INTER AMERICAN DEVELOPMENT BANK

DISASTER RISK MANAGEMENT POLICY GUIDELINES

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<table>
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<th>Abbreviation</th>
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<tr>
<td>CATSIM</td>
<td>CATastrophe SIMulation</td>
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<tr>
<td>CCLIP</td>
<td>Conditional Credit Line for Investment Projects</td>
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<td>DDI</td>
<td>Disaster Deficit Index</td>
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<td>DRA</td>
<td>Disaster Risk Assessment</td>
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<td>DRM</td>
<td>Disaster Risk Management</td>
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<td>EIA</td>
<td>Environmental Impact Assessment</td>
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<td>ENSO</td>
<td>El Niño Southern Oscillation</td>
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<td>ESMR</td>
<td>Environmental and Social Management Report</td>
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<td>IIASA</td>
<td>International Institute for Applied Systems Analysis</td>
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<td>LDI</td>
<td>Local Disaster Index</td>
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<td>PBL</td>
<td>Policy Based Loans</td>
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<td>Project Performance Monitoring Report</td>
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<td>Prevalent Vulnerability Index</td>
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<td>RMI</td>
<td>Risk Management Index</td>
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<td>SECCI</td>
<td>Sustainable Energy and Climate Change Initiative</td>
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<td>SPF</td>
<td>Safeguards Policy Filter</td>
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<td>VPC</td>
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I. INTRODUCTION

Purpose of the Guidelines

1.1 The purpose of the present guidelines is to help Bank teams and borrowing member countries to implement Bank actions according to the principles of the Disaster Risk Management Policy (GN-2354-5) approved February 2007. The objectives of the Policy are: (i) 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. The guidelines are part of the Bank’s framework for the management of development risk at the country and project levels.

1.1 There are four possible strategies to manage risks: (i) acceptance, when risks remain below levels deemed tolerable by the parties involved; (ii) prevention and mitigation; (iii) sharing, when risks can be effectively transferred to a third party, for example through insurance; and (iv) rejection (“avoidance”), when the level of risk exceeds the risk level deemed acceptable but cannot be lowered at a reasonable cost.

Directives of the Policy

1.2 The Policy directives outlines the actions that are to be used both by the IDB staff and by teams of the borrowers, who are responsible for:

(i) Country programming - Policy Directive A-1
(iii) Loan reformulations for financing disaster response - Directive B-1
(iv) Preparation and execution of reconstruction projects - Directive B-2

1.3 The guidelines will contribute to the mainstreaming of disaster risk management (DRM) into the Bank’s programming exercises with the borrowers, particularly in high-risk countries. In order to determine which of the IDB’s borrowing member countries will require a country risk assessment, a provisional classification of all countries has been prepared.

1.4 The guidelines will be used for the design and implementation of lending programs, technical cooperations, small projects, co-financing, and pre-investment activities consistent with the identified risk level. They will address ways to manage risk in public and private sector projects, in order to improve project viability. Whenever significant risks due to natural hazards are identified in project preparation, appropriate measures will be taken to secure the viability of the project, including the protection of populations and investments affected by Bank-financed activities. The Bank has non-reimbursable resources that may be used to cover the transaction costs incurred with the implementation of these guidelines.1

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1 The Disaster Prevention Fund (GN-2405-3) and the Multi-donor Disaster Prevention Trust Fund (GN-2427) are potential sources for this kind of financing.
1.5 These guidelines will also recommend ways to evaluate the benefits and opportunity costs of loan reformulations and give guidance on how to ensure adequate transparency and effective monitoring, auditing and reporting on the use of redirected funds. In addition, the guidelines describe precautions to be taken to avoid rebuilding or increasing vulnerability during rehabilitation and reconstruction.

1.6 The guidelines are designed to be flexible in their application to the various situations that borrowing member countries and the Bank may experience, in the face of natural hazards and disasters affecting their development prospects and performance.

**Natural Hazards and Climate Change**

1.7 The present guidelines apply to all natural hazards, including the hydro-meteorological hazards – windstorms, floods and droughts – that are associated with both the existing climate variability and the expected change in long-term climate conditions. Of note for risk assessments, climate change is expected to change some countries’ disaster risk (their probable losses) by changing the characteristics of the hydro-meteorological hazards.

1.8 Although uncertainty persists, recent advances in downsizing climate models are allowing disaster managers to better calibrate their risk assessments to understand potential impacts due to climate change at the sub national level. Tools for identifying such climate risk at the country and project levels, and measures for mitigating these increased risks to Bank investments (climate change adaptation) will be developed under Pillar 4 of the Bank’s Sustainable Energy and Climate Change Initiative (SECCI) Action Plan.

### II. POLICY DIRECTIVE A-1: COUNTRY PROGRAMMING

#### A. Purpose and Scope

2.1 The purpose of this section is to provide guidance to Bank teams on the implementation of Directive A-1 of the Disaster Risk Management Policy, particularly for countries classified as having high disaster risk, as well as for those sectors which are associated with a high vulnerability to natural disasters and in which the Bank has identified opportunities for financing. In accordance with this Policy, the Bank will encourage

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2 The Companion Paper to the Disaster Risk Management Policy illustrates some of these changes. see page 5 (http://www.iadb.org/sds/ENV/publication/publication_2530_4573_e.htm)

3 Climate changes are likely to influence weather related hazards, and thus probable losses, in three principal ways: (i) By altering the intensity and frequency of climatic extremes, i.e., hurricanes, tropical storms, drought, heat waves and cold snaps; (ii) by shifting the average climatic conditions and climate variability, i.e. precipitation levels; and (iii) initiating hazards that are new to a region such as sea level rise and glacial melt that are predicted to worsen storm surge, coastal flooding as well as floods and droughts in watersheds.

4 Sources of information on climate change and climate change adaptation are available, on the IPCC website (see http://www.grida.no/climate/ipcc_tar/wg2/index.htm).

5 The SECCI Action Plan on Adaptation to Climate Change will develop a Climate Risk Screening Tool to support project teams in identifying potential climate impacts.
countries to include proactive DRM in programming activities in those countries, as indicated in Directive A-1 of the Policy:

2.2 **A-1. Programming**

Dialogue with borrowing member countries. The Bank will seek to include the discussion on proactive disaster risk management in the dialogue agenda with borrowing member countries. The Bank will give due consideration to vulnerability associated with natural hazards and risk management in relation to the priority areas of intervention discussed and agreed with the borrowers for the development of country and regional strategies, and operational programs.

The Bank will identify countries according to their level of exposure to natural hazards based on existing indicators and Bank experience. For countries that are highly exposed to natural hazards, the Bank will identify their potential vulnerability as a major development challenge and propose a country level disaster risk assessment. When the assessments identify that potentially important disruptions in the country’s social and economic development could be caused by disasters resulting from natural hazards, the Bank will encourage the inclusion of disaster risk management activities in the country strategy and operational program agreed with the borrower. These may include policy reforms, and specific institutional strengthening and land use planning activities, measures of financial protection such as through risk transfer, and investment projects conducive to reducing vulnerability at the national, regional and municipal levels. Where the natural hazards may affect more than one country, the Bank will encourage a regional approach within the existing programming framework. The Bank will promote the use of the Disaster Prevention Sector Facility and the Disaster Prevention Fund, described in Section V of this policy, and other means it offers to finance the recommended actions resulting from the assessment process.

2.3 In order to meet the requirement of the DRM Policy to identify countries according to their level of risk exposure, a provisional country classification has been developed. The provisional classification will be subject to change, based on expert knowledge, and eventually on the complete dataset of risk information derived from the implementation of the Bank’s Indicators for Disaster Risk and Risk Management Program in its 26 borrowing member countries. The Indicators Program has been completed in 14 countries to date.

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6 The provisional classification was made on the basis of existing data, collected by the University of Louvain, Belgium (see www.em-dat.net), related to periods of 30 and 100 years respectively, on disaster impacts. This is one of the few sources available for all the borrowing member countries of the Bank. It is deficient in some aspects, for example local hazard events, or institutional aspects of disaster risk management are not included. A revised classification, using the criteria of past impacts measured by recurrence of events, deaths, affected population, GDP losses and expected levels of future vulnerability will be included in the DRM Policy Implementation Toolkit. This classification will guide country programming teams to request country level disaster risk assessments for the preparation of particular country strategies.

7 See www.iadb.org/sds/env for the publication or project site in http://idea.unalmzl.edu.co
B. Programming Stages

1. Disaster Risk Information for Country Dialogue and the Preparation of Country Strategies

2.4 Country Disaster Risk Assessment: As indicated in Directive A-1, countries that have been identified as being highly exposed to natural hazards will be encouraged by the Bank to include DRM as a priority area for Bank assistance. In those cases, the Bank will propose that a country disaster risk assessment be carried out. The assessment would give an overview of the risks facing a country; identify the sectors and geographical areas that should receive priority attention; provide initial policy orientation, reviews of relevant institutional capacities, and assistance needs. These assessments may already exist, or may be put together from country and secondary sources.

2.5 The evaluation of the macroeconomic impacts as part of the country disaster risk assessment may allow for the identification of risk reduction needs and the quantification of possible resource gaps between available resources and funding needed for disaster response and recovery. Recommendations will be prepared concerning opportunities for the Bank to contribute to financial protection against disasters, as appropriate, such as direct funding for risk identification and support for risk transfer in financial markets in order to improve the effectiveness of the country’s development efforts in the areas and sectors of Bank involvement.

2.6 Identification of Opportunities for Bank Financing. In line with the new country development risk framework, a more detailed disaster risk assessment will be recommended when disaster risks faced by certain areas/sectors of Bank involvement could significantly jeopardize the achievement of a country’s development objectives. These sector-specific or area-specific assessments would analyze how these risks could affect specific areas/sectors and make recommendations on how best to address the risks identified. For this purpose, loans, technical cooperations and non-financial Bank products for proactive DRM may be proposed within the country programming activities.

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8 General information on the frequency of disaster occurrence, affected population, mortalities and economic losses is available at www.em-dat.net. The IDB’s Prevalent Vulnerability Index (PVI) will provide analysis of exposure as part of the IDB Indicators Program for 14 countries (www.iadb.org/sds/env).

9 Information on local disasters may be found at the website of the Social Studies Network for Disaster Prevention in Latin America (see www.desinventar.org). For the IDB’s Local Disaster Index (LDI), see www.iadb.org/sds/env.

10 For the IDB’s Risk Management Index (RMI), see www.iadb.org/sds/env.

11 The Bank has developed the Disaster Deficit Index (DDI), a tool for the analysis of the financial impact of potential losses and damage caused by major disaster events that could compromise a country’s macroeconomic stability and the effectiveness of its efforts and investments geared towards development. (www.iadb.org/sds/env). The DDI measures the shortage/surplus of financial resources that a country has to cover the costs of reconstruction in the wake of catastrophic events.

12 The International Institute for Applied Systems Analysis (IIASA) has developed a pilot software program (known as CATSIM, short for CATastrophe SIMulation) that has been used to analyze alternative funding sources for various disaster risk scenarios (see http://www.iiasa.ac.at/Research/RAV/Projects/catsim.html)

2.7 When deemed necessary by the Bank and if the borrower agrees, DRM activities will be included as in the implementation of the country strategy. The Bank will give due consideration to the following:

- In the programming and portfolio reviews, the Bank and the borrower may seek to implement risk reduction investments in the priority sectors and geographical areas through disaster prevention and mitigation measures. These investments may be financed with free-standing loans\(^\text{13}\) or as part of larger investment programs,\(^\text{14}\) Policy Based Loans (PBL) or private sector operations.

- Technical assistance may be considered for carrying out area- or sector specific risk evaluations, strengthening risk management through policy reforms, organizational design, land use planning activities, the preparation of new prevention loan programs, and supporting the implementation of financial protection schemes such as through insurance to cover disaster losses.\(^\text{15}\)

- Loan portfolio modifications will likely be necessary due to the occurrence of major disasters during the regular programming cycle. Borrowers may request new emergency or reconstruction financing and will have access to either new resources, for instance though the Immediate Response Facility for Emergencies Caused by Disasters (GN-2038-12 and GN-2038-16), or “existing” resources, through loan reformulations (see Directive B-1).

2.8 The results of the DRM implementation in country programming will be evaluated using the monitoring system defined in the Country Strategy document.

C. Regional Activities

2.9 The Bank may recommend activities of a regional nature whenever it is known that a particular disaster could affect several borrowing member countries simultaneously. Examples of this situation are the ENSO (El Niño Southern Oscillation) phenomenon, and the hurricanes and tropical storms in the Caribbean and Central America.

2.10 The regional activities that possibly involve Bank financing will be agreed beforehand with the affected borrowing member countries and may involve coordination with other international entities. The resulting operations to be included in the regional portfolio of the Regional Strategy document could be funded through Bank instruments, such as technical cooperations of the Regional Public Goods Program or Disaster Prevention Fund, or loans prepared in parallel, in close cooperation with the countries interested in a regional program.\(^\text{16}\)

\(^{13}\) The Disaster Prevention Sector Facility (GN-2085-5) may be used for the funding of these investments.  
\(^{14}\) For example in a watershed management programs, flood monitoring and mitigation could be included as an activity, or in a housing programs, landslide identification and prevention.  
\(^{15}\) Resources from the Disaster Prevention Fund (GN-2405-3) or the Multi-donor Disaster Prevention Trust Fund (GN-2427-2) may be used for these purposes.  
\(^{16}\) Regional activities might include, among other things, integrated management of shared watersheds, investments aimed at reducing the vulnerability of logistical corridors, interconnected energy distribution
III. POLICY DIRECTIVE A-2: RISK AND PROJECT VIABILITY

A. Purpose and Scope

3.1 The purpose of this section is to provide guidance to project teams on the implementation of the Bank’s Disaster Risk Management Policy Directive A-2: Risk and Project Viability. This Directive is designed to promote the incorporation of DRM in a systematic manner during project preparation and execution. The objective is to reduce risk to levels that are acceptable to the Bank and the borrower, as indicated in Directive A-2 of the Policy:

3.2 Identification and reduction of project risk. Bank-financed public and private sector projects will include the necessary measures to reduce disaster risk to acceptable levels as determined by the Bank on the basis of generally accepted standards and practices. The Bank will not finance projects that, according to its analysis, would increase the threat of loss of human life, significant human injuries, severe economic disruption or significant property damage related to natural hazards.

During the project preparation process project teams will identify if the projects have high exposure to natural hazards or show high potential to exacerbate risk. The findings will be reported to the Bank through the social and environmental project screening and classification process. Project teams should consider the risk of exposure to natural hazards by taking into account the projected distribution in frequency, duration and intensity of hazard events in the geographic area affecting the project.

Project teams will carry out a natural hazard risk assessment for projects that are found to be highly exposed to natural hazards or to have a high potential to exacerbate risk. Special care should be taken to assess risk for projects that are located in areas that are highly prone to disasters as well as sectors such as housing, energy, water and sanitation, infrastructure, industrial and agricultural development, and critical health and education installations, as applicable. In the analysis of risk and project viability, consideration should be given to both structural and non-structural mitigation measures. This includes specific attention to the capacity of the relevant national institutions to enforce proper design and construction standards and of the financial provisions for proper maintenance of physical assets commensurate with the foreseen risk.

When significant risks due to natural hazards are identified at any time throughout the project preparation process, appropriate measures should be taken to establish the viability of the project, including the protection of populations and investments affected by Bank financed activities. Alternative prevention and mitigation measures that decrease vulnerability must be analyzed and included in project design and implementation as applicable. These measures should include safety and contingency planning to protect human health and economic assets. Expert opinion and adherence to international standards should be sought, where reasonably necessary. In the case of physical assets, the Bank will require that, at the time of project preparation, the borrower establish protocols to carry out periodic safety evaluations (during construction as well as during the operating life of the project) and appropriate grids and communication systems, and the promotion of programs of mutual assistance in case of disasters.
maintenance of the project equipment and works, in accordance with generally accepted industry norms under the circumstances.

The Bank’s social and environmental project screening and classification process will evaluate the steps taken by project teams to identify and reduce natural hazard risk.

3.3 Under the Bank’s new risk management development effectiveness framework, a common approach to the management of project risks is proposed. Disaster risk is one of several project risks. These guidelines are an input to the Bank’s approach on project risk management. They apply to Bank-financed investment loans and technical cooperation projects in the public and private sector as well as to operations supported by the Multilateral Investment Fund.

B. Disaster Risk Management Process

3.4 During the assessment, management and monitoring of disaster risk at the project level, the disaster risk is reviewed at various stages of project preparation and implementation. On this basis, appropriate actions are taken to protect project benefits and outcomes.

3.5 Directive A-2 requires that the Bank’s social and environmental project screening and classification process provide for project teams to identify and reduce disaster risk. The recommended DRM steps are as follows:

For All Projects:

- Project Screening and Classification
  Outcome: Identifies those projects where the DRM Policy is applicable and classifies as high, moderate or low risk.
  Document: Report of the Social and Environmental Safeguards Policy Filter (SPF) and Social and Environmental Safeguards Screening Form.

For High-Risk Projects:

- Disaster Risk Assessment (DRA), including disaster risk management plan
  Outcome: Provides a detailed evaluation of the impacts of the significant natural hazards identified during project classification on project components; and outlines appropriate risk management and mitigation measures.
  Document: DRA Report, prepared by the Borrower (this may be a stand-alone report or it may be incorporated into the environmental impact assessment report).

- Disaster Risk Management Summary

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17 The title of A-2 was taken directly from the DRM policy document. The term project refers to different types of activities or a group of activities that the Bank finances; in this context, it may also refer to programs.

18 A more limited DRA may be required for moderate-risk projects.

19 For projects in which both a DRA and an EIA is required, the DRA report may be incorporated in the EIA Report. See DRM Toolkit for outline of EIA with DRA issues included.
Outcome: Provides information on the specific disaster risks associated with the project and the risk management measures proposed by the Borrower.

Document: DRM Summary, for inclusion in the Environmental and Social Management Report (ESMR), prepared by Project Teams.

- Project Implementation, Monitoring and Evaluation

Outcome: Identifies the approaches which the executing agency applies during project implementation; and which project teams apply during project monitoring and evaluation.

1. Project Screening and Classification

3.6 The Bank’s social and environmental screening and classification system of projects will be used to filter and classify those projects for which disaster risk is likely to be an issue for project viability and effectiveness.20

3.7 There are two possible types of disaster risk scenarios:

- Type 1: The project is likely to be exposed to natural hazards due to its geographic location.
- Type 2: The project itself has a potential to exacerbate hazard risk to human life, property, the environment or the project itself.

Disaster Risk Management Policy Filter (a component of the Safeguard Policy Filter)

3.8 The purpose of this step is to establish, early in the project preparation process, whether natural hazards are likely to pose a threat to the project area during the execution (construction) period and/or the operational life of the project, due to Type 1 and Type 2 risk scenarios.

Project Classification

3.9 **Type 1 Risk Scenario**: The level of disaster risk associated with a given project is dependent on the characteristics of the natural hazards as well as on the vulnerability of the sector and project area. The project is classified on the basis of an estimate of the impacts/losses due to the significant hazards associated with Type 1 risk scenario. Project teams classify their projects in terms of high, moderate or low disaster risk on the basis of the (i) projected frequency of occurrence and magnitude or intensity of the hazard and (ii) estimated severity of the impacts associated with the hazard, i.e., the magnitude and extent of the likely social, economic and environmental consequences of the hazard on the various project components and on the general zone of influence of the project. The classification process also provides project teams with a preliminary indication of the hazards likely to be of greatest significance, as well as their likely impacts on project components.

3.10 This classification is included on the Social and Environmental Safeguards Screening Form and reported as part of the disaster risk profile21 presented in the Environment and

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20 Additional modules are to be incorporated into the Bank’s Environmental Toolkit to enable filtering and classification of projects on the basis of disaster risk. Guidance on sources of information for project screening and classification on the basis of disaster risks are provided in Annex I.

21 The disaster risk profile provides a summary of the key disaster risk issues identified during project screening and classification viz. the significant hazards that affect the project area, the anticipated short to medium term impacts, recommended classification of the project according to disaster risk; as well as
Social Strategy document. The project team will report its findings to the Bank unit responsible for social and environmental screening and classification of projects, as part of the Bankwide safeguards and risk management procedure.\textsuperscript{22}

\textit{High-Risk Projects}\textsuperscript{23}

3.11 The project will typically be classified as high-risk if one or more of the significant natural hazards may occur several times during the execution (construction) period and/or the operational life of the project and/or the likely severity of social, economic and/or environmental impacts in the short to medium term is major or extreme. These impacts are of sufficient magnitude to affect project viability and may affect an area broader than the project site. As such hazards may affect project viability, a more detailed investigation of disaster risk, in the form of a disaster risk assessment (DRA), is required.

\textit{Moderate-Risk Projects}

3.12 The project will typically be classified as moderate risk if one or more of the prevalent natural hazards are likely to occur at least once during the execution (construction) period and/or the operational life of the project and/or the likely severity of impact in the short to medium term is average. These impacts are typically confined to the project site and can be mitigated at reasonable costs. Projects associated with a moderate disaster risk do not typically require a DRA. However, a more limited DRA may be required, depending on the complexity of the project and where the anticipated vulnerability of a specific project component may compromise the achievement of project outcomes.

\textit{Low-Risk Projects}

3.13 The project will typically be classified as low risk if natural hazards are not likely to occur during construction and/or the operational life of the project and/or associated with a low severity of impact in the short to medium term. Those impacts that occur do not lead to a disruption in the normal functioning of the operation and can be corrected as part of project maintenance. The occurrence of the hazard event does not impact on the achievement of project outcomes. A DRA is not required.

3.14 \textit{Type 2 Risk Scenario:} The impacts associated with Type 2 risk scenario are addressed under Directive B-3 of the Bank’s Environment and Safeguards Compliance Policy (OP-703). Such impacts are thus considered and included in the categorization of environmental impacts.

3.15 The unit responsible for environmental and social risk mitigation reviews the classification of all operations and may recommend a new classification based on the review of the disaster risk profile presented in the \textit{Environment and Social Strategy}. The unit and Line Divisions will need to agree on the final classification of the operations.

\textsuperscript{22} It is recommended that the comprehensive process for environmental and social review of projects from preparation to implementation, include the input of a disaster risk management specialist.

\textsuperscript{23} Further descriptions for the characteristics of high, moderate and low risk projects will be provided in the DRM Toolkit.
2. Disaster Risk Assessment (DRA)\textsuperscript{24}

3.16 For projects that are identified as high-risk, a DRA\textsuperscript{25} is required and is prepared by the Borrower.\textsuperscript{26} The objective of the assessment is to evaluate in greater detail the impacts of the significant natural hazards identified during project classification on project components. The results of the risk assessment will guide the selection of appropriate risk management and mitigation measures.

3.17 The DRA Report

- Evaluates the frequency, intensity and severity of previous hazard events that have affected the project area, as well as those predicted to affect the site over the project’s operational life;
- Identifies the vulnerability\textsuperscript{27} and probable losses of project components, i.e. the nature and magnitude of the probable social, economic and environmental impacts due to each hazard; this includes both direct and indirect impacts;\textsuperscript{28}
- Provides a disaster risk management plan, including proposals for the design of disaster prevention and mitigation measures, including safety and contingency plans to protect human health and economic assets, and their estimated costs; an implementation plan; a monitoring program and indicators for progress; and an evaluation plan. The implementation plan includes protocols to undertake periodic safety evaluations from project implementation up to project completion and maintenance of project equipment and works.\textsuperscript{29}

3. Project Analysis

3.18 Project teams include a summary of the DRA Report in the Environmental and Social Management Report,\textsuperscript{30} which is reviewed by both the Bank unit responsible for environmental and social risk mitigation screening and the Sector Divisions Chiefs will sign off on the ESMR and safeguard compliance plan, including the DRM activities. The DRM Summary provides information on the specific disaster risks associated with the project and the risk management measures proposed by the Borrower.

3.19 The project’s proposed management and mitigation measures should comply with international standards of good practice and relevant national laws and regulations, such

\begin{itemize}
\item For purpose of this document, the term disaster risk assessment is being used interchangeably with natural hazard risk assessment (see Glossary).
\item Example terms of reference for disaster risk assessments consistent with international best practices will be included in the DRM Toolkit.
\item The Bank’s non-reimbursable resources, including the Disaster Prevention Fund and the Multidonor Disaster Prevention Trust Fund, may be used to finance DRAs.
\item See glossary.
\item Direct impacts include loss of life, damage/loss to physical infrastructure works, effects on communities and other population groups in the project area, and damage to the environment. Indirect impacts refer to the flow of benefits such as loss of production of goods and provision of services.
\item Example terms of reference for stand-alone disaster risk assessments consistent with international best practices will be included in the DRM Toolkit. For projects in which both a DRA and an EIA is required, the DRA report may be incorporated in the EIA Report. See DRM Toolkit for outline of EIA with DRA issues included.
\item See a description of the ESMR on page 33 of the Implementing Guidelines for the Environment and Safeguards Compliance Policy.
\end{itemize}
as national planning policies, laws and regulations, as well as national building codes and standards.

3.20 Project teams will analyze the impact of the disaster risk prevention and mitigation elements\textsuperscript{31} in their assessment of project viability,\textsuperscript{32} verifying that identified hazard impacts on project components are reduced to acceptable levels.\textsuperscript{33}

### 4. Project Implementation, Monitoring and Evaluation

3.21 The Executing Agency is responsible for ensuring that all DRM activities (including prevention and mitigation measures) associated with the project are implemented in accordance with the provisions of the loan agreement. This includes periodic safety evaluations and appropriate maintenance during project implementation and through project completion. Project teams will monitor implementation to verify that the DRM actions in the project risk management plan are carried out effectively; they shall use standard monitoring (Project Performance Monitoring Report or PPMR) procedures.

### IV. POLICY DIRECTIVE B-1: LOAN REFORMULATION

#### A. Purpose and Scope

4.1 The loan reformulation addressed by these guidelines provides financing for post-disaster response to the impacts of natural hazard events and physical damage (such as structural collapse and explosions) caused by technological accidents or other types of disasters resulting from human activity. Loan reformulation includes the diversion of existing loan resources to specific activities within the same project or to another existing project, in order to finance unplanned disaster response.\textsuperscript{34} Reformulations may thus involve just a single loan or several operations.

4.2 Loan reformulation allows for the reallocation of resources from existing loans to other projects under certain circumstances, in the aftermath of disasters, as stipulated in Directive B-1 of the Policy:

\textsuperscript{31}These measures may include strengthening the project’s physical infrastructure against hazard impacts, such as retrofitting, flood control works and slope stabilization; improving land use planning in the project area and in the sector; capacity enhancement of national, local and sector institutions to manage identified risks, including strengthening of the legal and regulatory framework for enforcement of disaster-resistant design and construction; public education and awareness in disaster risk reduction; safety and contingency planning to protect human health and economic assets; community disaster mitigation, preparedness and response programs; financial strategies for risk management in the country and sector, including measures to facilitate appropriate maintenance of physical assets.

\textsuperscript{32}Further guidance on project viability in the context of disaster risk is provided in “Keipi, K; Mora, S; Bastidas, P; 2005. La gestión del riesgo dentro del ciclo de los proyectos: Lista de preguntas indicativas (document ENV 144), Inter-American Development Bank, Sustainable Development Department; pages 25 and 46.

\textsuperscript{33}Acceptable level of risk refers to that level of probable losses/impacts after prevention and mitigation measures have been adopted, that are deemed manageable.

\textsuperscript{34}Reformulation refers to any proposed change in an existing Bank loan operation. It will require Board approval if at least one of the following apply: (i) the proposed change would substantially alter the structure, cost or the beneficiaries of the project, as well as other agreements for the implementation, including significant exception to the Bank policies for the acquisition of goods, works and services; (ii) change the borrower or the guarantor and (iii) the proposed change would alter the source of funds.
4.3 The Bank may approve the reformulation of existing loans in execution in response to disasters if: (i) a state of emergency or disaster has been officially declared by the government; (ii) the impact of the loan reformulation has been estimated taking into account the intended uses and project objectives of the loan or loans to be reformulated relative to the new proposed use of the funds, thereby creating the conditions for more informed decisions on the part of the approving authorities; (iii) adequate transparency and sufficient mechanisms for monitoring, auditing and reporting the use of the redirected funds are in place, while taking into account the need of a timely response given the nature of the situation; and (iv) a significant share of the redirected funds will be earmarked to reduce the borrower’s vulnerability to future disasters and improve the country’s capacity for comprehensive disaster risk management.

B. Reformulation Process

1. Declaration of State of Emergency, Originating Report and Loan Request

4.4 In order to be considered for loan reformulation funding in response to a disaster, the Government must have declared a state of emergency or its equivalent, for a region or the country as a whole, according to the laws and regulations of the country.\(^3\)

4.5 The Country Office should prepare an originating document after the formal declaration of state of emergency by the Government, recommending the decisions that should be taken in relation to the projects/programs potentially affected by the disaster.\(^3\)

4.6 The Bank may offer technical support to the government in preparing an official request for financing through loan reformulation, on the basis of the Originating Report.

4.7 Once a financing request is received, a project team is appointed, and the approval process of the reformulation operation(s) will follow the established Bank procedures on delegation of authority, according to regular Bank procedures.\(^3\)

2. Analysis of Projects for Reformulation

4.8 Once the Bank has received an official request from the borrowing country for financing disaster response, the possibility of using fresh IDB resources, such as through the Immediate Response Facility (GN-2038-12 and GN-2038-16), is analyzed. If their use is not considered feasible, the impact of the loan reformulation will be estimated by VPC, with support from VPS, taking into account the intended uses and project objectives of the loan(s) to be reformulated either: (i) as a provider of funding or (ii) as a recipient of resources.

4.9 The analysis for operations receiving funding in response to a natural hazard or physical damage from technological activities or other types of disasters resulting from human

\(^3\) The requirement concerning the declaration of an emergency is the same for the Immediate Response Facility (GN-2038-12 and GN-2038-16).

\(^3\) For the contents of the originating summary report on disaster and sources of funding, see Annex II.

\(^3\) During the writing of these guidelines, the principal procedural document available was the Operations Administration manual OA-420. For emergency situations, some procedures are similar to those of the Immediate Response Facility (GN-2038-12 and GN-2038-16), such as the one concerning the declaration of an emergency and the contents of the originating report.
activity will reflect the nature of the projects, available information, and use of the
reallocated resources for an emergency, rehabilitation and reconstruction.

4.10 The revision of the portfolio in emergency situations should be done jointly with the
Borrower. Those projects whose development objective is unlikely to be achieved
should be considered first as candidates for reformulation. The team responsible for the
portfolio analysis needs to determine performance indicators, based on the possible
revisions and reformulations being considered.

Analysis of loans used as a source of funding

4.11 The impact of redirecting loan resources from existing loans will be estimated taking into
account the intended uses and project objectives of the loan or loans to be used as a
source relative to the new proposed use of the funds, thereby creating the conditions for
more informed decisions. Resource transfers could be done between cost categories
within a project (in which case more streamlined approval procedures will apply), or
between separate loans as stipulated by Bank procedures.

4.12 For choosing existing projects as origin of resources, following factors (in order of
priority) would be considered:

i. Public sector projects. Only public sector loans would be considered. Loans to the
private sector should not be included in the package of loans for possible reformulation as
a result of disasters.

ii. Development impact in the reformulated operations. The loans that are having a
relatively low economic/financial impact in the country should be considered first as a
source for redirecting resources from existing loans towards emergency funding. Redirecting
resources that are within a loan generally have a smaller effect than those
involving several operations. The original development objectives may not be achieved
due to the new social or economic situation created by the disaster or it could be
considered too expensive to reorient the resources within the old operation. Recommendations regarding the redirection of resources will be based on project
performance indicators used by the Bank.

iii. Level of execution. Operations with a low level of physical execution or
disbursements and commitments could be chosen for redirection, except for those loans
with a very high development impact. The selection should not only be based on a low
disbursement rate of the existing loans alone, but also on an analysis of the underlying

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38 For Conditional Credit Line for Investment Projects (CCLIP), or operations with other instruments that
encompass more than one loan, the impact of the changes that are being introduced in such operations on
subsequent loans will need to be analyzed.

39 The socioeconomic analysis that the Bank performed at the time of project preparation should generally
have included a scenario without the project and scenarios with delays in the execution. In some cases
there has been a scenario with implementation of the project with a reduced scope. The evaluation of all
of these alternatives should be considered in the analysis of the redirecting of resources from the original
loan, applying indicators of the results framework of the Bank.

40 See the Operations Administration Manual (OA-420).

41 In exceptional cases there may be projects for which the development objectives have been largely
attained but some funds remain un-disbursed, and could be subject to reorientation.
causes of the poor performance and any remaining opportunities for attaining project goals.

iv. Loans in affected sectors. Resource transfers within an affected sector will be preferred due to the greater similarity of their respective objectives compared with those of loans in different sectors.

v. Loans in affected region(s). In general, existing projects in the disaster area will not be used to provide resources to be transferred to other programs in the same area. However, when damage is so severe that the attainment of the original development objectives is in jeopardy, or the continuation of a certain component of the project as a whole is unjustifiable on account of excessive costs, parts or all of the undisbursed balances may be re-channeled toward emergency or rehabilitation and reconstruction projects in the same area.

Factors to be considered in projects receiving funding

4.13 The following are the recommended actions to be considered by project teams, whilst preparing the funding analysis:

4.14 i. Technical analysis.

- For emergencies, the technical analysis will be aimed at reestablishing basic services and critical infrastructure in a time efficient manner.
- The attainment of fully functioning facilities and productive capacity through rehabilitation and reconstruction will be measured through a detailed technical analysis with the objective of reaching disaster resistance, and fulfilling technical standards across the board and performance criteria required by the Bank.

4.15 ii. Socioeconomic analysis.

- For emergency response, the socioeconomic analysis will be limited to the evaluation of the cost effectiveness of restoring the basic services and critical infrastructure. If information is scarce, the analysis may be done based on comparable data from similar operations elsewhere. Any delays in the analysis and processing of the emergency financing may limit the Bank to have a meaningful contribution to resolve critical needs that are affecting the population, urgent reestablishment of basic services and critical activities.42
- The analysis for rehabilitation and reconstruction investments will follow standard Bank practices. If future project benefits cannot be estimated, cost effectiveness analysis will be carried out.

4.16 iii. Evaluation of institutional capacity and coordination. In order to gain sustainability, existing agencies are preferred to the establishment of new, ad hoc entities. A rapid analysis will be carried out of the institutional capacity, procurement management capability and financial track record of the existing agencies. Based on its results, it will be determined if the resources will be disbursed on an ex-post or on a concurrent basis.

42 Expected benefits of the financing should be estimated. If available data is not sufficient to perform a complete cost-benefit analysis, it is recommended that a cost effectiveness analysis be performed. Data from comparable projects could complement the set of information required for this analysis. See also document Tools for Mainstreaming Disaster Reduction, Guidance Note 8 (at http://www.proventionconsortium.org/).
The administrative and technical responsibilities of all the participating institutions in different sectors and means of coordination need to be clearly defined to facilitate successful execution in a limited time frame. Planned strategies and activities need to be coordinated with other international agencies participating in the post disaster financing.

3. Transparency and Monitoring

4.17 i. **Procurement procedures.** The applicable Bank policy and rules will be followed for the procurement of goods and services. As an exception, for emergency situations, specific procurement procedures are available, in view of the special nature of these operations and the urgency involved.\(^{43}\)

4.18 ii. **Transparency in financing.** The financial management and evaluation of procurements, expenses and the utilization of goods and services to be funded with Bank resources for emergency situations will be audited on a concurrent basis, following current Bank practices. For rehabilitation and reconstruction investments the review may be on a concurrent or ex post basis depending on risk of lack of transparency estimated by the project teams. Loan resources can be used to contract the services of independent public accountants to audit the operation’s financial statements as required by the Bank.\(^{44}\)

4.19 iii. **Monitoring and evaluation.** Bank resources will be subject to review on a concurrent basis for emergency investments. For rehabilitation and reconstruction, an audit will be required on a concurrent or ex-post basis, depending on the risk of lack of transparency as estimated by the project team. Data collection will be planned for monitoring and evaluation. Only direct project impacts will need to be evaluated.

4. Reducing Vulnerability to Future Disasters

4.20 Vulnerability should not be replicated when designing disaster response financing. In the preparation of reformulations for rehabilitation and reconstruction, a proportion of the resources of the operation should be allocated to prevention and mitigation activities.\(^{45}\) The percentage of the total cost that will be dedicated to prevention and mitigation should be defined and the viability of these investments assessed by the project team. The project team should also justify any potential deviations from international practices in these allocations for disaster prevention and mitigation.\(^{46}\)

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\(^{43}\) See GN-2349-7 Policies for the procurement of works and goods financed by the IDB; and GN-2350-7 Policies for selection and contracting of consultants financed by the IDB.

\(^{44}\) For further financial control, firms may be contracted to administer the whole execution of the project, as has been a common practice in the IDB funded Immediate Response Facility operations.

\(^{45}\) See Glossary for definitions of rehabilitation and reconstruction, prevention and mitigation.

\(^{46}\) In some developed countries (e.g. U.K. and the USA) the regulations require that at least 10% of the funds to be invested in natural hazard response projects be directed to reduce vulnerability (in investments or other activities that are considered critical to improve the capacity for comprehensive disaster risk management). Information from the OAS and PAHO indicates that rehabilitation or reconstruction project investments in prevention and mitigation on the order of 5 to 7 percent of the total cost of new construction substantially reduce the probability of future losses. Retrofitting is much more expensive. According to an evaluation of 13 IDB reconstruction projects between 1995 and 2002 (document RE-292), the average estimated investment in prevention and mitigation was only 4.5 percent. The project team will give due consideration to the prevention of technological accidents and other human-driven disasters in its regular project design (see Companion Paper to the Disaster Risk Management Policy (document ENV-150))
V. POLICY DIRECTIVE B-2: RECONSTRUCTION

A. Purpose and Scope

5.1 The purpose of this section is to provide assistance to project teams on the implementation of Directive B2: Reconstruction. Specifically guidance is provided on the precautions that country programming process and project teams should take to promote revitalization of development efforts in the aftermath of disasters, while ensuring that rehabilitation and reconstruction projects do not lead to a rebuilding of or an increase in vulnerability. As indicated in Directive B-2 of the Policy:

5.2 Avoiding rebuilding vulnerability. Operations that finance rehabilitation and reconstruction after a disaster require special precautions to avoid rebuilding or increasing vulnerability. These include the precautions mentioned in A-2, as well as correcting deficiencies in risk management policies and institutional capacity as reflected in A-1. A significant share of the new investment will be earmarked to reduce vulnerability to future disasters and improve the country’s capacity for comprehensive disaster risk management. Particular attention must be given to lessons learned from recent hazard events. The Bank will not assume that pre-disaster conditions persist in whole or in part in the affected area. Disaster risk assessment of the reconstruction project should be carried out taking into account the specifics of the area, the sector and the infrastructure concerned, as well as the current environmental, social and economic situation and any changes in the affected area as a result of the disaster.

5.3 Reconstruction may follow as a response to the impacts of natural hazard events, and physical damage (such as structural collapse and explosions) resulting from technological accidents or other types of disasters resulting from human activity.

B. Vulnerability Reduction Considerations

5.4 The guidelines for Directive A-2: Risk and Project Viability, as described in Section 4 of these guidelines, also apply to rehabilitation and reconstruction projects. For projects identified as high risk, the disaster risk assessment, and design and implementation of risk reduction measures, will incorporate the lessons learned from the disaster event, including the performance of the physical works, the relevant sectors, institutions and other project components. Risk reduction measures will include enhancements in national, regional and sectoral risk management policies and strengthening of institutional capacity.

5.5 In order to avoid the rebuilding of or an increase in vulnerability, a proportion of the resources of the operation will be allocated to prevention, mitigation and risk transfer. The percentage of the total cost is at the discretion of the project team, but will be guided by international practices.47

47 See previous footnote.

http://www.iadb.org/sds/ENV/publication/publication_2530_4573_e.htm)
VI. GLOSSARY

Adaptation to Climate Change. The adjustment in natural or human systems in response to the effects of actual or expected climatic stimuli, which moderates harm or provides beneficial opportunities.

Climate Change *. The climate of a place or region is changed if over an extended period (typically decades or longer) there is a statistically significant change in measurements of either the mean state or variability of the climate for that place or region.

Disaster **. A serious disruption of the functioning of a society, community or a project causing widespread or serious human, material, economic or environmental losses, which exceed the coping ability of the affected society, community or project using its own resources.

Disaster Emergency Management **. The organization and management of resources and responsibilities in order to deal with all aspects of immediate response to emergencies associated with a disaster, including preparedness, contingency planning and rehabilitation.

Disaster Risk Assessment (DRA). Determination of the nature and extent of risk by analyzing potential hazards and evaluating existing conditions of vulnerability that could pose a potential threat or harm to people, property, livelihoods and the environment on which they depend. i.e. measuring probabilities of the effects of potential natural hazard events on exposed and vulnerable elements that cause a disaster, in order to evaluate alternatives to reduce their impact. In some region, such as the Caribbean, the term natural hazard risk assessment is used. For the purpose of these guidelines, the term disaster risk assessment is used interchangeably with natural hazard risk assessment.

Disaster Risk Management (DRM) **. The systematic process that integrates risk identification, prevention, mitigation and transfer, as well as disaster preparedness, emergency response and rehabilitation/reconstruction to lessen the impacts of hazards.

Disaster Risk Reduction*. The systematic development and application of policies, strategies and practices to minimize vulnerabilities, hazards and the unfolding of disaster impacts throughout a society, in the broad context of sustainable development.

Emergency Financing. Providing immediate financial support to help address the short-term effects of a disaster in order, to reestablish basic services and reinitiate critical infrastructure for socio-economic development.

Humanitarian Assistance **. The provision of commodities and materials required to prevent and alleviate human suffering during a disaster relief operation. Assistance in such circumstances is likely to consist of food, clothing, medicines and hospital equipment.

Sources:
Loan Reformulation. Any proposed change in an existing Bank loan operation in the wake of a disaster. It will require Board approval if at least one of the following apply: (i) the proposed change would substantially alter the structure, costs or the beneficiaries of the project, as well as other agreements for the implementation, including significant exception to the Bank policies for the acquisition of goods, works and services; (ii) change the borrower of the guarantor and (iii) the proposed change would alter the source of funds.

Mitigation*. Structural and non-structural measures undertaken to limit the adverse impact of natural hazards, environmental degradation and technological hazards.

Natural Hazard **. Natural hazards refer to naturally occurring hazards i.e. natural processes or phenomena which have an impact on the biosphere and may constitute a damaging event. Such hazards include: earthquakes, windstorms, hurricanes, landslides, tidal waves, volcanic eruptions, floods, forest fires, and drought, or a combination thereof); as well as those that may have human-induced triggers, and include those hazards associated with climate change.

Natural Hazard Risk Assessment. See the definition of Disaster Risk Assessment.

Preparedness*. Activities and measures taken in advance to ensure an effective response to the impact of hazards, including the issuance of timely and effective early warnings and the temporary evacuation of people and property from threatened locations.

Prevention **. Activities to avoid the adverse impact of hazards and means to minimize the impacts of related disasters.

Proactive Disaster Risk Management. Addressing the development challenges that lead to the accumulation of human vulnerability in order to reduce the effects of natural hazards that generate disasters. It emphasizes on ex ante over ex post actions.

Reconstruction. Construction of new facilities to replace those that were destroyed or damaged beyond repair by a disaster, to standards that avoid the rebuilding or increasing of vulnerability.

Recovery. Decisions and actions taken after a disaster with a view to restoring or improving the pre-disaster living conditions of the stricken community, while encouraging and facilitating necessary adjustments to reduce disaster risk.

Rehabilitation. Provisional repairs of damaged infrastructure, social services or productive capacity to facilitate the normalization of economic activities.

Resilience. The capacity of a system or a society to resist negative impacts of a hazard or adapt itself, in order to reach and maintain an acceptable level of functioning and structure.

Risk*. The probability of harmful consequences or expected losses (deaths, injuries, property, livelihoods, economic activity disrupted or environment damaged) resulting from interactions between natural or human-induced hazards and vulnerable conditions.

Risk Management. The systematic application of policies, procedures and practices in order to identify and reduce risk and respond effectively to disasters.

Safeguards. Guidance within a regulatory framework designed to reduce the negative impacts of potentially harmful natural or human-induced processes on human activities.
Screening of Projects. The first required analysis to be done to a project before it is classified according to its risk level.

Vulnerability*. The conditions determined by physical, social, economic and environmental factors or processes, which increase the susceptibility of a community to the impact of hazards.
Annex I

SOURCES OF DISASTER RISK INFORMATION, PROJECT SCREENING AND CLASSIFICATION
(DIRECTIVE A-2)

The Country Disaster Risk Assessment and Country Development Risk documents prepared during the country programming process are important sources of information for filtering projects on the basis of disaster risk. These documents provide information on past and predicted risk conditions at the country and sector levels, including significant prevalent hazards that affect the country, specific areas of the country and sectors at risk, as well as the observed magnitude of hazard impacts, including social, economic and environmental.

Country Disaster Risk Assessment and Country Development Risk reports, as well as the documents of Country Environmental Assessment, Environmental Impact Assessment and Strategic Environmental Assessment may also provide information suitable for project-level classification. However, it is recommended that project teams use country-level risk information only as a guide, as disaster risk at the project site may be higher or lower than that estimated at the country level.

Common sources of project-level information on hazard frequency and projected vulnerability include:

(a) DRM sector notes, prepared for several countries within the Bank Action Plan for Improving Disaster Risk Management (2005-2008);
(b) Disaster risk assessments, natural hazard impact assessments, climate change impact assessments, environmental impact assessments and environmental and social management reports prepared for Bank-financed projects that are located in the vicinity of the proposed projects;
(c) Available historical databases of natural hazards and disasters; hazard mapping and vulnerability assessment studies developed at the federal, state and municipal levels, or as part of regional assessments; though expert knowledge, including local knowledge; and
(d) Risk assessment studies developed by external partners, such as multilateral and bilateral agencies, and academic institutions.
Annex II

ORIGINATING SUMMARY REPORT ON DISASTERS AND FUNDING SOURCES FOR LOAN REFORMULATION (DIRECTIVE B-1)

1. Structure of the originating summary report

An initial operational summary report should be prepared in relation to the disaster and the projects/programs in execution in the affected area(s) by the disaster. The summary text will include the following:49

a. A description of the event.
b. The extent and scope of the disaster.
c. An official declaration from the government declaring a state of emergency, natural disaster or equivalent.
d. An initial review of damage and needs for affected areas.
e. A summary of government action and a preliminary assessment of the country’s capacity to cope with the disaster.
f. Justification and initial assessment of funding needed.
g. Review of the Bank’s portfolio, with a list of affected loans and project components; corresponding costs and Bank financing.
h. Identification of possible loans for reallocation of IDB funds to disaster response, and those that will not be used for reallocation: aspects to be considered include: (a) time efficiency of a possible reallocation (especially for emergency operations); (b) effectiveness of the contribution to the country’s development objectives in an environment where the priorities may have been adjusted due to a disaster and (iii) institutional capacity for execution.
i. Coordination with other agencies.

2. Sources of funding

On the basis of the originating report, the client country and the Bank analyze the option for the Bank to be a source of funding. Justification and initial assessment of funding needed through reformulation will require an analysis of the availability of other sources of funding for the losses. These may include also the government’s own financing (budget transfers, reserve or calamity funds, etc.), estimated coverage by insurance, potential financing from other international agencies and other internal or external sources. For emergency situations the Bank should also consider using fresh loan resources through the Immediate Response Facility (GN-2038-12 and GN-2038-16) or new rehabilitation and reconstruction loans. For humanitarian assistance the Bank has created the Emergency Technical Cooperation (GN-1862-5).

49 See also the report required for the financing through the Immediate Response Facility guidelines (GN-2038-12 and GN-2038-16).