governmental and academic institutions. Building on this initial work, the GFDRR is taking a programmatic approach to build resilience to natural disasters and climate change in the country.

Senegal has benefited from four regional projects, some of which build linkages between the regional level work of various partners and national level efforts, focusing on mainstreaming of ex ante and ex post DRR and CCA. One of the initiatives supported by GFDRR strengthens capacity in the coastal communities of West Africa by supporting the government's

GFDRR's role is to complement international frameworks and to strengthen actions that reduce climate change risks, by supporting developing countries' efforts to build disaster risk resilience—both present and future. In fulfilling this role, GFDRR is emerging as one of the stable and efficient global humanitarian and adaptation financing mechanisms



Photo: The World Bank

policies on coastal and marine resource management, including the critical problem of coastal erosion, and by developing local-level policies and community-specific strategies to respond to local risk factors resulting from climate change.

## Building Economic Evidence for Disaster Risk Reduction

The GFDRR will support global, regional and country level efforts to generate economic evidence for disaster risk reduction and to enable developing country governments to prioritize policies and investments in risk reduction and risk transfer solutions. —GPS, Strategic Direction (2009–2012)

In order to support global, regional and country level efforts to generate economic evidence for disaster risk reduction, GFDRR conducted a joint study with the World Bank and the UN on the economics of disaster risk reduction.

The just launched study report, "Natural Hazards, UnNatural Disasters: the Economics of Effective Prevention," is intended to influence the broader thinking related to disaster risks and disaster occurrence, raise awareness of the potential to reduce disaster costs, and provide guidance on the implementation of disaster risk reduction interventions.

Earthquakes, droughts, floods, and storms are natural hazards. But the unnatural disasters are deaths and damage that result from human acts of omission and commission. The report is about prevention—measures that reduce the risk of death, injury, and damage from disasters—and how to ensure it in a cost-effective manner.



With a critical eye, "Natural Hazards, UnNatural Disasters" examines which prevention measures need to be undertaken and how. It presents new analyses on longrun economic and welfare impacts of natural disasters; on how individuals and governments make decisions on reducing disaster risks; and on future trends, such as rapid urbanization and a changing climate, expected to shape the disaster prevention landscape.

### Promoting Innovation in DRR

GFDRR will continue to promote innovative costeffective local solutions to disaster risk reduction which may have high impact such as those that catalyze the integration of disaster risk reduction and climate adaptation in Poverty Reduction Strategy Papers/Country Assistance Strategies (PRSPs/CASs), increased South-South Cooperation in DRR, greater investments in DRR, and mainstreaming DRR in development financing. —GPS, Strategic Direction (2009–2012

GFDRR is continually looking for innovative approaches to reduce disaster risk. In order to mainstream innovation in DRM from a regional to a global arena, GFDRR has launched the Global Facility Disaster Reduction and Recovery Laboratories (GFDRR Labs).

The Labs' mission is to inspire innovation in DRM through partnerships and technology, and to mainstream this approach in international development. The Labs team is expanding innovative regional projects into the global arena and establishing a consistent and unified methodology, based on lessons learned, to apply innovation in new and existing projects in the regions.

Working closely with the regional DRM units, the Labs team provides support in five core areas:

1. Building a Global Risk Model: The Labs team will support ongoing risk assessment projects, creating a framework for technical interoperability amongst

- GFDRR funded projects and similar international efforts in order to create a global risk model. Demand-driven multi-sectoral applications will be developed, focusing on decision-making tools for DRR. Examples of ongoing projects include: the Central American Probabilistic Risk Assessment (CAPRA) initiative, the Yemen Probabilistic Risk Assessment project, and the Pacific Catastrophe Risk Financing Initiative (PCRFI).
- 2. Sourcing, Creating and Sharing Risk Data: Labs will build a global risk database to source, create, and share the data required to drive the DRM cycle. Collecting data from existing World Bank projects and beyond, Labs will explore both topdown (earth observation, feature extraction) and bottom-up (crowdsourcing) approaches. Examples of ongoing projects include the GeoNode, the PCRFI, and OpenStreetMap (OSM) Haiti.
- 3. Convening the Understanding Risk Network: Through the Understanding Risk (UR) network, Labs will convene DRM experts and technologists from around the globe to promote and strengthen innovation in DRM. Via UR conferences, publications, and the development of the on-line community, best practice and innovation in disaster risk assessment will be showcased, providing a space for knowledge exchange.
- 4. Developing Nontraditional Partnerships: Labs will work toward achieving its mission of promoting innovation by building new public and private partnerships. Examples of partners include: the Global Earthquake Model, Google, Microsoft, Yahoo!, and NASA. Labs will also support grassroots community organizations to foster innovation. Engaging the Volunteer Technical Community presents a fundamental shift in the way the Bank can use technology to reduce disaster risk. Labs will be supporting initiatives such as the Crisis Commons and the Random Hacks of Kindness.
- Supporting Damage Assessment and Reconstruction: Labs will support the PDNA by providing realtime damage assessments through remote sensing and supporting initiatives such as the GEO-CAN

## INDONESIA: ON THE PATH TO COMPREHENSIVE DISASTER RISK FINANCING STRATEGY

GFDRR began assisting Indonesia in 2008 to reduce its vulnerability to a variety of natural hazards by mainstreaming DRR in its National Action Plan and Bank-funded development projects, assessing the risk of seven major hazards (earthquake, tsunami, flood, drought, landslide, soil erosion, and volcanic eruption), conducting baseline studies for catastrophe risk financing strategies, and training government officials on DRR. After much progress on these program components, the program is moving into its second phase, which will deepen policy and planning into implementation support. The risk assessment, which produced national risk index maps for the aforementioned hazards, is informing the development and the implementation of a comprehensive risk financing framework for Indonesia. GFDRR is providing technical support to the Indonesian Government to formulate its disaster risk financing policy framework, including disaster risk insurance and contingent financing, as well as to develop fund allocation mechanisms that will better suit its decentralized disaster management system.

## BURKINA FASO: UNDERSTANDING OPPORTUNITIES TO UTILIZE WEATHER INDEX-BASED INSURANCE

Since 2008, GFDRR has been assisting Burkina Faso to better understand and manage its exposure to drought and floods. A feasibility study on weather index-based insurance for the cotton sector, which plays a crucial role in the economic performance of Burkina Faso, found that there are clear opportunities to develop commercial index-based excess and deficit rainfall products. These products could help protect the 2.5 million Burkinabè directly or indirectly dependent on cotton production for their livelihood against crop losses from extreme deviations in rainfall. Since the completion of the study, there has been an ongoing stakeholder dialogue about possible weather index-based insurance pilot programs in Burkina.

## Advance Risk Financing and Insurance Mechanisms

GFDRR will continue to support development and application of the unique risk financing instruments that include Contingent Loans, such as the Catastrophe Reducing Disaster Risks for Sustainable Development Risk Deferred Drawdown Options (CAT DDO), and provide access to interna-

tional catastrophe reinsurance markets on competitive terms. —GPS, Strategic Direction (2009–2012)

Disaster risk financing is increasingly being acknowledged as an essential component of GFDRR programs. Disaster risk financing designs strategies to enable developing country governments to increase their resilience to natural disaster and secure additional resources for post-disaster recovery and reconstruction.

At the sovereign level, disaster risk financing assists policy makers to establish or strengthen strategies to increase the financial response capacity of governments of developing countries in the aftermath of natural disasters while protecting their long-term fiscal balances. As part of their national DRM plan, GFDRR assists countries in devising and implementing country disaster risk financing strategies based on a combination of multi-year reserves, contingent credit (like the World Bank's DPL with CAT DDO), reinsurance, and insurance-linked securities like catastrophe bonds; ongoing projects include Vietnam and Indonesia.

GFDRR also supports regional initiatives on disaster risk financing such as the South Eastern Europe Catastrophe Insurance pool and the Pacific Catastrophe Risk Financing Initiative. At the micro (household) level, GFDRR assists in the development of agricultural insurance schemes, such as those in Burkina Faso, India, and Nepal. Although agriculture's share in national GDP is declining in many developing countries, millions of farmers in developing countries still depend on agriculture for their livelihood. Agricultural insurance is an important element of risk mitigation and can help protect these farmers against major damages caused by weather events like droughts and floods.

In Vietnam, a study on disaster risk financing options for the government was conducted with the financial support of GFDRR. The study aims to build institutional capacity on catastrophe risk financing and to identify catastrophe risk financing options that are affordable and effective to the Government of Vietnam, including both sovereign risk financing and private insurance instruments. The study report, titled "Weathering the Storm: Options for Disaster Risk Financing in Viet Nam," has been disseminated through a workshop with the participation of government officials and insurance companies. The study results and recommendations are highly appreciated and highly promoted for catastrophe risk financing in the country.

### Gender Equality

Recognizing that, as a group, women and men are affected differently by natural disasters, the GFDRR will support countries to incorporate gender dimensions in national DRR strategies and include programs targeted to women and children to ensure gender equity during planning for recovery and reconstruction. —GPS, Strategic Direction (2009–2012)

Recognizing the importance of gender equality, mainly the crucial role that women play in sustaining households, community economies and social networks, the GFDRR strongly promotes a gender-inclusive approach to DRM both at policy and community levels.

Women are more vulnerable to the impact of disaster due to the existing socio-economic, political, and cultural disadvantages. Their voices are lost or inadequately addressed while managing disasters. In disaster reduction strategies and actions, women and gender equality issues are marginalized, leading to ineffective relief, a rise in violations of women's rights, and compromises in results of disaster reduction activities.

In this regard, a course on gender aspects of disaster risk reduction, together with other courses on DRR, has been developed. The module, developed in collaboration with Cambridge University and with financial support of Government of Norway and Government of Finland through the Trust Fund for Environmentally and Socially Sustainable Development illustrates how the inclusion of both women and men in DRM results in more equitable and efficient outcomes during disaster recovery and reconstruction. It reviews the aspects of disaster management in which gender concerns arise, and introduces policies and tools for gender mainstreaming.

Another significant achievement for gender equality for this fiscal year is the work on gender and DRM in

Southeast Asia. The objective of the work is to ensure that women and men benefit equally from DRM efforts by (a) contributing to a better understanding of the impact disasters have on women and men; (b) identifying how DRM programs can be an opportunity for transferring decision making, implementation, and resources to poor communities and promoting gender equitable development over time; and (c) providing operational guidance and recommendations on how the East Asia and Pacific (EAP) region's DRM work can become more effective by ensuring that women's and men's particular needs, constraints, and opportunities are adequately addressed.

## Making Cities and Communities Safer

GFDRR will support design and implementation of programs to reduce vulnerabilities of communities and cities to rapid urbanization leading to uncontrolled growth in hazard prone areas. Particular attention will be given to the coastal cities to enhance their resilience to impacts of natural hazards including climate change. GFDRR support will also enable cities to develop and implement disaster risk reduction plans as an integral element of their sustainable growth agenda. GFDRR will help to develop urban planning which will reflect the risks of earthquakes and promote earthquake resistant designs for infrastructure, buildings and houses in the urban areas. —GPS, Strategic Direction (2009–2012)

A significant reason for the rapid growth in disaster losses is the concentration of population, assets, and investments in urban areas exposed to hydrometerological and geophysical hazards. This rapid urbanization has increased the potential for disaster losses. GFDRR is focusing on reducing the vulnerabilities of cities and communities faced with these challenges.

In the aftermath of January 12, 2010, earthquake, GFDRR strengthened its ongoing DRM program in Haiti. The support rapidly provided by GFDRR has enabled the World Bank team on the ground to swiftly respond to requests of support from the Haitian government and civil society organizations.

GFDRR supports a rapid multi-hazard assessment that aims at improving production and circulation of risk information available to decision makers. Based on the initial work, the project team has identified natural hazard hotspots requiring additional study. The hotspots identified are areas hosting temporary shelters, identified future reconstruction sites, and urban and productive development poles. The results of this assessment are guiding the recovery and reconstruction process by supporting decision making on safe resettlement and housing, and early contingency planning for rainy and hurricane seasons. The project will ultimately result in the creation of risk scenarios and a high resolution risk map (departmental and municipal level). In order to achieve the overall goal, the project will have to collect data on exposure and vulnerability of the high-risk areas (hotspots) and reinforce national technical capacities for updating and disseminating the maps.

GFDRR is strengthening capacity in the coastal communities of West Africa by supporting the governments' policies on coastal and marine resource management and by developing local-level policies and community-specific strategies to respond to local risk factors resulting from climate change. In addition, GFDRR is supporting the national and local governments of Egypt, Tunisia, and Morocco in assessing and valueing the vulnerability of the coastal cities of Alexandria, Tunis, and Casablanca to natural hazards while underlining the synergies with climate change vulnerability. Furthermore, comprehensive preparedness action plans are being developed that will address urban coastal vulnerability and infrastructure for the three cities and for the urban expansion of the Bouregreg Valley between the cities of Rabat and Sale in Morocco.



## Making Critical Infrastructure Resilient

GFDRR will provide technical and financial support to help ensure that critical infrastructure systems and their component facilities (such as schools, hospitals, bridges, and road networks) built over the next decade meet higher standards of hazard resilience. Development and enforcement of building codes will form an integral component of national programs supported by GFDRR. —GPS, Strategic Direction (2009–2012)

In partnership with several international agencies, GFDRR is undertaking a specific initiative to help developing countries make their schools and hospitals more hazard resilient.

Schools represent one of the most valuable assets in our global community, playing a major role in the formation of citizens, transmission of values, knowledge, and cultural practices. Protecting the educa-

tional environment can contribute significantly to the achievement of the Millennium Development Goals, since schools and education are closely linked to poverty reduction, gender equality, and social health.

Each year thousands of schools are severely damaged or left unable to function due to natural hazards. There are countless examples of education infrastructures that collapsed during a natural disaster, killing large numbers of children and school workers. To save human lives and minimize the disruption of education activities and economic losses for the country, school safety programs should be a priority, not only in developing countries, but in all disaster-prone regions.

The construction of disaster-resilient schools has been identified by governments and the international community as one of the major steps in the global effort to create a safe school environment. GFDRR produced a guidance note on safer school construction with principles and techniques for the construction of disaster resilient schools, and is contributing to the





capacity building of professionals on safer construction in priority countries and through South-South cooperation programs worldwide.

In November 2009, Tropical Storm Ida damaged 111 schools in El Salvador, 35 of which were severely damaged. More than 43,000 children were directly affected, and the total cost for the reconstruction of these facilities was estimated at US\$4,352,909. To assist the Government of El Salvador in the reconstruction of its educational sector, the Brazilian Government, together with GFDRR, has started the

construction of a safe school in the municipality of Tepetitan. This project will benefit more than 200 children and serve as a model that can be easily replicated throughout the country. The initiative aims to reduce the vulnerability of the education sector to natural hazards and create a safe learning environment for El Salvador's children. Since its conception, the project has been organised together with the local community and government. The school recognizes the importance of CCA by incorporating reduced energy and water consumption techniques.

### Bolstering National Capacities in Disaster Risk Reduction

GFDRR supports the development of tools and methodologies and enhancement of both individual and institutional capacities to facilitate mainstreaming of disaster risk reduction in country planning. Capacity development is a key factor of many GFDRR projects to prepare countries that are undergoing a substantial shift in disaster risk management structures, roles and responsibilities away from traditional disaster response functions towards multi-sectoral development agendas on risk reduction and climate change adaption. GFDRR will make strong investments in national capacities of governments to lead and implement comprehensive risk reduction agendas and to coordinate between ministries. At the same time, local authorities at the district level will also receive technical support to implement new strategies.

—GPS, Strategic Direction (2009–2012)

Building national capacity has always been a key component of GFDRR interventions for mainstreaming DRR in developing countries. As one of the five HFA priorities, it is an integral part of the Country Programs developed in GFDRR's 31 focus countries. National DRM Specialists deployed in those priority countries are also providing some support to manage a comprehensive in-country sectoral dialogue with key stakeholders and support government leadership in this dialogue.

Through training events and technical assistance, GFDRR has strengthened the capacities of government institutions on risk assessment (Morocco, Yemen), hazard proofing (Madagascar), community-based DRM (Morocco, Vietnam), and risk financing (Chile, Costa Rica). Very often, those capacity building interventions have led to the development and approval of comprehensive DRM strategic frameworks and/or strategies (Indonesia, Morocco).

Haiti's public administration was already suffering from serious structural problems prior to the recent earthquake. Following the earthquake, the public administration sustained very high human and material losses. The destruction of office equipment, files, and computer data has affected several key ministries that were in the affected buildings, constituting major damage for the public sector. After the January 12 earthquake, the need to support line ministries has become even more pressing.

The earthquake caused particularly high human and material losses to Haiti's public administration and institutions, diminishing their capacity to continue basic activities, including those related to DRR. Bolstering the capacity of key line ministries to respond to these needs must occur in parallel with constructive institutional reform, particularly reforms that will ensure effective cross-sectoral DRR.

In an attempt to streamline recovery and empower Haitian national institutions in the reconstruction efforts, GFDRR supports a project that aims at providing strategic and technical support to the high decisionmaking level (President and Prime Minister) in managing crises generated by both natural and man-made disasters. The strategic leadership of the project is ensured by a high-level expert seconded as an adviser to the President of the Republic. Since January 12, the project has provided regular technical support to the offices of the President and the Prime Minister with written and verbal briefings to support the decision making process in response to the earthquake. The project has also initiated a participatory process that will result in several legislative proposals in the areas of crisis governance, emergency management, and risk prevention.



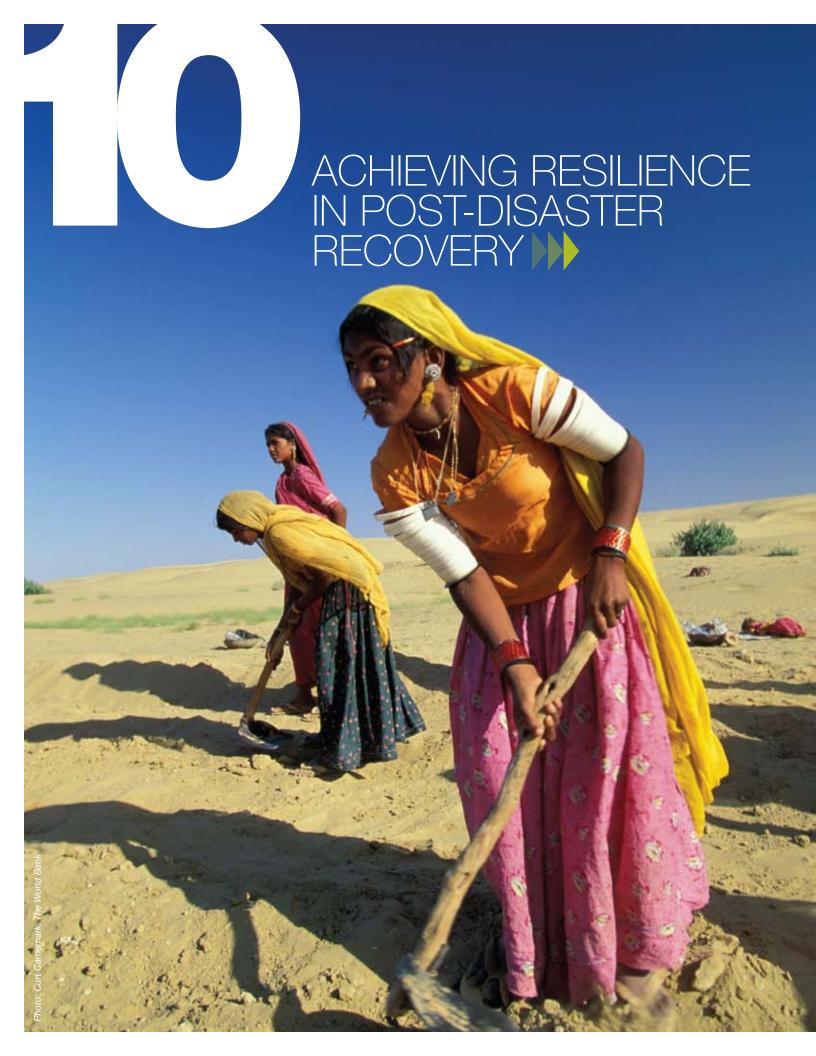


The South-South Cooperation Program complements the GFDRR's Disaster Risk Reduction Mainstreaming Program (Track II). The program, the first of its kind, is anchored by the belief that expanded partnerships among developing countries are key drivers of effective risk reduction. By systematically sharing experiences and lessons learned, disaster-prone countries facing similar challenges—and operating under comparable financial and political constraints can arrive at better solutions to climate change and disaster-related problems.

The GFDRR South-South Cooperation Program focuses on sustainable policy and institutional development as opposed to one-off short-term exchange cooperation. Enabling both recipient- and Bank-executed projects, the initiative facilitates both intra-regional and cross-regional long-standing partnerships. With the cessation of requests for proposals, GFDRR concentrates on developing identified South-South partnerships by the World Bank regions, complementing their DRR and CCA programs.

The program currently has two active projects and four more in the pipeline. In June 2009, GFDRR awarded the first South-South cooperation grant to create a partnership among three disaster-prone cities-Makati (Philippines), Kathmandu (Nepal), and Quito (Ecuador)—for the exchange of knowledge and good practices in risksensitive land-use planning and city emergency management systems. In early 2010, a second award was made to the IGAD to forge partnerships among the East African Countries that will strengthen the countries' institutional arrangements to improve disaster preparedness, and climate monitoring and prediction.

GFDRR is in the final stages of granting awards to three Southern NGOs, namely Swayam Shikchan Prayog (India), Fundacion (Guatemala), and Comite de Emergencia Garifuna (Honduras) for their proposal "Facilitating Women's Leadership and Forging Partnerships to Drive the Demand for Local Implementation of Hyogo Framework of Action" (for disaster risk reduction). Additionally, work is continuing with four more proponents from four geographic regions— Tsunami and Disaster Mitigation Research Center (Indonesia), Centro Internacional de Investigaciones para el Fenomeno El Nino (Ecuador), Engineering Research Center at American University of Armenia (Armenia), and the Arab Academy for Science, Technology and Maritime Transport (Egypt)—to develop four separate partnerships for disaster risk reduction. The GFDRR South-South Cooperation Program's active projects have facilitated partnerships among 13 countries, with further cooperation among 27 countries and more than 20 organizations currently in development.



### Natural Disasters in 2010 and the GFDRR Response

The year 2010 witnessed a number of catastrophic disasters such as the earthguake in Haiti in January 2010, followed by the floods in Pakistan in July to September 2010. In 2009 West African countries such as Central African Republic, Burkina Faso, and Senegal experienced severe floods, Typhoon Ketsana affected the Philippines, Vietnam, Lao PDR, and Cambodia, Sumatra suffered an earthquake, and there was a Tsunami in Samoa. These disasters affected more than 16 million people, and the recovery budgets were estimated to be more than US\$19 billion.

Urban populations were extremely hard hit and urban flooding emerged as a recurrent phenomenon across many regions of the world. This is a trend that seemingly is linked to climate change impacts and is likely to magnify over the coming years, as evidenced by the recent catastrophic floods in Pakistan that affected 20 million people and caused multi-billion dollar damages to public and private assets across all regions of the country. These disasters tested GFDRR's rapid response capacities but also created the opportunity to use its partnership platform to assist disaster-affected countries and their populations with timely and increasingly coordinated support. This assistance combines best practices in recovery and reconstruction that integrate and mainstream all aspects of longer term disaster risk reduction toward sustainable development.

### Introduction to the Standby Recovery and Financing **Facility**

Objectives and Mandate: GFDRR established the Standby Recovery and Financing Facility (SRFF) in 2007, to provide support to disaster affected countries in ensuring that: (a) future risk reduction measures are incorporated into post-disaster recovery and reconstruction plans and programs, and (b) preparedness measures are devised, strengthened, and implemented to improve the efficiency and effectiveness of future disaster responses.



Donors and Funding Windows: Regular contributing donors to the SRFF include Australia, Brazil, Denmark, EC, Ireland, Luxembourg, Ireland, Italy, Norway, Sweden, and Switzerland, with a cumulative pledged amount of more than US\$23 million. SRFF uses the following two financing windows

- ▶ Technical Assistance Fund strengthens recovery mechanisms and integrates risk reduction in both preparedness and response through capacity development, knowledge management, and partnership building.
- ▶ Callable Fund is a fund in readiness with prior agreements with donor governments that is activated when a disaster strikes. Its resources are targeted to support disaster recovery and financing plans—or similar recovery plans—developed by the affected country and accelerated recovery projects that bridge the gap between humanitarian aid and longer term reconstruction.

GFDRR's Utilization of PDNAs as a Key Tool for DRR: The SRFF provides rapid technical and financial assistance for sustainable disaster recovery in low-income countries, mostly, but not necessarily only, in the form of PDNAs. The main objective of a PDNA is to provide the strategic underpinnings for medium to long-term reconstruction and recovery planning, prioritization, and programming in the event of a natural disaster. This normally includes the: (a) quantification and validation of the impact on the economy, households, and individuals; (b) development of sector level recovery and reconstruction strategies for public and private infrastructure, services, and livelihoods; and (c) quantification and prioritization of corresponding sectoral and overall recovery and reconstruction and disaster risk reduction needs. A PDNA is a government-led exercise with integrated support from the UN, the EC, the World Bank and other national and international actors. It consolidates all assessment information into one report that can be readily used by the government and the donors for raising funds As a government representative in exercise during the PDNA-BF, let me, at your request, expand on the few elements that I regard as the assets derived from the exercise; this is my personal assessment of the PDNA-BF. Firstly, the PDNA experience was very beneficial for Burkina Faso in so much as the exercise began with the training of participants to the assessment mission. They were introduced to methodologies for evaluating these types of disaster. This enhanced the capacity of about one hundred people in the field of DNA who got the opportunity to immediately apply what they had learned on the ground. Second, the data collected and published in the report, before it was even finalized, were used for all purposes by the authorities, civil society organizations, the press and even Development partners. Indeed, the report was the sole source of reliable information on the 1 September 2009 floods and covered all activity sectors in the National economy on the one hand and covered the entire Country on the other hand. Finally, the PDNA was "merged" with the Government's response plan to the International Financial and Economic crisis. This has allowed the government to have a single document that took into account all of its concerns to with regards to crisis. Today, in my opinion it is clear that the PDNA-BF is the only reference document on the disaster. I hope that GFDRR will provide the Government with further support in the field of DRR (internship, training, ...) particularly given the fact that this year again, the Country is plagued with numerous floods.

-Yacouba DIE, Economist, Economic Affairs Advisor, Ministry of Economy and Finance, Burkina Faso

and implementing coordinated recovery efforts. The PDNA is now firmly established and is being used as the key and most visible activity by GFDRR for supporting resilient disaster recovery and leveraging longer term disaster risk reduction.

## EVOLUTION OF THE STANDBY RECOVERY AND FINANCING FACILITY (SRFF) STRATEGY AND PERFORMANCE EVALUATION APPROACH

SRFF Strategy 2009–2012: Since its commissioning in 2007 and under GPS 2009-2012, the SRFF has further consolidated its strategic mandate from not merely "assisting post-disaster countries in achieving efficient, effective and resilient disaster recovery," but also necessarily "promoting and leveraging greater and longer term disaster risk reduction" in post-disaster countries. Under the GPS (2009-2012), SRFF developed a comprehensive strategy to achieve the above goals through a five-pillar approach: (a) strengthened and coordinated disaster recovery planning; (b) systematization of disaster recovery experiences into knowledge products and tools; (c) enhanced and strengthened in-country capacities in recovery preparedness and response; (d) accelerated, sustainable, and more predictable recovery financing; and (e) promotion of greater disaster risk reduction.

### SRFF PERFORMANCE EVALUATION APPROACH FOR THIS ANNUAL REPORT

The end of FY-2010 also marks the end of the first implementation year of the GPS (2009–12). This report shall therefore attempt to evaluate SRFF performance on these five strategic pillars or "sets of intermediate outcomes." We do this by reporting both quantitative and qualitative information, although the newly designed and CG/RMC-endorsed GFDRR results framework is still in an early stage of operationalization. The report uses the following three techniques:

- Quantitative Portfolio-based Evidence
- Qualitative Report-based and Anecdotal Evidence
- An Initial Case Study Demonstrating a Resultsbased Approach

While more structured quantitative and qualitative information on the agreed program-level and intermediate outcome indicators will begin to flow in over the next couple of years, this report attempts to present an initial case study of results and performance achieved on one key SRFF outcome indicator, i.e., the extent to which GFDRR-supported recovery assessments are leading to strengthened recovery preparedness in post-disaster countries. This case study has been appended to this annual report to not only



present results achieved over the past two years, but also to set the stage for the proposed results evaluation approach that SRFF is planning to institutionalize over the coming months and years.

#### SRFF ACTIVITIES AND PORTFOLIO GROWTH – A COMPARISON OF HISTORIC TRENDS AND FY 2010

This section presents and assesses quantitative SRFF portfolio-based evidence to demonstrate SRFF performance and achievements over FY 2010, particularly in comparison to historic trends of SRFF funds allocation, distribution, and physical/financial performance.

Since its establishment in 2007, SRFF has assisted 25 post-disaster countries in assessing medium and longer term disaster impacts and recovery needs for sustainable recovery: Bangladesh, Bhutan, Bolivia, Burkina Faso, Cambodia, Central African Republic, El Salvador, Guatemala, Haiti, India, Indonesia, Lao PDR, Madagascar, Malawi, Moldova, Myanmar, Namibia, Pakistan, the Philippines, Samoa, Senegal, Sri Lanka, and Yemen.

GFDRR has risen to the challenges posed by the greater frequency and impact of disasters in recent years by increasing its resource mobilization for the SRFF from US\$4 to US\$23 million. In FY 2010 alone, GFDRR supported ten PDNA's: Burkina Faso, Central African Republic, El Salvador, Guatemala, Haiti, Indonesia, Lao PDR, Pakistan, the Philippines, Samoa, Senegal, and Sri Lanka. Assessments are currently under way and scheduled for delivery by October 2010. Beyond the PDNA, GFDRR assists disaster affected countries with support to develop the recovery and reconstruction plans and financing mechanisms, monitoring tools, and coordination support, such as the continued support in FY10 to the ASEAN Humanitarian Task Force in Myanmar to coordinate and monitor recovery efforts following Cyclone Nargis.

Besides assisting with PDNA, Track III also supports institutional preparedness for coordinated needs as-

sessment and recovery planning; to date close to 500 officials in 11 countries—Bangladesh, Djibouti, Egypt, India, Indonesia, Madagascar, Myanmar, Philippines, Saudi Arabia, Togo, Uganda— were trained in the PDNA and the damage, loss, and needs assessment methodology. Six training sessions are planned this year to respond to an increased demand by governments to develop their own professional cadres in PDNA.

A quick SRFF portfolio review has been conducted as part of this annual report, comparing historical budget allocation and funds utilization trends with those emerging in the year 2010.

The increasing number of natural disasters in FY 2010 led to increased spending on the conduct of PDNAs and disaster recovery planning, from 81 percent of the historical portfolio to 95 percent of the current SRFF portfolio. This caused a significant relative reduction in SRFF budget allocations for trainings and tools under the SRFF. This trend will need to be closely monitored in the future and adequate allocations retained for recovery capacity building and systematization of disaster recovery experiences (Figure 1).

SRFF Budget allocations across regions have followed more or less similar trends over the 2010 period as compared to historic spending patterns across the regions. The EAP Region attracted more than 40 percent of SRFF funds, followed by LRC at 19 percent and AFR at 18 percent. LRC shares seem to have been increased, while global allocations have been cut down by almost half (Figure 2).

SRFF funds utilization or disbursement/spending efficiency has remained the same for training and tool-development activities, but has registered a sharp decline (cut by almost half) in the case of PDNAs/disaster recovery planning exercises. However, this is explained by the relatively large amounts made available by donors as prior contingency sums available for quick utilization in the event of major upcoming or future disasters (Figure 3).

FIGURE 1 SRFF BUDGET ALLOCATIONS ACROSS ACTIVITIES HISTORICAL VERSUS FY 2010

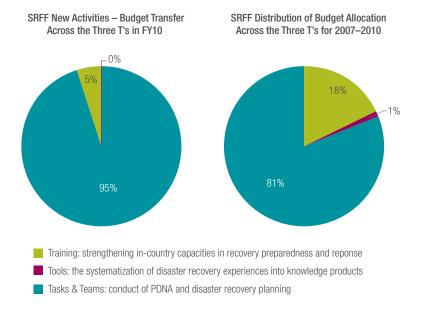


FIGURE 2 SRFF BUDGET ALLOCATIONS ACROSS REGIONS - HISTORICAL VERSUS FY 2010

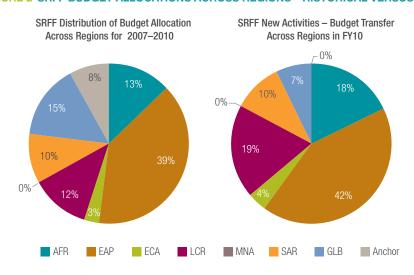
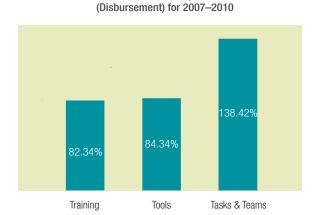
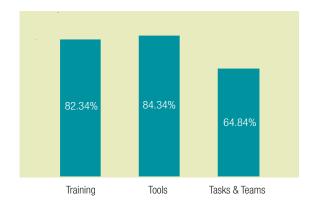


FIGURE 3 SRFF FUNDS UTILIZATION ACROSS ACTIVITIES AND REGIONS - HISTORICAL VERSUS FY 2010



SRFF Funds Utilization By the Three T's

SRFF Funds Utilization (Expenditure) By the Three T's in FY10



## SRFF PERFORMANCE OVER FY 2010 – KEY ACHIEVEMENTS, RESULTS & IMPROVEMENTS NEEDED

This section presents and assesses qualitative reportbased and anecdotal evidence to demonstrate SRFF performance in its five strategic areas of engagement, in terms of key achievements, lessons learned, and improvements needed. It also provides a snapshot or case study of the results/impact-based approach that GFDRR and SRFF are committed to adopt for future performance assessments.

# Strengthening and Coordinating Disaster Recovery Planning

The UN, World Bank Partnership Framework for Crisis and Post-Crisis Situations, and the tripartite EC, UN, World Bank Joint Statement on Post-Crisis Assessment and Recovery Planning, affirm the highest level of commitment to work together in supporting disaster affected countries. GFDRR will continue to support the spirit and implementation of the agreements, which was evidenced in several of the six Post-Disaster Needs Assessments (PDNA) that were supported by the SRFF in 2008.

—GPS, Strategic Direction (2009–2012)

Over FY 2010, GFDRR-supported PDNAs have delivered a coordinated system of international assistance to disaster-affected countries.

Under the framework of EC-UN-WB cooperation in post-crisis situations, GFDRR has promoted and supported an inclusive PDNA process that is led by the government and fully owned by the major stakeholders in recovery, reconstruction, and disaster risk reduction. While serving as the base document for donor conferences to enhance donor coordination, and aid harmonization and leveraging, these PDNA reports have

also provided a unique opportunity for mainstreaming disaster risk reduction into country development strategies (e.g., Bolivia, Haiti, Lao PDR and Yemen). Some examples of strengthened and coordinated recovery planning in FY 2010 follow.

After the severe earthquake that hit Haiti in January 2010, a GFDRR-facilitated inter-agency PDNA was conducted in partnership with the EC, the Inter-American Development Bank, and the UN to lay out the recovery and vulnerability reduction road map for Haiti. The assessment served as the basis for the elaboration of the national Action Plan for Recovery and Development and was instrumental at the international donor conference where US\$9.9 billion was pledged for Haiti's recovery and reconstruction.

A similar response occurred in Sumatra after intense damage by an earthquake of 7.6 on the Richter scale that hit in September 2009 killing 220 thousand people and affecting more than 4 million. To facilitate coherent and systematic medium- to long-term recovery planning, further assistance was provided in formulating a reconstruction strategy that reduces risks in rebuilding livelihoods.

GFDRR supported the conduct of a PDNA in the Philippines for damages, losses, and the economic and social impacts caused by tropical typhoons—Ondoy and Pepeng—in late September and early October 2009 The PDNA provided the basis for determining the country's needs for post-disaster recovery and reconstruction.

Likewise, GFDRR's support for a government-led inclusive and coordinated PDNA for the Ketsana typhoon in Lao PDR provided the country with an accurate and credible evaluation of impacts and needs. The assessment facilitated and laid the groundwork for resilient recovery and reconstruction and resulted in a comprehensive in-country capacity development in assessment and planning.



In this fiscal year, GFDRR supported the Senegalese government in conducting an inclusive PDNA process that involved the UN, EC, WB, government, and NGOs for urban floods that raised disaster risk reduction awareness.

GFDRR Track III has established partnership agreements with centers of global expertise to make global best practices in disaster recovery available to disaster-stricken countries. Partnership agreements with bilateral donors and governments have enabled GFDRR to constitute a Standby Recovery Team, which is a small, mobile, and highly experienced roster of World Bank, UN, and donors' experts who are on standby to be deployed to requesting governments facing post-disaster challenges. El Salvador, Haiti, Indonesia, and Pakistan have benefited from this assistance.

During FY 2010, the SRFF's Quick Reaction Team (QRT) continued to provide expeditious responses to various post-disaster situations through its expert locator, post-disaster knowledge resources, and sharing of best practices. Particularly notable were the QRT's actions in the Africa floods, where a regional study was conducted into the causes of the floods, the Haiti earthquake, where knowledge notes were produced to provide best practice advisory support to recovery

and reconstruction, and the East Asia typhoons. Over the last year, a roster of non-Bank experts has been developed to include global disaster subject matter experts. Under QRT's mandate of fostering a global network of disaster experts, GFDRR also formalized agreements and organized knowledge exchange events with the Norwegian Geotechnical Institute, the Italian Civil Protection Department, and the Swedish Civil Contingency Agency MSB so that experts from these agencies can be deployed in response to major disaster events. There is also a further need for developing similar seamless linkages among expert locators of various global and regional institutions such as the International Recovery Platform, SOPAC, AusAID, and Institute of Geological and Nuclear Sciences-New Zealand. QRT will also develop an open-source collaboration platform and a centralized content management system to enhance knowledge and expert discovery and to foster a focused community of practices on key post-disaster challenges.

Summary of Results: During FY 2010 the PDNA has been increasingly recognized as an internationally accepted standard for a government-led assessment to verify the impact and identify the needs for recovery and reconstruction. Since 2008 there has been a tendency to move away from conducting many separate assessments of government-led joint assessments,



supported by an increasing number of international organizations. It is now becoming common practice, for example, for regional development banks such as the Asian Development Bank and the Inter-American Development Bank to participate with experts in PD-NAs, as in the assessments conducted in El Salvador, Indonesia, Philippines, Samoa in 2009 and in Haiti in 2010. Also, experts from bilateral donor countries are increasingly deployed for PDNAs, such as experts from Civil Protection (Italy), the Civilian Corps (Australia, Canada), the Geotechnical Institute (Norway), experts from Belgium, France, Germany, Japan, Spain, Sweden, United Kingdom, United States, and universities from Belgium, Germany and Switzerland. The Haiti PDNA is a good example of almost the entire international community uniting to support one sole assessment that served as a blueprint for further recovery and reconstruction planning and implementation, making the partnership in rebuilding truly global and inclusive for the Haitian government and all partners.

## Systematization of Disaster Recovery Experiences

GFDRR will strengthen knowledge management in disaster recovery by producing sector spe-

cific knowledge such as the Housing Handbook and a Toolkit for Social Protection that are under preparation. Furthermore, GFDRR will generate guidance notes and best practice notes that will be further developed to cover each type of natural disaster and sector. GFDRR will strengthen knowledge exchange by supporting global, regional, sub-regional and national platforms.

—GPS, Strategic Direction (2009-2012)

In FY 2010, GFDRR's SRFF continued to strive toward refining the knowledge and tools needed for measuring disaster impacts. The process brought about several improvements in the Damage and Loss Assessment (DaLA) methodology (initially developed by UN-Economic Commission for Latin America and the Caribbean in 1972) in cooperation with practitioners and partners from the WB, EC, and UN, in order to make post-disaster assessments more holistic and comprehensive. SRFF is currently supporting the standardization of a PDNA guide in close collaboration with the UN and EC. This includes a cooperation protocol for joint post-disaster response, to make international and in-country assistance to requesting governments more predictable, coordinated, and efficient. The PDNA guide includes standard assessment tools and procedures for conducting a government-led assessment supported by the international community. A technical dialogue on the guide was held among sector experts in Geneva on Sept 16–17, 2010.

## CONTRIBUTIONS OF THE GLOBAL EXPERT TEAM ON DISASTER RISK MANAGEMENT

The World Bank's Global Expert Team on Disaster Risk Management (GET-DRM), managed by the SRFF mechanism, has provided state-of-the-art expert services to a range of clients in the DRM arena during FY 2010. These include (a) supporting policy development for DRR; (b) developing regional and country catastrophe risk modeling and financing initiatives; (c) DRM capacity building and training; (d) development of global and bank-wide DRM knowledge management forums; and (e) advisory services for disaster recovery operations. One key GET contribution was the rapid support provided to the Government of Haiti for its earthquake response, primarily through the development of ten knowledge/good practice notes covering 'burning' post-disaster recovery and reconstruction issues (ranging from building seismic safety assessments, debris management, and management of recovery to managing post-disaster aid, transitional shelter, and building resilient communities). The fact that the Government of Haiti accepted the notes with appreciation and full ownership indicate that the good practices disseminated through the knowledge notes are likely to be considered in key policy and strategic decisions. The notes were subsequently also shared with the Government of Chile. The real index of the efficacy of the GET-DRM notes, however, will become evident in the medium to long term, in the extent to which the recovery and reconstruction process in Haiti mainstreams disaster risk reduction as a key element of its sustainable development agenda.

GFDRR has developed a library of recovery and reconstruction guidance notes outlining resources, approaches, past experiences, lessons learned, and recommendations, and covering (a) the overall process of responding to a major natural disaster, (b) the issues

and priorities raised by different types of hazards, and (c) specific recommendations for sectoral responses to each type of hazard. These include numerous guidance notes on estimation of post-disaster needs, postdisaster damage and loss assessment, safer school construction, and adaptation for different sectors. GFDRR's intention is not to produce a detailed and lengthy handbook as a one-off exercise, but rather a living set of brief notes, organized by the hazard and sector in question, that contain only the most critical information, reference key sources of more detailed information, and can be readily updated at regular intervals. This work will not therefore displace the more detailed disaster- / sector- / a country-specific review produced by regions and sectors within the Bank, but rather aims to bind together and make more accessible that dynamic body of knowledge.

Immediate Needs for the Systematization of Disaster Recovery Experiences: In past three years, more than 25 country governments have led post-disaster damage, loss, and needs assessments with the assistance of EC, UN, and the WB/GFDRR. These assessments pointed out the need for a diagnostic review of the efficacy of post-disaster recovery planning mechanisms in measuring socio-economic impact of disasters, in recovery and reconstruction planning and leveraging of finance, and in longer term integration of disaster risk reduction in growth strategies. In this regard, a Global Dialogue on Post-Disaster Recovery and Reconstruction planning will take place on October 5, 2010 in Washington DC. This conference will include participants from governments, bilateral and multilateral donors, international organizations, DRM practitioners, and technical institutions. It is anticipated that the session will produce recommendations on refining the PDNA mechanism and on how to further refine international assistance to country governments facing challenges of post-disaster recovery and reconstruction.



# Building In-Country Capacities in Recovery Preparedness and Response

GFDRR will continue to provide training courses in the methodology for assessing post-disaster damage and losses and expand these efforts towards recovery and reconstruction planning and recovery monitoring as well as towards pre-disaster planning.

—GPS, Strategic Direction (2009–2012)

SRFF-supported recovery assessments are leading toward much improved and strengthened recovery preparedness in post-disaster countries in FY 2010, as compared to preceding years. A recent case study by the GFDRR Results Team, employing a systematic results-based performance measurement approach, shows that, compared to FY 2009, a much higher percentage of post-disaster countries where GFDRR has carried out recovery assessments are moving toward strengthening their recovery preparedness capacities. As shown in the results evaluation sheet in Annex 1, in almost 90 percent of GFDRR supported post-disaster countries in FY 2010, there are evidence to suggest that recovery assessments are leading to programs and projects for strengthened recovery preparedness, compared to 67 percent of such countries in FY 2009. This has resulted from both a heightened focus on recovery preparedness in GFDRR-supported PDNAs and from GFDRR's and the Bank's continued post-PDNA engagement and follow-up in such countries.

An important subset of SRFF activities aims at improving the self reliance of high-risk countries through capacity building in damage, loss, and needs assessment methodology. While the primary objective is to follow a programmatic approach and pro-actively improve the capacity of government officials at national, provincial and local levels in assessment methodology, the recent mega-disasters necessitated just-in-time training activities for partners involved in government-led PDNA. Since EU, UN, and WB signed an agreement to foment cooperation in recovery

planning and assessment, joint PDNA exercises were preceded by training workshops in Haiti, Indonesia, Moldova, the Philippines, and Sri Lanka. Representatives of key ministries, from finance to agriculture, trade and commerce to public works, civil defense and emergency agencies, statistical offices, and regional and local governments participated in these training events alongside with staff from humanitarian organizations, international agencies, and NGOs. More than 600 professionals received basic training in assessment methodology that provided them with the necessary knowledge and technical skills to conduct the post-disaster assessment.

During FY 2010, GFDRR supported capacity building for PDNAs and recovery planning enabled some countries to institutionalize PDNAs in their national systems. With GFDRR support, Bangladesh and Lao PDR have established in-country capacity for carrying out PD-NAs. Similar capacity development initiatives are being undertaken to build capacity in regional organizations like EC, ADB, ADPC, ASEAN, SOPAC, the Arab Academy, and many African organizations. The West African regional study of the impact of floods and disaster preparedness was conducted for a better understanding of the flood's regional issue in order to better manage recurrent flooding in the region, encouraging dialogue and information sharing between the 16 countries. The regional study was coordinated through the ECOWAS with EC funding. The study generated information and knowledge on causes, effects, and cross-border impacts of floods and provided a first assessment on climate variability trends for the region. The damage, loss, and needs assessment training also provided opportunities to engage high-risk countries in a dialogue on risk management and mitigation approaches and on integrating disaster risk reduction into development planning. Training offered to government officials in Egypt, Morocco, and the Saudi Arabia raised awareness on basic DRM issues by exposing participants to conceptual framework, technical aspects, and application of the assessment methodology.

During FY2010, GFDRR supported capacity development in regional organizations in recovery planning. To ensure that regional organizations are able to help the countries they serve, GFDRR initiated capacity development initiatives with regional organizations such as UN-ESCAP (facilitated by UN-ECLAC), ASE-AN, and the Arab Academy. This is part of a larger strategy to increase regional and subregional capacities in disaster risk reduction and recovery support for disaster-prone countries.

During FY2010, GFDRR provided joint training with the UN for EC staff in PDNA. Since the EC is not only contributing financially to PDNAs but is also deploying technical staff, GFDRR in partnership with the UNDP Bureau for Crisis Prevention and Recovery (BCPR) trained 50 EC staff in the principles of PDNA.

Future Needs and Plans: To facilitate and scale up capacity development efforts, SRFF is designing new learning products to increase outreach and provide easily accessible learning opportunities to its clients. Web-based courses in assessment methodology, both facilitated and self-paced, are under development together with step-by step guidance notes and manuals to ensure standardized and high-quality training. Video presentations of the damage, loss, and needs assessment training will be put into the public domain through the revamped GFDRR Web site and knowledge platform.

# Accelerated, Sustainable, and More Predictable Recovery Financing

GFDRR will continue to refine The Standby Recovery Financing Facility (SRFF), a fund activated after a disaster, to support risk reducing recovery programs. SRFF will also be better linked with con-

tingent financing windows of the World Bank, other IFIs and bilateral donors to deliver coordinated aid for post-disaster recovery and reconstruction.

—GPS, Strategic Direction (2009–2012)

More than most previous years, the PDNA emerged as a very important tool to leverage recovery and reconstruction financing, integrating risk reduction measures in FY 2010. An ongoing review, mainly accounting for leveraging of World Bank financing, shows that seven PDNAs (Bangladesh, Bhutan, Central African Republic, Madagascar, Samoa, West Sumatra, and Yemen) leveraged approximately US\$597 million, while Haiti recently received pledges in the amount of US\$9.9 billion.

Contributions from the SRFF Callable Fund: Since 2007, SRFF Callable Funds have been used many times in critical situations to match the most urgent country and government needs in post-disaster situations in addition to the traditional development assistance provided by donors and partners. More than US\$3.4 million has been utilized strategically in PD-NAs, coordination assistance, and early reconstruction projects like multi-purpose shelters in Bangladesh and a Safe School in El Salvador. With the contributions from Denmark, Italy, Switzerland and the EC, the Callable Fund is continuing to support the Government of Bangladesh's recovery efforts after Cyclone Sidr, through the construction of multipurpose shelters and the restoration of agricultural livelihoods and other vital infrastructure. Single Donor Callable Fund grants have also been provided to support the recovery and reconstruction plan of schools and hospitals in Jamaica and a pilot project of a Safe School in El Salvador that will serve as a model for other schools countrywide.

**Summary of Results**: A recent review of eight PD-NAs<sup>3</sup> concluded that the PDNA process and reports effectively informed and influenced the governments' approach toward planning and financing post-disaster recovery and reconstruction. Overall, the inclusivity

<sup>&</sup>lt;sup>3</sup> The review focuses on eight representative country-samples ranging from large countries to small Island states in the East Asia-Pacific, Africa, and North Africa regions.



and syncretism of the PDNA generated various options for effective leveraging and targeting of post-disaster development assistance. Some governments took concrete steps to introduce new risk financing instruments; others are currently evaluating various options. In Yemen, the government established a Reconstruction and Recovery Fund for effective and transparent use of funds. Madagascar created a Disaster Contingency Fund. In Indonesia, a Multi-Donor Trust Fund was set up.

## Promotion of Greater Disaster Risk Reduction

The same PDNA review also concluded that often the actual process of the PDNA exercise proved to be as important as the PDNA report itself in terms of influencing in-country institutional and policy improvements; determining options for recovery, reconstruction, risk reduction, and transfer; and mainstreaming the longer term disaster risk reduction framework in country development and growth strategies. The review establishes a positive correlation between the PDNAs in these countries and the respective institutional and attitudinal improvements that resulted from the PDNA process and report. A positive shift in government awareness and ownership was discerned in all cases. In some cases, where the PDNA did not yield immediate or direct institutional outcomes, it still led to institutional readjustments in governments to enhance clarity in allocation of business among agencies and ministries for enhanced disaster response preparedness and longer term mainstreaming of disaster risk reduction in country development strategies. This is especially true in countries such as CAR, Lao PDR, and Yemen, which were in the early stages of institutional development for disaster response preparedness and risk reduction.

In some cases, the PDNA helped governments to identify and address systemic weaknesses with knowledge support from GFDRR and the World Bank GET-DRM.

In some other cases, like Indonesia and Madagascar, the PDNA also served as the catalyst to highlight core disaster risk reduction issues like building codes and construction standards. In these countries, the PDNA longer term needs recommendations were useful to governments to move toward institutionalizing and codifying optimal building standards and regulations. In addition, the GFDRR supported a structural assessment program in Haiti after the earthquake, which led to the creation of the Technical Unit on Building Evaluation within the Haitian Ministry of Public Works. More than 400 engineers are trained in building damage assessment, and over 200,000 buildings have been evaluated to date.

The review postulates that the PDNA process and report have significant impacts on the overall disaster response preparedness and disaster risk reduction frameworks of the affected countries. The PDNAs include an assessment of the strengths and weaknesses of the existing DRM and DRR frameworks. This assists governments in taking timely steps to address weaknesses with the support of the international community, including the World Bank and GFDRR. Using the PDNA outcomes, GFDRR has undertaken demand-driven projects to strengthen the DRM and DRR frameworks in several at-risk, priority countries.

PDNAs have served to bring the disaster response preparedness agenda into sharp focus at both the incountry and international levels. It has generated an enabling environment for the voluntary adoption and mainstreaming of DRM and DRR measures by country governments for reducing risk from known vulnerabilities and promoting sustainable development. A significant impact of PDNAs is the capacity and awareness generation among government officials at federal, provincial, and local levels.

Examples include Namibia after the PDNA, where there was a perceptible shift in focus of government officials from ex post-disaster response to ex ante-disaster mitigation. In Sumatra, recognition of the importance of a DRR strategy resulted in the eleva-

tion of DRR as a policy priority with corresponding allocation of resources, and using risk and vulnerability assessments in spatial planning and planning of new infrastructures and facilities. The Senegal PDNA created an opportunity to define short-term action plans to mitigate the impact of future flooding and to strengthen the DRM and DRR system, in each of its components: policy and institutional dimension, risk identification and monitoring, education and awareness raising, reduction of underlying risk factors, and strengthening of disaster preparedness and response, for which GFDRR funded US\$1.4 million.

### Looking Ahead-SRFF

The SRFF will continue to consolidate the PDNA as the international standard for coordinated post-disaster recovery and reconstruction planning. It will continue to develop guidance and implement strategies for optimum coordination and technical assistance to support countries' rapid recovery. Moreover, SRFF will strive to establish new and improve existing partnerships to ensure that the PDNA consolidates as the international standard for post-disaster recovery planning. This will require a sustained dialogue with special focus on the multilateral development banks and the private sector, capacity development, expansion and interlinking of existing rosters (UN, International Financial Institutions and bilaterals) toward the establishment of a Global Recovery Expert Team and the introduction of a PDNA handbook and cooperation protocols.

Under Track III, GFDRR will continuously work on improving the tools, methodologies, and training materials that are part of the PDNA to ensure that the latest available technologies are used.

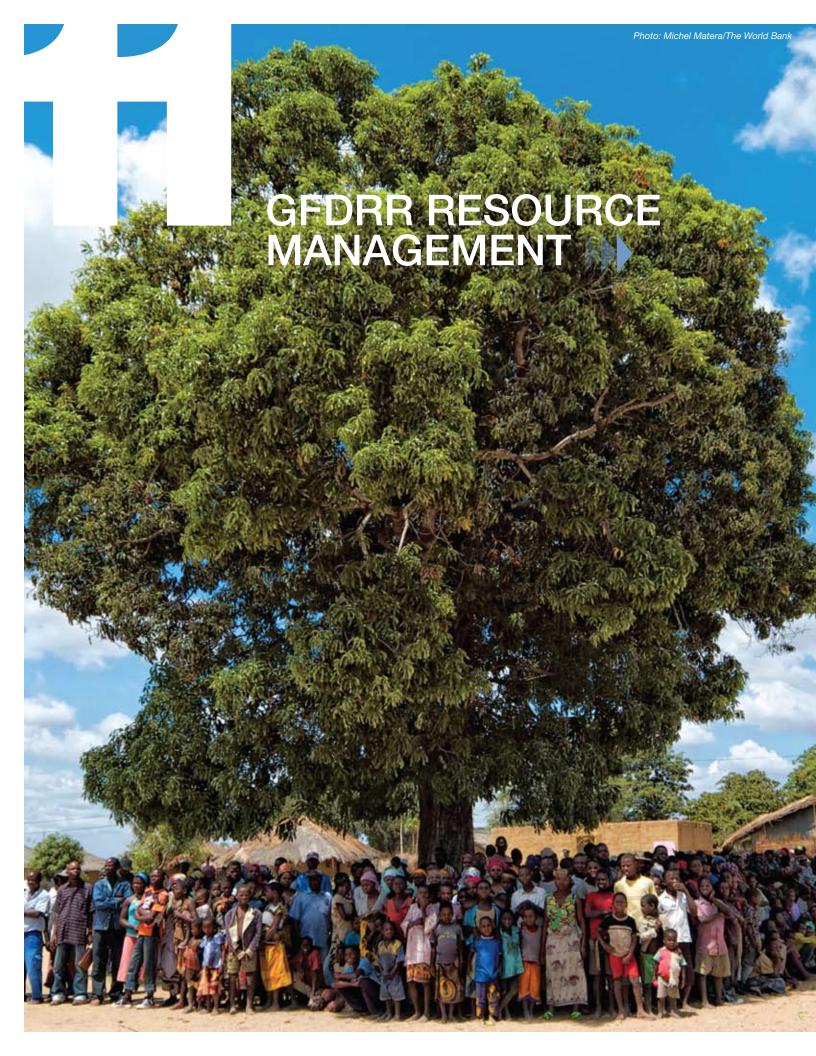
PDNA serves as means to resilient recovery and not as an end in itself. Track III will therefore seek to reinforce and sustain its strategic engagement with affected countries where PDNAs take place. To enhance and strengthen country capacities for recovery preparedness

and response, SRFF will venture out to: (a) strategically incorporate and advocate the need for improved recovery preparedness at the PDNA and project-formulation stages, and (b) stay engaged with countries beyond the PDNA stage to leverage and facilitate the actual implementation of "build back better" recommendations. Track III's performance in this respect will be measured by the extent to which post-disaster recovery programs supported by GFDRR lead to strengthened recovery preparedness and risk reduction such as building standards developed and enforced, and emergency management institutions established, including enhanced capacities of civil protections.

Similarly, the PDNA capacity-building program for countries may be deepened to include not only training on PDNA, but also follow-up interventions that would help governments in setting up systems and procedures (such as for predisaster data preparedness) for the institutionalization of the PDNA approach.

Track III will introduce qualitative monitoring of disaster risk reduction investments in recovery and reconstruction operations in order to ascertain the eventual ownership and impact of PDNAs on national development and growth strategies. This can lead to introducing major recommendations of PDNAs into sustained Track II country programs aimed at mainstreaming disaster risk reduction.

GFDRR is seeking to increase the availability of pooled un-earmarked financing to Track III to ensure aid sufficiency and predictability as well as rapid response in the event of disasters. This will maintain the credibility and true global profile of Track III by introducing the flexibility needed for proportionate and rapid response to requests from disaster-affected countries, by their governments and their people. In order to achieve the proposed level of institutional preparedness to assist disaster-affected poor countries, the resource base of the GFDRR Standby Recovery Financing Facility of Track III would need to be expanded from an annual donor commitment of US\$4.2 million to the vicinity of US\$20 million.



As of fiscal year 2010 (June 30, 2010), GFDRR has received 109 million in contributions from donors under all the three Tracks. These include 20 million for Track I (for global and regional partnerships); 74 million for Track II (for mainstreaming disaster risk reduction and adaptation in development and for the South-South Cooperation Program); and 15 million for Track III (for Sustainable Recovery).

The contributing donors are Australia, Brazil, Canada, Denmark, European Commission, France, Germany, Ireland, Italy, Japan, Luxembourg, Netherlands, Norway, Spain, Sweden, Switzerland, United Kingdom, and the World Bank.

Since the establishment of GFDRR, the numbers of donors and amount of pledges have been increasing steadily. As of August 30, 2010, donors have pledged over US\$240 million under different GFDRR funding tracks.

GFDRR has committed approximately 70 percent, or US\$94.5 million of its actual contribution with signed Aid Agreements to various programs in all Tracks by the end of June 2010. GFDRR is committing at least 80 percent of its Track II Multi Donors' Trust Fund resources in selected priority countries to increase the impact. GFDRR is prioritizing activities to meet 80:20 targets, the ratio of resource allocation of core funds between focus countries and flexible innovative grants. There has been significant success toward meeting the targeted ratio. It stood at 67:33 during 5th CG meeting in November 2008, Copenhagen; 74:26 at the 6th CG meeting in June 2009, Geneva; and now it is maintained at the ratio of 80:15:5 for priority country, innovative/flexible and knowledge grants. GFDRR-supported disaster risk reduction programs are climate sensitive and they directly contribute to

building adaptive capacities in both ex ante and ex post interventions of GFDRR.

### GFDRR's Funding Channels

GFDRR partnership is the leading global financing mechanism for disaster risk reduction and interlinked climate adaptation efforts. The present financing structure of GFDRR has allowed it to meet demands of the disaster-prone developing countries, both in preparing the nations to reduce the risks of disasters and in recovering from disasters as they occur. Its comprehensive financing structure responds to a variety of needs and concerns, allowing bilateral donors, emerging economies, UN agencies, international finance institutions, and private sector partners to participate in the global effort for mainstreaming DRR and climate adaptation for sustainable development.

GFDRR's funds are channeled through three different tracks in fulfilling the HFA, which are complementary to each other.

Track I - Global and Regional Cooperation: World Bank's DGF is the only entity contributing funds for GFDRR Track I activities. Since FY 2007, DGF has contributed US\$5 million every year. These resources



continue to be committed in support of an enhanced regional cooperation in DRR. For FY 2011, WB is contributing \$4.25 million in this Fund for enhanced global and regional cooperation.

Track II - Mainstreaming DRR in Development: Australia, Canada, Denmark, European Commission, France, Germany, Ireland, Italy, Japan, Luxembourg, Netherlands, Norway, Spain, Sweden, Switzerland, United Kingdom, and United States of America are the generous donors contributing to Track II activities. The EC, through the EU African Caribbean and Pacific Natural Disaster Facility, has pledged €60 million (€5 million in Multi Donors' Trust Fund and €55 million in a Single Donor's Trust Fund). The new pledges to date total US\$125.6 million; program commitments in 20 core countries and the high-impact program total US\$60 million. While Sweden is the largest donor of Track II MDTF, the EC is the largest contributing donor of all GFDRR funds.

Track III – Standby Recovery Financing Facility: This track is funded through an annual contribution from Luxembourg, Norway, and Sweden. In post-disaster situations, Australia, Brazil, Denmark, European Commission, Ireland, Italy, Luxembourg, Norway, Sweden, and Switzerland have also contributed to this track fund. Sweden is the largest donor of Track III MDTF. The cumulative new pledges to date are US\$15.7 million; the program commitments for ex ante PDNA training and undertaking PDNAs after disaster total US\$14.5 million.

Pledges and received contribution by GFDRR as of June 30, 2010 are presented in the Tables 1 and 2. GFDRR expenditures for (a) program activities, (b) GFDRR Secretariat costs, and (c) administrative costs from FY 2007 to FY 2010 are shown in Tables 3 and 4. About 88 percent of total funds were expended to support program activities in Tracks I, II, and III as of June 30, 2010; and about 5 percent was spent for the GFDRR Secretariat.

TABLE 1 MEMBER CONTRIBUTIONS TO GFDRR RECEIVED AS OF JUNE 30, 2010 (IN US\$ THOUSANDS)

		Tr	ack II		Track III				
MEMBER	CORE	NON- CORE	South- South	TOTAL RECEIVED	TA	CALLABLE	EC- SDTF	TOTAL Received	ALL TOTAL
Australia	4,168	2081		6,249	2,809			2,809	9,058
Brazil				0		50		50	50
Canada	3,113			3,113				0	3,113
Denmark	6,364			6,364		1,984		1,984	8,348
EC				0	1,207		1,206	2,413	2,413
France	1,364			1,364				0	1,364
Germany	8,602			8,602				0	8,602
Ireland	357			357				0	357
Italy	3,051		1057	4,108		558		558	4,666
Japan	3,000	3000		6,000				0	6,000
Luxembourg	4,439			4,439		124		124	4,563
Netherlands	2,200			2,200				0	2,200
Norway	4,012		394	4,406	2,444			2,444	6,850
Spain	3,024	3210		6,234				0	6,234
Sweden	9,676			9,676	3,685			3,685	13,361
Switzerland	1,704			1,704		1025		1,025	2,729
United Kingdom	9,396			9,396				0	9,396
United States				0				0	0
World Bank	20,000ª			20,000				0	20,000
TOTAL	84,471	8,291	1,451	94,213	10,145	3,741	1,206	15,092	109,305

 $<sup>^{\</sup>mbox{\tiny 1}}$  Note: Contributions refers to donor funds deposited to the GFDRR trust accounts.

a US\$ 5 million per year for four years (FY07 to FY10) is provided as a grant to the United Nations International Secretariat for Disaster Recovery (ISDR) under the Track I financing

TABLE 2 GFDRR MEMBER PLEDGED CONTRIBUTIONS AS OF SEPTEMBER 15, 2010 (IN US \$ THOUSANDS)

MEMBER		Tra	ck II		Track III				
	CORE	NON- CORE	South- South	TOTAL PLEDGED	TA	CALLABLE	EC- SDTF	TOTAL PLEDGED	ALL TOTAL
Australia	9,570	4,729 <sup>a</sup>		14,298	3,033			3,033	17,331
Brazil				0		1,550		1,550	1,550
Canada	3,113			3,113				0	3,113
Denmark	10,558			10,558		1,984		1,984	12,542
EC	6,134	67,505		73,639	2,273		2,354	4,627	78,266
France	1,579			1,579				0	1,579
Germany	8,602			8,602				0	8,602
Ireland	538			538	126			126	664
Italy	6,900		1,057	7,957		558		558	8,515
Japan	6,000	6,000 <sup>b</sup>		12,000				0	12,000
Luxembourg	4,439			4,439		1,734		1,734	6,173
Netherlands	6,600			6,600				0	6,600
Norway	6,067		394	6,461	5,598			5,598	12,059
Spain	6,024	6,211°		12,234				0	12,235
Sweden	13,827			13,827	6,434			6,434	20,261
Switzerland	2,342			2,308		1,520		1,520	3,862
United Kingdom	9,396			9,396				0	9,396
United States	3,000			3,000				0	3,000
World Bank	24,250 <sup>d</sup>	d/		24,250				0	24,250
TOTAL	128,938	84,445	1,451	214,833	17,405	7,346		27,164	241,997

NOTE: Amounts quoted at time of donor's pledged agreement or signed Administrative Agreement. Referred actual received contributions from Table 1. Depository schedules could spread from one year to three years.

a Targeted to the following specific countries: Bangladesh, Cambodia, Philippines and Vanuatu

b Targeted to the following specific countries: Lao PDR, Pakistan and Sri Lanka

c Targeted to the following specific countries: Colombia, Costa Rica, Ecuador and Guatemala

d US\$ 5 million per year for three years (FY07 to FY10) is provided as a grant to the United Nations International Secretariat for Disaster Recovery (ISDR) under the Track I financing. FY11 contribution is \$4.25 million.

TABLE 3 GFDRR EXPENDITURES FOR PROGRAM ACTIVITIES, SECRETARIAT COSTS AND ADMINISTRATIVE FEES FROM FISCAL 2007 TO JUNE 30, 2010 (IN US\$ THOUSANDS)

EXF	PENSE CATEGORY		2007		2008		2009		2010	TOTAL
Prograr	n Activities		6,762		11,696		19,655		24,450	62,563
o/w	Track I	5,000		5,000		5,000		5,000		20,000
	Track II	1,762		5,786		12,593		15,109		35,251
	Track III			910		2,062		4,341		7,313
Secreta	ariat <sup>a</sup>		347		1,524		957		1,171	3,999
Adminis	strative Fees		211		1,279		1,217		1,684	4,391
TOTAL			7,320		14,500		21,829		27,305	70,953

NOTE: Program Activities for Track II and III included global anchor operational support from GFDRR

TABLE 4 GFDRR SECRETARIAT EXPENDITURES, FISCAL 2007 TO JUNE 30, 2010 (IN US \$ THOUSANDS)

EXPENSE CATEGORY	2007	2008	2009	2010	TOTAL
Administration					
Staff Costs <sup>1</sup>	225	977	601	870	2,673
Travel <sup>2</sup>	92	282	115	265	754
Overhead <sup>3</sup>	4	23	113	2 c	141
Other <sup>4</sup>	26	241	128	34	429
TOTAL <sup>a,b</sup>	347	1,524	957	1,171	3,998

<sup>&</sup>lt;sup>a</sup> This would refer to actual payments made and contracts already entered in the Bank's SAP system.

a Includes Program Management Unit staff costs (management, administration, evaluation of proposals, governance, and donor relations).

b This would refer to actual payments made and contracts already entered in the Bank's SAP system.

<sup>&</sup>lt;sup>b</sup> Secretariat cost varied across 4 years with start-up cost expected higher in FY08.

<sup>°</sup> FY10 Overhead included the Institutional trust funds indirect rates. Other years indirect rates captured under Staff Costs.

<sup>&</sup>lt;sup>1</sup> Staff Costs included salaries and benefits of PMU Headquarters staff (including ETC/ETT)

<sup>&</sup>lt;sup>2</sup> Travel included travel expenses of the PMU Headquarters staff, candidates/interviewees for GFDRR positions, Annual Meeting participants, other participants in GFDRR-sponsored events.

<sup>3</sup> Overhead included office space, communications & IT, computers, other office equipment of Washington-based PMU and trust funds indirect rates in FY09.

<sup>4</sup> Other included the use of short-term consultants and other contractual services (e.g. editing, graphic design, translation, publishing and printing, representation, hospitality, etc.)

## GFDRR Resource Commitments at a glance

TABLE 5A APPROVED ACT IVI T IE S UNDER TRACK II FOR THE PERIOD FY07-FY10 AS OF JUNE 30, 2010 (BY REGION) (IN US\$ THOUSANDS)

REGIONS	APPROVED	TRANSFERRED	DISBURSEMENT <sup>a</sup> (Actuals + Commitments)	BURN RATE <sup>b</sup>
Africa	10,818	7,759	5,061	65%
East Asia and Pacific	12,394	9,061	5,713	63%
Europe and Central Asia	2,010	1,860	1,633	88%
Latin America and Caribbean	15,146	11,829	6,389	54%
Middle East and North Africa	4,666	3,258	2,423	74%
South Asia	4,604	3,638	2,576	71%
Global	12,414	11,249	10,100	90%
TOTAL	62,053	48,654	33,897	70%

<sup>&</sup>lt;sup>a</sup> This would refer to actual payments made and contracts already entered in the Bank's SAP system.

#### TABLE 5B APPROVED ACTIVITIES UNDER TRACK III FOR THE PERIOD FY08 - FY10 AS OF JUNE 30, 2010 (BY REGION) (IN US\$ THOUSANDS)

REGIONS	APPROVED	TRANSFERRED	DISBURSEMENT <sup>a</sup> (Actuals + Commitments)	BURN RATE <sup>b</sup>
Africa	1,301	1,297	1,122	87%
East Asia and Pacific	3,574	3,344	2,868	86%
Europe and Central Asia	275	175	139	79%
Latin America and Caribbean	3,373	1,200	1,017	85%
Middle East and North Africa				_
South Asia	3,948	2,620	1,673	64%
Global	2,070	1,040	842	81%
TOTAL	14,541	9,676	7,661	79%

<sup>&</sup>lt;sup>a</sup> This would refer to actual payments made and contracts already entered in the Bank's SAP system.

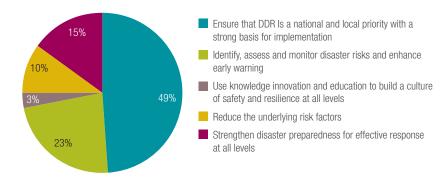
<sup>&</sup>lt;sup>b</sup> Disbursement rate as a percentage of actual amount transferred from inception to June 30, 2010.

<sup>&</sup>lt;sup>b</sup> Disbursement rate as a percentage of actual amount transferred from inception to June 30, 2010.

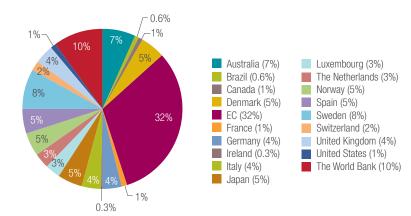
TABLE 6 GFDRR APPROVED ACTIVITIES BY HFA PRIORITIES FOR ACTION AND PRIMARY NATURE - FISCAL YEARS 2007 TO 2010, AS OF SEPTEMBER 15, 2010

	HFA Priorities for Action		Co-finance amount by other
	Priority Number and Primary Nature	GFDRR Total US \$	counterparts
1	Ensure that DRR is a national and local priority with a strong institutional basis for implementation	44,558,155	4,433,000
	Institutional Capacity and Consensus Building for Disaster Risk Reduction		
2	Identify, assess and monitor disaster risks and enhance early warning	20,562,692	13,673,200
	Disaster Risk Assessment and Monitoring		
3	Use knowledge innovation and education to build a culture of safety and resilience at all levels	2,895,360	0
	Knowledge and capacity enhancement for disaster risk reduction		
4	Reduce the underlying risk factors	9,146,810	2,347,169
	Disaster Risk Reduction and Financing for Sustainable Development		
5	Strengthen disaster preparedness for effective response at all levels	13,034,445	413,600
	Disaster preparedness and sustainable recovery		
	TOTAL	90,197,462	20,866,969

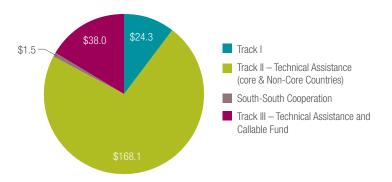
**GRAPH 1 DISTRIBUTION OF GFDRR RESOURCES BY HFA PRIORITY** PERCENTAGE OF TOTAL RESOURCES DISTRIBUTED BY HFA PRIORITY AREAS



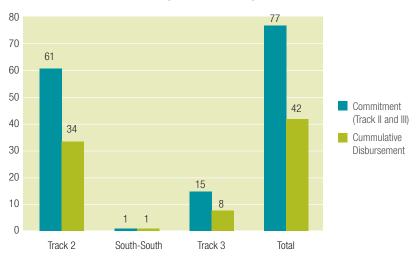
**GRAPH 2 DISTRIBUTION OF RESOURCES BY DONOR'S CONTRIBUTIONS** (AS OVERALL PERCENTAGE OF GFDRR FUNDING)



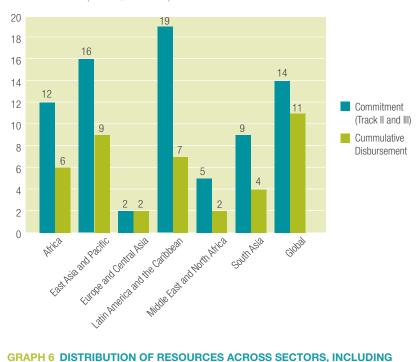
**GRAPH 3 DISTRIBUTION OF RESOURCES BY TRACKS** (IN US \$ MILLION)



**GRAPH 4 DISTRIBUTION OF RESOURCES BY TRACKS: COMMITTED AND CUMULATIVE DISBURSEMENT (IN US\$ MILLION)** 

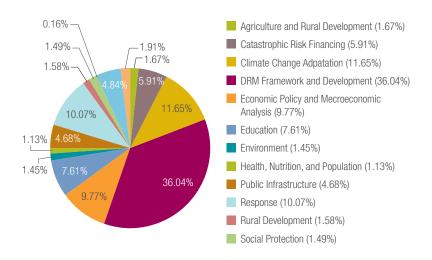


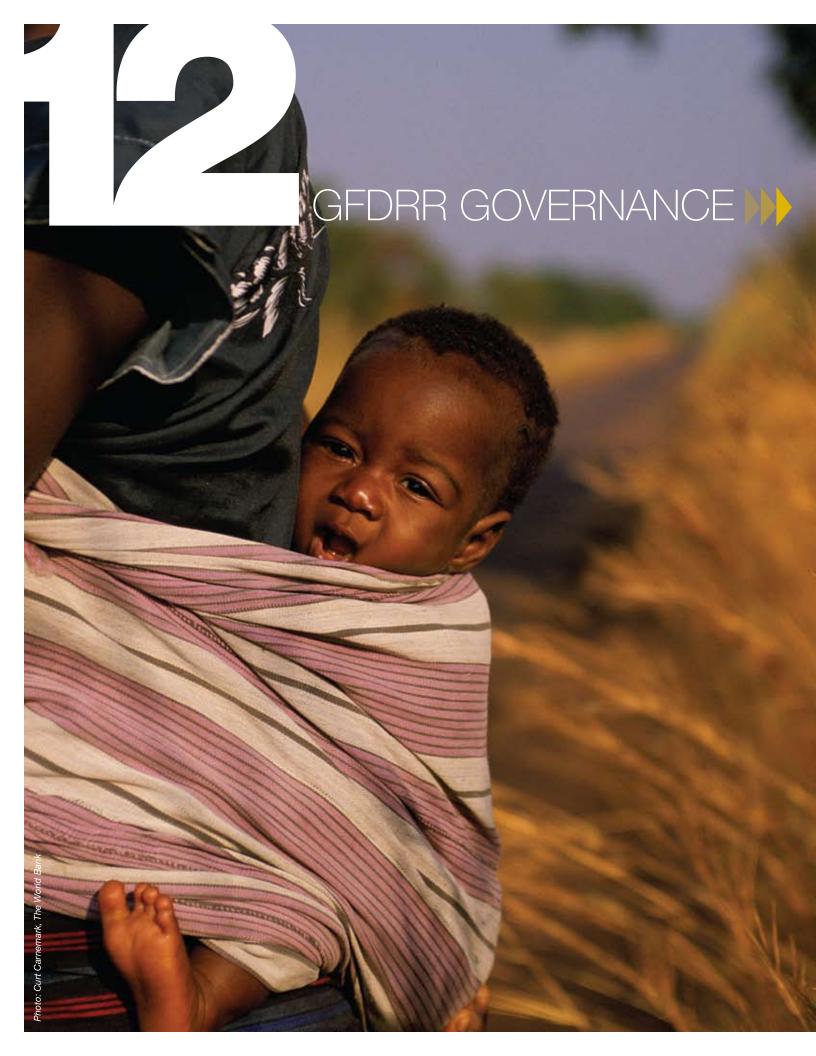
GRAPH 5 DISTRIBUTION OF RESOURCES BY REGIONS: DISBURSEMENT AND COMMITMENT (IN US \$ MILLION)



### GRAPH 6 DISTRIBUTION OF RESOURCES ACROSS SECTORS, INCLUDING CLIMATE CHANGE ADAPTATION OF TRACK II ACTIVITIES

PERCENTAGE SHARE OF TOTAL RESOURCES BY SECTORS





GFDRR is managed by the World Bank on behalf of the participating donors and other partnering stakeholders. The GFDRR's governance, mission, operating mechanisms, and organizational structure are clearly defined in its Partnership Charter that was adopted in February 2007 and amended in April 2010. In accordance with the Charter, GFDRR's governance includes a Consultative Group, a Results Management Council, and a Secretariat.

### a. The Consultative Group

The Consultative Group (CG) is GFDRR's policy-making body, which defines long-term strategic objectives of GFDRR and is also responsible for managing its expected results. Members include official donors contributing at least US\$3,000,000 in cash cumulatively over three consecutive years; recipient or developing country governments contributing at least US\$500,000 in cash cumulatively over three consecutive years; the chair of the UN International Strategy for Disaster Reduction; the Chair of the Results Management Council; and UNDP and IFRC as permanent observers. In addition, the CG may invite up to six developing country governments to be members of the Consultative Group on a two-year staggered-rotation

basis as a noncontributing members. The CG meets at least once a year and is chaired by the World Bank's Vice President for Sustainable Development and cochaired by a donor member (currently, Australia) of the CG.

Following the decision made by CG members in Stockholm on October 27, 2009, to invite six selective representative from developing countries to participate for two years as noncontributing CG members, Bangladesh, Haiti, Malawi, Senegal, Vietnam, and Yemen (from five different geographic regions) were welcomed into the CG, marking an important step forward for GFDRR. This demonstrated GFDRR partners' commitment to an inclusive partnership to ensure that the GFDRR stays relevant and in tune with the developmental needs of partner countries.



#### **ACP**

H.E. Dr Mohamed Ibn Chambas Secretary-General, The Secretariat of the African. Caribbean and Pacific

Group of States - ACP

Michele Dominique Raymond Assistant Secretary General The Secretariat of the African, Caribbean and Pacific Group of States - ACP

#### **AUSTRALIA (CO-CHAIR)**

Ms. Lisa Staruszkiewicz Manager, Disaster Risk Reduction Australian Agency for International Development (AusAID)

#### **BELGIUM**

Mr. Christian Panneels Head of Division Multilateral and EU **Programmes** Ministry of Foreign Affairs

Mr. Geert Vansintjan Head of Unit

D2.1 - Humanitarian Aid, Food Aid, Rehabilitation

Federal Public Service Foreign Affairs, **Foreign Trade** 

and Development Co-Operation

#### **BRAZIL**

H.E. Hon. Milton Rondo Filho Minister

Ministry of External Relations

Ms. Fabiana Moreira Second Secretary

Embassy of Brazil in Washington, DC

#### **CANADA**

Mr. Kent Smith

Manager of the Early Recovery and Disaster Risk Reduction Group International Humanitarian Assistance

(IHA) Directorate

Canadian International Development

Agency (CIDA)

#### **COLOMBIA**

H.E. Oscar Ivan Zuluaga Minister of Finance and Public Credit Ministerio de Hacienda

#### **DENMARK**

Mr. Michael Andersen Head of Unit - Humanitarian Assistance and NGO Cooperation Ministry of Foreign Affairs

#### **EGYPT**

Dr. Magued Osman Chairman Information and Decision Support Center (IDSC) The Egyptian Cabinet

#### **EUROPEAN COMMISSION**

Mr. Philip Mikos Head of Unit Disaster Risk Reduction and Development Policies for Sustainable Management of Natural Resources DG Development and Relations with African Caribbean and Pacific States

Ms. Genoveva Ruiz-Calavera Head of Unit, Crisis response and Peace Building **European Commission** 

Mr. Denis Salord Head of Unit

Centralized Operations for the ACP Countries

EuropeAid Cooperation Office DG EuropeAid

#### FINI AND

Ms. Anna Gebremedhin Counselor, Unit for Humanitarian Assistance Ministry of Foreign Affairs

#### **FRANCE**

Mr. Philippe Thiebaud Directeur, Direction des Biens Publics Mondiaux Direction Générale de la Mondialisation, du Développement et des Partenariats, Mr. Jean-François Bonnet Responsable du pôle eaux, sols et pollution Sous Direction de la gestion des ressources naturelles Direction des Biens Publics Mondiaux Ministere des Affaires Etrangeres et Europeennes

#### **GERMANY**

Ms. Kerstin Faehrmann Head of Division, Emergency and Transitional Aid BMZ (Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung)

#### ΗΔΙΤΙ

Mr. Jean Marie Claude Germain Minister of Environment Ministère de l' Environnement, Government of Haiti

#### **INDIA**

Mr. Pulok Chatterji **Executive Director** World Bank, ED's Office

#### **IRELAND**

Mr. Donal Kenneally First Secretary, Emergency and Recovery Irish Aid

#### ΙΤΔΙ Υ

Mr. Stefano Taliani Chief, Humanitarian Division Ministry of Foreign Affairs

#### **JAPAN**

Mr. Hiroki Owaki Deputy Director-General Global Issues Cooperation Division Ministry of Foreign Affairs

#### KINGDOM of SAUDI ARABIA

Dr. Sameer Ghazi **President Deputy** Presidency of Meteorology and Environment, Kingdom of Saudi Arabia

#### **LUXEMBOURG**

Mr. Marc Bichler, Director Ministry of Foreign Affairs, Directorate for Cooperation and Development

#### **MEXICO**

Dr. Manuel Lobato Osorio Head Insurance and Pensions Unit Ministry of Finance, Mexico

#### **NEW ZEALAND**

Mr. Michael Hartfield Programme Manager, Pacific Regional Environment New Zealand Agency for International Development (NZAID)

#### **NETHERLANDS**

Mrs. Hannah Tijmes Head of Humanitarian Division Ministry of Foreign Affairs, Humanitarian Division

#### **NORWAY**

Mr. Arman Aardal Senior Adviser, Humanitarian Affairs Section Ministry of Foreign Affairs

#### **SENEGAL**

H.E. Becaye DIOP Minister of Interior

Mr. Amadou Fall Canar Diop Deputy Director of the Civil Protection, responsible of the Division des Etudes et des Operations de Defense Civiles Ministry of Interior

#### **SOUTH AFRICA**

Mr. Andries Oosthuizen Deputy Director, Humanitarian Affairs Department of International Relations & Cooperation

Mr. George Kilian
Acting Executive Manager
National Disaster Management
Centre, Department of Cooperative
Governance and Traditional Affairs,

#### **SOUTH KOREA**

Mr. Chun-kyum Kim
Deputy director
National Emergency Management
Agency (NEMA)

Mr. Do Hyeong Kim Alternate Executive Director The World Bank

#### **SPAIN**

Mr. Pablo Yuste Echarren Head of Humanitarian Action Office Ministry of Foreign Affairs, Spanish Agency for International Development Cooperation

#### **SWEDEN**

Per Byman Director, Humanitarian Team Swedish International Development Co-operation Agency (Sida)

#### **SWITZERLAND**

Mr. René Holenstein Deputy Head, Division for Multilateral Affairs

Swiss Agency for Development and Cooperation

#### **TURKEY**

Director
Prime Ministry – Disaster and
Emergency Preparedness Presidency

#### **UNITED KINGDOM**

Mr. Mehmet Ersoy

Mr. Tim Waites
DRR Advisor
The Department for International
Development (DFID)

#### **UNITED STATES - USAID**

Dr. Ayse Sezin Tokar Hydro meteorological Hazard Advisor USA-US Agency for International Development

#### UAE

Mr. Younis Haji Al Khoori Director General United Arab Emirates, Ministry of Finance Mr. Saeed Thani Al Muhairi GM Office Manager, The Higher National Security Council United Arab Emirates, National Emergency and Crisis Management Authority

#### **VIETNAM**

Dr. Dao Xuan Hoc Vice Minister of MARD Ministry of Agriculture and Rural Development

#### **UNITED NATIONS/ISDR**

Ms. Margareta Wahlström Special Representative of the UN Secretary-General for Disaster Risk Reduction UN ISDR secretariat

#### **RMC CHAIR**

Dr. Abebe Haile Grabriel
Director
Department of Rural Economy and
Agriculture, Africa Union Commission

#### **UNDP**

Mr. Maxx Dilley
Chief, DRR Unit
Bureau for Crisis Prevention and
Recovery / UNDP

#### **IFRC**

Mr. Ibrahim Osman

Mr. Mohammed Omer Mukhier Head of Disaster Policy and Preparedness Department IFRC

#### **WORLD BANK (CHAIR)**

Ms. Inger Andersen
Vice President and Head of Network
Sustainable Development Network
The World Bank

Ms. Zoubida Allaoua Director Finance, Economics, and Urban Department, Sustainable Development, World Bank



# b. Results Management Council

The Results Management Council (RMC) provides technical guidance, reviews strategy, and contributes to the evaluation of the impact of GFDRR's financed activities. Members of the RMC consist of a World Bank director nominated by the chair, the director of the ISDR Secretariat, the GFDRR program manager, five selected regional and subregional organizations, and five selected experts and practitioners.

RMC comprises highly qualified technicians and experts from developed and developing countries, as well as regional and subregional organizations.

In its role of ensuring the quality and results of GFDRR activities, RMC continuously advises the GFDRR Secretariat on achieving its mission. The following are some of the areas in which the RMC has provided significant technical guidance this year: establishing a new and improved result framework for the comprehensive monitoring and management of GFDRR's activities; supporting postdisaster needs assessments while finding innovative ways to maximize the sharing of information; and providing strategic advice on the best way to share knowledge at the local, regional, and international levels while strengthening their respective networks.

## RESULTS MANAGEMENT COUNCIL

- Dr. Abebe Haile Gabriel, RMC Chair, Director
   Department of Rural Economy and Agriculture
- Ms. Adelina Kamal ,Head of Disaster Management and Humanitarian Assistance Division
   The Association of Southeast Asian Nations (ASEAN)
- Dr. Mohamed Farghaly, President
   The Arab Academy for Science, Technology and Maritime
   Transport (AASTMT)
- Mr. Jeremy Collymore, Executive Director
   The Caribbean Disaster Emergency Management Agency
   (CDEMA)
- Mr. Mosese Sikivou, Manager/Community Risk
   Programme
   Pacific Islands Applied Geoscience Commission (SOPAC)
- Mr. Amod Dixit, General Secretary and Executive Director National Society for Earthquake Technology-Nepal (NSET)
- Ms. Lorna P. Victoria, Advisor to the Board of Directors and Program Director
   CBDRM TRAINING AND LEARNING CIRCLE-Philippines
- Mr. Roland Nussbaum, CEO Mission Risques Naturels
- Mr. Murat Sungur Bursa, Chief Executive Officer
   Zorlu Energy Group
- Mr. Kaoru Takara, Professor
   Kyoto University
   Disaster Prevention Research Institute (DPRI)
- Mr. Almami Dampha, Policy Officer Forestry and Land Management
- Ms. Helena Molin Valdes, Deputy Director, UNISDR

### c. The Secretariat

The Secretariat carries out the mission of GFDRR and manages its day-to-day operations. The GFDRR Secretariat provides an annual report on GFDRR activities to the Consultative Group through the CG Chair. It is housed at the World Bank headquarters in Washington, D.C. Professional staff of the GFDRR Secretariat is recruited internationally based on relevant expertise following World Bank recruitment rules. Mr. Saroj Kumar Jha is the Program Manager and the head of the Secretariat; he leads a dedicated and growing team of 20 staff members based in Washington D.C., Brussels, and Geneva.

## GOVERNANCE STRUCTURE CHART

#### THE CONSULTATIVE GROUP

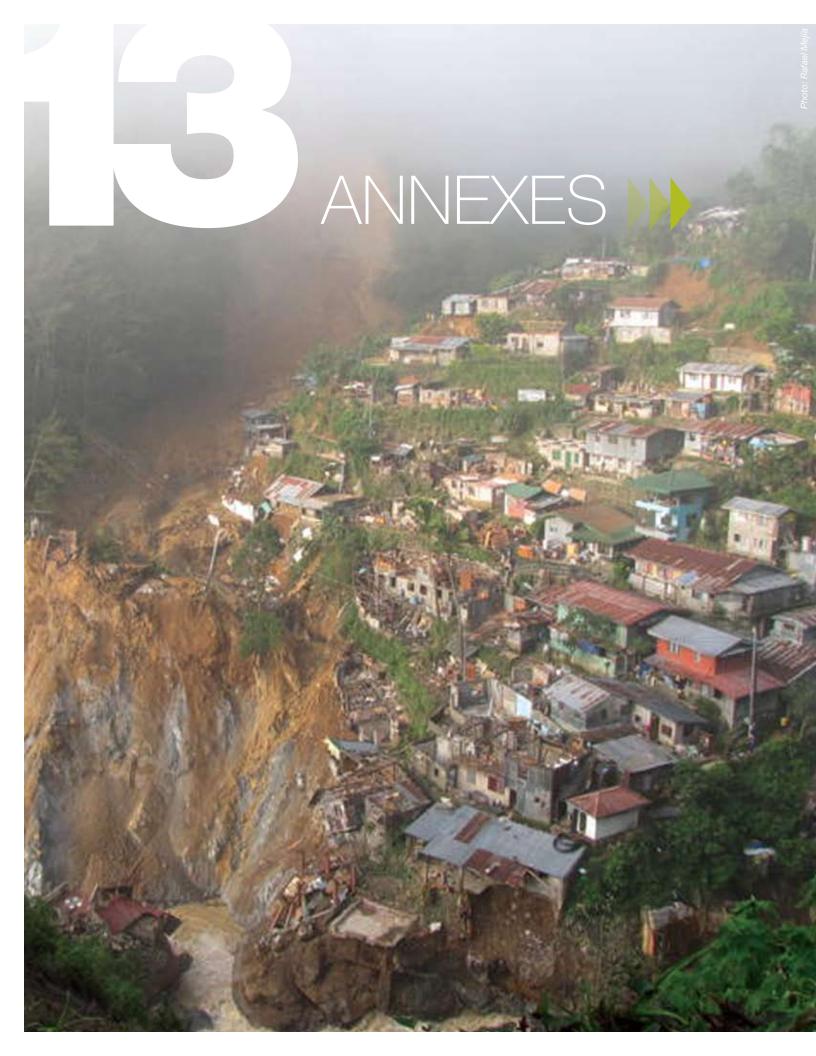
- Vice President of Sustainable Development of the World Bank
- Donor representatives
- ▶ The Chair of the ISDR System
- ▶ The Chair of the Results Management Council
- Recipient or Developing Countries Government
- UNDP(permanent observer)
- ▶ IFRC(permanent observer)

## THE RESULTS MANAGEMENT COUNCIL

- Director of the World Bank
- ▶ Director of the ISDR Secretariat
- ▶ Program Manager of GFDRR Secretariat
- ▶ Five Representatives of Regional and
- ► Inter-Regional Organization
- ▶ Five Prominent Experts in areas such as:
  - » Geological Hazards
  - » Weather-related Hazards
  - » Environmental Risks
  - » Advanced Research in Disaster Reduction
  - » Risk Financing Instruments
  - » Public Policy Specialist/Economist in Disaster Reduction
  - » Community-based Disaster Mitigation
  - » Institutional Capacity Building
  - » Knowledge Management
  - » Climate Adaptation

#### **GFDRR SECRETARIAT**

- Program Manager
- Staffs



### ANNEX I – GLOBAL AND REGIONAL PARTNERSHIPS ACTIVITIES UNDER TRACK I

Activity	Region	Total Cost (US \$)
FY07 AF1.1 Capacities and knowledge of DRR national platforms and regional institutions	Africa	350,000.00
FY07 AF1.2 Regional cooperation program on drought risk reduction in Africa.	Africa	330,000.00
FY07 AP1.1 Capacities and knowledge of DRR, national platforms and national and regional policy makers and institutions	East Asia and Pacific	300,000.00
FY07 G1.1 Global Information Platform	Global	250,000.00
FY07 G1.2 Networks of institutions and platforms engaged in DRR established	Global	150,000.00
FY07 G2.1 Global partnerships with the private sector, the media, the parliamentarians, and research and scientific o	Global	250,000.00
FY07 G3.1 Global biennial reports	Global	225,000.00
FY07 G4.1 Guidelines on the implementation of HFA and other DRR guidelines harmonized	Global	300,000.00
FY07 LAC1.1 Capacities and knowledge of regional and sub-regional organizations and networks	Latin America and the Caribbean	200,000.00
FY07 LAC1.2 Regional coordination, communication and collaboration	Latin America and the Caribbean	100,000.00
FY07 R1.1 Stronger engagement of the education sector, the media, and the private sector in all the regions	Global	450,000.00
FY07 R1.2 UN/ISDR regional advocacy and outreach capacity enhanced in all the regions	Global	900,000.00
FY07 R1.3 Partnerships between ISDR regional outreach and advocacy offices and the World Bank regional office	Global	950,000.00
FY08 A.P.1 Coordination of regional institutions in the area of DRR and HFA implementation	East Asia and Pacific	274,000.00
FY08 A.P.2.1 Integration of DRR indicators in development and poverty reduction strategies	East Asia and Pacific	120,000.00
FY08 AF.1.1 Regional coordination and resource mobilization in Africa and sub- regions	Africa	285,000.00
FY08 AF.1.2 Climate hazard resilience strategies	Africa	95,000.00
FY08 AF.2.1 Regional knowledge for mainstreaming DRR	Africa	120,000.00
FY08 Europe 1.1 Hydromet services, data sharing and early warning system in South Eastern Europe	Europe and Central Asia	70,000.00
FY08 Europe 1.2 Cooperation among the member states in disaster preparedness	Europe and Central Asia	190,000.00
FY08 Europe 1.3 Reduced burden on government budgets and the development of affordable insurance	Europe and Central Asia	70,000.00
FY08 Europe 1.4 Engagements on DRR issues, regional collaboration in Central Asia	Europe and Central Asia	120,000.00



Activity	Region	Total Cost (US \$)
Y08 Europe 2.1 DRR and HFA as national priority with appropriate reporting	Europe and Central Asia	50,000.00
-Y08 G.1.1 Global Assessment Report on DRR	Global	350,000.00
Y08 G.1.2 A virtual clearinghouse (Prevention Web)	Global	150,000.00
Y08 G.2.1 Climate change	Global	210,000.00
Y08 G.2.3 Education	Global	50,000.00
Y08 G.2.4 Health	Global	300,000.00
FY08 G.3.1 Media	Global	100,000.00
FY08 G.3.2 A coherent and coordinated approach towards the implementation of DRR strategies	Global	160,000.00
Y08 A.P.2.2 Urban disaster risk management capacities	East Asia and Pacific	106,000.00
Y08 LAC.1.1 Capacities for the implementation of the HFA and DRR initiatives in attin America and the Caribbean	Latin America and the Caribbean	150,000.00
Y08 LAC.1.2 Regional collaboration so as to reducing the risk of disasters in Latin America and the Caribbean.	Latin America and the Caribbean	210,000.00
Y08 LAC.2.1 Integration of DRR and Climate Change Adaptation within the HFA at atomational and sub-national level.	Latin America and the Caribbean	20,000.00
Y08 LAC.2.2 Networks of practitioners promote implementation of HFA	Latin America and the Caribbean	120,000.00
Y08 MNA. 1.1 Exchange of specialized knowledge and information on hazards and isks at regional level	Middle East and North Africa	200,000.00
FY08 MNA. 1.2 HFA implementation into regional policies and planning processes in Western Asia and Northern Africa	Middle East and North Africa	177,000.00
FY08 MNA.2. Enhanced communication of DRR solutions/approaches in Western Asia and Northern Africa	Middle East and North Africa	120,000.00
Y08 S.A.1 Knowledge base on risk levels and risk reduction measures	South Asia	200,000.00
Y08 S.A.2.1 Regional knowledge networking system	South Asia	262,000.00
Y08 S.A.3.1 Climate Change and hazard risk management in South Asia	South Asia	60,000.00
Y09 AF1.1 Support for development of regional capacity of the AU and RECs ECOWAS, SADC, IGAD, ECCAS)	Africa	355,000.00
Y09 AF2.1 Standardized tools and methodologies for disaster risk reduction in Africa	Africa	135,000.00
Y09 AF3.1 Development of a regional DRR program to support risk integration and assessment capacity development	Africa	160,000.00
Y09 AP1 Regional Intergovernmental Organizations have strengthened HFA mplementation Capacity	East Asia and Pacific	253,000.00
Y09 AP2.1 Integrated approaches to foster climate change and disaster resilience	East Asia and Pacific	60,000.00
Y09 AP2.2 Synthesis report on ASEAN countries disaster risks	East Asia and Pacific	55,000.00

Activity	Region	Total Cost (US \$)
FY09 AP2.3 Regional study for strengthening hydrometeorological services in ASEAN	East Asia and Pacific	106,000.00
FY09 AP3 Regional facilitation to raise awareness on practical approaches to DRR mainstreaming	East Asia and Pacific	66,000.00
FY09 Europe 1 DRR issues in South Eastern Europe	Europe and Central Asia	283,000.00
FY09 Europe 2.1 DRR issues in Central Asia	Europe and Central Asia	187,000.00
FY09 Europe 2.2 Regional Support to the implementation of HFA and DRR at the national level	Europe and Central Asia	33,000.00
FY09 Europe 3 Advocacy and knowledge on DRR issues	Europe and Central Asia	22,000.00
FY09 G1 Global Assessment Report on DRR	Global	400,000.00
FY09 G2 Environment	Global	80,000.00
FY09 G3 Targeted Advocacy for the Health Sector and Parlamentarians aligned with ISDR Annual Campaign	Global	250,000.00
FY09 G4 Support to Media Networks	Global	150,000.00
FY09 G5 Support to coherent approach and linking Track 1 with ISDR system partners, regional programs and climate change	Global	316,000.00
FY09 LAC1 Provide support to regional and national decision makers related to the application of hazard management tools	Latin America and the Caribbean	110,000.00
FY09 LAC2 Improvement of the regional knowledge networks in LAC, information management and HFA reporting	Latin America and the Caribbean	302,500.00
FY09 LAC3 Preparation and dissemination of DRR documents, safe hospitals campaign and information materials into Sp	Latin America and the Caribbean	82,500.00
FY09 MNA 1 Engaging with League of Arab States to Support t implementation of HFA and Regional Cooperation	Middle East and North Africa	230,000.00
FY09 MNA2 Standardized Tools and Methodologies for DRR	Middle East and North Africa	140,000.00
FY09 MNA3 Enhanced advocacy, partnerships and knowledge	Middle East and North Africa	130,000.00
FY09 SA1 Strengthening partnership with SAARC	South Asia	370,000.00
FY09 SA2 Development of the World Bank regional strategy for South Asia	South Asia	29,500.00
FY09 SA3 Climate Change and DRR integration in South Asia	South Asia	60,000.00
FY10-AF1-Continued development of regional capacity of the AU and promoting African Strategy and Programme for DRR	Africa	618,600.00
FY10-AF2 Support capacity development of RECs in Africa for linking CCA and DRR	Africa	1,267,000.00
FY10-ECA1-Enhanced DRR issues in South Eastern Europe supporting the implementation of SEEDRMAP	Europe and Central Asia	220,570.00
FY10-ECA2-Provided guidance in the implementation of the HFA in ECA	Europe and Central Asia	52,920.00
FY10-ECA3-Enhanced advocacy and knowledge on DRR issues including Urban Risk Campaign	Europe and Central Asia	52,050.00



Activity	Region	Total Cost (US \$)
FY10-ECA4-Enhancing DRR issues in Central Asia and Caucasus through the Central Asia Disaster Risk Management Initiative	Europe and Central Asia	224,460.00
FY10-G1-Create a repository of documents that explore the interface between DRR, CCA and Environment	Global	150,000.00
FY10-G2-Build a knowledge base by acting as a clearing house for cutting edge information on DRR (under development)	Global	150,000.00
FY10-G3-Engage strongly with different forms of media networks to promote Urban DRR (under development)	Global	30,000.00
FY10-G4-Pilot techniques to create a global asset database as a Public Good (under development)	Global	175,000.00
FY10-G5-Engaging Parliamentarians in Disaster Risk Reduction	Global	56,000.00
FY10-LAC1-Increased regional knowledge networks, capacities for information management and HFA reporting	Latin America and the Caribbean	371,749.00
FY10-LAC2 Information materials on DRR widely available for international campaign, safe schools and hospitals	Latin America and the Caribbean	54,050.00
FY10-LAC3Support available to regional and national decision makers related to the application of hazard management tool	Latin America and the Caribbean	124,200.00
FY10-MENA1-Promote and support regional partnerships for strengthened regional capacities in DRR and preparedness	Middle East and North Africa	270,000.00
FY10-MENA2-Support national capacity development targeting high risk countries	Middle East and North Africa	130,000.00
FY10-MENA3-Promote urban disaster risk reduction in the context of climate change adaptation	Middle East and North Africa	150,000.00
FY10-SA1 Strengthening partnership with SAARC	South Asia	150,000.00
FY10-SA2 Integration and mainstreaming DRR- CCA in South Asia	South Asia	275,000.00
FY10-SA3 Regional knowledge sharing	South Asia	125,000.00
FY10-SEAP1-Improved national commitment to manage and reduce disaster risk	East Asia and Pacific	237,000.00
FY10-SEAP2-Strengthened capacity for risk identification, early warning, risk management and linkages to climate change	East Asia and Pacific	150,000.00
FY10-SEAP3-Strengthen regional cooperation in disaster risk management in the Pacific	East Asia and Pacific	200,000.00

### ANNEX II - GFDRR INTERVENTIONS UNDER TRACK II

#### APPROVED PROJECTS BY REGIONS AFRICA

Projects	Country (ies)	Status	Total Cost (US \$)
Capacity Needs Assessment for Disaster Risk Management in Kingdom of Swaziland	Swaziland	Active	50,000.00
Central Africa Republic Flood Recovery and Resiliency Program	Central African Republic	Active	150,000.00
Central African Republic: Post Disaster Needs Assessment after Floods caused by El Nino in 2009	Central African Republic	Completed	125,000.00
Climate modeling and risk management	Burundi, Djibouti, Eritrea, Ethiopia, Kenya, Rwanda, Somalia, Sudan, Tanzania, Uganda	Active	439,780.00
Community Co-Management for Disaster Risk Management of Marine Resources in West Africa	Cape Verde, Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Mauritania, Senegal, Sierra Leone	Active	900,000.00
Disaster Risk Management and Climate Change Adaptation in Senegal	Senegal	Active	1,400,000.00
Disaster risk management in Africa – strategic framework, good practice, communication	Burkina Faso, Comoros, Congo Democratic Republic, Eritrea, Ethiopia, Kenya, Madagascar, Malawi, Mali, Mozambique, Niger, Rwanda, Senegal, Seychelles, Swaziland	Active	695,000.00
Disaster Risk Management in the Sub-Saharan Africa Region	Burkina Faso, Comoros, Ethiopia, Ghana, Kenya, Madagascar, Malawi, Mozambique, Seychelles, Swaziland, Region	Active	300,000.00
DRM TA to Focus Countries in AFR	Burkina Faso, Ethiopia, Ghana, Madagascar, Malawi, Mali, Mozambique, Senegal, Togo	Active	631,830.00
Enhancing the Disaster Risk Reduction Capacity in Agriculture and Rural Development Department in Bank	Burkina Faso, Comoros, Congo Democratic Republic, Eritrea, Ethiopia, Kenya, Madagascar, Niger, Rwanda, Senegal, Seychelles	Active	50,000.00
Ethiopia: Weather Risk Management Framework using Weather-Based Indices	Ethiopia	Active	330,000.00
Facilitating provision of baseline vulnerability information on flood exposed communities in Ethiopi	Ethiopia	Active	350,000.00
Feasibility Study for Pan African Drought Risk Pool	Burkina Faso, Ethiopia, Ghana, Kenya, Malawi, Mali, Mozambique, Senegal, Zambia, Zimbabwe	Active	300,000.00
Ghana North – Sustainable Development, Disaster Prevention, and Water Resources Management	Ghana	Active	660,000.00
Integrated Weather Risk Management for Sustained Growth in Burkina Faso	Burkina Faso	Active	50,000.00



#### APPROVED PROJECTS BY REGIONS AFRICA (continued)

Projects	Country (ies)	Status	Total Cost (US \$)
Mainstreaming Climate and Disaster Risk Management into Economic Development in Madagascar	Madagascar	Active	1,240,620.00
Mainstreaming Disaster Reduction for Sustainable Poverty Reduction: Malawi	Malawi	Active	914,000.00
Mainstreaming Disaster Reduction for Sustainable Poverty Reduction: Mozambique	Mozambique	Active	914,000.00
Mainstreaming Disaster Reduction in Mali	Mali	Active	5,000,000.00
Mitigating impacts of adverse shocks on nutrition and health	Ethiopia	Active	350,000.00
National Disaster Preparedness and Response Project – Seychelles	Seychelles	Active	1,000,000.00
Spatial analysis of natural hazard and climate variability risks in peri-urban areas of Dakar	Senegal	Completed	93,000.00

#### APPROVED PROJECTS BY REGIONS EAST ASIA AND PACIFIC

Projects	Country (ies)	Status	Total Cost (US \$)
4th Asian Ministerial DRR Conference	Korea, Republic of	Active	233,370.00
Action Plan for Reducing Earthquake Risk in East Asia	Region	Active	32,000.00
Disaster Risk Reduction Mainstreaming: EAP	Region	Active	368,000.00
DRR technical assistance to priority countries in East Asia and the Pacific	Australia, Cambodia, Indonesia, Lao People's Democratic Republic, Marshall Islands, Papua New Guinea, Philippines, Solomon Islands, Vanuatu, Vietnam	Active	407,000.00
EAP: Study on Coastal Cities and Climate Change	Region	Completed	145,000.00
Design and Implementation of Empirical Methodologies for Developing Disaster Risk Management StrategyS	Vietnam	Active	200,000.00
Gender and Disaster Risk Management in South east Asia	Lao People's Democratic Republic, Vietnam	Active	30,000.00
GFDRR Country Programming for EAP	Cambodia, Indonesia, Lao People's Democratic Republic, Marshall Islands, Papua New Guinea, Philippines, Solomon Islands, Timor-Leste, Vanuatu, Vietnam	Active	300,375.00
GFDRR Mainstreaming Disaster Risk Reduction in Indonesia ? Phase II	Indonesia	Active	2,000,000.00

#### APPROVED PROJECTS BY REGIONS EAST ASIA AND PACIFIC (continued)

Projects	Country (ies)	Status	Total Cost (US \$)
Integrated Flood Management in the Pacific-Nadi Flood Pilot	Fiji	Active	1,399,000.00
Hazard Risk Mgmt Institutional Dev't. Advocacy and Capacity Building Program	Vietnam	Completed	914,000.00
Knowledge and Learning in East Asia and the Pacific	Region	Active	367,490.00
Lao PDR: Joint Damage, Loss and Needs Assessment for Post Kestana Recovery	Lao People's Democratic Republic	Completed	250,000.00
Lao PDR: Post-Ketsana Community Driven Disaster Recovery	Lao People's Democratic Republic	Active	440,000.00
Mainstreaming DRR in Indonesia	Indonesia	Active	1,252,000.00
Mainstreaming Flood and Drought Risk Mitigation in East Mekong Delta	Cambodia	Active	400,000.00
Nias's Mainstreaming DRR into Local Economic Development	Indonesia	Active	60,000.00
Operationalizing Strategic Plan for Diaster Management in Lao PDR	Lao People's Democratic Republic	Active	1,215,000.00
Pacific Catastrophe Risk Pool Feasibility Study	Cook Islands, Fiji, Kiribati, Marshall Islands, Micronesia, Federated States of, Nauru, Niue Islands, Palau, Papua New Guinea, Samoa, Solomon Islands, Timor-Leste, Tonga, Tuvalu, Vanuatu	Active	1,000,000.00
Strengthening of Flood and Drought Early Warning Systems for Cambodia	Cambodia	Active	100,000.00
Supporting Local Government Capacity to Manage Natural Disaster Risks in the Philippines	Philippines	Active	1,150,000.00
Supporting Sustainable Post-Earthquake Recovery in China	China	Active	1,200,000.00
Sustainable management through reduced risk from disasters and climate	Fiji, Kiribati, Marshall Islands, Papua New Guinea, Solomon Islands, Timor-Leste, Vanuatu	Active	1,900,000.00
Urban Disaster Risk Index: Application to Ningbo	China	Active	44,000.00
Vietnam Disaster Risk Management Capacity Building Program	Vietnam	Active	2,000,000.00



#### APPROVED PROJECTS BY REGIONS EASTERN EUROPE AND CENTRAL ASIA

Projects	Country (ies)	Status	Total Cost (US \$)
An Action Plan for Improving Weather and Climate Service Delivery in High-Risk, Low-Income Countries	Kyrgyz Republic, Tajikistan, Turkmenistan	Completed	200,400.00
Armenia: Designing a Sustainable Institutional Arrangement in Hazard Risk Management	Armenia	Active	150,000.00
Central Asia Disaster Risk Management and Hydromet Modernization	Kazakhstan, Kyrgyz Republic, Tajikistan, Turkmenistan, Uzbekistan	Active	200,000.00
Europe and Central Asia Regional – Disaster Risk Mitigation and Adaptation	Albania, Bosnia and Herzegovina, Croatia, Macedonia former Yugoslav Republic, Montenegro, Serbia	Active	430,000.00
Geo-Hazards and Infrastructure: A Kyrgyz Case Study	Kyrgyz Republic	Completed	50,000.00
Geo-Hazards Management in the Transport Sector	Albania, Region	Completed	50,000.00
International Conference for Disaster Risk Reduction (Istanbul Conference)	Turkey	Active	245,000.00
Moldova Disaster and Climate Risk management Capacity Building	Moldova	Active	100,000.00
South Eastern Europe Disaster Preparedness Initiative	Region	Active	235,000.00
Turkey Disaster Mitigation and Preparedness	Turkey	Active	400,000.00

#### APPROVED PROJECTS BY REGIONS LATIN AMERICA AND THE CARIBBEAN

Projects	Country (ies)	Status	Total Cost (US \$)
Barranquilla- Preparation for integrated urban flood prevention investment project	Colombia	Active	150,000.00
CAPRA Colombia	Colombia	Active	500,000.00
Caribbean Risk Atlas	Antigua and Barbuda, Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Haiti, Jamaica, Montserrat, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Suriname, Trinidad and Tobago	Active	765,000.00
Central America Mitch +10 Report and Summit	El Salvador, Guatemala, Honduras, Nicaragua	Active	270,000.00
Central America Probabilistic Risk Assessment CAPRA – Panamá	Panama	Active	500,000.00
Central America Probabilistic Risk Assessment for Nicaragua and other Central American Countries	Costa Rica, Nicaragua	Active	1,274,000.00
Costa Rica Pilot Project on Early Warning Systems for Hydrometeorological Hazards	Costa Rica	Active	264,000.00

#### APPROVED PROJECTS BY REGIONS LATIN AMERICA AND THE CARIBBEAN (continued)

Projects	Country (ies)	Status	Total Cost (US \$)
Costa Rica Public Asset Catastrophe Risk Insurance Facility Feasibility Study	Costa Rica	Active	460,000.00
Country Programming for LCR	Barbados, Costa Rica, Guatemala, Haiti	Active	700,000.00
Development of scientific information to promote the municipal planning to reduce disaster risks	Guatemala	Active	730,000.00
Disaster Risk Reduction Mainstreaming for LCR	Colombia, Costa Rica, Guatemala, Haiti, Nicaragua, Panama	Active	280,000.00
Disaster Risk Reduction Program for the Municipality of Quito-Ecuador	Ecuador	Active	953,000.00
Enhancing Jamaica?s capacity to respond to and recover from natural hazards.	Jamaica	Active	217,857.00
Global Catastrophe Mutual Bond Risk Modeling For Chile	Chile	Active	250,000.00
Global Catastrophe Mutual Bond Risk Modeling For Mexico	Mexico	Completed	350,000.00
Haiti Disaster Recovery and Vulnerability Reduction Program	Haiti	Active	1,900,000.00
Haiti Multi-hazard Assessment	Haiti	Active	990,000.00
Haiti Structural Assessment Program	Haiti	Active	1,300,000.00
Integration of public policies on risk management for threats of water origin	Uruguay	Active	100,000.00
Mainstreaming Adaptive River Defence for Huayhuasi & El Palomar Settlements:	Bolivia	Active	427,000.00
Peruvian Earthquake Disaster Assistance	Peru	Completed	500,000.00
Resettlement Tool-Kit for Risk Reduction	Region	Active	275,285.00
Risk Modeling for HRM The Experience of Bogotá	Colombia	Active	100,000.00
Support to Design a Climate Proofing Program for Public Infrastructure Program for ECS	Dominica, Grenada, St. Lucia, St. Vincent and the Grenadines	Active	150,000.00
Support to National Institutions for Haiti Earthquake Recovery	Haiti	Active	1,100,000.00
Technical Assistance Support for Strengthening of Bolivia?s Disaster Risk Reduction Framework	Bolivia	Active	360,000.00
Villcanota Valley Project	Peru	Active	230,000.00



#### APPROVED PROJECTS BY REGIONS MIDDLE EAST AND NORTH AFRICA

Projects	Country (ies)	Status	Total Cost (US \$)
Capacity Building of regional DRR organization – Arab Academy	Region	Active	91,700.00
Disaster Risk Reduction in Priority Country- Yemen	Yemen Republic	Active	85,800.00
Disaster Risk Reduction Institutional Mainstreaming Strategy and Priority Intervention Areas in Sana	Yemen Republic	Active	230,000.00
Disaster Risk reduction Mainstreaming: MENA	Region	Active	210,000.00
Integrating Disaster Risk Management in investment decisions in the MENA region	Algeria, Bahrain, Djibouti, Egypt, Arab Republic of, Iran, Islamic Republic of, Iraq, Jordan, Kuwait, Lebanon, Libya, Morocco, Oman, Qatar, Saudi Arabia, Syrian Arab Republic, Tunisia, United Arab Emirates, West Bank and Gaza, Yemen Republic	Active	580,000.00
Mainstreaming disaster risk reduction in the Gulf Cooperation Council Countries	Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, United Arab Emirates	Active	379,000.00
National Catastrophe Risk Assessment and Strategy in Morocco	Morocco	Active	350,000.00
Natural Disaster Preparedness for Coastal Cities of North Africa	Egypt, Arab Republic of, Morocco, Tunisia	Active	250,000.00
Natural Disaster Risk Assessment and Monitoring System	Djibouti	Active	1,000,000.00
Preparatory activities and methodology to develop a risk map for Djibouti-ville	Djibouti	Completed	70,000.00
Republic of Yemen: Comprehensive Damage and Loss Needs Assessment	Yemen Republic	Completed	199,000.00
Risk Management Strategy for Morocco's Agricultural Sector	Morocco	Active	205,000.00
Strengthening Yemen National System for Disaster Risk Reduction and Recovery	Yemen Republic	Active	947,650.00

#### APPROVED PROJECTS BY REGIONS SOUTH ASIA

Projects	Country (ies)	Status	Total Cost (US \$)
Bangladesh: Agricultural Risk Insurance Feasibility Study	Bangladesh	Active	264,250.00
Building capacity to effectively deliver Safety Nets in post-disaster situations in Pakistan	Pakistan	Active	250,000.00
Capacity Building Program in Risk Identification, Risk Assessment and Risk Analysis	India	Active	362,150.00
Climate change and future flood risks	Bangladesh	Active	75,000.00
2nd Asian Conference on Disaster Reduction	India	Completed	75,000.00
Development of Lessons Learned Reports from Gujarat Emergency Reconstruction Project	India	Active	300,000.00
Flood Emergency Preparedness in Pakistan	Pakistan	Active	200,000.00
Hazard Risk Management Program: Nepal	Nepal	Active	914,000.00
Hazard Risk Management Program: SAR	Region	Active	500,000.00
Implementation Support for High Priority Disaster Risk Mitigation Program in India	India	Active	450,000.00
Improving Bangladesh?s Response and Recovery Activities	Bangladesh	Active	200,000.00
Improving Sri Lanka's response and recovery in the aftermath of natural disaster	Sri Lanka	Active	200,000.00
India Crop Insurance: Developing Market-based Products	India	Active	306,875.00
Nepal: Agricultural Insurance Feasibility Study	Nepal	Active	159,400.00
Results and Lessons in the Rural Housing Reconstruction Response to the 2005 Pakistan Earthquake	Pakistan	Active	230,000.00



### ANNEX III - DISASTER RISK REDUCTION IN RESILIENT RECOVERY, ACTIVITIES UNDER TRACK III

Projects	Region	Country (ies)	Status	Total Cost (US \$)
Burkina Faso: Post Disaster Needs Assessment	Africa	Burkina Faso	Active	150,000.00
Central African Republic: Post Disaster Needs Assessment after Floods caused by El Nino in 2009	Africa	Central African Republic	Completed	125,000.00
Ghana: Joint Progress Review of Response to Flood Emergency in Northern Regions	Africa	Ghana	Completed	20,000.00
Madagascar: Assessment of Socio-economic Impact and Recovery & Reconstruction Needs	Africa	Madagascar	Completed	167,614.00
Senegal: Post Disaster Needs Assessment	Africa	Senegal	Active	150,000.00
Uganda: Capacity Building in Damage and Loss Assessment	Africa	Uganda	Completed	28,617.00
Uganda: Round-2 Capacity Building in Damage and Loss Assessment	Africa	Uganda	Completed	72,000.00
Cambodia: Post Disaster Needs Assessment	East Asia and Pacific	Cambodia	Completed	250,000.00
Indonesia: Post Disaster Damage, Losses and Preliminary Needs Assessment	East Asia and Pacific	Indonesia	Completed	250,000.00
Lao PDR: Joint Damage, Loss and Needs Assessment for Post Kestana Recovery	East Asia and Pacific	Lao People's Democratic Republic	Completed	250,000.00
Monitoring the Social Impact of Cyclone Nargis in Myanmar	East Asia and Pacific	Myanmar	Completed	99,249.00
Myanmar: Capacity Building in Damage and Loss Assessment	East Asia and Pacific	Myanmar	Completed	157,804.00
Myanmar: Disaster Risk Reduction and Recovery in the Aftermath of Cyclone Nargis	East Asia and Pacific	Myanmar	Completed	885,000.00
Philippines: Post Disaster Needs Assessment	East Asia and Pacific	Philippines	Completed	250,000.00
Samoa and Tonga: Post Disaster Needs Assessment	East Asia and Pacific	Samoa	Completed	250,000.00
Supporting Sustainable Post-Earthquake Recovery in China	East Asia and Pacific	China	Completed	425,000.00
Moldova Needs Assessment	Europe and Central Asia	Moldova	Active	100,000.00
Bangladesh: Comprehensive Assessment of Socio- economic Impact and Recovery and Reconstruction Needs	Global	Bangladesh	Completed	250,000.00
Capacity Building in Damage and Loss Assessment for Disaster Recovery Experts	Global	Global	Active	274,598.00

Projects	Region	Country (ies)	Status	Total Cost (US \$)
Post Disaster Needs Assessments and Regional Study of West African Floods	Global	Global: Burkina Faso, Indonesia, Philippines, Senegal	Active	685,426.00
Support Regional Economic Commission for Capacity Building in Post Disaster Needs Assessment	Global	Global	Active	255,000.00
Support to global dialogue on developing post-disaster needs assessment	Global	Global	Active	50,000.00
Bolivia: Comprehensive Assessment of the Socioeconomic Impact and Recovery and Reconstruction Needs	Latin America and the Caribbean	Bolivia	Completed	82,738.00
El Salvador: Post Disaster Needs Assessment	Latin America and the Caribbean	El Salvador	Completed	100,000.00
Haiti: Joint Damage, Loss and Needs Assessment After Tropical Hurricanes (Fay,Gustav,Hanna and Ike)	Latin America and the Caribbean	Haiti	Completed	190,611.00
Haiti: Post Disaster Needs Assessment Yr.2010	Latin America and the Caribbean	Haiti	Active	545,000.00
Tropical Storm Gustav Emergency Recovery	Latin America and the Caribbean	Jamaica	Active	1,763,317.00
Djibouti: Capacity Building in Damage and Loss Assessment	Middle East and North Africa	Djibouti	Completed	25,000.00
An International Conference on Climate Change, Natural Disasters and Cyclone Sidr	South Asia	Bangladesh	Completed	72,383.00
Bangladesh: Capacity Building in Damage and Loss Assessment	South Asia	Bangladesh	Completed	25,000.00
Bangladesh: Support Rehabilitation in Cyclone Sidraffected areas through UP Block Grant System	South Asia	Bangladesh	Active	2,200,000.00
Bhutan Disaster Risk and Recovery Program	South Asia	Bhutan	Active	600,000.00
India: Capacity Building in Damage and Loss Assessment	South Asia	India	Completed	21,514.00



## ANNEX IV - PIPELINE OF POVERTY REDUCTION STRATEGIES, COUNTRY ASSISTANCE STRATEGIES, AND UN DEVELOPMENT FRAMEWORKS IN NATURAL **DISASTER HOTSPOT COUNTRIES**

		at risk	. <b>s</b>	as at			<u>e</u>	cycle	Pos	CAS Sc t 2006 (I GFDRR)	Post	Post	CAS Sco t 2006 (F GFDRR) <sup>2</sup>	Post
SI no	Country	% of total area at risk	% of population in areas at risk	% of GDP in areas at risk	GDP in billions	CAS-Board Presentation Date	PRSP-Board Date	UNDAF planning cycle 2010–11	Pillar <sup>3</sup>	Sector /cross- cutting agenda	Risk	Pillar	Sector /cross- cutting agenda	Risk
1	El Salvador	88.7	95.4	96.4	16	CAS - 11/24/2009		2012		~	~			
2	Jamaica	94.9	96.3	96.3	8	CAS - 03/23/2010		2012		~	~		~	~
3	Dominican Rep	87.2	94.7	95.6	19	CAS - 09/17/2009		2012		~	~			
4	Guatemala	52.7	92.1	92.2	27	CAS Progress Report – 09/16/2010		2010		<b>V</b>	V			
5	Korea, Rep of	82.8	92.2	91.5	680									
6	Vietnam	33.2	75.7	89.4	45	CAS Progress Report – 12/22/2009	12/5/2006	2012	<b>V</b>		<b>V</b>			<b>V</b>
7	Albania	86.4	88.6	88.5	8	CAS - 07/15/2010	4/17/2008	2011						
8	Costa Rica	51.9	84.8	86.6	18	CAS - 01/25/2011		2006		~	~			
9	Colombia	21.2	84.7	86.6	97	CAS - 04/12/2010		2008		~	~			
10	Bangladesh	71.4	83.6	86.5	57	CAS - 07/08/2010		2012	~	<b>V</b>	~	~	V	V
11	Philippines	50.3	81.3	85.2	86	CAS Progress Report – 04/19/2011		2012	<b>V</b>		<b>V</b>	<b>V</b>		<b>V</b>
12	Turkey	73	80.9	83.3	302	CAS Progress Report – 01/07/2009		2006		~	<b>V</b>			
13	Trinidad and Tobago	66.7	82.4	83.1	13	CAS - 06/12/2012		2012						
14	Guam	83.6	84.5	82.6										
15	Antigua and Barbuda	53.4	80.4	80.4	1									
16	Barbados	79.9	79.9	79.9				2012						
17	San Marino	66.7	55.3	73.1										

		ıt risk	. <u>s</u>	as at			<u>e</u>	cycle	Pos	CAS Sco t 2006 (F GFDRR) <sup>1</sup>	oring Post	Post	CAS Sco t 2006 (F GFDRR) <sup>2</sup>	Post
SI no	Country	% of total area at risk	% of population in areas at risk	% of GDP in areas at risk	GDP in billions	CAS-Board Pre- sentation Date	PRSP-Board Date	UNDAF planning cycle 2010–11	Pillar³	Sector /cross- cutting agenda	Risk	Pillar	Sector /cross- cutting agenda	Risk
18	Ecuador	24.4	73.6	72.2	30	CAS - 03/22/2011		2007						
19	Mexico	15.9	68.2	71.1	676	CAS - 3/25/2010		2008						
20	Dominica	68.3	67	68.3		CAS - 09/17/2009	1/10/2008							
21	Nicaragua	21.6	68.7	67.9	4	CAS Progress Report – 01/12/2010	PRSP JSAN – 7/27/2010	2008						
22	Chile	5.2	64.9	67.7	94	CAS - 01/20/2011		2007						
23	Iran, I. R. of	31.7	69.8	66.5	163			2005						
24	Venezuela	4.9	61.2	65.9	109			2008						
25	Uzbekistan	9.3	65.6	65.5	12	CAS Progress Report – 09/09/2010	1/24/2008	2005						
26	St Kitts and Nevis	0.01	52.8	64.9										
27	Jordan	13.7	64.9	64.7	11	CAS - 03/15/2011		2008						
28	Argentina	1.8	57.4	63.2	152	CAS - 06/09/2009								
29	South Africa	8.6	56.4	62.4	213	CAS Progress Report – 04/08/2010		2012						
30	Tunisia	30.4	64.1	62.4	28	CAS - 12/17/2009		2012			~			
31	Indonesia	11.5	67.4	62.3	258	CAS Progress Report – 02/17/2011		2006	<b>V</b>	V	<b>V</b>	<b>V</b>	V	<b>V</b>
32	China	13.1	49.8	56.6	1649	CAS - 10/12/20011		2006						
33	Honduras	19	56	56.5	7	CAS Progress Report – 10/28/2010	11/18/2010	2012						
34	Haiti	44.4	47.9	56	4	CAS - 06/02/2009	6/30/2009	2012	~		~			~
35	Uruguay	3	55	55	13	CAS - 09/28/2010		2007						
36	Peru	4	41.5	53.7	68	CAS Progress Report – 11/17/2011		2012						
38	Kyrgyz Rep	8.3	51.3	53.4	2	CAS Progress Report – 11/03/2009	5/22/2007	2012		<b>V</b>	<b>V</b>			



		ıt risk	Ë	as at			<u>e</u>	cycle	Pos	CAS Sc t 2006 (I GFDRR)	oring Post	Pos	CAS Sco t 2006 (F GFDRR) <sup>2</sup>	Post
SI no	Country	% of total area at risk	% of population in areas at risk	% of GDP in areas at risk	GDP in billions	CAS-Board Presentation Date	PRSP-Board Date	UNDAF planning cycle 2010–11	Pillar³	Sector /cross- cutting agenda	Risk	Pillar	Sector /cross- cutting agenda	Risk
39	Montserrat	50.3	50.3	50.3										
40	Romania	37.4	45.8	50.3	73	CAS - 07/16/2009		2005			~			
41	India	22.1	47.7	49.6	692	CAS Progress Report – 12/07/2010		2008						
42	Algeria	3.1	49.3	48.3	85	CAS - 11/18/2010		2012						
43	Niue	48.1	48.1	48.1										
44	Cyprus	50.4	60.5	47.4	15									
45	Korea, DPR	27.6	44.5	46.3				2007						
47	Paraguay	2	45.6	42.9	7	CAS - 05/05/2009		2007						
48	Azerbaijan	15.6	42.3	42.4	9	CAS - 10/19/2010		2006						
49	Pakistan	9	40.1	41.6	96	CAS - 07/08/2010	3/26/2009	2004		~	~			
50	St vincent	41.6	41.6	41.6										
51	Georgia	4.4	40.5	41	5	CAS - 09/10/2009	10/24/2006	2006			~			
52	Macedonia,	38.8	29.6	38.7	5	CAS - 09/21/2010		2005						
	FyR	4.4	00.0	00.0		0.8.0 0.5 /0.5 /0.04.0	10/11/0007	0005						
53	Tajikistan	4.1	38.2	38.3	2		12/11/2007	2005			<b>/</b>			
54	Bolivia	1	36.6	37.7	9	CAS - 10/18/2011	4 /5 /0000	2008						
55	Mozambique	0.01	1.9	37.3	6	CAS - 05/30/2007	1/5/2009	2012	~					<b>✓</b>
56	Djibouti Cambodia	9.1	31.7	35.3	1 5	CAS – 04/30/2009  CAS Progress Re-	10/7/2008 7/17/2007	2012		<u> </u>	<b>✓</b>			
31	Garriboula	9.1	31.3	34.3	J	port – 05/20/2008	771772007	2000						
58	Morocco	3.4	30.4	33.4	50	CAS - 01/26/2010		2012		~	~			
59	Bulgaria	29.3	31.6	30	24	CAS - 10/28/2010								
60	Nepal	80.2	97.4	<30	7	ISN - 06/04/2009	12/8/2006	2008			~			~
61	Burundi	96.3	96.6	<30	1	CAS - 08/05/2008	1/29/2009	2008			~			
62	Malawi	70.8	95.3	<30	2	CAS Progress Report – 01/27/2010	9/8/2008	2012		~	<b>V</b>			
63	Niger	14.4	76.4	<30	3	CAS - 05/29/2008	4/29/2008	2004		<b>V</b>	~			
64	Ethiopia	29.9	69.3	<30	8	CAS Progress Report - 10/28/2010	8/28/2007	2012		~	<b>V</b>	~		<b>V</b>

		t risk	. <u>e</u>	is at			<b>v</b>	cycle	Pos	CAS Sco t 2006 (F GFDRR) <sup>1</sup>	oring Post	Pos	CAS Sco t 2006 (I GFDRR) <sup>2</sup>	Post
SI no	Country	% of total area at risk	% of population in areas at risk	% of GDP in areas at risk	GDP in billions	CAS-Board Pre- sentation Date	PRSP-Board Date	UNDAF planning cycle 2010–11	Pillar <sup>3</sup>	Sector /cross- cutting agenda	Risk	Pillar	Sector /cross- cutting agenda	Risk
65	Kenya	29	63.4	<30	16	CAS - 04/20/2010	1/26/2010	2004						
66	Burkina Faso	35.1	61.7	<30	5	CAS - 09/03/2009	PRSP JSAN- 03/24/2011	2006			<b>V</b>			~
67	Bhutan	31.2	60.8	<30	1	CAS - 11/02/2010	5/26/2009	2008						
68	Madagascar	15.7	56	<30	4	CAS Progress Report – 03/09/2011	11/24/2009	2012		V	V		V	
69	Comoros	59	54.2	<30		Interim Strategy – 06/01/2010	1/8/2010	2008						
70	Tanzania	27.7	53.7	<30	11	CAS Progress Report – 04/28/2011	PRSP JSAN - 11/30/2010	2007						
71	Somalia	15.4	53.3	<30		ISN - 07/26/2007		2008						
72	Senegal	10.1	52.9	<30	8	CAS - 04/28/2011	12/11/2008	2012			~			V
73	Grenada	52.1	52.1	<30			4/13/2010							
74	Lesotho	52.4	50.5	<30	1	CAS - 07/01/2010		2008						
75	Afghanistan	7.2	46	<30	6	ISN - 06/04/2009	6/3/2008	2006						
76	Cameroon	9.2	42	<30	15	CAS - 03/30/2010	10/20/2009	2008		~				
77	Fiji	20	42	<30	3			2008						
78	Togo	61.2	39.3	<30	2	ISN - 05/29/2008	PRSP JSAN – 12/09/2010	2008			<b>V</b>			
79	Zimbabwe	10.1	39	<30		ISN - 05/30/2007		2012						
80	Congo, rep of	1.9	38.8	<30	4	CAS Progress Report – 06/16/2010	PRSP JSAN- 07/01/2010	2008						
						port - 03/30/2010								
81	Benin	37.2	38.6	<30	4	CAS - 02/26/2009	PRSP JSAN – 01/18/2011	2004			<b>V</b>			
82	Belize	19.8	38.2	<30	1	Interim Strategy		2012		<b>V</b>	<b>'</b>			~
83	Sierra Leone	13	35.7	<30	1	CAS - 04/06/2010	10/20/2009	2008			<b>/</b>		~	~
84	Mali	2.9	29.6	<30	5	CAS - 02/05/2008	4/13/2010	2008			<b>V</b>			
85	Lebanon	19.2	29.2	<30	22	CAS - 08/31/2010		2008						



		t risk	<u>.</u> ≘	is at			<b>U</b>	cycle	Pos	t 2006 (I	oring Post	CCA Pos	CAS Sco t 2006 (I GFDRR)	oring Post
SI no	Country	% of total area at risk	% of population in areas at risk	% of GDP in areas at risk	GDP in billions	CAS-Board Pre- sentation Date	PRSP-Board Date	UNDAF planning cycle 2010–11	Pillar³	Sector (Post 2006 (Pos	Risk	Pillar	Sector /cross- cutting agenda	Risk
86	Uganda	27.5	26.6	<30	7	CAS - 05/25/2010	1/8/2009	2010						
87	Liberia					CAS - 04/21/2009	3/26/2010	2008			<b>V</b>			
88	Myanmar													
89	West Bank and Gaza					ISN - 04/26/2011								
90	Angola					CAS - 12/21/2010		2005						
91	Chad					ISN - 07/22/2010	12/15/2009	2012						
92	Congo, Dem rep of					CAS Progress Report – 03/30/2010	12/29/2009	2008						
93	Eritrea					ISN - 06/19/2008		2012			~			
94	Guinea Bissau					CAS - 05/03/2011	PRSP JSAN- 12/09/2010	2008			~			
95	Guinea					ISN - 10/21/2010	7/3/2007	2012						
96	Kosovo					ISN - 02/04/2010								
97	Lao, PDr					CAS - 05/19/2011	6/17/2008	2012						
98	Solomon Islands					ISN-04/29/2010								
99	Sudan					ISN-04/28/2011	6/25/2010	2008						
100	Timor Leste					ISN - 09/15/2009								
101	Tonga					CAS - 10/14/2010								
102	Gambia, The					CAS Progress Report – 07/27/2010	2/17/2009	2012						
103	Mauritania					CAS - 07/17/2007	PRSP JSAN 5/12/2011	2012						
104	Nigeria					CAS Progress Report – 08/09/2011	6/21/2007				<b>V</b>			
105	Papua New Guinea					CAS Progress Report – 04/29/2010		2008		V	V		<b>V</b>	V

		t risk	. <u>s</u>	as at			¢.	cycle	DRM CAS Scoring Post 2006 (Post GFDRR) <sup>1</sup>			CCA CAS Scoring Post 2006 (Post GFDRR) <sup>2</sup>		
SI no	Country	% of total area at risk	% of population in areas at risk	% of GDP in areas at risk	GDP in billions	CAS-Board Presentation Date	PRSP-Board Date	UNDAF planning cycle 2010–11	Pillar <sup>3</sup>	Sector /cross- cutting agenda	Risk	Pillar	Sector /cross- cutting agenda	Risk
106	Sao Tome and Principe						4/29/2008	2012						
107	Vanuatu													
108	Cape verde					CAS Progress Report-11/30/2010	7/8/2008	2012						
109	Equatorial Guinea					ISN - 06/30/2011		2008						
110	Gabon					CAS - 01/25/2011		2012						
111	Mauritius					CAS Progress Report – 11/30/2010					<b>V</b>			<b>V</b>
112	Seychelles					ISN -11/05/2009			~	~	~	~	<b>V</b>	~
113	Swaziland					CAS - 05/26/2011		2006						
114	Brunei													
115	Kiribati													
116	Marshall Islands													
117	Micronesia, Federated States of													
118	Palau													
119	Samoa							2008						
120	Tuvalu													
121	Bahamas, The													
122	Guyana					CAS - 05/26/2009	1/28/2010	2012	~	~	<b>V</b>	~	<b>V</b>	~
123	St. Lucia													
124	St. vincent and the Grenadines													
125	Suriname							2012						
126	Bahrain													
127	Estonia													
128	Maldives					CAS - 06/07/2010	1/8/2008	2008	<b>/</b>	~	<b>/</b>	<b>'</b>	~	<b>~</b>



		ıt risk	. <u>s</u>	as at			Ð	cycle	DRM CAS Scoring Post 2006 (Post GFDRR) <sup>1</sup>		Post	Pos	CA CAS Scoring Post 2006 (Post GFDRR) <sup>2</sup>	
SI no	Country	% of total area at risk	% of population in areas at risk	% of GDP in areas risk	GDP in billions	CAS-Board Presentation Date	PRSP-Board Date	UNDAF planning cycle 2010–11	Pillar <sup>3</sup>	Sector /cross- cutting agenda	Risk	Pillar	Sector /cross- cutting agenda	Risk
129	Malta													
130	Qatar													
131	Cook Islands													
132	Nauru													
133	Rwanda					CAS Progress Report – 12/17/2010	2/28/2008			~	<b>V</b>			
134	Panama					CAS - 09/21/2010								
135	Yemen					CAS - 05/28/2009		2012	~		~		V	V
136	Armenia					CAS - 06/11/2009	12/2/2008							
137	Sri Lanka					CAS - 06/05/2008	6/5/2008			V	~			
138	Central African republic					CAS - 09/03/2009	6/30/2009	2012			<b>V</b>			
139	Cote d' Ivoire					CAS - 03/18/2010	PRSP JSAN 2/15/2011	2008						

<sup>1</sup> DRM CAS scoring column indicates the level of Disaster Risk Management (DRM) integration in World Bank Country Assistance Strategies (CAS)

<sup>&</sup>lt;sup>2</sup> CCA CAS scoring column indicates the level of Climate Change Adaptation integration (CCA) in World Bank Country Assistance Strategies (CAS)

<sup>&</sup>lt;sup>3</sup> Pillar implies that DRM and/or CCA is recognized as a strategic priority; Sector/cross-cutting implies that DRM and/or CCA is recognized in the sectoral/ cross-cutting agenda; and Ri sk implies that DRM and/or CCA is recognized as a challenge and major risk to development.

### ANNEX V - PDNA CASE STUDY: GFDRR SUPPORTED RECOVERY ASSESSMENTS LEADING TO STRENGTHENED RECOVERY PREPAREDNESS IN POST-DISASTER COUNTRIES

#### TRACK III INTERMEDIATE OUTCOME INDICATORS

#### Sample Indicators:

- (A) % Post Disaster countries where GFDRR supported recovery led to strengthened recovery preparedness: Longer term country outcome, which will require country assessment
- (B) % Post Disaster countries where GFDRR supported recovery assessments led to programs/projects for strengthened recovery preparedness: GFDRR level intermediate outcome

	GFDRF	R Contribution/Por	tfolio/Inputs	Res	ults					
			Means adopted for converting	Baseline	Current					
Beneficiary	Inputs	Outputs	outputs into outcomes	Situation (2008 PDNAs)	Situation (2009 PDNAs)	2010 2011 c) PDNAs PDNAs r th		2012 PDNAs		
GFDRR Supported Post Disaster Countries	GFDRR Activities	Longer term and Sustainable Strengthening of Recovery Preparedness Incoroporated in PDNA Recovery Framework	GFDRR's continued engagement on preparedness beyond PDNA; Govt/donor projects and programs for preparedness	Post Disaster Countries with Completed and ongoing programs on strengthening preparedness	Post Disaster Countries with Completed and ongoing programs on strengthening preparedness					
Bangladesh 2008		Υ	Υ	Υ	Υ					
Bolivia 2008		Υ	N	N	N					
Haiti 2008		Υ	Υ	Υ	Υ					
Yemen 2008		Υ	Υ	Υ	Υ					
Madagascar 2008		Υ	Υ	Υ	Υ					
Myanmar 2008		Υ	N	N	N					
Namibia 2009		Υ	N		N					
Bhutan 2009		Υ	Υ		Υ					
El Salvador 2009		Υ	Υ		Υ					
Central African Republic 2009		Υ	Υ		Υ					
Phillipines 2009		Υ	Υ		Υ					
Lao PDR 2009		Υ	Υ		Υ					



#### TRACK III INTERMEDIATE OUTCOME INDICATORS (CONT.)

	GFDR	R Contribution/Po	rtfolio/Inputs	Res	sults						
			Means adopted			Targe	ts for Imp	act-B			
Beneficiary	Inputs	for conv outputs		Baseline Situation (2008 PDNAs)	Current Situation (2009 PDNAs)	2010 PDNAs		2012 PDNAs			
GFDRR Supported Post Disaster Countries	GFDRR Activities	Longer term and Sustainable Strengthening of Recovery Preparedness Incoroporated in PDNA Recovery Framework	GFDRR's continued engagement on preparedness beyond PDNA; Govt/donor projects and programs for preparedness	Post Disaster Countries with Completed and ongoing programs on strengthening preparedness	Post Disaster Countries with Completed and ongoing programs on strengthening preparedness						
Senegal 2009		Υ	Υ		Υ						
Indonesia 2010		Υ	Υ		Υ						
Cambodia 2010		Υ	Υ		Υ						
Burkina Faso 2009		Υ	Υ		Υ						
Samoa 2010		Υ	Υ								
Haiti 2010		Υ	Υ								
Malawi 2010		Υ	Υ								
				4	9						
			Yearly	67%	90%	100%	100%	100%			

## **ABBREVIATIONS**

FY:

GFDRR:

GLOF:

Fiscal Year

Global Facility for Disaster

Glacial Lake Outburst Floods

Reduction and Recovery

ASEAN: Association of South-East Asian GPS: GFDRR Partnership Strategy **Nations** HFA: Hyogo Framework for Action AU: African Union IFRC: International Federation of Red Cross and Red Crescent Societies CADRI: Capacity for Disaster Reduction Initiative IGAD: Intergovernmental Authority on CAPRA: Central America Probabilistic Risk Development (Greater Horn of Assessment Africa) CAS: Country Assistance Strategy IPCC: Intergovernmental Panel on Climate Change CCA: Climate Change Adaptation Latin America and Caribbean LAC: CDERA: Caribbean Disaster Emergency MENA: Middle East and North Africa Agency CEDMA: Caribbean Disaster Emergency PDNA: Post Disaster Need Assessment Management Agency PRSP: Poverty Reduction Strategy Paper CEPREDENAC: Centro de Coordinación para QRT: Quick Response Team la Prevención de los Desastres Naturales en América Central SAARC: South Asian Association for Regional Cooperation DaLA: Damage and Loss Assessment SADC: Southern African Development DPPI-SEE: Disaster Prevention and Community Preparedness Initiative - South Eastern Europe SEE: South Eastern Europe DRM: Disaster Risk Management SOPAC: South Pacific Applied Geosciences Commission DRR: Disaster Risk Reduction **UNDAF:** United Nations Development EAP: East Asia and Pacific Assistance Framework ECCAS: **Economic Community of Central** UNISDR: United Nations Secretariat of the African States International Strategy for Disaster **ECOWAS: Economic Community of West** Reduction African States WB: The World Bank

WBG:

WMO:

World Bank Group

World Meteorological Organization

## GFDRR AT-A-GLANCE

The Global Facility for Disaster Reduction and Recovery (GFDRR) was established in September 2006 as a partnership of the ISDR system. It is a commitment by the international community (World Bank, United Nations, and donors) to seek ways to increase cooperation and coordination to support disaster risk reduction and climate adaptation in developing countries to reduce their vulnerability to natural hazards and adapt to climate change, by achieving disaster risk reduction goals as envisioned in the *Hyogo Framework for Action 2005–2015: Building the Resilience of Nations and Communities.* 

GFDRR Partnership Strategy (2009–2012) is guiding the implementation of current activities, which emphasize climate adaptation and sustainable development. These activities represent a deepened engagement in priority countries for increased impact, rapid response to disaster-affected countries for resilient recovery, and innovative approaches to financing disaster risk reduction and climate change adaptation.

The World Bank manages GFDRR on behalf of participating donor partners and other partnering stakeholders. The GFDRR provides technical and financial assistance to highrisk low- and middle-income countries to mainstream disaster reduction in national development strategies and plans to achieve the Millennium Development Goals (MDGs).

#### **MISSION:**

- To mainstream disaster reduction and climate change adaptation in country development strategies to reduce natural hazards, at the national and local levels.
- To foster and strengthen global and regional cooperation among various stakeholders under the ISDR system to leverage country systems and programs in disaster reduction and recovery.

#### VISION:

 To increase human security and prosperity through comprehensive national disaster risk reduction programs.

Mainstreaming the disaster risk management agenda in country strategies for sustainable poverty reduction such as Country Assistance Strategies and Poverty Reduction Strategies is central to the mandate of the GFDRR Partnership and its

work program, particularly in low income high-risk countries. GFDRR's interventions are channeled through three complementary tracks to achieve its objectives at global, regional and country levels. It addresses both *ex ante* and *ex post* disasters.

## TRACK-I: GLOBAL AND REGIONAL PARTNERSHIPS

This track supports enhanced global and regional advocacy and knowledge management for mainstreaming disaster risk reduction by facilitating the exchange of good practices, identifying and managing cross-boundary risks, and developing common tools and methodologies for risk reduction.

# TRACK-II: MAINSTREAMING DISASTER RISK REDUCTION (DRR) IN DEVELOPMENT

Track II supports the mainstreaming of disaster risk mitigation in national development plans that would catalyze investments in hazard prevention, mitigation, and preparedness (e.g., Hazard Risk Mitigation Program, Catastrophic Risk Financing Program, Early Warning and Response Capacity Building, etc.). Track II also includes special initiatives, namely South-South Cooperation and the Economics of Disaster Risk Reduction initiative.

# TRACK-III: STANDBY RECOVERY FINANCING FACILITY (SRFF) FOR ACCELERATED DISASTER RECOVERY

This track provides technical assistance and supplemental financing for a coordinated and accelerated recovery after a disaster occurs, primarily in low-income countries.

# SOUTH-SOUTH COOPERATION PROGRAM FOR DISASTER RISK REDUCTION

This special initiative of GFDRR fosters increased cooperation among Southern governments and research institutions through knowledge and practice sharing.

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

1818H Street, NW

Washington, DC 20433, USA
Telephone: 202-458-0268
Facsimile: 202-522-3227
Web site: www.gfdrr.org