



SUSTAINABLE DEVELOPMENT UNIT ■ LATIN AMERICA AND THE CARIBBEAN

Disaster Risk Management in Latin America and the Caribbean Region: GFDRR Country Notes

Costa Rica



THE WORLD BANK



GFDRR

Global Facility for Disaster Reduction and Recovery



**COUNTRIES AT HIGH
ECONOMIC RISK FROM
MULTIPLE HAZARDS**
(Top 33 Based on GDP
with 3 or more hazards)^a

1. Taiwan, China
3. Jamaica
4. El Salvador
5. Guatemala
7. Japan

8. COSTA RICA

10. Colombia
12. Chile
14. Turkey
15. Barbados
18. Ecuador
19. Venezuela
20. Peru
24. Honduras
27. Mexico

^a Dilley et al. (2005), Table 7.2.

Costa Rica has been identified as one of the most earthquake-prone and volcanically active countries in the world.

COSTA RICA

Natural Disasters from 1980 - 2008^b

Affected People

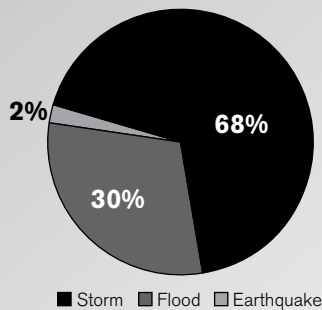
Disaster	Date	Affected (Number of People)
Storm	1996	500,000
Storm	1996	216,000
Flood	1991	185,021
Storm	1988	127,500
Flood	2008	92,000
Flood	2002	75,040
Storm	2008	55,000
Flood	2008	53,000
Flood	1993	38,451
Flood	1996	20,000

Economic Damages

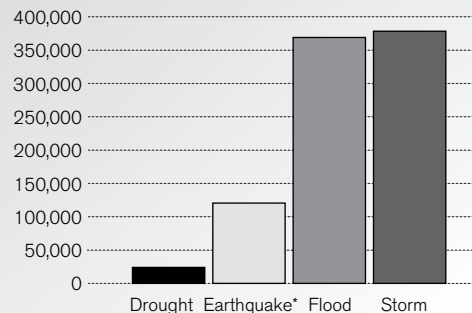
Disaster	Date	Cost (US\$ x 1,000)
Flood	1996	250,000
Storm	1996	200,000
Earthquake*	1991	100,000
Storm	1998	91,090
Flood	2007	80,000
Storm	1988	60,000
Flood	2005	25,000
Drought	1998	23,000
Storm	2005	20,000
Earthquake*	1990	19,500

Statistics by Disaster Type^b

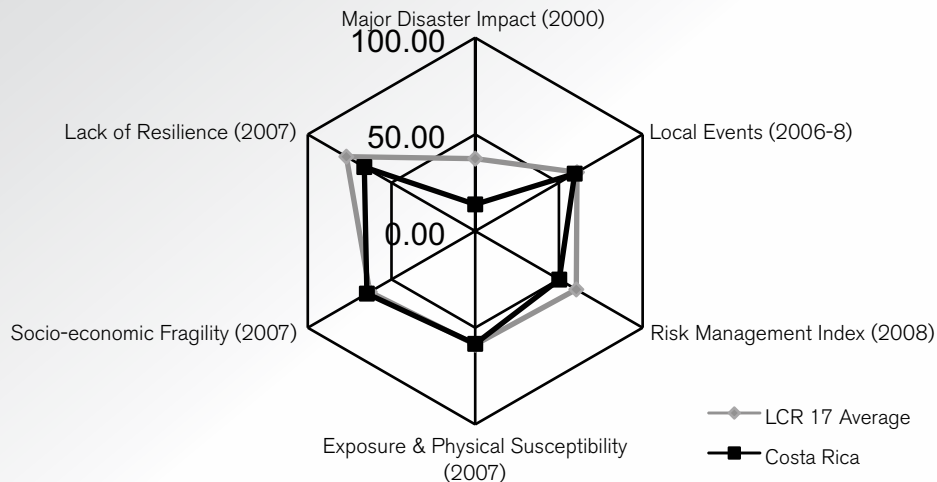
Population Affected by Disaster Type



Economic Damages / Disaster Type (1000s US\$)



Relative Vulnerability and Risk Indicators^c



^b UN (2009). <http://www.preventionweb.net/english/countries/statistics/?cid=41>. Source data from EM-DAT. Data displayed does not imply national endorsement.

^c Relative Vulnerability and risk Indicators are adapted from IADB-IDEA-ERN (2009). Values are normalized on scale of 0 – 100 and presented against the average for 17 LCR countries. Major disaster Impact taken from disaster deficit Index: the ratio of economic losses which a country could suffer during a Maximum Considered event and its economic resilience. Local events taken from Local disaster Index: the propensity of a country to experience recurrent, small-scale disasters and their cumulative impact on local development. risk Management Index is presented as the negative (i.e. 0 = optimal, 100 = incipient) of IADB's risk Management Index: measures a country's risk management capability in (i) risk identification, (ii) risk reduction, (iii) disaster management, and (iv) financial protection. resilience, Fragility and exposure are taken from the component indices of Prevalent Vulnerability Index. Date for local event data depends on information available for each country. Data, and the respective LCR 17 average, from 2000 is used for Dominican Republic, El Salvador, Guatemala, Jamaica and Nicaragua. Data, and the respective LCR 17 average, from 2006-08 is used for Bolivia, Colombia, Costa Rica, Ecuador, Panama and Peru. All LCR 17 averages are calculated based on available data.

DISASTER RISK PROFILE

Costa Rica has the 8th highest economic risk exposure to three or more hazards, according to the Natural Disaster Hotspot study² by the World Bank. This study also ranks Costa Rica as second among countries most exposed to multiple hazards based on land area, with 36.8% of the total area exposed to three or more natural hazards. The study estimates that 77.9% of Costa Rica's population and 80.1% of the country's GDP reside in areas exposed to high risk from multiple hazards.

Geological Hazards

Due to its geographic location and geotectonic characteristics, Costa Rica is exposed to a variety of natural hazards, including hydrometeorological and geophysical hazards.

The country has recently experienced floods, hurricanes, earthquakes, and landslides.

Costa Rica has been identified as one of the most earthquake-prone and volcanically active countries in the world. The country is located on the subduction zone of the Caribbean and Cocos tectonic plates, and the fracturing movements of these two plates have caused frequent earthquakes. In January 2009, an earthquake reaching 6.2 on the Richter scale, killed 22 people and caused more than US\$150 million in losses from damage to infrastructure and the agro-industry (public infrastructure was particularly affected by this event, with damages to eight bridges and several roads. Total insured losses are estimated at US\$72 million, most of them caused by damage to several hydroelectric plants). The country also has three mountain ranges that span the entire country—with 16 peaks of known volcanic origin and 9 active volcanoes. Five active volcanoes in Costa Rica have caused significant damage and economic losses in the past.

² Dilley et al. (2005). Table 7.2.

Floods and Landslides

The frequency of floods has been increasing in Costa Rica and this natural hazard currently represents the main source of losses in the country. During February 2009, heavy rains affected the Pacific Coast and the Central Valley of Costa Rica, causing floods and landslides in at least 65 of the country's 81 counties, with 18 deaths reported. There was serious damage reported to at least 27 major roads, including cutoffs on the Pan-American Highway. At least 2,000 homes were flooded in the northern province of Guanacaste, which forced 1,500 people into temporary shelter.

Triggered by intense rainfall, earthquakes, and volcanic eruptions, landslides and torrential debris flows are among the most costly in terms of human lives. During the heavy rains in October 2007, a total of 14 people died in a landslide in the city of Atenas. After the January 2009 earthquake, at least 10 people died in another landslide in Cinchona, a rural community 50 miles west of the capital city, San José.

Hurricanes

Costa Rica is also exposed to a hurricane hazard on its Caribbean coast. Hurricane Mitch, one of the most destructive events in Central America, caused economic losses amounting to approximately US\$98 million.

The following table outlines the estimated losses and budget allocations for declared emergencies between 1999 and 2007. The figures demonstrate a significant gap between budget allocations and resources needed to recover the estimated losses incurred.

Estimated Losses and Budget Allocation for Declared Emergencies (US\$ million)

Year	1999	2000	2001	2002	2003	2004	2005	2006	2007
Estimated Losses	29.8	24.5	23.8	15.8	1.5	1.6	39.6	10.8	50.3
Budget Allocation	8.3	3.1	1.6	1.1	1.5	1.7	7.0	13.1	7.9

Source: CNE.

Additional Vulnerabilities

The fast-growing metropolitan population in the Central Valley generates major stresses on the limited natural resources, public utilities and municipal services. The high concentration of the Costa Rican population in the Central Valley is the result of historical processes, exacerbated by the concentration of industrial developments and other sources of employment. Under these circumstances, affordable housing becomes a major socio-economic constraint that forces low-income families to relocate to higher-risk areas.

DISASTER RISK MANAGEMENT FRAMEWORK

Costa Rica has a comprehensive legal and institutional framework for disaster risk management (DRM). The recent strengthening of the institution and the legal framework is reflected in key disaster risk management actions such as the adoption of Law No. 8488 of 2006 and its consequent regulation (Executive Decree No. 34 361-MP of 2008). The law requires all central government entities and local governments to allocate resources for relevant disaster and risk activities in their programs and budgets. The Law also established a mandatory contribution of 3 percent of financial surplus or profit from all governmental institutions to be transferred to the National Emergency Fund (NEF).

In the event of a national emergency, the National Risk Prevention and Emergency Management Commission (CNE³) acts as the highest-ranked coordinating authority. CNE's capacity to coordinate and incentivize disaster risk management emergency activities was enhanced by the approval of the Emergencies and Risk Prevention Law No. 8488 in 2006.

The National Risk Management System (NRMS) has been mainstreamed by the Government of Costa Rica (GoCR). The NRMS integrates all the risk reduction and emergency relief efforts of the public entities, the private sector, and civil society, at the national, municipal, and regional levels.

The National Plan for Risk Management was updated according to Law 8488. A National Forum for Risk Management (October 14-16, 2009) proposed the National Plan for Risk Management (NPRM), which was approved in January 2010.

Disaster Risk Management (DRM) was incorporated into the 2006–2010 National Development Plan through the strategic action on land planning as part of the Social Development and Poverty Reduction component. The incorporation of DRM in this National Development Plan (NDP) obliges all line ministries to include risk analysis and mitigation initiatives in their annual programs. Currently, the Ministry of National Planning and Economic Policy (MIDEPLAN⁴) and CNE are proposing to incorporate the concept of risk management as a transversal policy axis in the new NDP (2011-2015). The

³ Comisión Nacional de Prevención de Riesgos y Atención de Emergencias.

⁴ Ministerio de Planificación Nacional y Política Económica.

Costa Rica National Platform has also adopted the recommendations of the strategic objectives and priority actions of the “Hyogo Framework for Action 2005–2015: Building the Resilience of Nations and Communities to Disasters.”

MIDEPLAN has strengthened risk management in the selection process of national investment projects to be approved by MIDEPLAN, through the establishment of a legal framework which supports the incorporation of risk analysis into the national investment process.

As an integral part of the strategy for disaster risk management, the GoCR is designing and implementing a strategy for financing catastrophic risk. In the case of the GoCR, the NEF is used to finance emergency rehabilitation and reconstruction for the lower levels of risk (high-frequency/low-cost). This fund consists of mandatory transfers, public entity transfers, and donations from various sources. Law 8488 stipulates that all public institutions should transfer to NEF 3% of its financial surplus or profit. The Catastrophe Deferred Drawdown Option (CAT DDO) loan signed in November 2008 complements the emergency funding system mentioned. The CAT DDO provides bridge financing at the time of a declared emergency. This enables the country to maintain its development programs while mobilizing other sources of funding to address the emergency. This is one of four lending operations agreed upon with the World Bank as part of the Country Partnership Strategy for FY09–FY11. Additionally, in order to reduce its fiscal vulnerability to the occurrence of natural disasters, the GoCR will create a Catastrophic Risk Transfer Vehicle (CRTV) to improve, in a first stage, the financial protection of public buildings and social housing.

The GoCR recognizes the connection between climate change and increased vulnerability and is taking steps to build awareness throughout the country. Under the Ministry of Public Education, the National Educational Plan for the Reduction of Risk to Disasters

is being incorporated into environmental education curricula. The GoCR is also implementing the National Strategy on Climate Change, which is expected to generate important recommendations on assessing risks of public and private investment projects.

Costa Rica has nationwide networks of volcanological and meteorological monitoring stations with highly qualified scientists and engineers involved in a wide variety of DRM-related research topics. Public universities and research institutions in Costa Rica cooperate with leading research organizations around the world.

Costa Rica has been effective in the development of building codes and ensuring that private and public works adhere to construction standards that minimize risk exposure. Under the provisions for a declaration of a state of emergency, the phases of immediate response and reconstruction must integrate disaster risk reduction measures.

A major challenge in implementing the DRM national policies is the development of local capacity at the municipal level, where technical and human resources can be very constrained.

ACTIVITIES UNDER THE HYOGO FRAMEWORK FOR ACTION

Hyogo Framework for Action (HFA) Priority #1: Policy, institutional capacity and consensus building for disaster risk management

The Costa Rica National Platform has adopted the recommendations of the strategic objectives and priority actions of the “Hyogo Framework for Action 2005–2015: Building the Resilience

of Nations and Communities to Disasters.” In agreement with the Framework guidelines, Costa Rica has a national platform for a DRM framework that includes the National Risk Prevention and Emergency Management Commission (CNE⁵), the National System for Risk Management (NSRM), the NPRM, and coordinating entities. The CNE monitors and reports annually on the country’s progress in its “National Report on the Implementation of the Hyogo Framework for Action.”⁶ Given the emphasis on prevention established by Law 8488, a restructuration process is in progress at CNE. The restructuration proposal was approved by CNE’s Board in August 2010.

The Government of Costa Rica (GoCR) strengthened its institutional framework and established the legal framework to guarantee the reduction of the causes of risk and timely, coordinated risk management in times of disaster. Through the 2006 approval of Law No. 8488, the regulations define in greater detail the DRM system, the mandate and role of the CNE, the GoCR’s disaster prevention responsibilities, the process of a declaration of a state of emergency, a general emergency plan, and financial resources. To facilitate timely coordination, the CNE’s Board of Directors is composed of the CNE President, the Ministers of Presidency, Health, Public Works and Transport, Public Security, Environment and Energy, Housing and Human Settlements, and Finance, the heads of the Institute of Social Assistance (IMAS), the National Insurance Institute (INS), and a representative from the Red Cross of Costa Rica.

The GoCR’s institutional framework for disaster risk management (DRM) ensures that disaster risk reduction is a national priority. The NPRM recognizes the need to carry out disaster risk reduction and mitigation activities. This involves coordinated participation of civil society and the private sector, and national and local government institutions throughout the country. The NPRM

2010–2015 emerged from public consultation, with the participation of more than 94 entities involved in risk management, who participated in the National Forum for Risk Management (October 14-16, 2009). Consequently, there is a collective definition of strategic actions and goals from an interagency and interdisciplinary approach. The NPRM was approved by CNE’s Board and presented at the Governing Council in January 2010.

The GoCR has greatly enhanced its ability to ensure the effective and efficient allocation of resources for disasters. All central government entities and local governments must allocate resources for relevant disaster and risk activities in their programs and budgets. In addition, 3% of financial surplus or profit from all governmental institutions must be transferred to the NEF to finance the National Risk Management System. This strengthens the government’s capacity to effectively support disaster mitigation activities in a sustainable manner. In the event of a declaration of national emergency, NEF funds are readily available to the CNE, which has the authority to allocate those funds as appropriate, without having to follow the lengthy administrative processes needed for allocations of funds during non-emergency situations. Once the emergency has passed, the CNE is still responsible for the proper accounting of any funds disbursed.

The Catastrophe Deferred Drawdown Option (CAT DDO) loan signed in November 2008 complements the NEF. The CAT DDO provides bridge financing at the time of a declared emergency. This enables the country to maintain its development programs while mobilizing other sources of funding to address the emergency. Additionally, there is a proposal for a Catastrophe Risk Transfer Vehicle that would allow for segregation of catastrophic risk from Government assets and social housing, in the first stage. In the second phase the infrastructure of roads and bridges will be included in the CRTV.

⁵ *Comisión Nacional de Emergencias.*

⁶ PreventionWeb (2009a).



Arenal Volcano, Costa Rica

The integration of the CAT DDO with this proposal and with the NEF would make a robust risk-financing strategy. The CRTV proposal is in line with the goals approved in the NPRM, which included among their goals “(...) the timely use of hedging instruments and financial management, in order to raise the quality, safety and longevity of goods and services”, and assigned responsibilities to INS to fulfill this goal. Additionally, the Agreement VI, No. 8987 of INS’ Board session, held on February 8, 2010, approved to institutionalize as one of the core projects of the organization the development of a Catastrophic Risk Transfer Program for the GoCR.

The GoCR understands the importance of mainstreaming disaster risk management (DRM) and significant progress has been made in Costa Rica. DRM was incorporated in the 2006–2010 National Development Plan (NDP), through the strategic action on land use planning as part of the Social Development and Poverty Reduction

component. The incorporation of DRM in the NDP obliges all line ministries to include risk analysis and mitigation initiatives in their annual programs. A comprehensive monitoring mechanism for disaster risk prevention and reduction investments by key line ministries is being prepared, so that information on DRM mainstreaming activities in all sectors can be used in the future for analysis. In addition, the CNE has been asked to (i) establish the National Risk Management System (NRMS), (ii) design and implement the NPRM, (iii) strengthen early warning systems, and (iv) strengthen risk management at the community level. Continued efforts need to be made to ensure that the integration of DRM priorities within line ministries and other government agencies are not relegated to the back burner when competing mandates arise. In this sense, MIDEPLAN and CNE will incorporate the concept of risk management as a transversal policy axis in the new National Development Plan (2011-2015).

Costa Rica has also integrated risk management considerations into the review process of all investment projects for the country. The Ministry of National Planning and Economic Policy (MIDEPLAN) recently added a disaster risk review in the project proposal format for national investments, through the Executive Orders 34 694-PLAN-H of August 2008 (Public National Investment System), 35 098-PLAN of March 2009 (National Public Investment Plan) and 35 374-PLAN of July 2009 (Technical Standards, Guidelines and Procedures for Public Investment). Under this measure, government agencies submitting investment projects for approval by MIDEPLAN are now required to conduct a disaster risk assessment of the proposed investment and include mitigation measures in case the project is exposed to adverse natural events. This improvement, along with the environmental review, has great potential to control and effectively address disaster risk in future investment programs. The country is currently assessing systems that could assist public officials in the decision-making process by assessing the disaster risk of planned investment projects. Additionally, MIDEPLAN implemented an ambitious training program, which includes risk assessment, for public functionaries involved in the public investment process.

Although significant advances in inter-institutional coordination have been made, Costa Rica has operative and financial constraints that diminish the country's ability to more effectively respond to emergency situations. This was recognized by the GoCR's self-assessment of progress and was highlighted during recent flood events and the recent earthquake of 6.2 on the Richter scale that generated losses of more than US\$150 million according to GoCR estimates.

HFA Priority #2: Disaster risk assessment and monitoring

The GoCR has attained significant achievements in the area of DRM and monitoring. The country

has a National Risk Atlas at the national and municipal (county) levels. Working closely with several national universities and research institutions, the CNE develops and maintains national- and local-level risk assessment maps for each type of hazard. The goal is to provide each municipality with up-to-date maps that can be integrated—using computer-based technologies such as geographic information system (GIS) mapping—as inputs for the preparation of the municipal urban zoning and land use maps, and enforcement of zoning and building codes. The CNE, in collaboration with these research partners, is also building databases with information on historical events to improve its prediction capabilities.

A major constraint in the process of delivering information to the local municipalities is the level of local technical capacity to absorb this information. Some municipalities have sophisticated mapping systems, while others have very little or no technical or human resources to fully benefit from the available information on hazards and related risks.

The CNE coordinates a national network of early warning stations for monitoring and registering rain data, river flows, and landslides, with the goal of providing local communities with critical, timely information about their level of exposure to flooding events. Every station in the network has access to radios and/or phones to help relay their data in real time. They also compile information on other threats, such as earthquakes, and relay data on intensity and damage to infrastructure and/or personal injuries to local communities, to the CNE, and first responders, using the nationwide 911 system.

The CNE also coordinates a network of 400 community-level, 100 municipal-level, and 6 regional-level Emergency Management Committees. These committees are organized to allow dissemination of critical time-sensitive information and to receive and distribute emergency aid should a localized event occur. Depending on the geographic scope of a given emergency, command and control escalates from

the community level to the municipal level, and so forth. The CNE is authorized by law to disburse funds to local communities in the event of a local level emergency, and to help reduce the risk of threats such as floods and landslides by providing funding to retrofit schools, hospitals, bridges, and levees, and to dredge rivers and creeks, among other activities.

The GoCR is currently developing a set of disaster risk indicators for use in public investment projects, along with better metrics to assess the costs of investment projects and to improve predictions of actual losses caused by disasters.

The country is also working on the implementation of the National Strategy on Climate Change, which is expected to generate important recommendations on assessing risks of public and private investment projects. The implementing agency is under the authority of the Minister of the Environment, who is also a member of the CNE Board, and it is expected that important synergies between work on climate change and DRM will continue to evolve.

In February 2008, the GoCR requested the World Bank's inclusion of Costa Rica within the CAPRA initiative (Central American Probabilistic Risk Assessment)⁷ to strengthen its risk management strategy to the occurrence of natural disasters. The CNE is working on the implementation of CAPRA through the Technical Advisory Committees of the National Risk Management System. This should help facilitate a comprehensive understanding of risk and risk management.

Costa Rica has recognized the link between environmental degradation and disaster risk and is incorporating DRM into the curricula on environmental education.

⁷ <http://ecapra.org>.

HFA Priority #3: Use of knowledge, innovation, and education to build a culture of safety and resilience at all levels

Costa Rica has a long history of advances in scientific and technical research in areas directly related to DRM. Highly qualified scientists and engineers are involved in a wide variety of DRM topics such as the development of national networks of volcanological and meteorological monitoring stations and detailed geographic and geological studies. Public universities and research institutions in Costa Rica cooperate with leading research organizations around the world.

Costa Rica has recognized the link between environmental degradation and disaster risk and is incorporating DRM into the curricula on environmental education. To further disseminate information on DRM, the GoCR is implementing the "National Educational Plan for the Reduction of Risk of Disasters" under the Ministry of Public Education.

Public universities in Costa Rica are also incorporating DRM training courses in the programs of those careers related to environmental sciences, health, geography, geology, and psychology. Public universities are organized under the National Deans' Commission (CONARE), which dictates general guidelines for their operation. CONARE created a commission composed of representatives from its member institutions charged with coordinating activities for developing DRM curricula in three main target areas: Community Outreach, Research, and Education. Concurrently, each university develops its own internal "Risk Management Program," consolidating relevant activities from all ongoing research and education projects. As part of these efforts, the University of Costa Rica is offering a Masters degree in DRM.

Several government agencies at the municipal level have developed information management systems by incorporating GIS technologies to



improve their capabilities to manage their urban development, titling, and land use data assets. A growing number of municipalities are also developing their presence on the Internet by creating their own websites and thereby increasing information dissemination to local and global communities.

The national government has clear policies on the development of e-government and the CNE has made important progress in developing its own website, where up-to-date information is published and made readily available to the general public. Important resources such as a catalogue of natural hazard maps, along with important studies related to DRM in Costa Rica, can be accessed through CNE's website.

Concerted efforts need to be made to overcome the unevenly distributed technical capacity at the

local level, particularly in smaller municipalities.

This constraint can be overcome through enhanced use and incorporation of available knowledge into municipal planning processes.

HFA Priority #4: Reduction of the underlying risk factors (reduction of exposure and vulnerability and increase of resilience)

Given Costa Rica's high exposure to natural and anthropogenic hazards, there is still room for improvement in the reduction of the underlying risk factors despite the progress that has been made. For example, continued efforts are needed to unify the agendas on Climate Change and disaster

risk management, including the enhancement of adaptability to changes in hydrological and water resource management issues.

Costa Rica has been effective in the development of building codes that ensure that private and public works adhere to construction standards that minimize the risk of exposure to certain natural and man-made hazards, such as earthquakes and fires. Along with the implementation of zoning regulations, the country is moving in the right direction.

As noted previously, any public works performed during immediate response and reconstruction phases under the provisions of a declaration of a state of emergency must integrate measures aimed at removing or reducing the conditions that created the risk in the first place. However, financing available for reconstruction is limited while in many instances the amount of financial resources needed to effectively reduce the risk and vulnerability to hazards is greater than the actual losses.

Increased private sector participation is essential to further reduce the underlying risk factors in Costa Rica. The country is trying to improve participation of the private sector in the DRM process by implementing mechanisms on a voluntary basis and also through the enforcement of the existing legal and regulatory frameworks.

The strict enforcement of building codes has become a major challenge for local authorities and it is necessary to reduce risk exposure of vulnerable socio-economic groups living in unplanned settlements in high-risk areas. Frequent, low-intensity emergency events, mostly affecting unplanned settlements in areas unsuitable for urban development, consume an important percentage of the available resources for DRM and social assistance. Relocating vulnerable families to lower-risk areas provides a temporary solution until a new wave

of squatters tend to settle into these high-risk areas, repeating the vicious cycle.

The DRM and social themes are linked and supported under the GoCR's commitments to achieving the goals of the Millennium Development Agenda. Although the GoCR's social policy is not explicitly geared to reducing vulnerability to disasters, the National Development Plan includes an annex on "Social Development and the Fight against Poverty." Strategic Action 9 of the annex contains several goals specifically geared to reducing vulnerability, including community organization and development of communal infrastructure, strengthening early warning systems, and implementing the NPRM.

To reduce the generation of new risk, MIDEPLAN established a legal framework for public investment that ensures that new investments to be approved by MIDEPLAN will comply with safe practices for handling disasters.

HFA Priority #5: Disaster preparedness, recovery and reconstruction at national, regional, and local levels

The CNE develops and coordinates the early warning system and defines mechanisms for addressing DRM issues at the municipal level throughout the country. The CNE also builds its own technical capacity for the data gathering, analysis, and dissemination of knowledge about threats, and is developing maps of hazards, and databases that are used as inputs for the preparation of municipal and local regulatory plans (zoning plans). Land use and urban development recommendations derived from these zoning plans are legally binding, and the CNE has the authority to stop public and private works that do not abide by them.

⁸ <http://www.encc.go.cr/>.

Many of the components of the National Climate Change Plan relate to the GoCR's ongoing DRM efforts. An Office of the National Strategy on Climate Change (ENCC)⁸ was created within the Ministry of the Environment, Energy and Telecommunications to prepare plans to minimize the effects of climate change on the priority axes of the strategy through mitigation, vulnerability and adaptation, and metrics. Other important components of the National Climate Change Plan such as public awareness and local capacity/technology transfer can further advance the existing DRM efforts in Costa Rica.

In line with the National Development Plan (NDP), Costa Rica is confronted with the challenge of strengthening the institutional capacities for DRM under policies of decentralization of authority and resources, making municipal governments accountable for designing and implementing changes to the regulatory framework for zoning and urban and industrial developments, congruent with the government's principles on "development in harmony with nature." These principles translate, within the DRM, into the promotion of a culture of risk prevention oriented toward preventing loss of human lives, protecting assets, and the reduction of environmental deterioration. This challenge continues, as it is intrinsic to a long-term vision of sustainable development, requiring permanent attention.

It is expected that mainstreaming of risk reduction into the national planning process

and promoting the integration of DRM into the development plans will continue. It is also expected that improving strategic risk management planning will continue in relevant sectors such as health, environment, education, agriculture, public works and investments, housing, and human settlements.

With regard to disaster response, one of the main challenges of the GoCR is to finance and rapidly initiate the recovery phase in the aftermath of a natural disaster. The CAT DDO, signed with the World Bank in November 2008, provides bridge financing at the time of a declared emergency. Additionally, there is a proposal for creating a Catastrophe Risk Transfer Vehicle that would allow for segregation of catastrophic risk from Government assets and social housing, in the first stage. Roads and bridges infrastructure will be included in the second phase.

The GoCR used to do emergency drills to prove the response capacity of the CNE and the COE. An earthquake drill in the city of Cartago, involving different search and rescue operations in collapsed structures, and a volcanic eruption drill in different communities of Turrialba, were done in November 2009.

Critical to this process is the implementation of the recently approved NPRM, as a strategic planning tool to drive the actions of government institutions and to promote a more active participation of civil society and the private sector.

KEY DONOR ENGAGEMENTS

Existing Projects with Donors and International Financial Institutions	Funding Agency / International Partners	Allocated Budget and Period (US\$)	HFA Activity Area(s)
Integration of Disaster Risk Information in Costa Rica Planning System	World Bank (IDF)	450,000 2009-2012	2, 3, 4
Support for the Pilot Project on Early Warning Systems for Hydrometeorological Hazards in Central America	World Bank (GFDRR) World Meteorological Organization	262,000 2009-2011	1, 2, 3, 4, 5
Costa Rica Public Asset Catastrophe Risk Insurance Facility Feasibility Study	World Bank (GFDRR)	460,000 2008-2011	1, 3, 4, 5
Probabilistic Risk Measurement for Central America (CAPRA)	World Bank (GFDRR)	360,000 2008-2010	2, 3
Costa Rica Catastrophe Deferred Drawdown Option (CAT DDO)	World Bank	65 million 2008-2009	1, 3, 5
Strengthening a Municipal Information System for Disaster Prevention in Latin America and the Caribbean (SIMPDI) Mitigation National Disasters	International Development Research Centre (Canada)	100,000* 2006-2009	2
Awareness Campaign on the Threat of Tsunamis in Some School Districts Within the Regional Directorate in Puntarenas, Costa Rica	Japan International Cooperation Agency	16,000 2007	3
Disaster Risk Management in Talamanca	UNDP	100,000 2006-2008	2, 4
Web-COE Project	Southern Command of the United States Army	not available permanent	5
"Prevention is Better" Community Intervention Strategy	ProVention Consortium, Organization of American States, British Red Cross, Finland Red Cross, Disaster Preparedness Programme of the European Commission's Humanitarian Aid Department (ECHO/DIPECHO)	50,000* 2007-2008	3
Regional Humanitarian Information Network (REDHUM) for Latin America and the Caribbean in the event of disasters	Spanish International Cooperation Agency (AECI), Switzerland Cooperation Agency (COSUDE), Government of Kuwait	100,000* 2006-2009	3, 5
Regional Program for the Reduction of Vulnerability and Environmental Degradation (PREVDA)	European Commission	1.65 million 2007-2011	1, 2, 4
Development of disaster risk management capacity at the local level	Japan International Cooperation Agency	300,000 2008-2011	2, 4
Regional Plan for Disaster Reduction (PRRD)	Norway Spanish International Cooperation Agency	400,000 2006-2011	1
Earthquake Risk Reduction In Guatemala, El Salvador and Nicaragua with regional cooperation support to Honduras, Costa Rica and Panama (RESIS II)	Norway	2.4 million 2007-2010	2
Regional Program of Environment in Central America (PREMACA)	Danish Cooperation (DANIDA)	not available	2, 4
Mesoamerican coordination system for territorial information	IADB	800,000 2009-2011	2
Strengthening of Information and Communication for CEPREDENAC and National Commissions	World Bank	446,000 2007-2009	1, 2

* Estimated

GLOBAL FACILITY FOR DISASTER REDUCTION AND RECOVERY (GFDRR): ACTION PLAN

Given Costa Rica's risk profile and its existing framework for disaster risk management, the key priority in Costa Rica is to continue to mainstream disaster risk reduction at the sectoral and local levels. Strategic actions are needed in the following areas to enhance disaster risk

management in Costa Rica: (i) strengthen institutional capacity at sectoral and local levels, (ii) develop a comprehensive risk assessment and monitoring capacity, and (iii) advance risk financing strategies.

The following activities have been identified in consultation with local authorities and international donor agencies. These actions support Costa Rica's disaster risk management program and reflect HFA priority action areas.

Indicative Program for GFDRR Funding (Projects and engagement areas being considered for GFDRR funding)	Implementing Agency / International Partners	Indicative Budget and Period (US\$)	HFA Activity Area(s) ⁹
Support the development and implementation of: (i) a monitoring mechanism for disaster risk prevention and reduction investments by key line ministries, that will support the implementation of the National Plan for Risk Management 2010-2015; (ii) a collection mechanism for the National Emergencies Fund	Ministry of Finance, CNE, MIDEPLAN, Contraloría General de la República	400,000 2010-2012	1, 2, 4
Enhance CNE's institutional capacity and DRM activities by: (i) supporting the implementation of CNE's restructuring plan; (ii) strengthening DRM activities at the sectoral level; and (iii) supporting vulnerability reduction efforts by improving CNE's safety and resilience programs at the community level	National Emergency Commission (CNE), MIDEPLAN	1 million 2010-2012	1, 3, 4
Support phase II of the development of a Risk Assessment Platform for Costa Rica	World Bank (GFDRR)	750,000 2010-2012	2, 3, 4, 5
Support phase II of the development of Costa Rica Public Asset Catastrophe Risk Insurance Facility Feasibility Study for including hydrometeorological risk	World Bank (GFDRR)	500,000 2010-2012	1, 3, 4, 5
Initial Budget Proposal:		US\$2.65 million	

In addition to the above-mentioned activities, it is expected that dialogue will continue with Costa Rican authorities to assess the feasibility of a Vulnerability Reduction Plan for Crime and Violence in the City of San José.

⁹ HFA Priority Action Areas: 1. Ensure that disaster risk reduction is a national and a local priority with a strong institutional basis for implementation; 2. Identify, assess, and monitor disaster risks—and enhance early warning; 3. Use knowledge, innovation, and education to build a culture of safety and resilience at all levels; 4. Reduce the underlying risk factors; 5. Strengthen disaster preparedness for effective response at all levels.



Global Facility for Disaster Reduction and Recovery

1818 H Street, NW
Washington, DC 20433, USA

Telephone: 202-458-0268
E-mail: drm@worldbank.org
Facsimile: 202-522-3227



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