

DISASTER RISK MANAGEMENT AND MULTILATERAL DEVELOPMENT BANKS

An Overview

The MDBs are uniquely positioned to further advance the global DRM agenda. In addition to integrating risk consideration in their own operations, MDBs have the opportunity to use their convening power to build strategic partnerships between governments, donor agencies, civil society, and the private sector. The range and reach of their services and programs provide incentives to proactively prevent and prepare for natural disasters.



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The Global Facility for Disaster Reduction and Recovery

1818 H Street NW

Washington, DC 20433

Telephone: 202-473-1000

Internet: www.gfdr.org

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List of Abbreviations and Acronyms

ADB	Asian Development Bank
AfDB	African Development Bank
AUC	Commission of the African Union
CCA	Climate Change Adaptation
CCAP	Climate Change Action Plan (AfDB)
CCS	Integrated Strategy for CCA and Mitigation and Sustainable and Renewable Energy (IDB)
CDB	Caribbean Development Bank
CDFS	ClimDev-Africa Special Fund (AfDB)
CRMA	Climate Risk Management and Adaptation Strategy (AfDB)
CSS	Climate Safeguard System (AfDB)
CPS	Country Partnership Strategy
DEAP	Disaster and Emergency Assistance Policy (ADB)
DiMSOG	Disaster Risk Management Strategy and Operational Guidelines (CDB)
DRF	Disaster Risk Financing
DRF	Disaster Response Facility (ADB)
EAL	Emergency Assistance Loans (ADB)
ERF	Emergency Reconstruction Facility (IDB)
HFA	Hyogo Framework of Action
IDB	Inter-American Development Bank
IRL	Immediate Response Loan (CDB)
IDRM	Integrated Disaster Risk Management (ADB)
MDB	Multilateral Development Bank
MTS	Medium Term Strategy (AfDB)
OAS	Organization of American States
RRL	Rehabilitation and Reconstruction Loan (CDB)
SECCI	Sustainable Energy and Climate Change Initiative (IDB)
SRF	Special Relief Fund (AfDB)
UNECA	United Nations Economic Commission for Africa
WB	World Bank

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Introduction

This paper will provide an overview of MDB's experience in providing ex-ante and ex-post support to disaster prone countries. It covers the MDBs that are the most active in this area: the Asian Development Bank, the African Development Bank, the Caribbean Development Bank, the Inter-American Development Bank, and the World Bank. The objective of this paper is (i) to review the strategies and policies which provide guidance and principles for DRM interventions, and (ii) to identify and characterize the different types of mechanisms, instruments and interventions supporting DRM.

Evidence shows that natural hazards have become more frequent and more costly. A number of global factors – among them rapid unplanned urban growth, environmental degradation, and demographic change - are expected to further exacerbate existing risks and create new risks. At the same time, many developing countries have limited means to effectively reduce the risks they face – most often due to lack of financing, experience and weak capacity.

Until recently, multilateral development banks (MDBs) did not consider natural disasters as a core development concern. Complementing the UN's mandate to provide immediate humanitarian relief, most MDBs interventions related to natural disasters focused primarily on emergency recovery and reconstruction. However, increased awareness that natural disasters undermine efforts to reduce poverty and stimulate economic growth has resulted in a growing interest for support from MDBs to proactively address disaster and climate related risks.

Driven by the development needs of their constituents, MDBs are developing a wide array of financial and non-financial mechanisms and tools to build disaster and climate resilience. In addition to enhancing the flexibility and speed of their *ex-post* efforts, MDBs now offer investment and policy loans, grants, technical assistance and knowledge services for *ex-ante* support. This allows for an increased engagement across a wide range of activities, including generating knowledge on disaster and climate risks, capacity building for preparedness and response, and bringing innovative solutions in the areas of risk assessment and risk financing.

While progress has been made, more remains to be done. First and foremost, all MDBs need to further integrate the consideration of disaster and climate risks into the design and implementation of regular investment operations. In addition, some MDBs do not have a policy framework to allow emergency operations to be processed under accelerated and simplified procedures. Finally, while MDBs often work together to assess post-disaster impacts and develop recovery strategies, cooperation in the areas of prevention and preparedness often remains limited.

The MDBs are uniquely positioned to further advance the global DRM agenda. In addition to integrating risk consideration in their own operations, MDBs have the opportunity to use their convening power to build strategic partnerships between governments, donor agencies, civil society, and the private sector. The range and reach of their services and programs provide incentives to proactively prevent and prepare for natural disasters. Particularly, the combination of having access to global good practice and the ability to tailor this knowledge to local circumstances allow MDBs to lay the groundwork for further investment in resilience. As the expiration date of the Hyogo Framework of Action (HFA) approaches in 2015, the efforts of MDBs will be vital to catalyze continued financing for DRM.

African Development Bank (AfDB)



I - Strategic Mainstreaming

The AfDB's 2008-2012 *Medium Term Strategy* (MTS) focuses on the following priority areas: economic growth, infrastructure, governance and regional integration. Climate change is recognized as a cross-cutting theme – this includes mitigation and adaptation. The strategy calls for mainstreaming climate change in all operations.

Aligned with the Bank's strategic focus, the AfDB adopted the *Climate Risk Management and Adaptation Strategy* (CRMA) in 2009. The strategy recognizes the link between increased climate variability and natural disasters such as floods and droughts. The three core areas of intervention are: (i) promoting climate resilience through climate proofing of investments; (ii) policy, legal and regulatory reforms to ensure sustainability of efforts to build climate resilience; and (iii) knowledge generation and capacity building to enhance the use of climate information and climate adaptation best practices.

AfDB's Country Strategy Papers (CSPs) increasingly identify climate risk and natural disasters as challenge (Box 1). The adoption of guidelines for mainstreaming climate change at the strategic level aims to ensure that future strategies will take climate risks into account and risk mitigation measures are adopted.

Box 1. Examples of mainstreaming climate resilience in AfDB Country Partnership Strategies

The **Southern Africa Regional Integration Strategy (RISP) 2011-2015** recognizes that climate change is eroding development achievements in the region. As such, the strategy notes that climate resilient development through adaptation and mitigation is critical.

The **Seychelles Country Partnership Strategy 2011-2016** acknowledges that the country's 115 islands are likely to be impacted by rising sea level and coral bleaching, extreme floods and droughts as a result of climate change.

The **Morocco Country Partnership Strategy 2012-2016** notes that the country suffers from extreme climatic conditions marked by alternate major droughts and flooding. Moreover, the strategy provides an overall vision that mainstreams climatic concerns in decision-making across sectors such as energy, transport, industry, waste, agriculture, and forestry.

The **Burkina Faso Country Partnership Strategy** considers climate risks, including floods, as exogenous risks to the achievement of the goals of the strategy.

II - Operational Policies

In the aftermath of a natural disaster, the response of the AfDB is guided by the *Policy Guidelines and Procedures for Emergency Relief Assistance*. The *Special Relief Fund* (SRF) is identified as the source of funding for emergency relief, whereas rehabilitation and reconstruction operations have to be financed through regular financing instruments (Ordinary Capital Resources).

In order to implement the CRMA, the AfDB adopted the *Climate Change Action Plan* (CCAP). The plan builds on three pillars: (i) adaptation and climate resilient development, (ii) low carbon development, and (iii) funding platform. A Results Measurement Framework is currently being developed for tracking progress in the implementation of the CCAP.

III – Mechanism, Instruments and Interventions

Ex-Post

In 1974, the AfDB established the *Special Relief Fund* (SRF) to provide assistance to countries in need of humanitarian relief. The maximum amount of each grant amounts to US\$ 1.0 million (Box 2), and specialized agencies, such as UN agencies and NGOs, are responsible for the implementation of these grants. The SRF only approves two operations per country annually.

Box 2. Examples of SRF interventions

In **Sudan**, the AfDB approved in September 2010 an emergency relief assistance grant to help Khartoum State restore schools affected by heavy floods of 2009. The two main activities were (i) school supplies and materials acquisition and (ii) school infrastructure restoration and facility repairs.

During a severe drought in the Horn of Africa in 2011, the AfDB approved emergency relief assistance to contribute to Transitional Federal Government of **Somalia** and the UN's efforts in providing urgent food and water purification supplies to drought affected families in arid and semi-arid areas.

Ex-Ante

ClimDev-Africa Programme

In 2010, the AfDB launched, in partnership with the Commission of the African Union (AUC) and the United Nations Economic Commission for Africa (UNECA), the *ClimDev-Africa Programme*. The overarching objective of this multi-partner initiative is to build a solid foundation to respond to climate change. This will be achieved through results in the following three core areas: (i) widely available climate information, packaging and dissemination; (ii) quality analysis for decision support and management practice; (iii) and informed decision-making, awareness and advocacy.

Each partner takes responsibility for a different element of the joint initiative: UNECA supports the African Climate Policy Centre, the AUC is in the process of establishing the Climate Change and Desertification Unit, and future investments will be financed by the ClimDev-Africa Special Fund (CDSF) which will be managed by the AfDB. During the first phase, these investments will primarily focus on strengthening the generation, dissemination and use of climate data and information.

The CDSF is not yet effective due to lack of resources. That said, the African Development bank has committed about US\$30 million to strengthen 5 regional Climate Centers on the continent – AGHRYMET, ICPAC, ACMAD and the Drought Monitoring Centre (DMC) in Gaborone. Several partners have also pledged resources to supporting the activities of ClimDev.

Climate Safeguard System (CSS)

Recognizing that thirty-two percent of AfDB projects are sensitive to climate change vulnerability, the AfDB recently launched the CSS. This system aims to ensure that climate change risks are mainstreamed into climate-sensitive sectors at an early stage of the project cycle, focusing initially on the agriculture, infrastructure, water and energy sectors. The system consists of four modules: (i) climate screening to

assess for vulnerability; (ii) adaptation review and evaluation procedures to identify adaptation measures; (iii) country adaptation factsheets with climate projections and country indicators, and (iv) providing access to information sources on adaptation.

Box 3. Examples of AfDB interventions to build climate resilience

In August 2009, the AfDB approved the ‘Institutional Support to **African Climate Institutions** Project’ which aims to enhance the capacity of African climate centers to generate and make widely available relevant climate-related information to end users. Expected outputs include trained and knowledgeable African climate scientists; climate related tools and data; and skills improvement of end users to use climate information in development planning.

In **Malawi**, the AfDB co-financed the ‘Climate Adaptation for Rural Livelihood and Agriculture Project’ (CARLA) in October 2011. This project supports improved resilience to current climate variability and future climate change by developing and implementing adaptation strategies and measures that will improve agricultural production and rural livelihoods. Activities include (i) developing and piloting new and innovative community based CCA practices and (ii) capacity building of national and district agencies.

Asian Development Bank (ADB)



I - Strategic Mainstreaming

The ADB’s *Long-Term Strategic Framework of the Asian Development Bank 2008-2020* focuses on the following areas: infrastructure, environment, regional cooperation and integration, financial sector development, and education. While 80 percent of all financial resources will be allocated in these areas, the strategy states that the ADB will continue providing early and medium term post-disaster response and mainstreaming DRM. The draft 2013-2015 Work Program and Budget Framework specifies that 15% of ADB’s sovereign operations will include disaster risk management components.

The ADB’s Country Partnership Strategies (CPS) often recognize that disasters and climate change pose a development challenge (Box 4).

Box 4. Examples of mainstreaming disaster and climate resilience in ADB Country Partnership Strategies

The **Nepal CPS 2010-2012** includes pilot-testing a disaster and climate change risk-screening tool to increase the understanding within project processing teams of the implications of climate change and disasters on their projects. The tool is expected to contribute to mainstreaming disaster and climate risk reduction across all infrastructure projects in the country.

The **Philippines CPS 2011-2019** emphasizes there is an urgent need to increase the resilience of the country to climate change and disasters. The strategy states that the ADB will assess options for setting up viable disaster-risk financing strategies. In addition, it states that the ADB will mainstream DRM and CCA into relevant ADB-financed investment projects.

The **Lao PDR CPS 2012-2016** highlights that climate change effects, including the intensity of floods and droughts, will affect water management strategies and planning across sectors. It calls for support of climate-resilient water resources management and interventions to incorporate climate-proofing concerns in urban planning.

II - Operational Policies

In 1987, the ADB was the first MDB to introduce an operational policy related to disasters, entitled *Rehabilitation Assistance to Small DMCs Affected by Natural Disasters*. Following an earthquake in Nepal and floods in Bangladesh, the ADB replaced this policy in 1989 with the *Rehabilitation Assistance after Disasters*.

In 2004, the ADB adopted the current *Disaster and Emergency Assistance Policy* (DEAP). The aim of DEAP is to enhance the Bank's capacity and effectiveness in supporting countries to manage their respective disaster programs. To this end, the policy calls for, inter alia, mainstreaming DRM and the provision of early and medium-term disaster response and assistance. The DEAP does not allocate financing for disaster related assistance.

Building on the DEAP, the ADB has adopted an *Integrated Disaster Risk Management* (IDRM) framework. The IDRM combines DRM, CCA, and disaster risk financing (DRF). The objective of the framework is (i) to link DRR and DRF initiatives to encourage systematic national and sub-national DRM capacity; (ii) to harmonize DRM and CCA programs; (iii) to play a catalyst role in the private sector and markets for DRF programs; and (iv) to demonstrate feasibility and effectiveness of IDRM through pilot projects and capacity development.

III – Mechanism, Instruments and Interventions

Between 1987 and 2012, the ADB approved 609 disaster-related projects, representing a financial commitment of approximately US\$ 14 billion. Of this, 52% was provided for disaster risk reduction, 35% for disaster reconstruction and rehabilitation, and 13% on emergency assistance.

Ex-Post

Following disaster, the ADB supports affected countries through: (i) conducting a damage and needs assessment, often in coordination with other development actors such as the World Bank; (ii) restructuring and/or additional financing to ongoing investment projects; (iii) small short-term projects focused on immediate rapid restoration, processed as Emergency Assistance Loans (EALs); and new investment projects focusing on medium to longer term reconstruction and rehabilitation, processed under regular procedures.

Box 5. Examples of ADB post-disaster interventions

In alignment with the priorities of the damage and needs assessment (DNA) prepared by ADB and the World Bank, the ADB approved the Flood Emergency Reconstruction Project in **Pakistan** (US\$ 654 million) in March 2011. The project aims to support urgent reconstruction priorities, focused on transport and irrigation.

In response to the 2011 floods, the ADB approved in March 2012 the Flood Damage Emergency Reconstruction Project in **Cambodia** (US\$ 55 million). This project aims to rehabilitate critical infrastructure, including national, provincial, and rural roads and irrigation facilities.

In response to the Indian Ocean Tsunami in 2004, the ADB established a special fund – the *Asian Tsunami Fund* – to support disaster response and promote risk reduction at the early stage of recovery

efforts (Box 6). To date, the fund has provided US\$ 573 million in assistance, bringing the total ADB's total tsunami-related assistance to US\$ 892 million. Similarly, the ADB established the *Pakistan Earthquake Fund* in 2005.

In 2009, the ADB established the *Asia Pacific Disaster Response Fund* with the aim to support countries impacted by major disasters (US\$ 40 million). The funds provides quick-disbursing grants up to US\$ 3 million to restore life preserving services to disaster affected communities (Box 6). As of August 2012, the fund has US\$ 10.4 million remaining and replenishment has not yet been confirmed.

Between 2005 and 2011, about 16 percent of the ADB's natural disaster-related assistance was funded through these special funds.

Box 6. Examples of ADB emergency interventions through special funds

Asian Tsunami Fund – In **Sri Lanka**, the ADB approved a U \$265 million grant assistance package to reconstruct roads and railways, and to restore livelihoods. Priorities included housing reconstruction, microfinance for livelihood programs, and coastal protection. Another example is the Earthquake and Tsunami Emergency Support Project (ETESP) to support disaster management, reconstruction and rehabilitation in affected areas of **Aceh and North Sumatra** (US\$ 291 million).

Asia Pacific Disaster Response Fund – In October 2010, the ADB approved the Typhoon Ketsana (Ondoy) Project in **Lao PDR**. The aim of the project is to help alleviate the fiscal constraints faced by the Government following the disaster.

The ADB recognizes there is a need to adopt a more flexible and systematic approach allowing a more effective response to disasters. Hence, the ADB will pilot a *Disaster Response Facility* (DRF) during 2013-2016. The DRF will, *inter alia*, help to (i) ease the resource constraint; (ii) reduce costly delays, (iii) lessen the need for reprogramming, and (iv) reflect a “build back safer” strategy.

Ex-Ante

In 2008, the ADB approved the *DEAP Action Plan* to implement the DEAP. The plan calls for mainstreaming DRM into the ADB's regular investment operations. The key objectives of the plan are: (i) to develop the ADB's internal capacity to implement the DEAP; (ii) to ensure that vulnerability assessments are undertaken as part of the CPS process, and to make certain that the natural hazard vulnerability is taken into consideration as part of program or project designs; (iii) to pay special attention to countries that are known to be at high risk from disasters; and (iv) to develop the ADB as a regional presence in DRM.

Box 7. Examples of ADB technical assistance to build disaster and climate resilience

In 2011, the ADB approved a TA to support the development of a pilot program which will design parametric models and insurance policies for disaster risk as well as the corresponding institutional vehicles in two countries.

In February 2012, the ‘Main River Flood and Bank Erosion Risk Management Program’ in **Bangladesh** was approved. The program supports, *inter alia*, enhanced integrated flood and riverbank erosion mitigation measures and support for enhancing local communities' risk management capacity.

In **Vietnam**, the ADB approved ‘Promoting Climate Resilient Rural Infrastructure in the Northern Mountain Provinces’ in June 2012. This TA aims to demonstrate appropriate and effective methods to reduce the possible damage due to climate change and other weather factors. This, in turn, is expected to be used for developing appropriate rural infrastructure design and construction standards, building implementation capacity, and taken into the design of future investments.

Caribbean Development Bank (CDB)



I - Strategic Mainstreaming

The CDB’s *Strategic Plan for 2010-2014* identifies environmental sustainability and DRM as a strategic objective. The plan calls for interventions to reduce vulnerability to natural hazards and to build resilience, as well as support for climate risk management. Other priorities include mainstreaming DRM into internal operations.

The CDB complemented the *Disaster Strategy* with the *Climate Resilience Strategy*. The strategy, adopted in 2012, seeks to: (i) develop and operationalize an environmental sustainability risk framework that includes climate resilience for CDB’s operations; and (ii) assist member countries and regional institutions to mobilize financing, design, and implement policies, strategies and investment programs to address climate resilience.

Box 8. Examples of mainstreaming disaster resilience in CDB Country Partnership Strategies

The **Belize CPS 2011-2015** recognizes the country’s vulnerability to natural hazards such as hurricanes and flooding. The strategy states that all interventions need to integrate climate change resiliency and disaster risk reduction considerations. The Bank will also support TA to mainstream disaster risk reduction in sectoral policies.

The **Montserrat CPS 2012-2013** calls for increasing resilience and reducing vulnerabilities. This includes strengthening the country’s capacity to safeguard its limited natural resources by improving natural hazard resilience and consolidating gains in DRM.

II Operational Policies

In 2009, the CDB approved the Disaster Risk Management Strategy and Operational Guidelines (DiMSOG) prioritizes disaster and climate risk reduction throughout the Bank’s operations. The strategy aims to (i) support member countries to reduce natural hazards and the adverse effects of climate change and facilitate rapid post-disaster response; (ii) strengthen the CDB’s effectiveness in these areas; and (iii) collaborate with MDBs and other development partners to increase effectiveness of donor interventions.

III – Mechanism, Instruments and Interventions

Between 1980 and 2011, the CDB approved 112 disaster related projects, representing a financial commitment of US\$ 363.7 million. The focus of the majority of these projects was related to post-disaster activities: 93 *ex-post* projects (US\$ 256.4 million) and 19 *ex-ante* projects (US\$ 98.2 million).

Ex-Post

In the aftermath of a natural disaster, the CDB provides funds for both relief and rehabilitation/reconstruction efforts. This assistance is channeled through the following financial instruments: Emergency Relief Grants (US\$ 200 K), Immediate Response Loans (IRLs - US\$ 750 K), and Rehabilitation and Reconstruction Loans (RRLs - Box 8). Recently, the CDB aims to build in risk reduction and resilience building dimensions into the RRLs (Box 9).

Box 9. Examples of CDB post disaster interventions

In **St. Lucia**, the CDB approved the ‘Natural Disaster Management Rehabilitation and Reconstruction Project’ (US 17.9 million) in 2011. The aim of the project to support the Hurricane Tomas recovery whilst reducing risks associated with landslide and flood hazards. Activities include: (i) assessment of slope stability and drainage and geotechnical conditions; (ii) mapping levels of risk; (iii) identifying causal factors of slope movement and cost effective slope stabilization, protection and landslide remediation measures. Flood assessment is expected to focus on the assessment of hydrologic and hydraulic conditions in a priority catchment with the identification of cost effective remedial works and non-structural mitigation measures. Other examples of RRLs which have integrated ex-ante activities were approved for the **British Virgin Islands, St. Vincent and the Grenadines, Grenada and the Commonwealth of Dominica**.

Ex-Ante

The CDB currently manages two funds which provide ex-ante assistance.

The *Community Disaster Risk Reduction Trust Fund* is the fund is capitalized with US\$ 22.0 million. The fund aims to reduce disaster risk at the community level through risk reduction, climate change adaptation and/or related livelihood projects. The fund also seeks to generate experience-based knowledge products to be disseminated within the region.

The *Micro-Insurance Catastrophic Risk Organisation (MiCRO) fund* supports the catastrophe micro-insurance facility which aims to provide parametric insurance to Haiti. The fund also aims to facilitate re-establishment of economic and trading systems, to reduce restrictions on access to financial services in the aftermath of a natural disaster, and to increase the viability and sustainability of Haiti’s microfinance sector.

Box 10. Examples of CDB interventions to build disaster and climate resilience

The CDB has supported strengthening the ‘regional building code’. By working with CARICOM and the Organization of American States (OAS), CDB has supported regional efforts to upgrade and maintain the CUBiC and the proposed new ‘regional Building Standards’ to be developed which will be based on codes of the International Code Council for application throughout the Caribbean.

I - Strategic Mainstreaming

The *Report on the Ninth General Increase in the Resources of the Inter-American Development Bank* identifies climate change adaptation and disaster risk management as one of the IDB's core priorities

In 2010, the IDB adopted the *Integrated Strategy for Climate Change Adaptation and Mitigation and Sustainable and Renewable Energy (CCS)* to guide efforts to mitigate and adapt to climate change. The CCS recognizes that climate-related disasters – storms, floods, droughts, landslides, extreme temperatures and forest fires – are an economic burden to the region.

The strategy also identifies actions to be taken. This includes, *inter alia*, the development of risk sharing and innovative transfer mechanisms to address loss and damage, enhancement of local adaptive capacity, improve the modeling and forecasting capabilities for assessing climate vulnerability and risk in the agriculture sector, and mainstream climate change adaptation priorities in the water and sanitation sector.

Box 11. Examples of mainstreaming disaster and climate resilience in IDB Country Partnership Strategies

The **Guyana Country Strategy 2008-2012** acknowledges that the country is vulnerable to natural disasters and climate change. The strategy puts forth that the IDB will (i) focus on institutional strengthening and (ii) assist the Government of Guyana to design and implement a Natural Disaster Risk Management Framework.

The **Honduras Country Strategy 2011-2014** recognizes the high frequency and intensity of natural disasters that hit the country as well as the limited capacity of the Government of Honduras to prepare for such events. To mitigate the risks, the strategy states that the IDB will assist in analyzing risk financing instruments, such as contingent lines of credit.

The **Colombia Country Strategy 2012-2014** calls for making the country more disaster resilient. Activities will focus on, *inter alia*, (i) bolstering the policy, regulatory, and institutional framework for risk management; (ii) developing institutional mechanism to enhance rehabilitation, construction, and reconstruction projects; (iii) building local probabilistic risk assessment capacity and resilience; and (iv) revising scientific and technical standards for earthquake-resistant construction nationwide.

The **El Salvador Country Strategy 2010-2015** identifies the prevention of the natural disasters in settlements locates over ravines in the San Salvador Metropolitan Area (SSMA) and other high risk areas as one of the IDB's key priorities in the country. In this context, the strategy states that the Bank will support the Government of El Salvador in risk mitigation through, *inter alia*, more robust risk evaluations and capacity building.

II- Operational Policies

In 2007, the IDB took an important step towards supporting proactive disaster risk management by adopting the *Policy on Disaster Risk Management*. The objectives of the policy are: (i) to strengthen the Bank's effectiveness to provide effective and efficient support to borrowing members in reducing disaster risks and (ii) to facilitate rapid and appropriate assistance by the Bank to its borrowers after a disaster.

III – Mechanism, Instruments and Interventions

During the period 1995-2012, the IDB has approved 68 lending operations related to natural disasters, representing a financial commitment of US\$ 2.82 billion – both ex-post (US\$ 1.37 billion) and ex-ante (US\$ 1.46 billion). In addition to investment and policy lending, the IDB also provided technical assistance: US\$ 40.2 million for disaster prevention and US\$ 18.7 for emergency response.

Ex-Post

Following a natural disaster, the IDB can use various financial and non-financial instruments to support response efforts.

In the immediate aftermath, the IDB can offer emergency technical cooperation grants. The maximum amount of such grant amounts to US\$ 200 K. The focus of these grants is mostly humanitarian and the responsibility for implementation lies with specialized entities with specific expertise in this area.

To respond to medium to long-term recovery needs, the IDB established in 1998, the *Emergency Reconstruction Facility* (ERF), renamed as *Immediate Response Facility* (IRF) in 2003. This facility can use up to US \$20 million of the IDB's Ordinary Capital (OC) resources or up to US \$10 million of the Fund for Special Operations to restore basic services following a natural disaster (Box 12).

In addition, the IDB can approve reconstruction loans and/or conduct a loan reformulation - diverting loan resources within a project or to another existing project. In the case of reformulations for reconstruction, part of the resources has to be allocated to prevention and mitigation activities.

Box 12. Examples of *Ex-Post* interventions

In 2011, the IDB approved a US\$ 20 million rehabilitation program in **Venezuela**. The objective of the program was to support efforts to restore basic services interrupted by the heavy rains that have caused flooding and landslides. Specifically, the program focused on restoring water and sanitation services and repairing road infrastructure in the affected areas, as well as providing shelter for displaced families.

The same year, the IDB also approved another US\$ 20 million rehabilitation program in **Argentina**. This program aimed is to allow the population affected by the eruption of Puyehue Volcano to resume regular economic and social activities by supporting initiatives to restore water and sewer, energy, and transportation services, remove/dispose of ash, and repair public buildings and damaged housing for the low income population.

Ex-Ante

The IDB has developed an integrated DRM approach to support countries. This approach focuses on: (i) national risk evaluation; (ii) prevention and mitigation measures; (iii) national and local institutional strengthening; and (iv) risk retention and risk transfer financing mechanisms. The ex-ante assistance is channeled through various financial instruments, including investment and policy loans, grants, technical assistance, contingent credit lines, and risk transfer financing.

In addition to the traditional investment and policy-based loans, which in principle have no amount upper limit, the following mechanisms are in place to provide ex-ante assistance:

In 2001, the IDB established the *Disaster Prevention Sector Facility* to provide countries with a fast track approval process for investments in disaster prevention. The maximum amount of each loan is US\$5 million. The facility supports activities in the areas of risk identification and forecasting, mitigation, preparedness, risk transfer, and institutional capacity building.

In 2006, the IDB established the *Disaster Prevention Fund* and *Multi-Donor Disaster Prevention Trust Fund*. These funds provide grant funding to support the design of disaster prevention investments, risk assessments, and institutional capacity building. Both funds approve grants up to US\$ 1 million.

In 2007, the IDB launched the *Sustainable Energy and Climate Change Initiative Fund* (SECCI). This fund supports, *inter alia*, climate change adaptation. Specific activities include: mainstreaming climate risk in country investments (assessments of climate change vulnerability, risk assessments, and identification of adaptation measures) and climate-proofing IDB investments (using screening tools to assess and mitigate climate risk in new projects).

Box 13. Examples of lending to build disaster and climate resilience

Investment lending - In December 2005, the IDB approved the “Early Warning System and Disaster Risk Management Program” in **Ecuador** (US\$ 5 million). This loan aimed at setting up an early warning system for the Tungurahua Volcano, and capacity building for mainstreaming disaster risk management in territorial planning at the municipal level.

Policy lending - In November 2011, the IDB approved the 'Disaster Risk Management and Climate Change Adaptation Program' in **Colombia** (US 120 million). This policy-based loan aims to support the Government of Colombia in the implementation of a process of legal and institutional reforms in DRM and CCA.

In March 2012, the IDB approved the 'Program to Reduce Vulnerability to Natural Disasters and Climate Change II' in **Panama**. The focus of this loan will be on policy reforms, specifically on (i) governance and development of regulatory frameworks to consolidate legal and policy instruments initiated by the country; and (ii) development of management instruments to increase the factors that determine Panama's Disaster Risk Management Index (RMI).

In 2009, the IDB established the *Contingent Credit Facility*. The facility provides loans up to US\$100 million per country as well as grant financing to provide technical expertise to help countries to adopt an integrated approach to DRM.

Box 14. Examples of IDB disaster risk financial protection financing

In 2009, the IDB approved its first contingent loan to the **Dominican Republic** (US\$ 100 million). Since, the IDB approved contingent loans for **Costa Rica, Honduras, Panama** and **Ecuador** (each US\$ 100 million). These loans aim to support more effective financial risk management by providing fast-disbursing, flexible, ex ante financing to cover emergency expenditures in the event of a severe or catastrophic natural disaster. A similar loan is currently in the pipeline for **Peru**.



I - Strategic Mainstreaming

The World Bank has made progress in mainstreaming DRM and CCA at the strategic level. This is reflected by the significant increase in the number of CASs which address disaster and climate risks between 2006 and 2011. In 2011, 70% of Country Assistance Strategies (CASs)¹ recognized natural disasters as a challenge to sustainable development, up from 40% in 2006 (Box 16). This upward trend has taken place across regions and country income groups. Similarly, all 2012 strategies mentioned vulnerability to climate change, compared to only 32% in 2007.

Box 15. Examples of mainstreaming disaster and climate resilience in Country Assistance Strategies

The **Tuvalu** CAS (FY12-15) aims, *inter alia*, to build resilience against exogenous shocks. This include shocks relate to climate change and drought. The strategy states that all activities will incorporate climate resilience measures. Furthermore, the World Bank will support the preparation of a drought management plan that will identify practical mitigation measures at government and household levels.

The **Nepal** ISN (FY12-13) includes a pillar which focuses on reducing food insecurity and improving resilience from exogenous shocks like climate change effects and natural disasters. In addition, the strategy states the Bank will focus on strengthening water resources management with an emphasis on regional cooperation and adaptation to climate change. In addition, programs for climate resilience focusing on climate proofing vulnerable infrastructure will be supported.

The **Colombia** CPS (FY12-15) considers resilience to climate change and disaster risk mitigation as high priorities for the WB's engagement. It states that significant work remains to be done in improving knowledge and risk assessments of territorial management; investing in critical infrastructure, and ensuring that institutional reforms and investment are accompanied by robust enforcement of zoning requirements and building codes.

II- Operational Policies

In recent years, the World Bank has made significant efforts to enhance the flexibility, speed and effectiveness of its crisis and emergency response policies and procedures. In 2007, the Bank revised the emergency response policy framework by adopting OP/BP 8.00, *Rapid Response to Crises and Emergencies*.

The revised policy allows emergency operations to be processed under accelerated and simplified procedures and streamlines requirements in fiduciary and safeguards areas. The policy also enables financing of a wider range of expenditures, faster disbursements and alternative implementation arrangements if deemed necessary.

III – Mechanism, Instruments and Interventions

¹ CAS products include Country Assistance Strategies (CAS), Country Partnership Strategies (CPS) and Interim Strategy Notes (ISN).

Between 1984 and 2005 the World Bank financed 528 projects with disaster-related activities, totaling more than US\$ 26 billion, or just less than US\$ 1.2 billion a year. Since then, financing directly linked to DRM has increased to more than US\$ 2.3 billion a year (totaling US\$ 11.7 billion). Between 2006 and 2011 the World Bank financed 113 disaster prevention and preparedness operations (US\$ 7.9 billion) and 68 disaster reconstruction operations (US\$ 3.8 billion). In all support for DRM, the World Bank promotes a comprehensive, multi-sector approach to managing disaster risk in countries.

Ex-Post

The World Bank provides post-disaster assistance through (i) contingent emergency components within existing investment projects; (ii) restructuring or additional financing to existing investment projects; (iii) emergency lending; and (iv) contingent credit lines.

Recently, the following mechanisms were adopted to further enhance the capacity of the International Development Association (IDA) to respond effectively to crises and emergencies:

During 2011, the World Bank emergency financing framework was complemented by a dedicated IDA funding mechanism: the *Crisis Response Window* (CRW). The CRW provides concessional assistance for post-disaster recovery and reconstruction. In the case of natural disasters, the CRW can only be used when the event is exceptionally severe. The CRW was first triggered in response to the 2011 drought in the Horn of Africa (Box 17).

In 2011, the World Bank also endorsed the *Immediate Response Mechanism* (IRM). Building on the existing flexibility in the Bank's operational policy to restructure existing projects to meet emergency needs, IRM seeks to facilitate rapid funds disbursement. In the event of a crisis or emergency, IDA countries can access the IRM for quick financing. This amounts to up to 5 percent of the undisbursed balances of the country's portfolio or US\$ 5 million for small states.

Box 16. Example of ex-post interventions

Contingent emergency components - The **Laos** Roads Sector Project (2010, US\$27.8 million) triggered a contingent component of \$1 million and reallocation of \$3 million from other project components, to repair roads damaged by Typhoon Haima. In **Indonesia**, contingent components have been added under the Third National Program for Community Empowerment in Urban Areas (2010, US\$150 million) and Western Indonesia Roads Improvement Project (2011, US\$250 million).

Emergency Lending - Responding to the drought crisis in the **Horn of Africa**, the World Bank made available US \$1.88 billion to respond in three phases. An additional IDA allocation of \$250 million (CRW) was pooled with other resources to support three new projects and provide additional financing to seven ongoing projects. One of the new emergency operations was the 'Emergency Health and Nutrition Project' (US\$ 30 million) to support the response in refugee camps in Kenya and Ethiopia by expanding implementation of a health and nutrition package of services.

Contingent credit lines - Seven countries currently benefit from DPLs with Catastrophe Deferred Drawdown Options (Cat DDO) for a total cover of just over US\$1.25 billion; four countries have already drawn down on their Cat DDOs. Most recently, in December 2011, the **Philippines** drew down its US\$500 million Cat DDO to assist with recovery and reconstruction efforts in the wake of Tropical Storm Washi.

Ex-Ante

The World Bank has a variety of financial and non-financial instruments that it can utilize to provide ex-ante assistance. The instruments include various types of investment loans, policy loans, grants and technical assistance.

Box 17. Examples of ex-ante investment loans approved in 2012

In **Senegal**, the World Bank supports ‘Water Stormwater Management and Climate Change Adaptation Project’ (US\$ 55.6 million). This project seeks to improve stormwater drainage and flood prevention in periurban areas of Dakar. Activities include building resilience awareness, communication and capacity at the community level and flood risk mainstreaming in the urban sector.

The World Bank supports the Metro Colombo Urban Development Project in **Sri Lanka** (US\$ 217 million). One of the main objectives of this project is to reduce flooding in the catchment of the Colombo Water Basin. Activities include improvements to flood and drainage management infrastructure and the development of an integrated flood management system (IFMS).

In **Indonesia**, the World Bank supports the ‘Jakarta Urgent Flood Mitigation Project’. The project aims to contribute to the improvement of the operation and maintenance of priority sections of Jakarta’s flood management system. It supports, *inter alia*, dredging and rehabilitation of selected key floodways, canals and retention basins.

In 2006, the *Global Facility for Disaster Reduction and Recovery* (GFDRR) was established to assist countries to reduce disaster losses. GFDRR is a growing partnership of 41 countries and 8 international organizations, including the United Nations and the European Union. Annual commitments to activities made by GFDRR have grown from US \$6.4 million in 2007 to US\$ 46.7 million in 2012.

GFDRR activities can be categorized as follows: (i) technical assistance to World Bank operational staff or directly to governments for the design and implementation of projects, policies or other development interventions; (ii) services to build capacity, including training and/or mentoring of non-expert government officials, representatives of inter-governmental organizations and others in the field of DRM; and (iii) knowledge generation and dissemination of evidence of impact and lessons from DRM interventions.

Box 18. Example of GFDRR support

The GFDRR/World Bank **Disaster Risk Financing and Insurance Program** (DRFI) assists governments in increasing their countries’ financial resilience to disasters by engaging in sovereign disaster risk financing and by promoting catastrophe risk market development. To date, DRFI operations have leveraged over US\$1.5 billion worth of lending to provide or facilitate greater than US\$106 billion worth of coverage for governments, households, and smallholder agricultural producers. Key results include, *inter alia*, the establishment of the **Turkish** Catastrophe Insurance Pool (TCIP), **Caribbean** Catastrophe Risk Insurance Facility (CCRIF), and agricultural insurance pools such as the Index-based Livestock Insurance Project (IBLIP) in **Mongolia** and the Weather Based Crop Insurance Scheme in **India**.