



# Costa Rica



## KEY PRIORITIES RELATED TO DRM IN THE COUNTRY

Costa Rica has developed the most comprehensive legal and institutional DRM frameworks in the Central American region, with government agencies complying with the National DRM Plan's guidelines and established mechanisms for interagency coordination. Despite sustained engagement with local governments and communities, mechanisms to effectively mainstream DRM for all municipalities will require technical and financial support. Consequently, the government's priorities consist

of: (i) further developing national DRM plans (ii) consolidating the national risk reduction and emergency response systems; (ii) decentralizing decision making and resource allocation; (iv) improving information sharing; (v) strengthening early warning systems; (vi) strengthening current insurance products for public assets; (vii) developing local capacity at the municipal level; (viii) mainstreaming disaster risk reduction at the sectoral and local levels and (ix) enhancing and diversifying its risk financing strategy.

## GFDRR ACHIEVEMENTS TO DATE

GFDRR has supported the government with DRM since 2008, beginning with the technical assistance provided in order to design a disaster risk transfer mechanism as part of the country's risk financing strategy. GFDRR helped the government design the legal, financial, institutional and operational components that would improve catastrophic risk coverage for government buildings and low-income housing. Through GFDRR-supported early warning system (EWS) pilot project, the government has also helped communities adapt to hazards caused by the Cinchona Earthquake (2009). The Cinchona Earthquake changed the landscape and altered key hydrological and hydraulic features of the Sarapiquí River. For this project, the national power utility company (a major player in watershed and water resource management in the country), the National Meteorological Institute (IMN), the World Meteorological Organization (WMO) and National Risk

Prevention and Emergencies Management Commission (CNE) have teamed up to assist over 50 communities (over 60,000 people) in the development of an EWS for hydrometeorological hazards in the Sarapiquí River Basin. As a result, communities are strengthening their Community Emergency Committees to use and rapidly respond to the information generated by a more modern and accurate EWS. Up-to-date flood hazard maps for the region are being developed as input for the EWS and land use planning. Through study tours of the communities already integrated into the EWS process, over 35 local community leaders have learned from the successful experiences of a community-based river basin management project. To date, five communities have developed and tested community emergency plans and protocols in cooperation with key national agencies, local governments and nongovernmental organizations (NGOs).

## LOOKING AHEAD

Over the next three years, GFDRR would like to assist the Government in its efforts to: (i) fully implement its disaster risk financing strategy; (ii) share lessons learned with other countries in the region; (iii) improve scientific and technical knowledge on DRM and climate change adaptation (CCA); (iv) provide technical

support to local municipalities in their efforts to develop DRM/CCA capabilities (v) enhance the resilience of cities; (vi) conduct cost-benefit analysis of DRM investments and (vii) address data gaps in the availability of local hydrological data that may affect the development of accurate predictions for input to the EWS.

# Background

## CLIMATE CHANGE & DISASTER RISK PROFILE

Due to a combination of geographic variations and economic factors, Costa Rica is highly vulnerable to extreme climate events and natural hazards. The country has the 8th highest economic risk exposure to three or more hazards, according to the Natural Disaster Hotspot study by the World Bank. The study also ranks Costa Rica 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.

Diminishing agricultural production, changes in water availability, environmental degradation, increased climate variability and rising sea levels are areas of major concern. The El Niño phenomenon causes severe droughts on the Pacific coast of Costa Rica. At the same time, cold air moving in from North America during the winter months combines with trade winds between July and August to produce intense rains that cause flooding on central Costa Rica's Caribbean slopes.

Studies of temperature and precipitation patterns reveal many changes in the extreme values of these variables over the last 50 years, with a trend toward increased variability in recent years.

## GFDRR ENGAGEMENT

<b>Source of Funding</b>	Spain SDTF, MDTF
<b>Resources Awarded</b>	US\$320,000
<b>Resources Disbursed</b>	US\$320,000
<b>Number of projects</b>	Ongoing: 1; Completed: 1

## KEY INDICATORS

<b>DRR Index<sup>1</sup></b>	WDI: 4.5/5 DRI Class: 4/7
<b>Income Group</b>	Upper-Middle
<b>Population</b>	4.7 million
<b>GDP</b>	US\$8,676/capita
<b>Poverty</b>	24% of population
<b>Urban Population</b>	65% of total

## DRM/CCA IN POLICY PAPERS

(as assessed by the DRM specialist)

<b>Mainstreaming:</b>	Low	High
<b>National Dvt.</b>		
<b>WB-CAS</b>		
<b>NAPA</b>		
<b>UNDAF</b>		
<b>EU-CSP</b>		

## NATIONAL PLATFORM

National Risk Prevention and Emergencies Management Commission (CNE). Declared to United Nations International Strategy for Disaster Reduction (UNISDR).

## NATIONAL LEGISLATION

Emergencies and Risk Prevention Law (Law No. 8488) requires Government agencies and municipalities to allocate resources for disaster risk reduction activities in their programs and budgets. Presidential Decree No.36721-MP-PLAN enhances the risk management competencies of the CNE and provides a model to assess vulnerability (compulsory in governmental planning processes).

1. The World Development Indicators (WDI) Disaster Risk Reduction progress score is an average of self-assessment scores, ranging from 1 to 5, submitted by countries under Priority 1 of the Hyogo Framework National Progress Reports (1-5 scale; 5=best). The Disaster Risk Index (DRI) is a mortality-based index developed in order to enable comparisons of countries hit by different hazard types (7 classes; 7=high mortality).

## GFDRR KEY PARTNERS

<b>National Services</b>	Ministry of Finance, National Risk Prevention and Emergencies Management Commission (CNE), Ministry of National Planning and Economic Policy, Ministry of Environment and Energy, National Meteorological Institute (IMN), National Insurance Institute (INS)
<b>International Organizations</b>	WMO, UNDP
<b>Regional Organizations</b>	IADB, CEPREDENAC, Central American Integration System (SICA)
<b>GFDRR Donors</b>	Spain

## Project

## Description

### PROJECTS AWARDED BY GFDRR 2007-2014

#### Costa Rica Pilot Project on Early Warning Systems for Hydrometeorological Hazards

US\$230,000 | 2011-2013 (Completed)



This pilot project demonstrated an effective framework for operational EWS. The project built upon operational coordination and cooperation between the National Meteorological Institute (IMN) and the CNE and works in collaboration with other national government agencies, and nongovernmental organizations at the local level. The following outputs have been completed: (i) design and implementation of a community EWS for hydro-meteorological hazards (ii) improved EWS capacity through the acquisition of two additional fully-equipped weather monitoring stations and (iii) improved inter-agency coordination and engagement of communities in local disaster risk reduction activities, as demonstrated by the successful completion of a flood emergency drill.

#### Costa Rica Public Assets Catastrophe Risk Insurance Feasibility Study

US\$90,000 | Start date: 2007 (Ongoing)



This project assesses the feasibility of a catastrophe risk insurance program for public assets in Costa Rica based on a public-private partnership between the government of Costa Rica and the domestic insurance industry. Outputs include: (i) a study to determine the viability of reducing the country's financial vulnerability to adverse natural hazards through a Catastrophe Risk Transfer Vehicle (CRTV) for public assets and social housing (ii) a design package that includes the legal, financial, institutional and operational components of the CRTV for government buildings and low-income housing and (iii) development of an inventory of public buildings and infrastructure.

## SYNERGIES WITH OTHER STAKEHOLDERS

<b>UNDP</b>	The United Nations Development Programme (UNDP) supports DRM activities, including funding post-disaster rehabilitation activities after the 2009 Cinchona earthquake and the preparation of the Early Recovery Plan after the passing of Tropical Storm Tomas in late 2010.
<b>IADB</b>	The Inter-American Development Bank (IADB) is financing the Mesoamerican coordination system for territorial information. The first phase of the system will look to strengthen capacities for the management and use of spatial information and improve prevention and risk mitigation in Central America, Mexico and Colombia.
<b>CEPREDENAC</b>	The Central American Centre for Natural Disaster Risk Management (CEPREDENAC) is in charge of coordinating regional disaster risk reduction and climate change adaptation efforts. CEPREDENAC is coordinating with senior DRM authorities in the region on implementing the Comprehensive Central American Disaster Risk Management Policy (PCGIR).
<b>World Bank</b>	<p>Development Policy Loan with Catastrophe Deferred Drawdown Option (CAT DDO)</p> <p>Allows countries to take a proactive stance towards reducing exposure to catastrophe risk and access funds immediately after a disaster resulting from an adverse natural event through a contingent line of credit. Costa Rica was the first country to request a CAT DDO and to draw down on its loan after a 6.2-magnitude earthquake struck the country in 2009.</p> <hr/> <p>Integration of Disaster Risk Management in the Costa Rica Planning System Project</p> <p>Streamlines the use of disaster risk information in Costa Rica's national planning system, thus enhancing its capacity to incorporate risk reduction measures in public investments while implementing vulnerability reduction programs through a grant from the Institutional Development Fund (IDF).</p> <hr/> <p>Natural Disaster Risk Assessment for Water and Sanitation Systems Project</p> <p>Enhances the use of disaster risk information in the planning process of the National Institute of Aqueducts and Sewerage.</p>