Disaster Risk Management and long-term adaptation approach at the Inter-American Development Bank (IDB)
Synthesis Report
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In an effort to enhance long-term adaptive capacity in its borrowing countries, IDB considers Disaster Risk Management (DRM) as the key element to address risks posed by climate variability and change. In this sense, IDB is committed to promote and facilitate systematic risk management practices in vulnerable countries throughout the LAC region using and/or creating new financial products. IDB's approach[1] to reduce present and future vulnerability to climate change includes the five main elements of an effective disaster management system, namely: (i) risk identification, (ii) emergency preparedness, (iii) governance, (iv) risk reduction (mitigation and prevention) and (v) financial protection.

To implement this approach, the IDB has a wide range of financial instruments that include disaster prevention technical co-operations (non reimbursable funds), investment loans, policy based loans, contingent credit facility and insurance facility. In addition to these ex ante financial instruments, the IDB has other ex post instruments to support its member countries to meet the needs of the affected population while reducing their vulnerability to future disasters during the emergency, rehabilitation and reconstruction phases.

(i) Risk Identification

Risk identification includes the analysis of current climate induced hazards and model-based projections by geographic location, as well as the frequency and intensity of their future occurrence. In addition, risk identification requires a thorough investigation on the socio-economic vulnerability of potentially exposed elements.

One of the activities IDB is currently supporting to contribute to risk identification in the Central American region (Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, Panamá) is a project on regional-scale hurricane forecast (RSHF). In cooperation with the National Centre for Atmospheric Research (NCAR), high-resolution simulations are generated to predict hurricane genesis, their travel pathways and decay regions incorporating models of global climate patterns. The combination of the models used by NCAR allow for predictions on finer scales than ever before. These forecasts will find a practical application into the Central America Probabilistic Risk Assessment (CAPRA) project, which is an ongoing initiative to develop a GIS-based decision-support tool for understanding, visualizing and communicating disaster risk to decision makers at the local, national and regional levels. The RSHF project will initially analyze how specific hazards (e.g. hurricanes' intensity and frequency) could be influenced by long-term climate change. The

[1] http://www.iadb.org/en/topics/natural-disasters/natural-disasters,1441.html

results from this investigation will be complemented in the near future with additional studies aimed at developing comprehensive information on how to identify and address basal causes of vulnerability to climate change (e.g. sectoral indicators), as well as, validated methodologies to develop climate change vulnerability maps that can inform the decision making processes. (e.g. introduction of key information from vulnerability assessments within land and ecological plans at the watershed level).

(ii) Emergency Preparedness

Emergency preparedness requires action to support communities in reducing the effects of a predicted adverse event to the largest extent possible. In this respect, IDB has been investing in the LAC region during the last decades in a wide group of projects aimed at improving countries capacities to better prepare to an eventual emergency. Some examples include community based early warning systems in Eastern Caribbean countries, Guyana and Ecuador, disaster risk local awareness raising and support the global campaign on safe schools in the Dominican Republic. As this particular element of DRM has demonstrated to significantly contribute to reduce vulnerability to current climate variability, it will be the starting point towards long-term adaptation planning. In this regard, model-based information related to changes in specific hazard trends and generated through the risk identification process could inform the design and implementation of specific emergency preparedness action plans. The Bank will prioritize programs that give priority to a community based adaptation approach including safety nets, as a way of raising awareness and preparedness in communities.

(iii) Institutional Capacity Building and Governance

IDB has supported institutional and legal framework reform processes in Peru and Guatemala through two Policy Based Loans (PBL). These loans have initiated the institutional changes and capacity developments necessary for an integrated approach to both subjects. In the case of Peru, the loan has led to the approval of a new legal framework for disaster risk management and has encouraged the integration of climate change considerations in the national system of public investment.

The IDB is currently preparing two additional Policy Based Loans (PBL) in Colombia and Panamá to enhance the integration of national disaster risk management and climate change adaptation strategies.

(iv) Risk Reduction (Mitigation and Prevention)

Risk reduction involves activities to reduce the vulnerability to specific hazards. IDB will continue its current lending program in LAC, giving priority to those areas with a higher vulnerability (e.g. the Caribbean, Central America and others). In particular and to the extension technology allows it, the design of risk mitigation actions will be informed by future climate trends presented by climate-system models and vulnerability assessments in order to avoid the development of projects that increase a specific system's vulnerability and promote mal-adaptation. Examples include community based coastal zone management in Jamaica and Barbados, and mitigation works in river basins in Nicaragua, Honduras and Haiti.

(v) Financial protection (risk retention and transfer)

In order to bridge the integrative risk considerations (spanning from risk assessment, mitigation, institution building, emergency preparedness and risk financing to relief operations, recovery processes and reconstruction) with committed post-disaster funds the Bank developed an innovative operational strategy, namely, the Natural Disaster Risk Management and Finance Approach. This approach proposes an integrated, both institutional and financial strategy, to all the different phases of the natural disaster management cycle. The most important advance is that it provides finance that bridges ex-ante and ex-post activities in a way that help preventing deep economic downturn after a severe or catastrophic disaster. In addition, it emphasizes the need for financial management of multi-country hazards and risks, and their potential intensification through climate change, promoting regional insurance pools, enabling the possibility of taking advantage of risk diversification efficiencies across the region and a greater access to the international reinsurance markets.