



DEVELOPMENT COMMITTEE  
(Joint Ministerial Committee  
of the  
Boards of Governors of the Bank and the Fund  
On the  
Transfer of Real Resources to Developing Countries)



**DC2014-0003**  
March 25, 2014

**PROGRESS REPORT ON MAINSTREAMING DISASTER RISK  
MANAGEMENT IN WORLD BANK GROUP OPERATIONS**

Attached is a document entitled "Progress Report on Mainstreaming Disaster Risk Management in World Bank Group Operations," prepared by the staff of the World Bank Group as background for the April 12, 2014 Development Committee meeting.

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# Progress Report on Mainstreaming Disaster Risk Management in World Bank Group Operations

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## A. Context

1. ***The 2012 Sendai Report***<sup>1</sup> set the stage for increased awareness of the need to integrate disaster and climate risk management into development priorities. The growing recognition by development partners that disasters threaten the global goal of eradicating extreme poverty by 2030 helped place disaster risk management (DRM) firmly in the global development agenda. As part of the post-2015 development goals, a United Nations Secretary General’s High Level Panel recently recommended that building disaster resilience be made a target under the new headline goal on ending poverty. The 2013 United Nations Framework Convention on Climate Change meeting in Warsaw also established an international mechanism to address *loss and damage* from climate change effects. Elsewhere, the World Economic Forum has been promoting a dialogue on public and private sector solutions to manage disaster risks. Looking ahead the World Conference on Disaster Reduction will be held in Sendai, Japan, in March 2015 to agree on the successor to the Hyogo Framework for Action. These joint efforts call for a concerted international effort to systematically address disaster and climate risks, to which the World Bank Group (WBG) is actively responding.

2. **The new focus on disaster and climate risk management is now at the core of the new WBG strategy approved at the 2013 Annual Meetings.** The new WBG strategy recognizes the risks from adverse natural events as a challenge to its dual goals of ending extreme poverty and promoting shared prosperity. A new Vice-Presidency was established on January 1, 2014, to address climate and disaster risk, and mainstream it in WBG operations. The next cycle of the International Development Association (IDA-17) also identifies climate change—including DRM—as a special theme. Under IDA-17, the WBG commits to incorporate climate and disaster risk considerations in all new country partnership frameworks; to screen all IDA operations for climate and disaster risks; and to introduce a *co-benefits* tracking system<sup>2</sup> for DRM funding. A new *resilience indicator* will also be developed to track country-level progress. These commitments, combined with its strong technical and operational expertise, confirm the WBG’s leading international role in promoting disaster and climate resilience.

3. **This report summarizes progress in mainstreaming DRM into WBG operations.** At the 2013 World Bank/International Monetary Fund (IMF) Spring Meetings, the Development Committee requested “a progress report on the implementation of the recommendations of *The Sendai Report*.” The main section of this report provides an overview of progress to date and reflections on the way forward. A summary table (Annex A) and a more detailed analysis (Annex B) reporting on each of *The Sendai Report’s* 11 priorities is also included. In order to illustrate more significant trends, the analysis is based on activities from fiscal year 2010 (FY10) to FY13.

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<sup>1</sup> The Sendai Report, “*Managing Disaster Risks for a Resilient Future*,” released at the 2012 Annual Meetings, emphasized the need to integrate disaster risk management into all aspects of development.

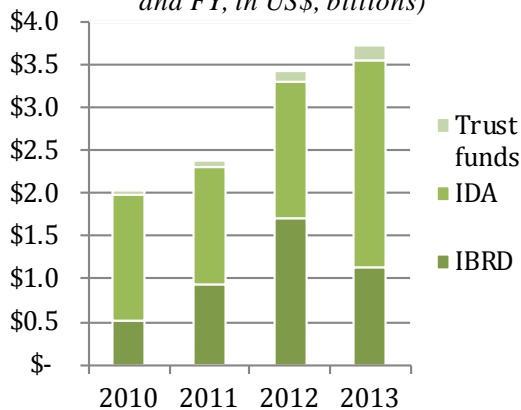
<sup>2</sup> See footnote 12 on how WBG tracks climate change co-benefits and how this was adapted to DRM and Priority 4 of Annex, fourth paragraph, for the exact language of the IDA-17 commitments.

## B. Progress in Mainstreaming Disaster Risk Management into WBG Operations

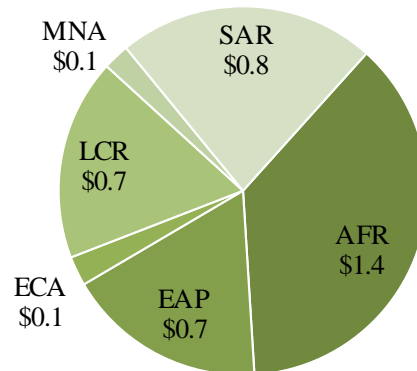
4. **The WBG continues to respond to growing client demand for assistance with disaster risk management.**<sup>3</sup> This is reflected in the rising financial commitments to DRM specific operations (see Figure 1); the increasing integration of DRM into policy and investment operations and country partnership strategies; and the growing utilization of specialized financial instruments and analytical services. Similar progress is taking place at the International Finance Corporation (IFC) and the Multilateral Investment Guarantee Agency (MIGA). In FY13, 85 percent of the WBG’s active country assistance or partnership strategies incorporated disaster and climate risk analysis, up from 70 percent in FY11, and 44 percent in the mid-2000s.

5. **Of particular significance is the growth of the World Bank’s disaster risk management portfolio, which has grown from US\$2.0 billion in FY10, to US\$3.8 billion in FY13.**<sup>4</sup> DRM-related activities accounted for 11.1 percent of the total combined World Bank approved commitments in FY13, an increase from the 9.4 percent reported by the 2006 Independent Evaluation Group report.<sup>5</sup> Of all regions, Africa registered the most consistent growth in DRM operations, with East Asia and Pacific, Latin America and Caribbean, and South Asia following closely behind (see Figure 2). Growth was particularly relevant in IDA countries with 64 percent of the DRM portfolio funded through IDA operations (see Figure 1). This growing trend is sustained into the FY14 lending pipeline, reflecting robust demand from client countries for operational support in building long-term disaster and climate resilience.

**Figure 1. DRM Financing Trends**  
(DRM approved commitments by financing source and FY, in US\$, billions)



**Figure 2. Total Approved Financing by Region (FY13)**  
(US\$, billions)



Note: EAP – East Asia and Pacific; AFR – Sub-Saharan Africa; SAR – South Asia; LCR – Latin America and Caribbean; ECA – Europe and Central Asia; MNA – Middle East and North Africa Regions of the World Bank

<sup>3</sup> In the context of this report, disaster risk refers to the threat from natural hazards including cyclones, droughts, earthquakes, floods, landslides, tsunamis, and volcanoes. Risks from technological disasters, plagues, or pandemics are not covered, although they are likely to become important, as shown by the FY08-10 avian and pandemic influenza outbreaks.

<sup>4</sup> All dollar amounts are U.S. dollars unless otherwise indicated.

<sup>5</sup> “Hazards of Nature, Risks to Development”

6. **Another noticeable development since 2010 is the proportion of operations supporting ex-ante disaster risk management activities (as opposed to post-disaster reconstruction).** In FY10-13, approximately 83 percent of DRM operations supported disaster prevention, an increase from 67 percent in FY06-11. *This increased emphasis on ex-ante disaster risk management was a key recommendation of The Sendai Report.* At the same time, the WBG continues to play a key role in supporting clients in disaster recovery and reconstruction. In the FY10-13 period the World Bank supported 41 damage assessments and financed 26 reconstruction activities. As an example, following Typhoon Haiyan, the WBG assisted the Philippines with a rapid damage assessment based on satellite imagery and geospatial information, and is helping the government with a long-term financing and reconstruction strategy.

7. **The wide range of financial instruments offered by the WBG has proven to be effective in addressing the diverse demand from client countries.** Specific Investment Loans comprised more than half of the DRM approved operations in FY10-13, while Development Policy Loans, in particular those with a Catastrophe Deferred Drawdown Option, now make up 17 percent of the portfolio. Adaptable Program Loans, Emergency Recovery, and Technical Assistance Loans comprise the remainder of the portfolio. A Program for Results operation, the Morocco Integrated Risk Management program, is currently under preparation. While countries have yet to use IDA's Immediate Response Mechanism (IRM), its introduction in 2011 has helped broaden the use of contingent components that can be triggered to provide rapid support in the aftermath of a disaster. Both the International Finance Corporation (IFC) and the Multilateral Investment Guarantee Agency have also been actively supporting investments that incorporate climate resilience, ranging from the promotion of drought resilient seeds, to the realignment of the Panama metro line to avoid flood risks. Finally, the WBG has been actively supporting client countries in transacting risk transfer solutions. The World Bank Treasury facilitated the issuance of a catastrophe bond by the government of Mexico in 2012, and a weather derivative to Uruguay in 2013, providing up to \$450 million in coverage to an energy company against the risks of drought and high oil prices.

8. **The disaster risk financing and insurance portfolio also continues to grow, in response to client demand.** The Risk Financing and Insurance Program, supported by the World Bank and the Global Facility for Disaster Reduction and Recovery (GFDRR), is currently advising more than 60 countries on options for financial protection, and helping countries strengthen their public financial management of natural disasters. In Colombia, for example, standard insurance policies have been designed for public buildings and infrastructure concessions. Indonesia, Peru, and the Philippines are designing sovereign catastrophe risk transfer solutions to increase their budget flexibility after disasters, also with WBG assistance. Regional risk pooling approaches have also proved to be highly effective, particularly amongst small island states. Building on the success of the Caribbean Catastrophe Risk Insurance Facility, Pacific Island Countries launched a regional catastrophe risk insurance pilot program in 2013, which secured \$67 million coverage from international reinsurance markets. Similar programs are being contemplated in Central America and for Indian Ocean island states. The WBG is further supporting initiatives to develop domestic catastrophe risk insurance markets—such as

the Southeastern Europe Catastrophe Risk Insurance Facility—and scale up private disaster and agricultural risk insurance in countries such as Bangladesh, Haiti, and Kenya.

9. **Advisory and analytical activities, primarily funded by trust funds, continue to play a key role in supporting the DRM portfolio.** A large part of these advisory and analytical activities are funded by GFDRR. This support has proven critical in informing the design and supporting the implementation of larger operations. For example, over the last three years, support has been provided to more than 43 client countries to improve information on hazard exposure. In the Pacific region alone, one project helped to geo-reference more than two million buildings, and produced a comprehensive inventory of public assets exposed to adverse natural events. This information was subsequently used to design risk mitigation programs, including a financial protection scheme providing Pacific states with liquidity in case of cyclone and earthquakes. In Manila, a GFDRR-supported flood and earthquake risk assessment led to the Philippines government's endorsement of a flood risk reduction plan worth upwards of \$9 billion.

10. **In February 2014, the Bank established a new program to scale up support to developing countries for mainstreaming DRM with financial support of \$100 million provided by Japan.** A unique feature of the program is the establishment of the Tokyo DRM Hub. The Hub will serve as a global center of DRM assistance to effect the expected results of increased mainstreaming of DRM both in World Bank strategies and operations and in national development planning and investment programs. It will support technical assistance, pilot projects, knowledge and capacity building activities and thematic initiatives focused on risk identification, risk reduction, preparedness, financial protection and knowledge mobilization and exchange. The Hub will connect centers of excellence in DRM in Japan and the region with World Bank regional teams and clients.

11. **Significant progress has been made to align disaster risk management and climate adaptation activities.** *This alignment was a key recommendation of The Sendai Report, which recognized that the continued financing of similar activities by different channels of development assistance—DRM and climate change adaptation—resulted in the fragmentation of capacity.* In FY13, 80 percent of approved World Bank operations with climate adaptation co-benefits also had DRM benefits. The two disciplines had a combined portfolio of \$4.4 billion, with IDA providing about two-thirds of the financing. The alignment also extends to WBG staff, many of whom now work in both DRM and climate adaptation operations, demonstrating the permeability of expertise and resources across the WBG. An example of this collaboration was the recent *Building Resilience: Integrating Climate and Disaster Risk into Development* report, which is contributing to both internal and global discussions on the synergies between the two agendas.

12. **Specialized teams, a stronger strategic focus, and growing external partnerships are reinforcing the WBG's disaster risk management capacity.** From FY11 to FY13, the number of WBG disaster risk management staff grew by 20 percent, from 93 to 112 staff members, many located in regional Vice Presidencies or country

offices. To better respond to client demand and support portfolio implementation, the DRM community of practice also established several specialized teams<sup>6</sup> and, in FY13, adopted a stronger program results framework. Externally, the WBG has established partnerships with other multilateral organizations, regional agencies, and civil society in areas of common interest. An example is the Understanding Risk community of experts, which currently connects more than 2,800 members from 125 countries. The WBG is also partnering with the United Nations and other donors to improve the tracking of DRM funding through the OECD-DAC's<sup>7</sup> Creditor Reporting System.

### C. The Way Forward

13. **The WBG has the opportunity to address several key challenges in the years ahead, thus further consolidating its position as a partner of choice in disaster risk management.** These opportunities include: (a) helping to frame the post-2015 development agenda; (b) working with other partners to strengthen and harmonize the measurement of results; (c) strengthening evidence based learning; (d) further assisting client countries in integrating disaster and climate risk into development planning; (e) continuing to work with the private sector to deliver innovative financial protection solutions; and (f) scaling up core expertise in the new WBG Global Practices.

14. **In 2015, three international processes—the new climate change agreement; the successor to the Millennium Development Goals; and the Post-2015 Framework for Disaster Risk Reduction—will bring disaster and climate resilience to the forefront of the development agenda.** Coordinated action from the WBG and other development actors will be required to ensure that these commitments are complementary, and the measurement of results from disaster and climate risk management activities are effectively harmonized. The WBG will continue to work with relevant United Nations agencies and other international development partners to ensure strong donor coordination, aid effectiveness and systematic and coherent disaster and climate risk management and resilient recovery approaches.

15. **The new Country Partnership Frameworks, IDA-17, and the robust demand from client countries will provide opportunities to further integrate disaster and climate risk management into WBG operations.** The Country Partnership Frameworks will replace Country Assistance and Partnership Strategies, and will be supported by a new Systematic Country Diagnostic, which will help to ensure systematic country diagnostic across the World Bank. The final guidelines for both are expected to reference the IDA-17 commitments and provide links to guidance, tools and experts to ensure systematic disaster and climate risk analysis, as well as the integration of such considerations in the content of the programs and the results framework. This new

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<sup>6</sup> The teams currently include (a) disaster risk financing and insurance (DRFI) instruments; (b) risk information (LABS); (c) hydro-meteorological services; (d) adaptation to climate change; (e) social development and DRM; (f) resilient reconstruction; and (g) safe schools. In addition to these, DRM teams embedded in all WBG regions play active roles in supporting client operations, and integrating DRM into other sectors' interventions. Specialized teams also exist in the Agriculture Department (focusing on agriculture risk management), IFC, the World Bank Institute, and the Climate Policy and Financing Group.

<sup>7</sup> Organization for Economic Co-operation Development – Development Assistance Committee

process, combined with the development of a new resilience indicator by December 2015, will help to inform improved reporting on the impact of DRM mainstreaming, with associated targets and indicators in future progress reports. Further evidence-based learning is also planned in the form of Economic and Sector Work on the links between climate change, disasters, and poverty. The WBG is also likely to continue to promote transformational disaster risk financing products through private markets, a role for which the institution is particularly well positioned.

16. **The WBG reorganization around 14 global practices and five cross-cutting solutions areas, including a Climate Change Group Vice Presidency, has the potential to provide a strong technical basis to support the DRM agenda.** DRM operational staff will be anchored within the Urban, Rural and Social Global Practice, thereby maintaining a strong pool of DRM technical expertise to support operations. At the same time, GFDRR is now part of Climate Change Group Vice Presidency. This new institutional arrangement recognizes the cross-cutting nature of DRM, and should provide the right coordination mechanism and incentives to further mainstream DRM across sectors. The Tokyo DRM Hub, serving as a global center of DRM assistance, should also play an important role in this context.



## Annex A – Summary of Progress by Sendai Report Priorities

<i>Sendai Report Priorities</i>	<i>Summary of Progress</i>
<p>Priority 1. Enhance the understanding of disaster risk as a first step to informing effective policy and investment decisions.</p>	<p><b><i>Disaster risk information increasingly used to inform policy and investments decisions.</i></b></p> <ul style="list-style-type: none"> <li>- Number of WBG Country Assistance/Partnership Strategies incorporating DRM increased from 70% in FY11 to 85% in FY13.</li> <li>- Support to over 43 countries in understanding disaster risks.</li> <li>- Generated 1,300 open-source geospatial datasets to inform disaster risk assessments.</li> <li>- DRM indicator incorporated into World Bank Corporate Scorecard.</li> <li>- IFC and MIGA Performance Standards on Environmental and Social Sustainability incorporate climate risks</li> </ul>
<p>Priority 2. Scale up technical assistance and financial support for building resilience to disasters and climate change in vulnerable countries.</p>	<p><b><i>The World Bank’s DRM portfolio in disaster risk management is robust and growing.</i></b></p> <ul style="list-style-type: none"> <li>- DRM-related commitments grew from \$2.4 billion in FY11 to \$3.8 billion in FY13 (11% of total for IBRD/IDA).</li> <li>- All regional DRM portfolios have been growing, with Africa showing the most robust growth over the period.</li> <li>- About 83% of DRM commitments in FY10-13 were for disaster prevention, an increase from 67% cited in Sendai report (FY06-11).</li> <li>- A new Tokyo DRM Hub has been established under the DRM program supported by Japan. It will match relevant expertise with World Bank DRM operations around the world.</li> </ul>
<p>Priority 3. Increase attention to disaster resilience at the local level.</p>	<p><b><i>WBG continues to build capacity in cities and communities for enhanced resilience at the local level.</i></b></p> <ul style="list-style-type: none"> <li>- WBG support to help cities build disaster and climate resilience has been growing, with a portfolio nearly \$14 billion since FY03.</li> <li>- Between FY01 and FY11, some \$12 billion of the Community Driven Development portfolio supported disaster and climate resilience.</li> </ul>
<p>Priority 4. Further align the disaster risk management and climate adaptation agendas.</p>	<p><b><i>There is a high level of synergy between the World Bank’s DRM and climate change adaptation portfolios.</i></b></p> <ul style="list-style-type: none"> <li>- In FY13, 80% of the operations that supported climate change adaptation also had DRM benefits.</li> <li>- WBG reform, including the creation of the Climate Change Group Vice-Presidency, has the potential to further align DRM and climate change adaptation</li> <li>- IDA-17 commitments call for systematic integration of climate and disaster risks into Country Partnership Frameworks and operations.<sup>8</sup></li> </ul>
<p>Priority 5. Increase support for the design and implementation of financial protection strategies.</p>	<p><b><i>Client countries are increasingly requesting WBG assistance in improving financial protection.</i></b></p> <ul style="list-style-type: none"> <li>- WBG is advising more than 40 countries in financial protection strategies for disaster risk.</li> <li>- Support has recently been provided to Colombia, Indonesia, Peru, and the Philippines to develop catastrophe risk transfer solutions.</li> </ul>

<sup>8</sup> See Priority 4 of Annex, fourth paragraph, for the exact language of the IDA-17 commitment.

<p>Priority 6. Promote the use of contingent components within its projects, including the Immediate Response Mechanism.</p>	<p><b><i>The WBG offers a growing number of contingent financing instruments, although adoption has been variable.</i></b></p> <ul style="list-style-type: none"> <li>- Growing demand for CAT-DDOs and Contingent Emergency Response Components.</li> <li>- While countries have yet to use the IRM, its introduction in 2011 has helped broaden the use of contingent components. A review of the instrument is planned for FY15.</li> </ul>
<p>Priority 7. Expand the use of market-based solutions and broaden the scope of intermediation services.</p>	<p><b><i>The WBG continues to expand the use of market-based solutions and broaden the scope of its intermediation services.</i></b></p> <ul style="list-style-type: none"> <li>- Catastrophe bond issued by Mexico in 2012, facilitated by WBG.</li> <li>- Caribbean Catastrophe Risk Insurance Facility now expanding to Central American countries. New Pacific Catastrophe Risk Insurance Pilot, launched in 2013, secured \$67 million from insurance markets.</li> <li>- WBG intermediation services were expanded toward the end of 2012 to cover derivatives for geological events (such as earthquakes and tsunamis) and to provide services to subnational, regional, and international organizations</li> </ul>
<p>Priority 8. Enhance support for accelerated recovery planning.</p>	<p><b><i>The WBG has continued to respond to all major natural disasters and clients are increasingly requesting rapid post-disaster assessments.</i></b></p> <ul style="list-style-type: none"> <li>- In FY13, WBG assisted 11 countries with post-disaster assessments.</li> <li>- 7 Emergency Recovery Loans were mobilized</li> <li>- About half of IDA-16 Crisis Response Window (\$686 million) was committed for post-disaster recovery.</li> <li>- Disaster Recovery Framework is being developed with UNDP &amp; EU.</li> </ul>
<p>Priority 9. Promote further convergence of donor efforts to support disaster resilience.</p>	<p><b><i>The WBG is promoting donor harmonization on reporting and tools for mainstreaming; however challenges remain.</i></b></p> <ul style="list-style-type: none"> <li>- Ongoing development of a DRM policy marker within the OECD-DAC Creditor Reporting System.</li> <li>- GFDRR has helped channel donor financing to DRM, primarily to technical assistance, which in turn has played key roles in leveraging Bank financing for DRM</li> </ul>
<p>Priority 10. Extend knowledge and partnerships to support disaster risk management policies and programs.</p>	<p><b><i>The World Bank is promoting partnerships and knowledge exchange in support of disaster and climate resilience.</i></b></p> <ul style="list-style-type: none"> <li>- Ongoing DRM partnerships with more than 300 national, regional, and international agencies.</li> <li>- Developed a DRM e-learning program for municipal governments.</li> <li>- Civil society engagement strengthened in 32 countries.</li> <li>- Open-source geospatial platforms, to enable free access of disaster risk data, deployed in over 35 countries.</li> </ul>
<p>Priority 11. Strengthen internal WBG capacity to better respond to client demand.</p>	<p><b><i>The disaster risk management community in the WBG is growing.</i></b></p> <ul style="list-style-type: none"> <li>- As of December 2013, 112 staff belonged to the DRM community of practice, a growth of 20% compared to FY11.</li> <li>- The new WBG architecture has the potential to help streamline funding sources, staff deployment, and more efficient client support. However, further coordination and incentives will be needed to enhance expert collaboration across global practices.</li> </ul>

## Annex B – Progress Description by Sendai Report Priorities

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**Priority 1.** *Enhance the understanding of disaster risk as a first step to informing effective policy and investment decisions*

**WBG activities related to disaster risk assessment are currently being implemented in more than 43 countries.** In most cases, this is happening through dedicated trust funds that provide technical assistance or analytical and advisory services, helping client countries to better understand their exposure to adverse natural events, and guide key policies and investments. This effort has helped generate more than 1,300 geospatial datasets through open-source data sharing platforms.

**Disaster risk assessments are increasingly informing country strategies and planning.** In FY13, 85 percent of the 98 active country assistance or country partnership strategies incorporated disaster and climate risk analysis—a steady increase from 80 percent in FY12, 70 percent in FY11 and less than 44 percent in FY05.<sup>9</sup> Over half of the country strategies in FY13 included specific activities on climate and disaster resilience.

**Disaster risk assessments are also increasingly used to guide policy and investment decisions.** As an example, the World Bank recently assisted the Pacific Islands region, through the Applied Geoscience and Technology Division of the Secretary of the Pacific Community (SPC/SOPAC), to establish a Pacific risk information open platform that helped geo-reference more than two million buildings. This information is now being used to guide investment operations in the Solomon Islands and Vanuatu. Moreover, the World Bank is increasingly promoting the use of trained volunteers to map critical assets in other vulnerable countries, such as the recent mapping of 350 health facilities and 2,256 schools in Nepal, and 450 kilometers of roads and 30,000 buildings in Sri Lanka. In parallel, the Agriculture Risk Management Team has continued to assist client countries in identifying the potential effects of weather- and price-related shocks on the agriculture sector.

**The World Bank is developing tools to more systematically screen IDA operations for climate and disaster risks.** These include national-level tools, to guide country partnership strategies in identifying key climate and disaster vulnerabilities and the corresponding adaptive capacity; and sector-level tools to help World Bank task teams identify the new IDA operations that may be threatened by climate and disaster risk—such as hydropower, food security or transport. The screening tools, which are scheduled for roll out in FY15, will be online, and draw upon information from the WBG’s Climate Change Knowledge Portal, as well as the Open Data for Resilience Initiative.

**A tier 2 disaster risk reduction performance indicator was incorporated in the World Bank’s Corporate Scorecard in FY13.<sup>10</sup>** This makes the World Bank

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<sup>9</sup> Data for 2005 is from IEG’s 2006 evaluation “Hazards of Nature, Risks to Development”.

<sup>10</sup> The Scorecard uses an integrated results and performance framework, which is organized in a four-tier structure that groups indicators along the results chain. Two of the tiers track elements of development results (Tiers I and II), and the other two capture elements of performance (Tiers III and IV).

accountable for reporting its contribution to making disaster risk reduction a national priority in its client countries. The three-year rolling baseline (FY09-12) for this indicator shows that the World Bank contributed to making DRM a national or local priority in 21 countries.<sup>11</sup> As of FY15, the Corporate Scorecard will apply to the entire WBG, and thus may encourage all WBG agencies (including IFC and MIGA) to report on the progress of disaster risk reduction at the country level. Further work is ongoing to better measure the impact of mainstreaming disaster and climate resilience in country development plans and policies, as well as to harmonize such efforts with that of other development partners.

**Project level risk reduction and mitigation is also integrated in IFC's Performance Standards on Environmental and Social Sustainability, which include specific requirements for assessment of climate risks.** IFC is developing sector specific tools and information that will allow assessment of climate risks at project appraisal stage. IFC has also produced several project and sectoral climate risk studies and guidance that helped catalyze adaptation investments and increasing projects' resilience.

**The Multilateral Investment Guarantee Agency (MIGA) is also considering disaster risks.** Similar to IFC, MIGA's Performance Standards on Environmental and Social Sustainability also include requirements for assessment of climate risks. For projects based in disaster-prone areas, MIGA requires measures to reduce risks to the health and safety of beneficiaries. For example, in a fertilizer plant in Gabon, as part of a joint MIGA and IFC project, the client raised the site by 3.5 meters above sea level, thus reducing the plant's disaster vulnerability from flooding and storm surge, the risk of which is growing due to sea level rise. The design of the plant's water pipeline has also taken into account the risk of low water flow under worst-case climate scenarios.

**Internally, the WBG is building a specialized team to support clients in conducting disaster risk assessments.** This team assists client governments in building capacity on the use of remote sensing, satellite imagery, crowdsourcing, and other innovative means of data collection. Following Typhoon Haiyan in the Philippines, the WBG assisted the government to use a disaster exposure database—developed under a World Bank and GFDRR initiative—to carry out damage and loss estimates remotely. This database is currently the most comprehensive inventory of exposed public assets in the Philippines. It includes at-risk populations, schools, health facilities, public buildings, and transport infrastructure.

**Externally, the World Bank has continued to support a community of practice of disaster risk assessment experts.** The Understanding Risk community, first established in 2010, now includes more than 2,800 members from 125 countries, including representatives from the public and private sector, multilateral organizations, civil society, academia, and scientific and technology institutions. The 2012 Understanding Risk Forum, held in Cape Town, South Africa, convened more than 500 risk assessment experts. The next forum is scheduled for July 2014 in London.

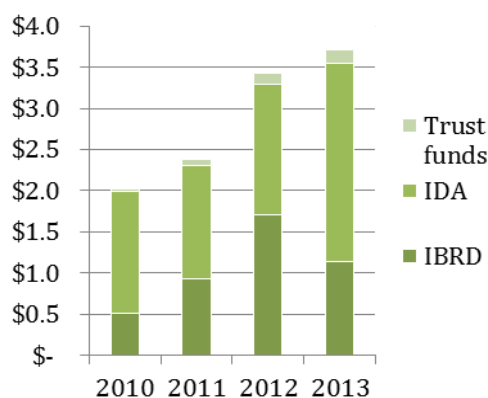
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<sup>11</sup> The 21 countries are: Albania, Bolivia, Colombia, Dominica, Egypt, El Salvador, Ethiopia, Grenada, Guatemala, Haiti, Indonesia, Honduras, Mexico, Peru, Philippines, St. Lucia, St. Vincent and the Grenadines, Sudan, Tonga, Vietnam, and the Republic of Yemen.

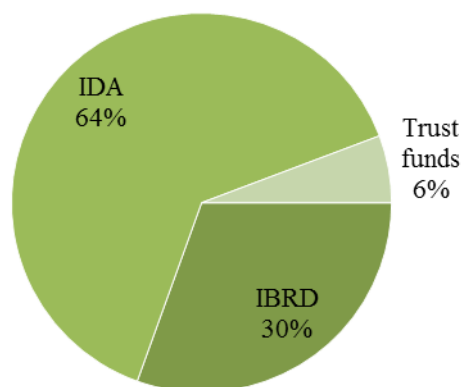
**Priority 2.** *Scale up technical assistance and financial support for building resilience to disasters and climate change in vulnerable countries*

**The World Bank’s portfolio in disaster risk management is robust and growing.** In FY13, 97 operations were approved with a DRM-related commitment of \$3.8 billion.<sup>12</sup> This represents a significant increase from previous years: 61 operations worth \$2.4 billion approved in FY11, and 36 operations worth \$2.0 billion in FY10<sup>13</sup> (see Figure B.1). DRM activities accounted for 11.1 percent of overall IBRD- and IDA-approved commitments in FY13, an increase from the 1984-2005 average of 9.4 percent. By source of funding, close to one-third came from IBRD (representing 7.4 percent of total FY13 IBRD commitments) and two-thirds from IDA (14.5 percent of total FY13 IDA commitments) with an additional 6 percent originating from trust funds<sup>14</sup> (see Figure B.2). The predominance of IDA on FY13 commitments is consistent with the redirection of DRM resources to the poorest and most vulnerable countries, in line with the WBG’s strategic goals. Cumulatively, the World Bank’s active DRM portfolio at the end of FY13 comprised 281 operations, totaling \$14.3 billion—of which 150 operations (\$6.6 billion) were approved in FY12-13 alone.

**Figure B.1. Total Approved Financing**  
(By Fiscal Year, in US\$, Billions)



**Figure B.2. Source of DRM Financing**  
Approved in FY13



<sup>12</sup> This portfolio analysis follows the same approach developed to track climate change financing, using the *co-benefits approach*. In order to qualify, a project must show (a) specific intent, i.e. explicit DRM consideration in project appraisal; or (b) activity linkage, where activity directly addresses vulnerability from natural hazards.

<sup>13</sup> This increase is partly due to the more in-depth analysis methodology of the FY13 portfolio review, which captured financing of specific DRM components, even within projects that did not have DRM as a development priority. In addition, DRM financing has historically been cyclical, with peaks coinciding with years of significant disasters. However, the overall trend has been upward.

<sup>14</sup> The main sources of recipient-executed trust funded activities in FY13 were the Pilot Program for Climate Resilience, the Bangladesh Multi-donor Trust Fund for Climate Change, the Global Environment Facility, the Global Facility for Disaster Reduction and Recovery, Nile Basin Initiative Trust Fund, the Global Agriculture and Food Security Program, and the Pacific Disaster Risk Financing and Insurance Multi-donor Trust Fund.

**Of all regions, Africa had the largest DRM portfolio in FY13, followed by South Asia, East Asia and Pacific, and Latin America and Caribbean.** In FY13, Africa (AFR) had the largest number of operations and associated DRM financing (\$1.4 billion). South Asia (SAR), East Asia and Pacific (EAP), and Latin America and the Caribbean (LCR) also had portfolios of over \$500 million each (see Table B.1). Going forward, there is a robust pipeline of DRM operations under preparation in most regions, with Africa, in particular, reflecting growing client demand to invest systematically in disaster and climate resilience. In terms of sectors, Urban Development and Water held the largest share of the DRM portfolio (21 and 22 percent in FY13, respectively), while Agriculture and Rural Development accounted for the largest number of operations. At the same time DRM is increasingly being mainstreamed into hydropower, agriculture, transport, and social protection projects, and many recently-approved operations are inter-sectoral in nature.

**Table B.1. DRM-Related World Bank Portfolio by Year of Approval (FY10-13)**  
(Amounts in US\$, Millions and Numbers of Operations)

Region	FY2010		FY2011		FY2012		FY2013	
	Amount	No.	Amount	No.	Amount	No.	Amount	No.
AFR	661	9	153	13	1,120	18	1,388	34
EAP	390	9	471	16	1,184	16	656	18
ECA	70	4	200	7	40	3	96	6
LCR	160	9	677	17	853	13	691	18
MNA	2	2	3	1	5	1	86	7
SAR	736	3	869	7	228	7	839	14
<b>Total</b>	<b>2,019</b>	<b>36</b>	<b>2,373</b>	<b>61</b>	<b>3,430</b>	<b>58</b>	<b>3,756</b>	<b>97</b>

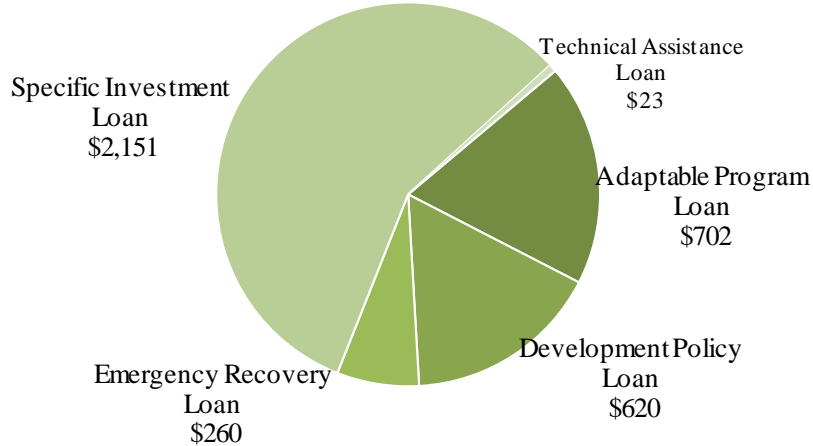
**Specific Investment Loans continue to be the preferred instrument to support DRM,** accounting for approximately half of the financing and two-thirds of the number of FY13-approved DRM projects (63 projects and \$2.2 billion).<sup>15</sup> Specific Investment Loans and other investment financing - such as Adaptable Program Loans, Emergency Recovery, and Technical Assistance Loans - were used to finance a wide range of activities ranging from disaster resilient infrastructure, to improved urban planning, embankments, early warning systems, and community-based DRM. There were only seven disaster-related Emergency Recovery Loans approved in FY13, which is likely due to the relatively low number of large disasters during that time period (see Figure B.3).

**Development Policy Loans, in particular those with a Catastrophe Deferred Drawdown Option, now make up 17 percent of the portfolio.** They have been used primarily to support the integration of disaster risk management into client government's policies, legislation and budgetary planning (see also Priority 7).

<sup>15</sup> As of April 8, 2013, a new Operational Policy came into effect in the WBG to simplify processes and increase flexibility of investment financing. Part of this reform brings all investment lending operations (including emergency recovery operations) under a single Investment Project Financing (IPF) instrument. For purposes of clarity, IPFs were classified as they were at the concept note stage, before this reform came into effect.

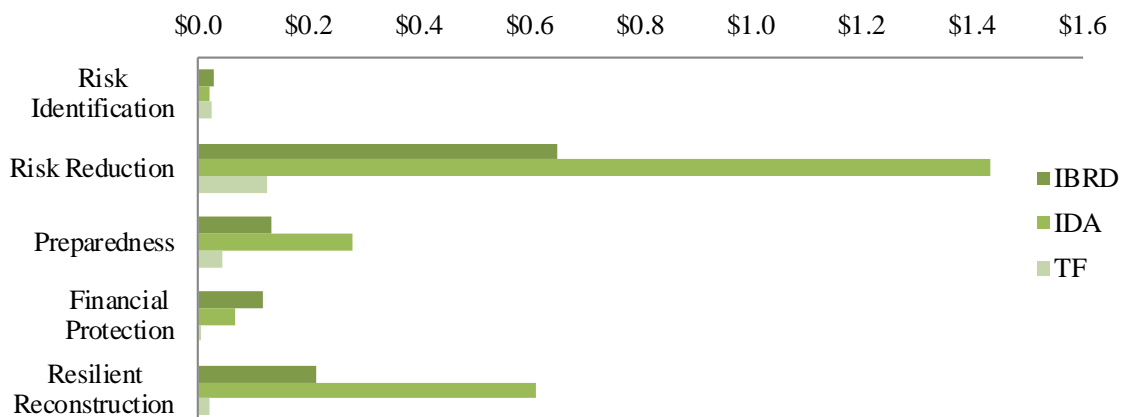
**The Program-for-Results lending instrument is starting to be used for DRM.** Of the 25 Program for Results operations approved or under preparation as of September 2013, one—the \$75 million Morocco Integrated Risk Management program—is focusing on the management of all risks, including disasters, climate change, financial and economic shocks. The Program for Results instrument has the potential to support the integration of DRM throughout a client’s institutional framework and, by disbursing against results, provide incentives for system-wide changes that take risk management into account.

**Figure B.3. DRM Financing Approved in FY13 by Lending Instrument**  
(US\$, millions)



**The World Bank is increasingly investing in ex-ante disaster risk management.** In FY10-13, approximately 83 percent of DRM operations supported disaster prevention, an increase from the 67 percent cited in *The Sendai Report* (FY06-11), and the 63 percent cited in the 2006 Independent Evaluation Group report. Amongst the five pillars outlined in *The Sendai Report*—risk identification, risk reduction, preparedness, financial protection, and resilient reconstruction—risk reduction now accounts for the largest share of World Bank financing (See Figure B.4). This focus on disaster prevention and preparedness is consistent with the recommendations of both the 2006 Independent Evaluation Group report and *The Sendai Report*.

**Figure B.4. DRM Financing by Pillar and Source in FY13**  
(US\$, billions)



**To build on the momentum of the Sendai Dialogue to scale up support for ex ante DRM investments, the World Bank has set up a new DRM mainstreaming program funded by Japan.** The program will be managed by GFDRR on behalf of the World Bank. The program is global in scope and will cover vulnerable developing countries spread across all the regions of the World Bank. Japan has pledged \$100 million to support the five year program, (FYs 14-18). A unique feature of the program is the establishment of the Tokyo DRM Hub.

**The Tokyo DRM Hub will support the Program in its technical assistance, capacity building and knowledge mobilization functions.** It will facilitate formulation and enhancement of technical assistance proposals by incorporating design inputs from centers of excellence in the public and private sectors in the region and in Japan<sup>16</sup>. The Tokyo DRM Hub will help monitor the program and provide on-demand support to World Bank teams on the ground. The Hub will also support capacity development, knowledge mobilization and outreach functions to promote mainstreaming of DRM.

**The IFC has integrated DRM into several areas, including project-level risk mitigation, products and services contributing to risk reduction, and identification of priority policies and regulations contributing to increased private sector resilience.** Recent projects include investing in a company developing drought resilient seeds tailored for local climate conditions, providing finance that will help smallholder farmers plant more climate resilient coffee varieties in regions affected by climate change, and investing in efficient irrigation in areas with increasing water scarcity. Out of this combined \$71 million investment, adaptation and DRM financing comprised approximately \$37 million. IFC is also currently preparing private sector led activities in nine Pilot Program for Climate Resilience countries.<sup>17</sup>

**MIGA is also underwriting several projects that specifically take into account disaster risks.** Amongst the most recent projects, the Panama Metro modified the alignment of the metro line and station locations – in some locations by up to 200 meters – to avoid low level, flood-prone areas. In Bangladesh, the Ashuganji Combined Cycle Power Plant is developing a flood management plan to elevate structures above the highest potential flood level. And in Brazil, MIGA is mobilizing \$300 million in the form of a Non-Honoring Sovereign Financial Obligation Guarantee to the São Paulo Sustainable Transport Program to improve transport efficiency and safety, and enhance Brazil's capacity in DRM and environmental management.

**Looking forward, demand for WBG support to disaster risk management is expected to continue to rise.** This is partially due to an increasing recognition that current development patterns—particularly in cities—are causing a high concentration of population and assets in areas at risk from disasters, and that mainstreaming DRM into key operations is cost-effective over the long term (even though it may entail higher

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<sup>16</sup> Centers of excellence will include, *inter alia*, universities, think tanks, civil society organizations, consultancies, technical agencies, etc.

<sup>17</sup> Bangladesh, Haiti, Jamaica, Mozambique, Nepal, Niger, St. Lucia, Tajikistan, and Zambia.



initial costs).<sup>18</sup> There is also a growing recognition that in order to achieve poverty reduction targets, additional assistance will be needed to help the poor become more resilient to disaster risks. To further inform this growing portfolio and align it closely with the WBG's dual goals, the Climate Change Group Vice Presidency will soon be starting major economic and sector work on the links between climate change, disaster risk, and poverty, scheduled for release in FY16.

### **Priority 3. *Increase attention to disaster resilience at the local level***

**At city and community levels, the World Bank is helping to focus attention on disaster resilience.** Since 2003, the World Bank has provided nearly \$14 billion to help cities prepare for, and respond, to the risks and impact of natural hazards and climate variability. A new programmatic initiative to help cities strengthen their resilience is under preparation. The program will serve as an umbrella for all future World Bank work on urban resilience. The World Bank is also developing a rapid diagnostic framework to support city mayors to develop risk and resilience financing tools, such as an instrument for monetizing averted losses and a methodology for mainstreaming resilience into local capital investment planning.

**World Bank Community-Driven Development operations provide critical opportunities to reach large numbers of poor and vulnerable households.** Such operations are now active in more than 110 countries, and comprise between 5 and 10 percent of annual World Bank lending (an average of \$2 billion a year). A 2013 review of the World Bank Community-Driven Development portfolio shows an investment of \$12 billion in disaster risk management and climate resilience over the 11-year period of FY01 to FY11. As an example, the Zambia Pilot Program for Climate Resilience (Phase II), approved in May 2013, is piloting a way to provide small grants to community groups and individuals. Grant recipients are identified first by local poverty assessment groups, and then awarded grants based on their engagement in transformative DRM or climate change adaptation practices. Grants are also earmarked for women-headed households in order to promote their role as resilience champions.

**An increasing number of World Bank DRM projects are sensitive to gender issues, and concerted efforts are focused on ensuring that projects are gender informed.** Of the FY13 approved projects with DRM co-benefits, 56 percent were gender informed. There are numerous examples where empowering women to exercise leadership within their communities has contributed to disaster and climate resilience, including in Indonesia, Nicaragua, India, Nepal and the Horn of Africa. Guidance notes have also been developed by the East Asia and Pacific DRM team to design and implement gender dimensions into disaster risk management work, and training was conducted for staff in the region to further scale up the integration of gender issues in DRM operations. To complement such activities, GFDRR supported women-led civil society organizations in Guatemala, Honduras, and India in bringing together women leaders and policy makers to share experience on community-led disaster risk management. By the end of this project in FY13, the three groups had helped more than 3,500 community leaders and

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<sup>18</sup> See World Bank (2010) "Natural Hazards, UnNatural Disasters: the Economics of Effective Prevention."

30,000 community members to map their risks and resources, and to establish partnerships with disaster management authorities.

**Safety nets and social protection schemes offer an important vehicle to directly reach households and communities.** In FY12 and FY13, the World Bank increased its efforts to build social protection systems that address increasing risk from disaster and climate change, and build long-term resilience. For example, in 2011 the Productive Safety Net Program in Ethiopia was expanded to meet the additional social protection needs sparked by the Horn of Africa drought. In addition to its core beneficiaries, the program reached an additional 3.1 million people over a three-month period. Such initiatives help to substantially reduce the impact of natural hazards, such as droughts, on poor and vulnerable families. The World Bank also developed a toolkit in 2013 to help countries integrate disaster and climate risk management into social protection systems.

**Going forward, the ongoing reform process at the WBG has the potential to continue the integration of DRM and climate considerations into subnational planning.** This emphasis is expected to be driven by the WBG dual goals of ending poverty and promoting shared prosperity (which will reinforce a focus on the poorest and most vulnerable communities), as well as the grouping of DRM, urban, rural, and social specialists within a common global practice.

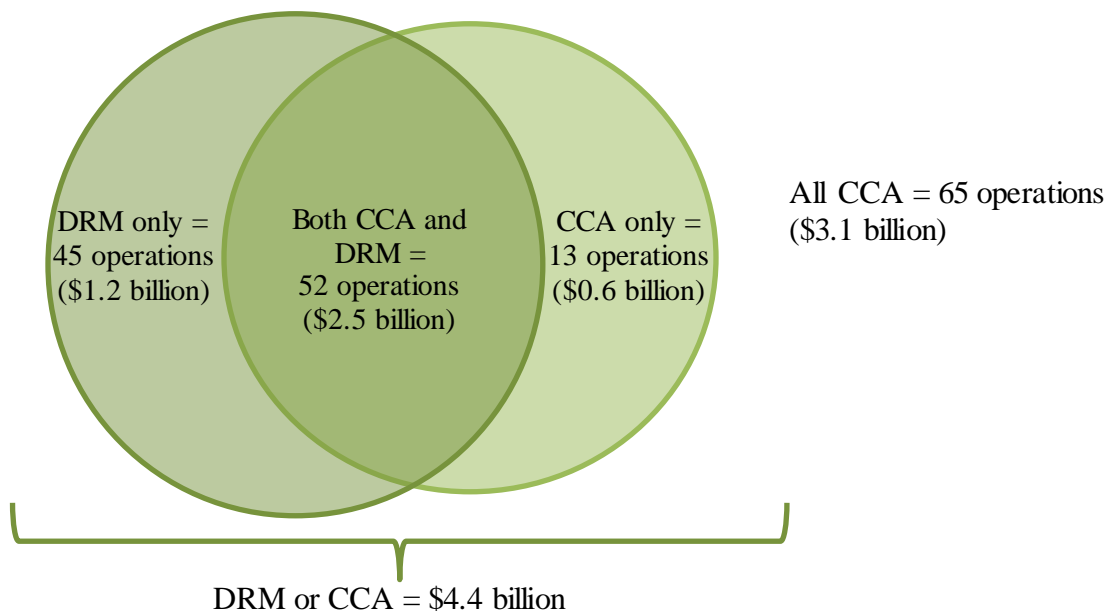
**Priority 4:** *Further align the disaster risk management and climate adaptation agendas*

**There is a high level of synergy between the World Bank's DRM and climate change adaptation portfolios.** In FY13, 52 of the 65 WBG operations that supported climate change adaptation also had DRM benefits (80 percent). This relatively high complementarity is due to the fact that the majority of climate adaptation activities focus on reducing the risk of extreme weather events. Conversely, a smaller proportion of DRM operations (67 percent) supported climate change adaptation (see Figure B.5). The remaining DRM-only operations tended to focus on disaster recovery and reconstruction, financial protection, and management of seismic risk. Looking ahead, it will be important to recognize that the DRM portfolio also extends also beyond climate risks, and to preserve an optimum balance relative to non-climatic hazards.

**Figure B.5. FY13 Operations and Financing Supporting DRM and Climate Change Adaptation (CCA)**

<i>(US\$, millions)</i>	<i>IBRD</i>	<i>IDA</i>	<i>TF</i>	<i>TOTAL</i>
All DRM	1,133	2,404	219	<b>3,756</b>
All CCA	873	2,052	215	<b>3,140</b>
Only DRM	444	773	25	<b>1,242</b>
Only CCA	184	421	21	<b>626</b>
DRM and CCA	689	1,631	194	<b>2,514</b>
<b>DRM or CCA</b>	<b>1,317</b>	<b>2,825</b>	<b>238</b>	<b>4,377</b>

All DRM = 97 operations  
(\$3.8 billion)



**In FY13, the combined World Bank financing in support of climate change adaptation or DRM objectives amounted to \$4.4 billion.** The DRM portfolio was slightly larger (\$3.8 billion) than the climate change adaptation portfolio (\$3.1 billion), with IDA providing about two-thirds of the financing (*see Figure B.5, above*).

**Institutional alignment between disaster risk management and climate change adaptation has the potential to improve following the WBG’s reorganization.** Under the new architecture, GFDRR, the Climate Policy and Finance Unit, and the climate change units of IFC and the World Bank Institute will be housed under the Climate Change Cross-Cutting Solution Area, while DRM operational staff will be mapped largely to the Urban, Social, Rural, and DRM Global Practice Group. Provided that incentives for cross-sectoral collaboration are effectively addressed—a key remaining challenge—this should help to better align external and internal funding sources and build an expert staff pool to more effectively support clients in climate and disaster resilience.

**Climate change and disaster risks will be further considered in IDA-17.** IDA-16 recognized climate resilient development as one of the “frontier” issues on the development agenda and called upon the World Bank to strengthen its climate engagement. The IDA-17 policy commitments and associated targets call for the further integration of climate and disaster risk considerations into core IDA operations by “*(a) requiring all IDA country partnership frameworks (CPFs) to incorporate climate and disaster risk into the analysis of the country’s development challenges and priorities and, when agreed with the country, incorporate such considerations in the content of the programs and results framework (target: 100 percent of all new IDA CPFs); (b) screening all new IDA operations for short- and long-term climate change and disaster risks and, where risks exist, integrate appropriate resilience measures (target: 100 percent of all new IDA operations screened); (c) Scale up support to IDA countries to develop and implement country-led, multi-sectoral plans and investments for managing climate and disaster risk in development in at least 25 additional IDA countries (target: 25 countries); and (d) enhance monitoring by expanding climate finance coding system to cover tracking of (Economic and Sector Work) and non-lending (Technical Assistance) that address climate change issues in IDA countries; and piloting a coding system to measure the share of IDA investments with disaster risk management co-benefits.*<sup>19</sup>”.

**Work to facilitate the implementation of these commitments is ongoing, with a scheduled roll-out FY15.** Guidance notes for the systematic integration of climate and disaster risk into the Systematic Country Diagnostic, the Country Partnership Framework, as well as screening tools for new IDA operations are currently being developed and tested. Such guidance, supported by a small team of experts, will help to ensure systematic disaster and climate risk analysis, as well as the integration of such considerations in the content of the programs and the results framework. Work is also ongoing to identify in which countries the Bank is best placed to support scaled up support in 25 additional IDA countries. To enhance the financial tracking, a methodology for tracking DRM co-benefits has been developed (the results of which are included in this report), similar to the climate change co-benefit methodology; work will now commence to integrate this into the World Bank coding system. To measure the impact of these new commitments, WBG management has also committed to develop a Tier 1 (country level) resilience indicator by December 2016.

**The progressive alignment of DRM and climate change adaptation in the WBG reflects a similar convergence in international climate change negotiations.** Under the Warsaw Loss and Damage Mechanism, the two agendas—as well as international financing—are expected to be increasingly aligned. The WBG has the relevant expertise and operational experience to act as an implementing partner, and to further scale up its support for climate and disaster resilience.

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<sup>19</sup> *Draft IDA-17 Deputies Paper,*

**Priority 5. *Increase support for the design and implementation of financial protection strategies***

**Client countries are increasingly requesting WBG assistance in improving financial protection against natural disasters at both national and subnational levels.** Given the greater understanding of risks and the level of liquidity, clients and markets have shown an increased demand for catastrophe risk products, with the WBG playing the role of innovator as well as convener. Currently, the WBG provides advisory services to design and implement national strategies in more than 40 countries, focusing on disaster risk financing and insurance through public and private partnerships. Colombia has recently approved its national strategy, and other countries such as Indonesia, Peru, the Philippines, and a number of Pacific island countries are in the process of finalizing their own strategies. This work is mainly implemented under the joint World Bank and GFDRR Disaster Risk Financing and Insurance Program, established in 2011.<sup>20</sup> The program aims to improve public financial management against the risk of natural disasters and promote market-based catastrophe risk insurance solutions.

**Part of this assistance involves technical advisory services on insuring public assets and on catastrophe risk transfer solutions.** For example, Colombia is implementing standardized insurance policies for its public buildings in order to improve the quality of coverage and to reduce premiums. The government is now putting in place standardized insurance contracts for infrastructure concessions that will total \$38 billion over the next five years. Financial risk management tools have also been developed in Indonesia and Peru to analyze options for sovereign market-based catastrophe risk transfer solutions. The Philippines has also made headway in developing an initial catastrophe risk model and a disaster risk financing and insurance strategy, based on the exposure assessments mentioned under Priority 1.

**The WBG is also supporting regional financial protection solutions.** Work is currently ongoing to expand the scope of the Caribbean Catastrophe Risk Insurance Facility—currently covering 16 Caribbean islands against earthquake and hurricane risks—to cover Central American countries, as well as the risks of excess rainfall. Following the Caribbean example, the WBG has also assisted Pacific island client countries to launch the Pacific Catastrophe Risk Insurance Pilot in 2013, in partnership with the Secretariat of the Pacific Community and the Government of Japan. This pilot program, which currently covers six Pacific island countries—the Cook Islands,<sup>21</sup> the Marshall Islands, Samoa, the Solomon Islands, Tonga, and Vanuatu—has secured \$67 million in coverage from insurance markets to protect against damages caused by earthquakes, tsunamis, and tropical cyclones. A similar scheme is being explored for the Indian Ocean island states, in partnership with the Indian Ocean Commission. In Sub-Saharan Africa, the WBG also provided initial technical support for the possible establishment of a pan-African facility to manage drought risk.

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<sup>20</sup> This program is funded by GFDRR, and the governments of Japan, the Netherlands, and Switzerland.

<sup>21</sup> In October 2013 the Executive Board approved the Cook Islands to become part of the Pacific Catastrophe Risk Insurance Project, a significant move since it allowed for diversification of pool participants through the inclusion of a non-borrowing country.

**Priority 6.** *Promote the use of contingent components within its projects, including Immediate Response Mechanism*

**The World Bank is now offering a growing number of contingent financing instruments, although adoption by client countries has been variable.** In particular, the use of Development Policy Loans with a Catastrophe Deferred Drawdown Option (CAT-DDOs) by IBRD-eligible countries, and the use of Contingency Emergency Response Components, by both IBRD and IDA clients, has expanded in recent years.

**CAT-DDOs have proven to be an effective contingent financing instrument.** The CAT-DDO is a pre-approved line of credit to IBRD borrowers that helps governments to rapidly access resources following a disaster, providing a much needed immediate source of liquidity. Since the instrument's inception in 2008, seven countries<sup>22</sup> have approved CAT-DDOs, for a total amount of \$1.3 billion, and discussions are ongoing in a number of additional countries. As part of a Development Policy Loan, the CAT-DDO is also designed to promote policy dialogue on DRM, and preliminary assessments indicate there is greater potential to bring about even more policy impact with this instrument. These discussions, however, require highly specialized technical assistance and may therefore need a further strengthening of the current pool of experts at the World Bank.

**CAT-DDOs are only eligible for IBRD recipients.** However, World Bank experts have started preliminary discussions on the possibility of pooling national and regional IDA credits amongst Pacific island countries to support a regional contingent credit facility. Although this may be feasible for groups of small island states, for other IDA countries at high risk from disasters, alternatives may need to be developed.

**The Immediate Response Mechanisms (IRM) was introduced in December 2011 to complement longer-term emergency response tools available to IDA countries.** It allows IDA countries to have immediate access to up to 5 percent of the undisbursed balances of their entire IDA portfolio in the event of an eligible crisis or emergency. While no country has yet accessed resources under the IRM, it has helped broaden the use of Contingency Emergency Response Components, which were included in 11 IDA operations in FY13. A review of the use of the IRM will be submitted to the Board in FY15.

**Priority 7.** *Expand the use of market-based solutions and broaden the scope of intermediation services*

**The WBG is offering intermediation services for weather and earthquake catastrophe risk transfer solutions.** In programs such as the Caribbean Catastrophe Risk Insurance Facility and the Pacific Catastrophe Risk Insurance Pilot, the WBG—through the Treasury Department—acts as an intermediary between the countries and the financial markets. The WBG also facilitates the placement of catastrophe bonds, as it was done in 2012 for the government of Mexico.

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<sup>22</sup> These include Colombia, Costa Rica, El Salvador, Guatemala, Panama, Peru and the Philippines.

**Recent WBG Board decisions have expanded the scope of WBG intermediation services to cover new risks and clients.** In October 2012, the Board approved a proposal to extend intermediation of disaster risk management products to include derivatives to hedge meteorological and geological events, including earthquakes and tsunami, and to offer these products to new clients, such as subnational entities, and regional and international organizations.

**In addition to providing intermediation, the WBG is supporting client countries to develop market-based insurance solutions.** This technical assistance, provided through the World Bank and GFDRR Disaster Risk Financing and Insurance Program, includes risk assessment, protocols for data collection and monitoring, structuring of financial transactions, market sounding, guidance on legal issues, and assistance with market execution. It has included, for example, support to the Southeastern Europe Catastrophe Risk Insurance Facility, to help Albania, the former Yugoslav Republic of Macedonia, and Serbia to develop their domestic catastrophe risk insurance markets. The WBG is also supporting a new initiative to scale up disaster risk insurance in lower-income countries. Four countries—Bangladesh, Haiti, Kenya, and Senegal—have been identified as initial pilots to stimulate insurance penetration.

**The WBG supports agricultural insurance to protect farmers and herders against adverse weather.** In India, for example, the World Bank has helped the government to shift its national crop insurance program, which covers 30 million farmers, from a public to a public-private partnership program with the participation of domestic private insurers. Pilot initiatives are similarly ongoing in Africa and Latin America under the International Finance Corporation-led Global Index Insurance Facility and the IBRD-led Agricultural Insurance Development Program.

**IFC's work also focuses on identifying priority initiatives to enable the private sector to mobilize climate adaptation investments at national levels.** For example, a recent project in Turkey, done in partnership with the European Bank for Reconstruction and Development, and Turkish public and private sector partners, identified the need for several billion dollars of investments in specific initiatives that would increase the climate resilience of companies, mainly small and medium-sized enterprises. The IFC's Enabling Environment for Private Sector Adaptation initiative, launched in 2013, identifies practical policy, regulatory, and economic interventions that can significantly help the private sector reduce risks and increase resilience.

#### **Priority 8.** *Enhance support for accelerated recovery planning*

**The World Bank continues to respond to client's requests for assistance in the aftermath of major natural disasters.** In FY13, the World Bank and GFDRR assisted client countries in carrying out 11 post-disaster assessments<sup>23</sup> and mobilizing seven Emergency Recovery Loans.<sup>24</sup> The post-disaster assessments in Cameroon, Niger, and

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<sup>23</sup> In Cameroon, Comoros, Fiji, Georgia, Guatemala, Malawi, Mozambique, Niger, Nigeria, Samoa, and the Seychelles.

<sup>24</sup> Including Cameroon, the Comoros, Haiti, Madagascar, Mauritania, Moldova, and Myanmar.

Samoa leveraged nearly \$250 million in recovery financing from the World Bank. Of the seven Emergency Recovery Loans, four included disaster risk management components designed to increase resilience as part of the recovery. Following the March 2012 floods in Madagascar, for example, transport and community infrastructure were rehabilitated using a *build back better* approach. This was carried out in compliance with the climate resilience norms for transport infrastructure developed by the government with GFDRR support. This Emergency Recovery Loan also included a Contingency Emergency Response Component, and capacity building for the Roads Authority to maintain key transport infrastructure and respond to major disasters. This provides an example of how emergency response operations are also increasingly used as opportunities to improve future resilience to disasters.

**The Crisis Response Window has proven to be an effective source of additional financing to support accelerated post-disaster recovery in IDA countries.** Since the beginning of IDA-16, a total of \$686 million has been committed in Crisis Response Window resources for post-disaster recovery (see Table B.2). This represents approximately half of the \$1.3 billion that was set aside for the window in IDA-16. Under IDA-17, 2 percent of core IDA and regional program financing will be set aside for the Crisis Response Window, a slight decline from the 3 percent earmarked under IDA-16. This does not necessarily imply a decline in post-disaster financial assistance for IDA countries, as it will depend on other competing demands for these resources, such as economic crises.

**Table B.2: Use of Crisis Response Window Resources under IDA 16 (July 2011 – December 2013)**<sup>25</sup>

<i>Description</i>	<i>Committed (US\$, million)</i>	<i>Number of Projects</i>
Response to the 2010 Earthquake in Haiti	405	8
Response to the 2011 Drought in the Horn of Africa (Regional, Djibouti, Ethiopia, Kenya)	190	7
Response to the 2012 Tropical Cyclone Evan in Samoa	20	3
Limpopo Valley 2013 Flooding (Mozambique)	71	2
<b>Total</b>	<b>686</b>	<b>20</b>

**Clients are increasingly requesting the Bank to support rapid post-disaster assessments, in time to inform recovery planning and investments.** On one hand, a rapid post-disaster assessment, concluded in weeks, helps lock in external and domestic resources for recovery and reconstruction at an early stage; on the other hand, many countries look to the World Bank to support resilient recovery and reconstruction planning and to mainstream DRM into the country’s long-term development strategy. This requires resources to remain deployed beyond the assessment stage, to help institutionalize disaster risk management into broader development planning. In response to this demand, GFDRR is developing a *Disaster Recovery Framework Guide* in partnership with the United Nations Development Programme (UNDP) and the European Union. This builds upon the 2008 *Joint Declaration on Post-Crises Assessments and*

<sup>25</sup> WBG Business Warehouse.



*Recovery Planning* to improve the coordination of support offered to governments affected by crises. The Disaster Recovery Framework Guide, set to be published in late 2014, will help ensure that post-disaster assessments inform recovery planning, and influence long-term paths toward development goals.

**The World Bank has helped build the capacity of national and local governments in the Philippines to carry out their own post-disaster assessments.** Building on this support, the government of the Philippines was able to conduct its own post-disaster assessment following Typhoon Haiyan. A World Bank technical assistance team assisted with a rapid assessment of damage to infrastructure and other critical assets using satellite imagery, geospatial information created by volunteers using OpenStreetMap, geo-referenced public asset data, and field reports. The World Bank is also assisting the government in designing a comprehensive recovery and reconstruction plan following the principles of *building back better*, and to establish a reconstruction monitoring system. Rapid mobilization enabled the World Bank to release a \$500 million Development Policy Loan within a few weeks of the disaster. The World Bank will complement early reconstruction efforts with a \$480 million loan for a national community driven development project to help typhoon affected areas build infrastructure and social services. In parallel, IFC is in discussions with international and rural banks and microfinance institutions to help the private sector recover from the devastation.

**GFDRR seed funding for recovery assessment has been instrumental in leveraging Bank funding for DRM.** Examples in the Middle East and North Africa show that post-disaster needs assessments in Djibouti in 2011 and the Republic of Yemen in 2008, as well as the probabilistic risk assessment supported in Morocco in 2012, led to the establishment of risk mitigation projects in the housing, infrastructure, energy, water, and agriculture sectors worth, respectively, \$30 million in Djibouti, \$65 million in Yemen, and \$75 million in Morocco.

#### **Priority 9.** *Promote further convergence of donor efforts to support disaster resilience*

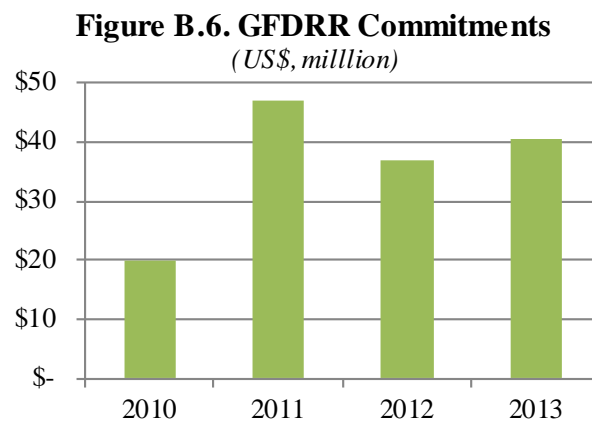
**The WBG is promoting donor harmonization in the reporting of DRM financing and the development of common tools to measure the progress of DRM mainstreaming into development aid. Significant challenges remain, however.** Led by GFDRR and in collaboration with partners such as the United Nations Office for Disaster Risk Reduction (UNISDR) and the OECD Development Assistance Committee, an expert advisory group is developing guidelines for a policy marker for DRM within the Creditor Reporting System. A proposal will be submitted to OECD-DAC Working Party on Development Finance Statistics in June 2014. This marker is expected to offer comparable and transparent reporting of DRM investments, and foster disaster risk-sensitive development planning amongst donors. In parallel, the World Bank will track the DRM co-benefits of its own financing, as committed under IDA-17.<sup>26</sup> Collaboration is also starting between the WBG, the European Commission, and other multilateral development banks to develop screening tools to incorporate disaster and climate risk considerations into their operations. However, significant coordination challenges remain

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<sup>26</sup> See Priority 4 of Annex, fourth paragraph, for the exact language of the IDA-17 commitment.

amongst the multiple donors and stakeholders involved in any given country, as highlighted in the recent 2012 Independent Evaluation Group Global Program Review report.

**GFDRR provides a channel to align donor funding in support disaster and climate resilience.** GFDRR, a global partnership program established in FY07, serves as a specialized grant making facility to build disaster and climate resilience in disaster-prone countries and to promote donor coordination. In addition, GFDRR acts as the policy anchor for DRM in the World Bank, and coordinates the growing community of DRM practitioners between regions and sectors in the WBG. Between FY11 and FY13, GFDRR received \$197.6 million from its donors, and its portfolio has been steadily increasing (see Figure B.6). In FY13, it adopted a new three-year strategy and work plan, with the aim of pooling donor financing into a single multi-donor trust fund and improve its results framework, in accordance with the recommendations of recent independent reviews.



**Priority 10.** *Extend knowledge and partnerships to support disaster risk management policies and programs*

**The WBG has built a network with other organizations to collectively manage disaster and climate risks.** Many of these partnerships are managed through GFDRR, which maintains working relationships with more than 300 national, regional, and international agencies. In recent years, these partnerships have included support to UNISDR in the development of the successor framework to the Hyogo Framework for Action—a global blueprint for DRM—and the integration of DRM considerations in the post-2015 development frameworks along with UNDP; coordination on post-disaster needs assessments with UNDP and the European Union; and support to modernize hydrometeorological services in collaboration with the World Meteorological Organization and expert national and regional agencies.

**Regional partnerships have significant potential to generate transformational change amongst groups of countries.** The WBG engages with regional organizations in all regions, often in partnership with UNISDR, to address trans-boundary risk and support groups of countries to devise common approaches to managing disaster risks. For

example, the regional DRM strategy to strengthen the partnership with the Middle East and North Africa region, in partnership with UNDP and UNISDR, was presented at Jeddah, Saudi Arabia, to 15 countries, generating strong interest and demand for risk management services, particularly for risk assessment, weather forecasting and risk communication. Another example is the emerging regional cooperation in support of a Sahel resilience program, or the state of the art flood-forecasting model for the White Volta River in Ghana.

**The World Bank Institute, in partnership with GFDRR, has also collaborated with intergovernmental organizations and training centers to improve the quality of DRM learning.** This has included, for example, engaging the Arab Administrative Development Organization to train professionals in 20 countries in the Middle East and North Africa Region. The World Bank Institute has also developed an online learning program on DRM for municipal governments in client countries to familiarize them with contemporary DRM concepts and practices and support a paradigm shift from reactive to proactive approaches. Further collaboration between GFDRR and the climate change and DRM teams of the World Bank Institute is expected once they are both located within the Climate Change Group Vice Presidency.

**The WBG is scaling up its engagement with civil society in disaster and climate resilience.** GFDRR, together with the World Bank civil society and social resilience teams, the Global Environmental Facility, and the European Union have joined efforts to promote community leadership and civil society engagement in disaster and climate resilience. By supporting civil society organizations as partners in developing policy, knowledge, and advocacy activities, GFDRR has strengthened civil society engagement in DRM in 32 countries, including Kenya, Niger, Papua New Guinea, and St. Lucia. It is also developing an online platform to map civil society engagement worldwide.

**GFDRR is also developing a Safer Schools Program to make school facilities, and the communities they serve, more resilient to natural hazards.** The program will operate at two levels. At the country level, the core of the Program supports activities to ensure construction practices take disaster risk into account, mainly implemented through World Bank-funded education or community driven development projects. For example, previous World Bank engagements in this field include, in Madagascar, which has supported the development of safer construction norms for public buildings (including schools and health centers), implemented through social fund programs. In Mozambique, it involved collaboration between the disaster management agency, UN Habitat, the University of Eduardo Mondlane, and the multi-donor funded Education Sector Support Program. At the global level, the Safer Schools Program supports the establishment of an open source collaboration platform to share information on school safety globally. The platform will become a tool that enables effective articulation of common goals, more efficient collaboration, and better measurement of progress towards school safety globally. Overall, the Program is aligned with the Comprehensive School Safety Framework endorsed by various development actors, such as UNISDR, UNICEF, Save the Children and Plan International, which builds on the strengths of each partner to ensure that DRM is integrated holistically throughout the education system. This initiative has received funding from the government of Australia and GFDRR has

received previous contributions to support safer schools activities from the government of Brazil.

**The WBG is promoting collaboration and knowledge exchange in support of disaster and climate resilience.** For example, DRM regional teams, through assistance from GFDRR, have supported the deployment of open-source geospatial platforms—called *geonodes*—in more than 35 countries. These platforms enable development partners to share datasets, maps, and analyses on disaster risks. Key examples include the Horn of Africa, Mozambique, and Sri Lanka Geonodes, as well as new platforms soon to go online in the Kyrgyz Republic and Pakistan. During Typhoon Haiyan recovery efforts, the WBG collaborated with the government, the American Red Cross, OpenStreetMap, and the United Nations Office for the Coordination of Humanitarian Affairs to launch [yolandadata.org](http://yolandadata.org), which offers maps and data layers relevant to recovery efforts. The WBG is also helping to facilitate south-south exchanges, such as the recent sharing of safer school building experience between Madagascar and Mozambique.

**Using its convening power and technical expertise, the WBG has played an important role in producing and sharing DRM knowledge since the publication of *The Sendai Report*.** Examples include the *World Development Report 2014, Risk and Opportunity: Managing Risk for Development*, which examines how improving risk management can lead to larger gains in development and poverty reduction; the sequel to the *Turn Down the Heat* report that examines the impact of a 4°C warmer climate in Sub-Saharan Africa, South Asia, and South East Asia; the *Building Resilience: Integrating Climate Risk into Development* report, a contribution to the international loss and damage agenda; a new report on national meteorological and hydrological services; and the *Climate Change, Disaster Risk, and the Urban Poor* report, focusing on the impact of climate change on urban poverty. WBG experts are also contributing to the *5th Assessment Report of the Intergovernmental Panel on Climate Change* as well as the *Global Assessment Report on Disaster Risk Reduction*, coordinated by UNISDR.

**Priority 11. Strengthen internal WBG capacity to better respond to client demand.**

**The disaster risk management community in the WBG is steadily growing.** As of December 2013, 112 staff belonged to the DRM community of practice, a growth of 20 percent compared to FY11 (93 staff). As the new practice groups emerge, and with the convergence of climate adaptation and DRM anchor units, funding sources, staff deployment, and efficient client support should be better streamlined. This has the potential to promote cross-fertilization of disaster and climate resilience expertise throughout World Bank operations and across sectors, thus enabling rapid deployment of global experts in response to client demands.

**As a global institution, the WBG is well placed to promote DRM knowledge, as well as to facilitate transformative initiatives with high overall impact.** At the same time, it should be recognized that DRM mainstreaming is a long-term process that depends on multiple external factors—such as institutional accountability—as well as changing risk behaviors. Increasingly, this has required long-term, multiple stakeholder programs, supported by the specialized technical teams offered by the DRM community of practice.