



# Analysis of legislation related to disaster risk reduction in the Dominican Republic

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## About this report

This report was commissioned by the IFRC and prepared by Maria Clara Attridge, DRM Consultant. It is one of several case studies the IFRC is undertaking to learn about how legislation can support (or impede) disaster risk reduction, particularly at the community level. For more information about the project and various case studies as they become available, please visit our website at <http://www.ifrc.org/idrl>.

## About the IDRL Programme

The IFRC's "International Disaster Response Laws, Rules and Principles" (IDRL) Programme seeks to reduce human vulnerability by promoting legal preparedness for disasters. It works in three areas: (1) collaborating with National Red Cross and Red Crescent Societies and other partners to offer technical assistance to governments on disaster law issues; (2) building the capacity of National Societies and other stakeholders on disaster law; and (3) dissemination, advocacy and research.

E-mail: [idrl@ifrc.org](mailto:idrl@ifrc.org)

Web site: <http://www.ifrc.org/idrl>

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P.O. Box 372  
CH-1211 Geneva 19  
Switzerland  
Telephone: +41 22 730 4222  
Telefax: +41 22 733 0395  
E-mail: [secretariat@ifrc.org](mailto:secretariat@ifrc.org)  
Web site: <http://www.ifrc.org>

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# Executive summary

The Dominican Republic is the second most vulnerable country in the Caribbean after Haiti, being exposed to tropical storms and hurricanes, floods, droughts, wildfires and landslides, as well as being at considerable risk from seismic events and tsunamis; high proportion of the population lives in poverty and inequality between the rich and the poor is also substantial. Escalating rates of urbanization and migration from Haiti have led to the development of often unregulated communities living in high-risk areas.

Over the last decade, considerable effort has been made in the development and progressive implementation of disaster risk reduction legislation, including the overarching Disaster Risk Management Act of 2002, and relevant legislation in different areas. The Act incorporates core criteria promoted by the international community in relation to disaster prevention, mitigation and response. In addition, a number of other laws regulate directly-related sectors, including the management of the environment and natural resources, building and construction, education, health and water management.

Work is on-going in the development of a national disaster risk management (DRM) policy, in the drafting of the national DRM plan, as well as in initiatives to support the development and financing of the National Fund for Disaster Prevention, Mitigation and Response. In what is clearly a long-term process, efforts continue in the integration of disaster risk considerations into development planning, including land-use management, building and construction and environmental management.

Disaster risk reduction, environmental management and climate change adaption are core components of the country's national development strategy for the next twenty years and notable advances have been made across related technical sectors. In education, for example, the General Education Act and strategic and operational plans highlight the role of the state in strengthening schools as centres for disaster risk reduction education, with initiatives ranging from school safety to awareness raising on specific hazards. Innovative approaches at the community level, including the creation of pilot projects encouraging the active participation of local people in forest preservation and water management, could also serve as valuable blueprints for the development of additional targeted initiatives aiming to reduce disaster risk at the local level.

The principal responsibilities for DRR have been decentralized to sub-national and local levels, and there is an increased focus on the need for the continued development and strengthening of governance systems at the local level through targeted projects in high-risk areas. To date, however, although legal provision is made for a fixed percentage of governmental income to be transferred to municipal authorities for the provision of basic services, including elements of DRR, in practice, allocations have not met outlined targets and there are insufficient resources at the local level for the development of vital and much-needed mitigation works.

Under the DRM Act, provisions are made to promote community engagement and participation in DRR at all levels. Citizens are given a clear and specific right to be protected from disasters and the participation of community-based organizations and civil

society in decision-making bodies involved in the National prevention, mitigation and response (PMR) System at regional, provincial and municipal levels is also provided for. Although participation is encouraged within the national system, greater clarity is required regarding roles and responsibilities to avoid missed opportunities in the implementation and systematization of invaluable local level DRR initiatives.

Current community-based DRR projects highlight the importance of community engagement and empowerment in strengthening front-line capacity and in fomenting ownership of DRR initiatives. Community-based DRR initiatives provide relevant examples of best practice in the development and consolidation of local level disaster risk management, including the development of community networks and their integration into the national system at municipal level, allowing for the articulation of community concerns and needs within local decision-making processes.

Government commitment and assistance from external partners has been vital in achievements to date. Work is on-going in the strengthening of the legal and institutional frameworks and their application at national and sub-national levels in what is clearly a long term and incremental process. Key challenges include the strengthening of institutional capacity for DRR at sub-national levels, the effective integration of DRR considerations in sectors where there is a tendency to focus on response, and finally ensuring that community-level initiatives are firmly linked to both national and sub-national processes.

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# Abbreviations

<b>AECID</b>	Spanish Agency for International Development Cooperation (Agencia Española de Cooperación al Desarrollo)
<b>CBDRR</b>	Community-based disaster risk reduction
<b>CBDP</b>	Community-based disaster preparedness
<b>CCA</b>	Climate Change Adaption
<b>CDM</b>	Clean Development Mechanism
<b>CEPRENAC</b>	Coordination Centre for the Prevention of Natural Disasters in Central America (Centro de Coordinación para la Prevención de los Desastres Naturales en América Central)
<b>CODIA</b>	Dominican School of Engineers, Architects and Surveyors (Colegio Dominicano de Ingenieros, Arquitectos y Agrimensores)
<b>CODOPYME</b>	Dominican Confederation of Small and Medium Businesses (Confederación Dominicana de la Pequeña y Mediana Empresa)
<b>COE</b>	Emergency Operations Centre (Centro de Operaciones de Emergencia)
<b>CNE</b>	National Emergencies Commission (Comisión Nacional de Emergencia)
<b>CTN</b>	National Technical Committee for Disaster Prevention, Mitigation and Response (Comité Técnico Nacional de Prevención y Mitigación)
<b>DIGECOOM</b>	Directorate General of Multilateral Cooperation (Dirección General de Cooperación Multilateral)
<b>DIPECHO</b>	Disaster Preparedness Programme of the European Commission's Humanitarian Aid Department
<b>DGODT</b>	Directorate General of Land-use Planning and Development (Dirección General de Ordenamiento y Desarrollo Territorial)
<b>DRC</b>	Dominican Red Cross
<b>DRI</b>	Disaster Risk Index
<b>DRR</b>	Disaster risk reduction
<b>DRM</b>	Disaster risk management
<b>ECHO</b>	European Commission's Humanitarian Aid Department
<b>ECLAC</b>	Economic Commission for Latin America and the Caribbean (UN)
<b>EIA</b>	Environmental Impact Assessment
<b>EM-DAT</b>	OFDA/CRED International Disaster Database
<b>EWS</b>	Early warning system

## Abbreviations

<b>EU</b>	European Union
<b>GIS</b>	Geographical information system
<b>GDP</b>	Gross domestic product
<b>GIZ</b>	German Society for International Cooperation (Deutsche Gesellschaft für Internationale Zusammenarbeit, previously GTZ)
<b>FEDOMU</b>	Dominican Federation of Municipalities (Federación Dominicana de Municipios)
<b>FUNDESUR</b>	Foundation for the Support of Development in the South-East (Fundación de Apoyo al Suroeste)
<b>FLACSO</b>	Latin American Faculty of Social Sciences (Facultad Latinoamericana de Ciencias Sociales)
<b>HDI</b>	Human Development Index
<b>HFA</b>	Hyogo Framework for Action
<b>IADB</b>	Inter-American Development Bank
<b>IFRC</b>	International Federation of Red Cross and Red Crescent Societies
<b>INAPA</b>	National Institute of Drinking Water and Drainage (Instituto Nacional de Aguas Potables y Alcantarillados, INAPA)
<b>INDRHI</b>	National Institute of Water Resources (Instituto Nacional de Recursos Hidráulicos)
<b>INGO</b>	International non-governmental organization
<b>INTEC</b>	Technical Institute of Santo Domingo (Instituto Tecnológico de Santo Domingo)
<b>ISDR</b>	International Strategy on Disaster Reduction
<b>La Red</b>	Social Studies Network for Disaster Prevention in Latin America (Red de Estudios Sociales en Prevención de Desastres en América Latina)
<b>LMD</b>	Dominican League of Municipalities (Liga Municipal Dominicana)
<b>MDGs</b>	Millennium Development Goals
<b>MMARN</b>	Ministry of the Environment and Natural Resources (Ministerio del Medio Ambiente y Recursos Naturales)
<b>MEPD</b>	Ministry of Economy, Planning and Development (Ministerio de Economía, Planificación y Desarrollo)
<b>MINERD</b>	Ministry of Education (Ministerio de Educación de la República Dominicana)
<b>MOPC</b>	Ministry of Public Works and Communications (Ministerio de Obras Públicas y Comunicaciones)
<b>MSPAS</b>	Ministry of Public Health and Social Assistance (Ministerio de Salud Pública y Asistencia Social)
<b>NDS</b>	National Development Strategy
<b>NGO</b>	Non-governmental organization
<b>NOAA</b>	National Oceanic and Atmospheric Administration
<b>OCHA</b>	Office for the Coordination of Humanitarian Affairs (UN)

**Abbreviations**

<b>ONAMET</b>	National Meteorological Office (Oficina Nacional de Meteorología)
<b>ONAPLAN</b>	National Planning Office (Oficina Nacional de Planificación)
<b>ONESVIE</b>	National Office for Seismic Evaluation and Infrastructure and Buildings Vulnerability (Oficina Nacional de Evaluación Sísmica y Vulnerabilidad de Infraestructura y Edificaciones)
<b>PMR</b>	Prevention, Mitigation and Response
<b>PRIL</b>	Support to Civil Society Initiatives Programme of the EU (Programa de Apoyo a las Iniciativas de la Sociedad Civil, PRIL)
<b>PROPYME</b>	Programme for the Promotion and Support to Micro, Small and Medium Businesses (Programa de Promoción y Apoyo a la Micro, Pequeña y Mediana Empresa)
<b>SNIP</b>	National System of Planning and Public Investment (Sistema Nacional de Planificación e Inversión Pública)
<b>SN-PMRD</b>	National System for Disaster Prevention, Mitigation and Response (Sistema Nacional de Prevención, Mitigación y Respuesta ante Desastres)
<b>STP</b>	Presidential Technical Secretariat (Secretaría Técnica de la Presidencia)
<b>UNDAC</b>	United Nations Disaster Assessment and Coordination
<b>UNDP</b>	United Nations Development Programme
<b>USGS</b>	United States Geological Survey
<b>VCA</b>	Vulnerability and Capacity Assessment

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# Chapter 1

## Introduction

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## Background

Legislation for disaster risk reduction (DRR) is fundamental to the protection of vulnerable populations. It is widely viewed as the core component for ensuring that DRR is mainstreamed into all aspects of development, including the crucial phases of rehabilitation and recovery. Comprehensive legislation can outline key responsibilities, set budgets and refine policies. The definition of citizens' rights is essential and can also be used to provide incentives or sanctions for safe practice through the enforcement of minimum standards in areas such as construction, land-use and environmental management.

In 2005, the Hyogo Framework for Action (HFA) outlined five priorities for global action to reduce disaster risk, the first of which calls for states and the international community to "ensure that DRR is a national and local priority with a strong institutional basis for implementation," identifying the need for the adoption or modification of legislation as a critical component towards mainstreaming DRR in national development.<sup>1</sup> Whilst there has been a considerable increase in the development of different forms of disaster management legislation over the last decade, not all have included a strong, or holistic, DRR orientation. Participants at the Second Global Platform on DRR emphasized the pressing need for strengthened legal and institutional frameworks to guide sustainable DRR practices, with some countries requesting technical assistance to build capacity in this area.

Legislative development for disaster risk reduction in the Dominican Republic has been stimulated to a great degree by recent and catastrophic disasters, including the devastation left by the passing of Hurricane Georges in 1998 and the intensification of the risk presented by increased floods, forest fires and prolonged droughts over the last decade. International developments, including the International Decade for Disaster Risk Reduction and the UN International Strategy for Disaster Risk (UNISDR) also influenced the development of national efforts, with the 2002 Disaster Risk Management Act predating the HFA. National efforts to strengthen the National System for Disaster Prevention, Mitigation and Response (SN-PMRD) are on-going and supported by key external actors, further stimulated by the January 2010 earthquake in Haiti highlighting extensive vulnerabilities in the country.

The IFRC is not alone in recognizing the importance of the consolidation of strong legal and institutional frameworks for DRR. United Nations Development Programme (UNDP) has played a fundamental role in supporting the mainstreaming of DRR into development planning. United Nations Disaster Assessment and Coordination (UNDAC) teams have realized evaluations and made detailed recommendations to strengthen national disaster response capacity in the Dominican Republic in 2005 and 2010. An inter-institutional team led by the UNISDR also conducted a detailed analysis of country progress in meeting HFA priorities in 2010. Leading donors which have supported the development of specific and targeted programmes and projects, include the European Commission, the Inter-American Development Bank (IADB), the Spanish Agency for International Development Cooperation (AECID) and the World Bank amongst others.

This study is part of a series of country case studies undertaken during 2010-2011, to review best practice and to identify gaps in existing legislation in countries vulnerable to disasters where governments, civil society and members of the Red Cross Red Crescent are active in disaster risk reduction. The purpose of these studies is to

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<sup>1</sup> The Hyogo Framework for Action 2005-2015, UN, 2005.

## Introduction

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enhance national and international dialogue on the development and improvement of DRR legislation and practice. The study is not intended to be exhaustive or prescriptive, instead seeking to address key issues that could support and strengthen on-going legislative development.

Given the short time-frame of the research period, the study does not attempt to cover all disaster risk reduction legislation in the country. The study considers natural hazards, including those with a human-induced element, such as wildfires, but it does not review legislation related to epidemics or disease control. The study aims to cover core legislation with some representative examples at the regional and local levels, providing a general overview as well as highlighting specific aspects for discussion and focusing, where possible, on local level application and community implementation. The paper addresses questions regarding the overall disaster management legislation and its application to date, as well as sectoral laws relevant to DRR, including, environmental management and protection, building and construction.

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## Methodology

The methodology of this study included initial desk research on key legislation, followed by a short in-country mission to consult key stakeholders and the drafting of the final report. Primary research was based on publically available national legislation, as well as national strategy and policy documents. Additional research covered national and international documents from a range of sources, including national and international NGOs, the academic sector, as well as project reports from national DRR programmes and community-based projects undertaken by the Dominican Republic Red Cross.

An in-country mission was undertaken from 17 January to 5 February 2011 to collect legislation, meet with stakeholders and consolidate understanding of the principal aspects pertinent to DRR legislation in the country. These meetings were particularly useful to understand institutional arrangements in place, as well as core issues regarding best practice and existing gaps in the country's legislative framework, and its practical application and implication at the local level.

Meetings were held with a range of governmental officials at the national, provincial and municipal levels, including actors of the SN-PMRD, as well as United Nations representatives, donors, members of the Red Cross Red Crescent Movement and non-governmental actors, including civil society and community representatives. Given time limitations, it was not possible to meet with representatives of all governmental bodies, donors and non-governmental organizations. Meetings were conducted informally, addressing the legislation and aspects of its implementation relevant to each particular actor, as opposed to formal structured interviews. Statements from these discussions are not directly quoted, but referenced when relevant and as a sole source to particular points discussed in this paper.

Meetings at sub-national level were held in four provinces, including three municipalities, four districts and six communities, as listed in the table below. Locations were selected taking into consideration levels of exposure to disaster risk, as well as levels of accessibility given the tight time-frame of the project. Provincial, municipal and community interviews were undertaken in areas where DRR projects have been organized by the Dominican Red Cross to discuss how existing laws are applied at local level and where improvements could be made.

## Introduction

The Enriquillo Region is composed of four provinces in the south-west macro-region and is characteristically one of the poorer areas of the country. Independencia Province is located along the border with Haiti and has high rates of settlement by Haitian migrants. It is at high risk of exposure to hurricanes, floods and droughts, as well as landslides given increasing rates of deforestation in the area. The Province is affected by the growth of the 265 square kilometre salt-water Enriquillo Lake, as well as being in a high-risk area to seismic activity due to its proximity to the Enriquillo Plantain Garden fault. Barahona Province is another high-risk area vulnerable to flooding caused by the Yaque del Sur River and its tributaries, as well as suffering exposure to landslides, droughts and hurricanes. Its close proximity to several fault systems also makes it highly vulnerable to potential seismic activity.

South-west Provinces, Enriquillo Region	Municipality	District	Community	Main disaster risks*
Independencia	Jimani	El Limón	Palmerito	Flooding and landslides
		La Descubierta	-	Flooding
Barahona	Barahona	Barahona	Papoi	Flooding and landslides
		Canoa	Canoa	Flooding

\*Community consultations following VCA.

The Cibao Nordeste Region is part of the North or Cibao Macro Region and is composed of four provinces. Duarte and María Trinidad Sánchez Provinces are at risk of floods from numerous rivers, including the Yuna River, as well as droughts and seismic activity. The town of Sánchez, located at the mouth of the aforementioned river, in particular suffers from landslides. Both Provinces are located in an area highly vulnerable to seismic activity from the Septentrional fault and additional off-shore fault systems.

North-East provinces, Cibao Nordeste Region	Municipality	District	Community	Main disaster risks*
Duarte	Villa Rivas	Guaraguao	La Ceibita	Flooding and landslides
María Trinidad Sánchez	Sánchez	Sánchez	La Plazoleta	Landslides
			La Torre	Landslides

\*Community consultations following VCA.

Disaster risk reduction activities focus for the main part on hurricane and flood risk, with some later activities including earthquake risk.

Whilst short consultations with community leaders and members are fundamental to the findings of this paper, more extensive consultation at community level would clearly support future analysis, in particular in areas not currently covered by existing disaster risk reduction projects, to obtain a clear baseline regarding current implementation and needs at local level.

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The list of consultations is located in Annex A.

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## **Chapter 2**

# Overview of the disaster risk profile of the Dominican Republic

## Overview of the disaster risk profile of the Dominican Republic

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A number of disaster risk and vulnerability studies have been elaborated by senior-level actors, including the “Country Documents” prepared under the Disaster Preparedness Programme of the Directorate General of Humanitarian Aid of the European Commission (DIPECHO). The aim of this brief summary is not to repeat the work of previous detailed studies, but to provide an outline of the potential disaster risks and vulnerabilities that the country faces and background context for the development of disaster risk reduction legislation in the country.

### Disaster risks

The Dominican Republic occupies two-thirds of the Island of Hispaniola in the Major Antilles below the Tropic of Cancer in the Caribbean Region. Covering an area of 48,670 square kilometres and including the islands of Saona, Beata, Catalina and other smaller islands, the Island is shared with the Republic of Haiti with a 383 kilometre “porous” border to the west. A tropical country, it has eight extensive rugged mountain ranges that span the country, separated by relatively fertile valleys, sierras and limestone regions. With an average precipitation of around 1,500 mm, the country has large bodies of subterranean water, fourteen principal river basins, over 400 rivers systems and streams that feed the country’s reservoirs, power hydroelectric plants and feed extensive irrigation systems.<sup>2</sup>

The Dominican Republic is subject to a number of different hazards including hydro-meteorological events such as tropical storms, depressions and hurricanes, floods, landslides and droughts, as well as seismic events including earthquakes and tsunamis, and finally diseases including dengue, malaria and most recently an outbreak of cholera crossing the Haitian border into Dominican territory in late 2010. EM-DAT registers 47 natural events during 1980-2011, of which 21 were caused by storms, followed by 18 floods, five epidemics and one earthquake. Jointly these events have caused the death of 1,486 and affected 2.7 million people, whilst causing close to US\$ 2.61 billion in economic damages.<sup>3</sup> Statistics from the 2009 Global Assessment Report on Disaster Risk Reduction indicate that, in terms of severe exposure, 6.3 per cent of the population is located in high-risk earthquake hazard zones subject to significant loss, followed by 5.9 per cent in hurricane zones and 5.4 per cent in drought zones. Additional estimates indicate that up to 80 per cent of the population may be at risk of suffering both directly and indirectly from one or more disasters.<sup>4</sup> Notably, the Dominican Republic has the highest number of deaths per million inhabitants and highest mortality risk to disaster in the Caribbean after Haiti, placing it high on regional rankings for total disaster losses.<sup>5</sup>

### Hurricanes, tropical storms and depressions

Located in the hurricane “belt” of the Atlantic and Caribbean oceans, the country is particularly susceptible to hydrometeorological phenomena, including tropical storms, depressions, hurricanes and associated heavy wind and rain causing flooding, coastal

<sup>2</sup> Dominican Republic Disaster Risk and Vulnerability Analysis, VI DIPECHO Action Plan for the Caribbean, ECHO and partners, 2009, pp. 13-28.

<sup>3</sup> EM-DAT, OFDA-CRED International Disaster Database, data from 1980-2011.

<sup>4</sup> UNDP.

<sup>5</sup> EM-DAT, OFDA-CRED International Disaster Database; Summary table on mortality risk, Global Assessment Report on Disaster Risk Reduction, ISDR 2009.

storm surges and landslides. Links to the El Niño/La Niña Southern Oscillation climate pattern also periodically exacerbate the impacts of hydrometeorological hazards.

The hurricane season lasts from August to November but events are even more frequently occurring from as early as June and as late as December. The main hurricane routes enter from the south or east, with high-impact zones in the south-east and south-west coasts, followed by a medium-impact zone along the north coast and finally a low-impact zone in the centre of the country as storms weaken overland.<sup>6</sup> Recent and catastrophic events include Hurricane Georges (1998), Hurricane Jean (2004) and Tropical Storms Noel and Olga (2007).

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## **Floods and landslides**

The rainy season typically lasts from May to November, although floods occur all through the year with around half taking place outside of the rainy season and unrelated to tropical storm activity. Moderate or heavy rain in mountainous or hilly areas also cause frequent landslides or land movement, especially in deforested areas, where land easily becomes saturated and unstable, as well as resulting in surface run-off causing flash-floods.

Heavy precipitation, deforestation and inadequate or inappropriate management of the country's river and reservoir systems are contributing factors to heavy or flash flooding, with river flooding alone representing around 38 per cent of total registered floods.<sup>7</sup> Flood frequency has also increased over the last ten years. From 1980-2000, floods occurred on average every 3.5 years, with average recurrence increasing to every 1.6 years during 2000-2010.<sup>8</sup> Recent large flood events include, the Yuna River Basin flood (2003), the Jimani River flash-flood (2004), and the Yaque, Yuna and Nizao floods associated with Tropical Storms Noel and Olga (2007). According to EM-DAT, large reported floods have caused more deaths and affected more people than any other event over the last 30 years. Taking into account the myriad of smaller unreported and localized floods, the total impact on populations is therefore considerable.

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## **Seismic activity**

The entire Caribbean Region is seismically active and is prone to damaging earthquakes, leading geologists to note it as a smaller "ring of fire" comparable to the zone surrounding the Pacific Ocean. The Island of Hispaniola is in a highly active zone located between three major tectonic plates. The North American plate pushes down from the north, whilst the South American plate pushes up from the south, with the Caribbean plate located in the middle and split into two smaller plates, the Gonave and the Septentrional micro-plates. Major fault systems circuit the Dominican Republic, and include the North Hispaniola off the north-east coast, the Septentrional to the north, the Enriquillo-Plantain Garden to the south-west and the Southern Peninsula off the south and south-east coastlines.<sup>9</sup>

<sup>6</sup> Dominican Republic Disaster Risk and Vulnerability Analysis, VI DIPECHO Action Plan for the Caribbean, ECHO and partners, pp. 13-28.

<sup>7</sup> Id.

<sup>8</sup> EM-DAT, OFDA-CRED International Disaster Database.

<sup>9</sup> Update Assessment of Earthquake Hazard and Safety in Haiti and the Caribbean, US Geological Survey, February 2010.

## Overview of the disaster risk profile of the Dominican Republic

An estimated 13 major earthquakes have hit the Dominican Republic since the 1500s, including, most recently, a quake measuring 6.5 on the Richter Scale in Puerto Plata and Santiago in the north in 2003, as well as comparatively minor effects from the 7.3 Haiti (Hispaniola) earthquake in 2010. The risk of earthquake damage in the country remains extremely high. Experts predict a major quake in the north along the Septentrional fault line, which has not had major activity for the last 800 years, and which could affect Santiago and the surrounding valley of Cibao. A second major threat stems from the Enriquillo Plantain Garden fault. Whilst the Enriquillo fault was previously believed to be the main cause of the 2010 Haiti quake, recent research points to an unmapped “Leogane” fault leading some geologists to predict further major activity along Enriquillo.<sup>10</sup> Risk of extensive loss is particularly acute in Santiago and Santo Domingo, given population density, current land use and building practice.

### Tsunamis

Closely linked to seismic activity, the Dominican Republic and neighbouring Caribbean Islands are extremely vulnerable to tsunamis caused by local or long-distance earth movements, including earthquakes, volcanic eruptions or submarine land shifts. Whilst the low-lying coastal areas are most at risk and localized tidal waves caused by nearby faults are most common, the risk posed by regional or global movements is acute. Available data registers around nine large tsunamis since the 1700s, with the most recent in 1946 and 1953.<sup>11</sup> The Pacific coastline is particularly at risk due to the presence and proximity of nearby submarine fault systems.

### Droughts

The Dominican Republic has experienced several prolonged droughts due to a lack of sufficient rainfall combined with other complex factors, including inappropriate land use, soil absorption capacity, high temperatures, as well as increased demands for water from the growing population and the agriculture and tourism sectors. Water shortages affect agricultural production and food security, as well as contributing to increased environmental degradation, including desertification. According to estimates from the Ministry of Environment and Natural Resources, around 70 per cent of the country is dry, semi-dry or humid. The country is highly prone to desertification and the north-west is particularly vulnerable to drought and associated wildfires. With climate change and subsequent changes in precipitation patterns, it is clear that prolonged droughts and wildfires may continue to become more frequent in the recent future.

### Climate change

As an island state with an extremely rich and diverse make-up, the Dominican Republic is particularly vulnerable to climate change. Most experts agree that the frequency and intensity of out of season extreme climatic events such as storms and hurricanes, floods and prolonged droughts will continue to increase. Different climate change scenarios include changes to established rainfall patterns, as well as increased ocean

<sup>10</sup> Transpressional rupture of an unmapped fault during the 2010 Haiti Earthquake, Eric Calais et al, *Nature Geoscience* 3, pp. 794-799, October 2010; Enriquillo-Plantain Garden Strike-Slip Fault Zone: A Major Seismic Hazard Affecting [Dominican Republic](#), [Haiti](#) and [Jamaica](#), Paul Mann et al, 2008.

<sup>11</sup> Dominican Republic Disaster Risk and Vulnerability Analysis, VI DIPECHO Action Plan for the Caribbean, ECHO and partners, pp. 13-28.

temperatures. Whilst it is difficult to predict whether changes will result in an increase in the number of floods, landslides or droughts –or a combination of all of these– it is clear that the challenges for the country are immense. A reduction in rainfall, for example, would cause severe and increased pressure on water resources for a rapidly growing population. On the other hand, an increase in ocean temperatures and a rise in sea-levels would lead to the destruction of coral reefs and marine diversity, the flooding of coastal low-lands, as well as the salination of subterranean coastal waters. Regardless, such changes clearly threaten not only human and economic development, but also the physical loss of national territory.<sup>12</sup>

### Vulnerability factors

Whilst damaging natural events occur frequently, their risk of becoming a disaster is compounded not only by the physical force of the event, but also its location, the vulnerability of local populations, infrastructure and the nation's general level of preparedness. These are also affected by a range of often inter-linked factors which are generally both a cause and consequence of poverty, including inappropriate land use, migration and escalating urbanization, environmental degradation as well as climate change.

The Dominican Republic has a population of 10.2 million, which is expected to rise rapidly to 12.4 million by 2030. The country is classified as a lower middle income country with many attributes characteristic of modern economies. It has experienced strong economic growth over the last 35 years, although this has been marred by crisis points highlighting its relative economic instability. At well above regional averages, per capita GDP growth has risen from US\$ 335 in the 1970s to US\$ 4,576 in 2008.<sup>13</sup> With the decline of the sugar and tobacco industries, production has shifted away from agriculture towards service industries including construction, manufacturing and tourism, with services now accounting for over half of the country's economic activity.<sup>14</sup> Despite significant growth, however, poverty remains high, with only minor improvements to social welfare for the majority of the population allowing for vulnerability and exposure to disaster risk.

In 2010, the country was ranked at number 88 with a rating of 0.663 on the human development index (medium human development), dropping to 0.499 (nearly low human development) when adjusted to take into account the extremely high inequality between the rich and the poor not only in income but also access to basic services, including health, education and safe housing.<sup>15</sup> Figures to 2008 indicate that nearly half of the population (48.5 per cent) live below the poverty line struggling to meet basic family necessities, with 4.4 per cent of citizens living in extreme poverty surviving on less than US\$ 1.25 per day.<sup>16</sup>

Public policy has historically promoted a strong concentration of investment and physical infrastructure in the two principal cities of Santo Domingo and Santiago. 69.2 per

<sup>12</sup> MMARN.

<sup>13</sup> Human development index, UNDP, 2010 and Country Economic Memorandum, The Foundations of Growth and Competitiveness, World Bank, 2006.

<sup>14</sup> International Commission Report on the Strategic Development of the Dominican Republic, 2010-2020, Attali and Associates p. 8.

<sup>15</sup> Inequality adjusted human development index. Figures from 2005, indicate that the top 20 per cent of the population holds 50 per cent of the country's total income, whilst the bottom 20 per cent only 1.3 per cent, Income inequality in Central America, Dominican Republic and Mexico: Assessing the importance of individual and household characteristics, ECLAC, 2005.

<sup>16</sup> Human development index, UNDP, 2010.

cent of the total population currently live in urban areas, with projections indicating that these rates will continue to rise substantially over the next twenty years, with largely unregulated human settlements growing around the peripheral zones of cities and with inadequate services to meet their needs.<sup>17</sup> Challenges associated with internal migration are also compounded with additional and significant migration across the Haitian border, a phenomenon which has increased substantially since the January 2010 earthquake with an estimated one million Haitians now living in the Dominican Republic and representing one of the most vulnerable groups in the country.<sup>18</sup>

### Key vulnerability factors

- human settlements located in high-risk areas prone to hazards
- inadequate building practices, regulations, supervision and enforcement mechanisms especially in marginalised communities
- dense concentration of buildings in urban areas, especially in Santo Domingo, with a lack of consolidated urban planning and appropriate land use (earthquakes)
- deforestation and construction practices leading to land with little rain absorption capacity and/or poor drainage (floods)
- lack of comprehensive centralized and community-based early warning / alarm systems
- incipient public awareness to disaster risk among much of the population, especially regarding earthquake risk.

Whilst recent disasters have served to push forwards the government's agenda on the management of risk, it is clear that a lack of strong policies and laws, and their enforcement, in areas such as building regulation or land-use management is also a major contributing factor to the actual or potential impact of natural hazards.

<sup>17</sup> Population projections, National Planning Office (ONAPLAN).

<sup>18</sup> Estimates indicate a 15 per cent increase during 2010 following the January earthquake, Directorate General of Migration.

Analysis of legislation related to disaster risk  
reduction in the Dominican Republic

## **Chapter 3**

Overview of the legislative  
framework for disaster  
risk reduction

## Government and legislative structure

The system of government of the Dominican Republic is defined by its Constitution as being civilian, republican, democratic and representative, with government power divided in independent executive, legislative and judicial branches.<sup>19</sup> Executive power is held by the president, who is elected for a four year term. As head of state and head of government, the president is supported in his functions by a council of 22 ministers. Legislative power is invested in the 210-seat national congress which has the authority to legislate over any matter.

The Dominican Republic promulgated its first constitution in 1844 and its most recent revision was enacted in January 2010.<sup>20</sup> All new laws must be approved by Congress although the executive branch retains the right to issue decrees, regulations and instructions that are binding. The various state ministries and other government offices may also issue resolutions and norms that are binding.

The country is divided politically into three macro-zones, the North or Cibao, the South-west and the South-east composed of ten development regions. It has a National District and 31 provinces, which are sub-divided into 148 municipalities and 158 district municipalities. The political capital is located in Santo Domingo in the National District. Municipalities are divided into sections and parajes (areas) and governed by a civil governor who is the representative of executive power. Whilst the national legislature holds the core function of making laws at the national level, some ministries and offices have line functions at the sub-national level. Under the National District and Municipalities Act (Law No. 176-07), local authorities have considerable autonomy in making local by-laws and taking administrative decisions.

Since 1991, the Dominican Republic has undertaken major and comprehensive reform seeking to modernize government, including the revision of legal and economic frameworks to strengthen democratic processes and consolidate the country's inclusion in regional and global economies. Most recent legislative reforms have included the updating of basic laws relating to social and economic development, including planning and public sector investment, finance and trade, the environment, social security, as well as laws relating to self-governance and disaster risk management.

## National legal and policy framework for disaster management

### Legal definitions

The definition of disaster under national law is:

“A situation or social process that can be triggered as a result of a natural, technological or man-made phenomenon, which, finding suitable levels of vulnerability in a community, causes intense disruption in the normal functioning of the society, represented by loss of life and health of the population, the destruction or loss of collective goods, and severe damages to the environment, requiring an immediate response by the authorities and the population to assist those affected and to re-establish normality.”<sup>21</sup>

This definition encompasses a broad range of disasters, including both natural and man-made disasters as well as epidemics. Notably, the reference to man-made

<sup>19</sup> Constitution of the Dominican Republic, 26 January 2010, art. 4.

<sup>20</sup> Among multiple revisions, the last three are dated 1966, 1994 and 2002.

<sup>21</sup> Law No. 147-02 on disaster risk management, art. 4.

phenomena could also be extended to include situations of armed conflict. Subsequent decrees and laws do not implicitly address the issue, although the National Disaster Risk Management Plan does provide more details, referring to meteorological, geological and anthropogenic hazards, such as hurricanes, storms, floods, tidal waves, earthquakes, fires and technological risks.<sup>22</sup>

The definition of disaster risk as outlined in national law is:

“The probability that unfavourable economic, social or environmental consequences occur in a particular place, and during a specific period; determined by the relationship between the particular hazard presented and the vulnerability of exposed elements.”<sup>23</sup>

Disaster risk management is defined as the:

“planning and application of measures directed at preventing or reducing the adverse effects of dangerous events on the population, goods, services and the environment. Integrated actions in the prevention-mitigation of disasters and in the preparation for the assistance and recovery of the potentially affected population.”<sup>24</sup>

### Key legal instruments for disaster risk management

The Dominican Republic has a substantial body of legislation relating to disaster management dating from 1912,<sup>25</sup> and now has a relatively modern legal framework embodied in the Disaster Risk Management Act (Law No. 147) of 2002 (DRM Act), based on other normative frameworks viewed as “advanced in their contemplation of disaster risk reduction and incorporating core criteria promoted by the international community.”<sup>26</sup>

National laws regulate not only the prevention, mitigation and response to disasters as outlined in the DRM Act, but also a range of relevant matters directly related to the reduction of disaster risk, including the protection of the environment and natural resources, building and construction, education, health and water management. The legally mandated system of decentralized decision-making and local governance is fundamental to the application of relevant DRR legislation and the implementation of activities at sub-national levels.

### Evolution of the legal and institutional framework

In the absence of an overarching institutional framework for disaster management, the Civil Defence Office was created in 1966 to ensure an adequate response to disasters, coordinate the actions of different state and non-state actors, as well as prepare a national plan and programme for civil defence.<sup>27</sup> In 1968, the National Civil Defence Commission was created to take the lead in developing initiatives in case of disaster with key state actors involved in response activities and the Dominican Red Cross.<sup>28</sup>

During the 1970s, the Dominican Republic suffered multiple disasters of varying scale and with the vast damage wreaked by the passage of Hurricane David and Tropical

<sup>22</sup> National Disaster Risk Management Plan, 2006, p.3.

<sup>23</sup> Law No. 147-02, art. 4.

<sup>24</sup> Id.

<sup>25</sup> Law No. 5110 which creates the Fire Brigade, 1912.

<sup>26</sup> Dominican Republic disaster risk reduction diagnosis, ISDR et al, 2010, p. 34.

<sup>27</sup> Law No. 257 on the creation of the Office of Civil Defence, 1966 and Decree No. 1525 establishing the Office's regulations, 1966.

<sup>28</sup> Decree No. 2045 on the Creation and Integration of the National Commission of Civil Defence, 1968.

## Overview of the legislative framework for disaster risk reduction

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Storm Federico in 1979 it was evident that modifications were required in the planning and coordination of disaster-related activities. In 1981, the National Emergency Plan Commission was created to draft the national disaster policy, emergency plan and associated systems and procedures, including coordination mechanisms for prevention and damage assessments, as well as the creation of agencies responsible for disaster prevention.<sup>29</sup>

More than 1,000 small-scale and large-scale events during the 1990s, including fires, drought, epidemics, plagues of insects and in particular hydrometeorological events, stimulated further advances. In the aftermath of Hurricane Georges in 1998, disaster risk reduction was recognized as a crucial and necessary component in the development of Dominican Republic law, whereas the legal framework, agents and instruments previously focused exclusively on response. Evaluations of state capacity undertaken by external partners at this time clearly identified the need for an updated national policy, a new legal framework, the implementation of information management systems, dedicated human and financial resources, as well as the need to foment community participation in local risk management.<sup>30</sup>

In 2001, the Emergency Operations Centre (COE) and National Office for the Seismic Assessment and Vulnerability of Infrastructure and Buildings (ONESVIE) were established.<sup>31</sup> In the same year, the National Emergency Commission (CNE) was created, chaired by the Civil Defence and including representatives of different institutions as well as civil society, and charged with the responsibility of overseeing all plans, projects or proposals relating to disaster risk management involving the state.<sup>32</sup>

### Disaster Risk Management Act

The DRM Act (Law No. 147-02) was promulgated in 2002 in recognition of the need to develop instruments and institutional arrangements clearly integrating a holistic approach to the management of disaster risk. The Act establishes the new legal framework addressing the integration of processes to intervene in disaster risk reduction throughout the disaster management cycle and in creating a new national system for its coordination. Revised rules for its application were promulgated in 2009 providing further detail regarding implementation.

The Act provides highlights that national DRM policy should intend to “avoid or reduce loss of life and damages of public goods, materials and the environment, or those of citizens, as a consequence of existing risks of natural or man-made disasters that can occur in the national territory.”<sup>33</sup> The Act also outlines the core criteria that should guide national policy, based on the:

- right of individuals, to have their persons, goods and environment protected from potential disasters or adverse events
- obligatory actions that prevent or mitigate disaster loss

<sup>29</sup> Decree No. 2784 on the Creation and Integration of the National Commission of the National Emergency Plan, 1981, modified by Decree No. 159 and later repealed by Law No. 147-02.

<sup>30</sup> IADB.

<sup>31</sup> Decree No. 360 on the Creation of the Emergency Operations Centre and Decree No. 715 on the Creation of the National Office for Seismic Assessment and Vulnerability of Buildings and Infrastructure, 2001.

<sup>32</sup> Decree No. 360 and Decree No. 487 on the Creation of the National Emergency Commission, 2001. Both later repealed by Law No. 147-02.

<sup>33</sup> Law No. 147-02, art. 2.

- devolution of prevention, mitigation and response responsibilities to the local level, assuring the decentralisation of functions and close coordination between sectoral and territorial actors
- strengthening of procedures to encourage citizen participation in prevention, mitigation and response activities.<sup>34</sup>

In 2009, an implementing regulation was adopted to further elucidate responsibilities under the DRM Act<sup>35</sup> and work is currently underway, with the support of external consultants, to develop a National DRM Policy.<sup>36</sup>

Policy instruments as defined by the Act include the National System of Disaster Prevention, Mitigation and Response, the National Disaster Risk Management Plan, the National Emergency Plan, the National System of Integrated Information and the National Fund for Disaster Prevention, Mitigation and Response:<sup>37</sup>

### **National System for Disaster Prevention, Mitigation and Response**

The National System for Disaster Prevention, Mitigation and Response (hereinafter, SN-PMRD or “the National System”) is defined as the “package” of norms, guidelines, activities, resources, programmes and actors that together work towards the fulfilment of disaster risk objectives defined by the law itself. It is a permanent mechanism that aims to order and integrate actors working in DRM issues at the national, regional provincial and municipal levels, covering actions from prevention and mitigation, through to preparation, response, rehabilitation and recovery. The SN-PMRD is composed of public and private entities, community organizations and NGOs, the media and donors working in related activities.<sup>38</sup> The institutional arrangements provided for the coordination and implementation of the National System are discussed below in Part 4.

### **National Disaster Risk Management Plan**

The second policy instrument defines the objectives, strategies, programmes and sub-programmes which should guide the activities of the SN-PMRD. Under the DRM Act, the core pillars of the Plan are:

- promotion and dissemination of knowledge and risk evaluation and its dissemination
- revision and reduction of risk
- improvements in alert and response
- training of human resources
- strengthening of institutional capacity in DRM.

The drafting of the Plan is the responsibility of the National Technical Committee for Prevention Mitigation and Response (CTN).<sup>39</sup> To date, several draft plans have been elaborated with the support of external partners. A first draft was prepared in 2001, updated in 2006 and, at the time of writing was undergoing additional revision as of January 2011 for presentation to the CNE and National Council for DPMD for approval during the course of the year.<sup>40</sup> Under the DRM Act, the SN-PMRD should include the

<sup>34</sup> Id., art. 1.

<sup>35</sup> Decree No. 874-09 approving the Implementing Regulation for Law No. 147-02, 2009.

<sup>36</sup> With support from AECID.

<sup>37</sup> Id., art. 2.

<sup>38</sup> Id., arts. 5-7.

<sup>39</sup> Id., art. 15.

<sup>40</sup> IADB (2001 Plan) and AECID (2011 Plan).

## Overview of the legislative framework for disaster risk reduction

DRM plans of all National System actors.<sup>41</sup> The lack of an approved and finalized DRM Plan, however, means that current projects undertaken by the government and donors have, to date, lacked a clear overarching plan of action.

### National Emergency Plan

The National Emergency Plan defines inter-institutional structure and responsibilities for disaster management, covering preparation, response, rehabilitation and recovery. It also seeks to establish clear coordination mechanisms between actors at all levels of the National System, as well as with the public. Under the Act, the COE is responsible for the elaboration of the Plan, which is then presented to the CNE and the National Council for approval.<sup>42</sup> The 1984 Plan was updated in 2001 with support from external partners, and with subsequent revisions by the COE planned on a yearly basis.<sup>43</sup> Hazard-specific contingency plans are annexed to the Emergency Plan, with earthquake and hurricane plans drafted to date and a tsunami plan under elaboration.<sup>44</sup>

Notably, the only sanctions included under the DRM Act apply to the delay or lack of collaboration from relevant actors in the drafting of the Emergency Plan, leading to the possible dismissal of responsible public officials.<sup>45</sup>

### Regional, provincial and municipal Plans

All sub-national authorities are responsible for preparing DRM and Emergency Plans within their geographical area and in line with national plans, with the support of members from their own Prevention Mitigation and Response Committees, and in the case of DRM Plans, with the support of the CTN.<sup>46</sup> National plans should clearly incorporate regional level issues and institutional plans. National plans should be supported by specific norms for their implementation, as well as officially recognized by Decree. To date, sub-national emergency plans have been developed largely with the support of external partners under specific capacity-building programmes,<sup>47</sup> with little progress to date on holistic DRM Plans, and there is considerable confusion at the local level regarding the different plans required under current legislation.<sup>48</sup>

### National Integrated Information System

The National Integrated Information System is a proposed mechanism for collecting information on national hazards, vulnerabilities and risk, as well as data related to existing monitoring and alert systems and response capacities. Intended to provide a baseline for, and support to, the work of the National System and the prioritization of inter-institutional programmes and projects as outlined in the DRM Plan. As yet undeveloped, the law outlines the responsibility of System members to facilitate information on areas within their particular competency, and the responsibility of the CNE in setting up the System.<sup>49</sup> Whilst different information mechanisms exist, including an

<sup>41</sup> Decree No. 874-09 approving the Implementing Regulation for Law No. 147-2, art. 4, point 1.

<sup>42</sup> Id., art. 16.

<sup>43</sup> IADB, ODC-Ingeniar, La Red and ICF Consulting (2001 Plan).

<sup>44</sup> COE.

<sup>45</sup> Law No. 147-02, art. 16, paragraph II.

<sup>46</sup> Id., art. 17.

<sup>47</sup> Including for example, the North-East Region under the Disaster Prevention and Preparedness Programme (EC, UNDP, DRC and partners) and the South-East Region under the Disaster Risk Reduction Programme (AECID, SRC, DRC and partners).

<sup>48</sup> FEDOMU/INTEC/Dominican Republic disaster risk reduction diagnosis, ISDR et al, 2010, p. 36-37.

<sup>49</sup> Law No. 147-02, art 19.

information management system developed by the COE, the absence of a centralised and systematic database which would inform the work of National System actors is keenly felt.

### National Fund for Disaster Prevention, Mitigation and Response

The National Fund for Disaster Prevention, Mitigation and Response is an instrument for capturing and administering funds to finance disaster risk reduction, response, rehabilitation and recovery from the national budget, and national and international public and private institutions. The fund has seen little activity to date, and what has been done has been oriented towards emergency assistance and response, with little or no investment in DRR activities. Work is currently underway to assess how the Fund can be financed and activated with external support.<sup>50</sup>

## Other laws related to disaster risk reduction

### Local governance

The National District and Municipalities Act (Law No. 176-07) provides for the decentralization of government functions at the sub-national level, providing local authorities with authority to make local by-laws and to take administrative decisions within their own areas of jurisdiction, with some exceptions. Particular areas relevant to DRR tasked to municipal authorities include development planning, urban and rural land-use management, infrastructural works, environmental management and fire prevention. Responsibilities shared jointly with the central government include the monitoring of disaster risks and measures to guarantee citizen safety during emergencies. Minimum and obligatory services that must be provided at this level include urban planning, civil defence and environmental protection.<sup>51</sup>

The financing of local government is covered by Law No. 166-03, which outlines the transfer of 10 per cent of government income to municipalities for the fulfilment of services. To date, however, this amount has not been covered in full in annual budgets, leading to intense debate on the need for increased financing to meet basic local services, including the minimum services as outlined above, as well as additional local interventions in DRR.<sup>52</sup> Of particular relevance is Law No. 170-07 creating the System for Participatory Municipal Budgets, which provides for citizen participation in the content, implementation and evaluation of municipal budgets, in particular regarding the financing of social and economic works in both rural and urban communities (40 per cent of municipal income received from the national budget).<sup>53</sup>

### Development planning

In force since 2007, Law No. 496-06 re-defined government actions in development planning, creating the Ministry of Economy, Planning and Development (MEPD) aligning development with social, economic and territorial planning processes, as well as with the modernization of public sector administration. As coordinator of the SNIP, the MEPD oversees macroeconomic policy and sustainable development, and is charged

<sup>50</sup> CNE/AECID.

<sup>51</sup> Law No. 176-07, arts. 19-20.

<sup>52</sup> FEDOMU.

<sup>53</sup> Law No. 166-03 on the transfer of funds to municipal authorities and Law No. 170-07 on the creation of the Participatory National Budgets System.

## Overview of the legislative framework for disaster risk reduction

with the drafting of national development strategy, national public sector budgets and land-use management policy. Efforts aim to include risk analysis as cross-cutting to all phases of public investment to ensure both the viability and sustainability of proposed interventions.<sup>54</sup>

The Planning and Public Investment Act (Law No. 498-06) aims to structure development actions, encouraging the decentralization of planning processes, with the creation of regional, provincial and municipal development councils to act as channels for local demands to municipal and central government. It provides for the elaboration of strategic development plans as well as short and medium term plans and projects.<sup>55</sup> Also included in this Act is the proposal for the elaboration of sectoral and institutional strategic development plans allowing for both sub-national and sectoral planning.

Some stakeholders contacted for this report noted a lack of clarity and articulation in SN-PMRD and SNIP mandates, including overlapping roles and responsibilities as well as in general overall coordination.<sup>56</sup>

### Proposal for the national development strategy

The country's proposed National Strategy for Development for 2010 to 2030 outlines the overall strategy for government policy and planning. Developed by the MEPD and the National Council for the Reform of the State, and presented to Dominican civil society for consultation, it presents the country's efforts towards alleviating poverty, promoting sustainable development and meeting the Millennium Development Goals. It provides strategies, objectives and actions for development in four pillars. These cover state reform and good governance, poverty and inequality reduction, economic development, and environmental management and climate change adaptation.

Risk management is embedded within the fourth pillar. The Strategy aims to further the development of an efficient national risk management system involving the active participation of communities and civil society. Included here are goals to strengthen the coordination of the National System, the building of capacity in risk identification, monitoring, evaluation and early warning, and the consolidation of human, financial and material resources of National System actors.<sup>57</sup> The Draft Bill on the National Development Strategy of the Dominican Republic for 2010-2030, proposes that the Strategy will itself become law, which raises additional concerns regarding discrepancies in the SNIP and the SN-PMRD as outlined above.

### Environment and natural resources

The Environment and Natural Resources Act of 2000 (Law No. 64-00) creates the Ministry for the Environment and Natural Resources (MMARN) as the principal institution responsible for overseeing environmental concerns, and provides an overarching legal and normative framework for the sustainable management and protection of the environment and natural resources.

<sup>54</sup> MEPD.

<sup>55</sup> Law No. 498-06 on planning and public investment, art. 14.

<sup>56</sup> MEPD, CNE and Dominican Republic disaster risk reduction diagnosis, ISDR et al, 2010, p. 35-36.

<sup>57</sup> Draft Bill, Dominican Republic National Development Strategy, 2010-2030.

### National land-use planning

The Environment Act provides for a National Land-Use Plan as an instrument for environmental management, to be drafted by the MMARN, in coordination with the Presidential Technical Secretariat and other relevant institutions. As yet undeveloped, such a Plan would clearly serve to assist in the appropriate location of human settlements and optimize the use of resources, whilst at the same time reducing the risk of adverse events on the population and the environment. Since 2008, public policy in sustainable land-use management has been overseen by the Directorate General for Land-Use Development and Planning (DGODT). A new Land-Use Law is currently being drafted.

### Environmental impact assessments and licenses

Environmental Impact Assessments (EIAs) are an instrument for assessing the environmental impact of public and private development works, projects and activities, and are a prerequisite for the granting of an environmental license for the development of such initiatives. The granting of an environment license implies that the license holder assumes responsibility for damages caused to the environment and is obliged to observe existing rules and norms. Law No. 64-00 requires that a wide range of projects and activities must be subject to EIAs, including urban development and the location of human settlements, however, to date, emphasis has been placed on large development projects or high-risk activities, such as mining projects, projects handling or producing dangerous substances, and tourism development initiatives.<sup>58</sup>

The Environment Act promotes the decentralization of functions via technical regional, provincial and municipal environmental management units. Whilst MMARN is responsible for the development of national norms, standards and rules, municipal authorities can emit and monitor environmental protection norms within their area of jurisdiction.<sup>59</sup> Norms included in Law No. 64-00 and related to the protection of the environment cover water pollution, atmospheric pollution, dangerous substances, domestic and municipal waste and the location of human settlements. Norms for the protection of natural resources cover land use, water management, biological diversity, coastal and marine areas, forestry and subterranean resources. The Act also outlines provisions for environmental emergencies and the declaration of areas under environmental risk or where pollution constitutes a real danger to the population and the environment.<sup>60</sup>

### Climate change adaptation

To date, there is no core national legislation related to climate change adaptation although the country is signatory to global agreements, such as the UN Framework Convention on Climate Change, the Kyoto Protocol and the UN Convention to Combat Desertification. Climate change is the responsibility of the relatively new National Council for Climate Change and Clean Development Mechanism set up in 2008 to work on the formulation of national policy and plans, as well as to provide support to specific initiatives including projects financed under the Clean Development Mechanism.<sup>61</sup> The National Council is not a part of the MMARN but reports directly to the president, highlighting both its multidisciplinary approach and importance on the national agenda. As

<sup>58</sup> Law 64-00 on the environment and natural resources, art. 41 and MMARN.

<sup>59</sup> Id., art. 79.

<sup>60</sup> Id., art. 78.

<sup>61</sup> Decree No. 701-08 on the creation of the National Council for Climate Change and Clean Development Mechanism.

## Overview of the legislative framework for disaster risk reduction

mentioned above, climate change adaptation and environmental management are core components of the National Development Strategy, with risk management embedded within this pillar.

### Water management

The prime law concerning water management is the Terrestrial Water Management and Public Water Distribution Act (Law No. 5852) of 1962 and its modifications, with responsibilities regarding policy and regulatory functions fragmented across a range of institutions. The National Institute of Water Resources (INDRHI) is by law defined as the ultimate authority regarding the control, use and construction of water works, including, river management (regulation, channelling and flood management); agricultural water resources; irrigation systems, reservoirs, dams and hydroelectric plants. INDRHI reports to MMARN with regard to its interventions including the evaluation and protection of water resources, including water basins, lakes and rivers.<sup>62</sup>

Regulatory authority regarding water usage is shared with several agencies, including the Corporation for the Promotion of Industry and the Dominican Electricity Corporation regarding the industrial and hydroelectrical use of water; the Ministry of Agriculture regarding the agricultural use of water; the National Institute of Drinking Water and Drainage (INAPA) regarding water supply to aqueducts, as well as with regional water service providers covering large cities and towns, and INAPA covering other areas. Water and sanitation policy is defined by the Presidential Technical Secretariat (STP in Spanish) whilst the Ministry of Public Health and Social Assistance (MSPAS) oversees regulation. The control and granting of licenses to exploit subterranean water resources are administered directly by the MMARN.<sup>63</sup>

A draft bill for a revised Water Act proposes the creation of a new and overarching regulatory authority, the National Water Authority (ANAGUA). Several important provisions for DRM are also covered, including the role of ANAGUA and sectoral partners in the development and implementation of prevention, mitigation, response and recovery programmes in the face of drought, flood or additional hydrometeorological phenomena, and the inclusion of risk-oriented approach to land-use planning, basin mapping and including a National Hydrological Plan and a National Land-Use Plan.<sup>64</sup>

### Building and construction

Building and construction are covered by the dated Urbanization, Public Display and Construction Act (Law No. 675 of 1944) and its modifications, the General Building Regulations and Rules (2006), and the National Building Codes (1979 and 2000). These are administered by the Directorate General of Buildings of the Ministry for Public Works and Communications (MOPC) with the supervision of rules overseen by the Directorate General of Regulations and Systems. The authority of the MOPC extends to large public works, whilst private and smaller scale public works are the responsibility of Municipal Councils.

The General Building Regulations and their Rules for Application came into force in 2008 and establish the minimum requisites for building projects in the country, from the expedition of licensing permits to design, construction, supervision and inspection

<sup>62</sup> Law No. 6, 1965 establishing INDRHI, article 5.

<sup>63</sup> Law 64-00, art.s 196-197.

<sup>64</sup> Draft Water Bill, 2010, art.s 189-190.

which should guarantee quality and safety for users. The General Building Regulations require, as of 2009, that all buildings that have been constructed (or which are in process of construction) without an adequate licensing permit undergo structural evaluation to ensure their safety. Failure to comply with minimum standards entails a responsibility to reinforce concerned buildings in accordance with the regulations.<sup>65</sup>

The current National Building Codes concerning the evaluation of construction risk include the newly revised Seismic Code (2011) and the Wind Code (2000), which are obligatory for the construction of all houses and buildings in the country, and a requirement for the approval of plans and the expedition of licences by the MOPC.

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<sup>65</sup> Decree No. 576-06 on the Rules for the Application of the General Building Regulations, art.s 2.1.4 and 2.1.5.

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# Chapter 4

## Institutional arrangements

## Institutional framework for disaster risk reduction

Under the DRM Act and its implementing Regulations, the Government of the Dominican Republic has established the SN-PMRD, headed by the president, as the structure to lead DRM in the country, with different levels of coordination and responsibility defined within the law.

### National Council for Disaster Prevention, Mitigation and Response

The National Council for Prevention, Mitigation and Response (CN-PMR) is the highest organ responsible for the leadership of the National System and thus its overall orientation, direction, planning and coordination. Headed by the president, and led by the executive director of the Civil Defence as permanent secretary, the Council is formed of 22 ministers or high-ranking officials from government institutions as well as representatives from the Santo Domingo National District Council, the Dominican Red Cross and civil society organizations. The Council is given the responsibility of approving policy and establishing the framework of action of the members of the National System. To carry out these tasks, the Council is required to meet at least twice a year and as required under situations of emergency.<sup>66</sup>

### National Emergency Commission

Dependent on the National Council, the National Emergency Commission (CNE), is the coordination mechanism responsible for executing policy and decisions made by the Council. The CNE is tasked with the consolidation of the legal framework through the drafting of rules and norms. The CNE is also responsible for the finalization of operational plans and budgets, with clearly defined roles and responsibilities within the SN-PMRD. In addition to planning, the CNE is charged with the coordination and implementation of PMR activities.<sup>67</sup> It is composed of a permanent executive secretary, and officials as delegated by institutions participating in the National Council. The CNE meets regularly on a monthly basis and member attendance is obligatory.

Under the DRM Act, the CNE should be composed of a permanent technical team to direct areas related to specific legal, institutional, technical and financial aspects at all levels, including community-level.<sup>68</sup> A major concern expressed by stakeholders is the under-staffing and under-funding of the Commission to fulfil its responsibilities as outlined under the Act, with only the executive secretary in place, supported by a small four-person staff to handle office administration and logistics.<sup>69</sup>

The CNE includes the National Technical Committee for Risk Prevention and Mitigation, the National Emergency Operations Centre, Advisory Teams, and Regional, Provincial and Municipal PMR Committees.

### National Technical Committee for Risk Prevention and Mitigation

Created in March 2008, the role of the National Technical Committee for Risk Prevention and Mitigation (CTN) is to act as advisor and coordinator of DRR activities, as well as to

<sup>66</sup> Law No. 147-02, art. 9, and Decree No. 874-09, art.s 6-9.

<sup>67</sup> Under Law No. 257-66, the Civil Defense is still charged with coordination in times of emergency.

<sup>68</sup> Law No. 147-02, art. 10 and Decree No. 874-09, art. 10.

<sup>69</sup> CNE and partners.

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update the National DRM and Emergency Plans.<sup>70</sup> The Committee is composed of technical representatives of the institutions participating in the SN-PMRD. Meetings, led by a part-time technical coordinator, take place on a monthly basis and when required by the CNE.

As with the CNE, concerns have been raised regarding the lack of human and financial resources at the Committee's disposition, impeding the fulfilment of essential responsibilities. External cooperation has been vital to support the role of both organs in the development of key tasks, including the drafting and/or updating of national DRM policy and plans as noted above.<sup>71</sup>

### National Emergency Operation Centre

The National Emergency Operation Centre (COE) is the structure responsible for the planning and coordination of emergency preparation and response operations of the SN-PMRD, from the declaration of alerts through to possible or eventual response.<sup>72</sup> The National COE has a permanent team structure in place, which supports on-going monitoring, evaluation, as well as the dissemination of information regarding disaster risk and preparedness to the general public. Whilst COE representation exists at sub-national levels, work on the establishment of regional centres is on-going. The COE is activated during times of emergency, convening members from institutions active in response, and intervening throughout the national territory when regional or provincial capacity to act is overcome.

### Advisory teams

The DRM Act includes a provision for the creation of temporary or permanent technical teams to support the work of programmes, projects and activities as outlined in the National DRM and Emergency Response Plans.<sup>73</sup> Currently, technical teams have been formed to address important issues, including early warning / alert, climate change, radio communications, tsunamis and dams.<sup>74</sup>

### Regional, provincial and municipal Prevention, Mitigation and Response Committees

In line with the decentralization of functions, Prevention, Mitigation and Response (PMR) committees are to be set up at all territorial levels, presided by local authorities (governor or mayor), Civil Defence and the presidents of local Dominican Red Cross branches. Members include representatives from the institutions participating in the SN-PMRD where devolved as well as civil society representatives.<sup>75</sup> Each committee is responsible for the promotion and coordination of DRM related activities of their members.

To date, the creation of Provincial and Municipal PMR committees has largely been possible through external funding of capacity building programmes supporting activation and training of members. Following a survey carried out in December 2010, preliminary estimates indicate that, out of 93 municipalities interviewed, around 64 per

<sup>70</sup> Law No. 147-02, art. 11, paragraph II.

<sup>71</sup> Id. art. 11.

<sup>72</sup> Id. art. 12.

<sup>73</sup> Id. art. 13.

<sup>74</sup> CTN.

<sup>75</sup> Law No. 147-02, art. 14.

cent had formed a PMR committee. Of these committees, 80 per cent acknowledged that they only meet in case of emergency to activate local preparedness and response mechanisms and rarely, if at all, to review the coordination and implementation of actions related to DRR.<sup>76</sup> Perhaps as a result, confusion remains as to the exact division of responsibilities for DRM activities and there are still coordination problems between different key actors within the System.<sup>77</sup> Greater levels of coordination and clarity at local level have been achieved, however, in areas where external cooperation had played a principal role in the consolidation of sub-national capacities.<sup>78</sup>

An additional challenge identified was that of coordination between the various sub-national committees and their national counterparts.<sup>79</sup> Whilst under the implementing Regulations to the DRM Act, each region should select a governor as coordinator of its regional committee, there is no apparent central mechanism currently overseeing the work and coordination of all committees.

### Additional actors

The DRM Act does not make provision for the roles and responsibilities of non-state actors such as non-governmental and civil society organizations or the private sector. This has reportedly led to some confusion regarding collaboration as well as duplication or omission in some areas. Work has taken place, however, in the drafting of protocols for interaction with the private sector, in the setting up of the Platform for Disaster Risk Reduction, bringing together civil society and donors interacting with the National System members to support inter-institutional coordination of proposed and planned interventions, as well as in the organization of national and international DRM fora.<sup>80</sup> Notably, the DRM Act does not provide for the community level coordination and implementation mechanisms. The formation and value of these community networks are discussed in greater detail in Part 5.

### Resources and funding mechanisms

Under existing provisions in the DRM Act, the CNE and CTN should receive financing from the annual budget to cover operational costs and to finance their tasks related to DRM.<sup>81</sup> To date, although basic administrative costs are covered, they have received insufficient resources to fulfil their roles adequately. Funds are not contemplated for staff, or for specific PMR activities at sub-national level. The Civil Defence and COE are also under-funded with regards to the responsibilities that they should fulfil.<sup>82</sup> Individual line ministries, institutes and offices are responsible for raising funds to finance activities as outlined in their DRM Plans. Regional, provincial and municipal PMR committees do not receive a dedicated budget for implementing activities; instead, some funds are raised locally during times of disaster, and some isolated prevention and mitigation activities are financed through the Participatory Municipal Budget allocation.

<sup>76</sup> INTEC/FLACSO/FEDOMU.

<sup>77</sup> FEDOMU and Dominican Republic disaster risk reduction diagnosis, ISDR et al, 2010, p. 36.

<sup>78</sup> Id.

<sup>79</sup> DRC/CTN.

<sup>80</sup> Report on the implementation of the 53 recommendations of the UNDAC 2005 evaluation mission on national disaster response capacity, UNDAC, 2010, p. 10.

<sup>81</sup> Law No. 147-02, art. 22.

<sup>82</sup> Report on the implementation of the 53 recommendations of the UNDAC 2005 evaluation mission on national disaster response capacity, UNDAC, 2010, p. 11.

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Funds are contemplated to cover unforeseen “public calamities”, with 1 per cent of central government revenue available to the president via the CNE under the Public Sector Budget Act.<sup>83</sup> The National Fund for Disaster Prevention, Mitigation and Response provides an additional financing mechanism, however, as mentioned above, it has largely been used to finance emergency response activities and has been under-utilised in its capacity to capture and administer DRR funds. As a consequence, and in practical terms, national and sub-national risk reduction activities rely heavily on human and financial resources from the UN System, INGOs and the Dominican Republic Red Cross.

### Additional roles and responsibilities in disaster risk management

#### Hazard monitoring and risk identification

The DRM Act outlines the role and responsibility of the SN-PMRD in the identification, monitoring and evaluation of hazards and their risk to the population. Specific functions include the development of detailed risk analysis evaluations reviewing natural and man-made hazards to which the country is exposed, as well as vulnerability assessments of human settlements in high-risk areas.<sup>84</sup>

The 2006 draft National DRM Plan describes additional tasks, including the development of a multi-hazard and risk inventory and mapping at national, provincial and municipal levels, risk evaluation to support planning, prevention activities to protect human settlements such as land-use assessments, and urban risk and vulnerability analysis encompassing the evaluation of vital buildings and infrastructure. The Rules for the Implementation of Law 147-02 provide detail regarding specific activities to be financed by the National Fund, including the development and dissemination of risk maps per province and per municipality, a “national risk atlas”, hydrogeological maps for the most prominent river basins, as well as scientific research and the implementation of specific projects to improve knowledge of the country’s disaster risk.<sup>85</sup>

Responsibilities for hazard and risk identification and evaluation rest with a range of different sectoral governmental institutions and have been supported by NGOs working in the area. The Military Cartographic Institute is currently responsible under the DRM Act Rules for supplying detailed maps. However, a draft bill currently in process of approval would create a new National Cartographic Institute that would supplement the work of this and other organizations working on map production and the collection of geo-spatial information. The National Meteorological Office (ONAMET) is responsible for monitoring, evaluating and supplying hydrometeorological data, the National Institute of Water Resources (INDRHI) is responsible for flood risk and hazard analysis in river basins, whilst the Seismology Institute of the Autonomous University of Santo Domingo (UASD) is responsible for national seismic activity.<sup>86</sup>

The COE also holds a specific function in the monitoring of potential hazards, their possible development and the transmission of information to the public when a warning is issued. Close links are maintained with scientific institutions, including ONAMET and INDRHI with clear and established protocols for the sharing and communication

<sup>83</sup> Law No. 423-06 on public sector budgets, art. 33.

<sup>84</sup> Law No. 147-02, art. 7.

<sup>85</sup> Decree No. 874-09, art. 20.

<sup>86</sup> Id., art. 15.

of information.<sup>87</sup> Links have also been strengthened with institutes charged with the monitoring of seismic risk, including the National Seismic Institute and the National Office for Seismic Evaluation and Infrastructure and Buildings Vulnerability (ONESVIE). Under the DRM Act, regional, provincial and municipal committees are tasked with hazard monitoring and evaluation, being bound to inform the CNE in a timely manner of natural events that may cause, or have caused, local damages within their areas of jurisdiction.<sup>88</sup>

Reportedly, whilst some agreements have facilitated inter-institutional cooperation, information remains largely dispersed amongst the different actors involved, leading to possible duplication in some areas and omission in others. Whilst maps do exist and studies have been elaborated for certain high-risk areas, stakeholders asserted that there is a need to extend work in this area and to better ensure that information is clearly centralized and channelled to support development planning. This would require additional and sustained investment in technical, financial and human resources.<sup>89</sup> The development of the National Integrated Information System would clearly have a central role in centralizing and systematizing information on hazards, vulnerabilities and risks. The updating and adequate financing of actions included in the DRM Plan, and the activation of the National Fund are also essential to support on-going work in this area.

### Early warning

Under the DRMA Act, the SN-PMRD bears responsibility for setting up and consolidating early warning systems. Provisions for some financing for this have been included in the National Fund.<sup>90</sup> Current systems in high-risk areas include a hydrometeorological early warning system in the North-East Region and a forest fire early warning system.<sup>91</sup> There is also a tsunami surveillance network managed by ONAMET which has agreements with NOAA in Puerto Rico to exchange information on tsunamis in the region. Whilst some important steps have taken place, most stakeholders acknowledge that current efforts require strengthening, in particular regarding the systematization of available information and the consolidation of national and local early warning systems.

The COE is the only institution authorized to issue alerts or information to the public regarding adverse events.<sup>92</sup> Bulletins are issued in real-time allowing for joint decision-making regarding the type of warning to be issued. Once the need for a public warning has been decided, different media, including national and sub-national TV, radio, press and SMS are informed allowing for the dissemination of warnings to communities in order to prepare for or mitigate a possible disaster. Bulletins are also shared with actors from the SN-PMRD and are available publically through the COE website.

Early warning information is further disseminated through the Dominican Republic Red Cross regional branches and community level volunteers, who are present throughout the national territory. Although there are a number of community-based early warning / early alarm initiatives supported by the DRC and other partner organizations, they

<sup>87</sup> Developed with the support of the UNDP under the Disaster Prevention and Preparedness Programme.

<sup>88</sup> Decree No. 874-09, art. 14.

<sup>89</sup> Dominican Republic disaster risk reduction diagnosis, ISDR et al, 2010, p. 39.

<sup>90</sup> Law No. 147-02, art 7, and Decree No. 894-09, art. 20.

<sup>91</sup> Developed with support from the UNDP under the Disaster Prevention and Preparedness Programme.

<sup>92</sup> Decree No. 894-09, art. 12.

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are only in place in selected areas. In general, early warning systems at the community level are clearly in early stages of development. Greater awareness-raising is required regarding alerts and subsequent actions, as well as more formalized channels for the dissemination of information to and from this level. A clear strategy, guidelines and operating norms and standards would also support the consistent development of community-based early warning system; current initiative employ different methodologies and sometimes lack appropriate technology and information to provide adequate warning times.

### Mitigation measures

The SN-PMRD has a responsibility under the DRM Act to establish contingency and security measures in public and private infrastructure. Financing is contemplated from the National Fund to mitigate the impact of disasters on vital infrastructure, such as schools, hospitals, roads, bridges and the energy, transport and communications sectors.<sup>93</sup>

As noted above, responsibility for local-level mitigation works is devolved to municipal councils under the National District and Municipalities Act, whilst larger scale schemes are a national responsibility. For example, municipal or district councils may undertake localized measures in flood or fire management, but initiatives that may cross regional or national boundaries, such as river basin or forest management initiatives are the responsibility of regional or national entities. Stakeholders acknowledge that, to date, principal mitigation initiatives, including structural improvements to schools and hospitals, have largely come about in response to recent emergencies and often with the support of external partners, which have highlighted urgent or immediate issues to be addressed as opposed to a much-needed longer term and integral approach regarding the mitigation of disaster risk.

### Building code implementation

As mentioned above, the MOPC is responsible for large-scale public infrastructure and for associated mitigation works, as well as outlining and providing support for the application of building regulations, rules and codes at the local level. Neither the MOPC nor local authorities, however, have sufficient human and financial resources to conduct systematic supervision or inspection of works, or to undertake more detailed risk evaluations.<sup>94</sup> Instead, seemingly ad hoc initiatives are underway covering high-profile or “prominent” cases, including works in tourist areas, very large buildings and selected schools, hospitals and churches.<sup>95</sup> Somewhat confusingly, under the Environment Act, additional responsibility is allocated to the MMARN (in coordination with the MOPC) to ensure that buildings comply with norms related to seismic activity, hurricanes and fire.<sup>96</sup>

Studies following the Hispaniola earthquake of January 2010, clearly highlighted the limited quality and seismic vulnerability of many buildings in the country. Whilst many buildings, particularly large projects financed by national or international public and private capital, are carried out by professional teams that adhere strictly to the legal requirements, a lack of comprehensive supervision or inspection means that proprietors and constructors assume *de facto* responsibility for the correct implementation of

<sup>93</sup> Law No. 147-02, art. 12 and Decree No. 874-09, art. 20, paragraph 1-B.

<sup>94</sup> When required.

<sup>95</sup> MOPC.

<sup>96</sup> Law No. 64-00, art.s 110-112.

their works. As of 2010, the MOPC was preparing new rules for the private supervision of large projects to formalise this situation.<sup>97</sup>

Similarly, although many commercial buildings or those over two storeys are built under savings and loans schemes and therefore have to meet the building codes, an estimated 80 per cent of all buildings in the country are constructed informally without adherence to the regulations or adequate supervision presenting a vast risk to the population.<sup>98</sup> The drafting of land-use plans, and the approval, enforcement and sanctioning of the new building codes will clearly be essential to reduce vulnerability in the future.

### Land-use management

As mentioned above, the responsibility for the definition of public policy on land-use planning and development lies with the DGODT. The responsibility for the drafting of the actual land-use plans lies with regional, provincial and municipal authorities and requires close inter-institutional collaboration in the development, implementation and evaluation of urban and rural plans. The SN-PMRD, however, is responsible for ensuring that disaster risk criteria are incorporated into development planning and land-use plans.<sup>99</sup>

To date, stakeholders note that, despite ample sectoral laws, plans and programmes, a lack of coordination exists in inter-sectoral planning that often leads to conflicting initiatives in the use of land or partial plans that fail to address complex issues in a comprehensive way. In a similar vein, although information exists regarding different geospatial use of land, for example, regarding human settlement, forestry or agriculture, the data is dispersed and often inaccessible for appropriate land-use management purposes, as well as for the definition of public policy and plans.<sup>100</sup>

With no clearly defined national policy, urban development has, for the most part, taken place at the municipal level without consolidated planning processes in place, apart from some initiatives underway in the larger cities, including Santo Domingo and Santiago.<sup>101</sup> Whilst some larger municipalities, such as Santo Domingo, have defined urban planning, environmental and risk management units, regulatory plans, and regular practices of issuing land-use permits for larger projects, smaller municipalities often lack the resources required for effective implementation. In one of the four municipalities visited, a draft land-use plan was elaborated in 2008 with external assistance but was still pending additional revision before circulation.<sup>102</sup> In the other municipalities, plans did not exist, although all stakeholders interviewed clearly acknowledged their importance in reducing the exposure of local populations to current and future hazards.

Even where more defined processes exist, such as in Santo Domingo, there are many areas where informal settlements are not regulated, in particular in peripheral areas which are often the location of new settlers. This includes high-profile cases such as La Barquita in Santo Domingo Este where overcrowding and unhealthy conditions persist, and communities along the mouths of the Ozama and Haina Rivers, which suffer from

<sup>97</sup> MOPC.

<sup>98</sup> See Dominican School of Engineers, Architects and Surveyors (CODIA) in Building control as a measure to reduce disaster risk caused by earthquakes in the Dominican Republic, Neris, K. et al, Zaragoza University, 2010, p. 316.

<sup>99</sup> Law No. 147-02, art. 7, point 7.

<sup>100</sup> The Dominican Republic in 2030: Towards a cohesive nation, ECLAC, 2009, pp. 314-315.

<sup>101</sup> Despite the existence of the out-dated Law No. 6232-63 on urban planning.

<sup>102</sup> IADB.

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persistent and frequent flooding. The lack of land-use management legislation means that new settlers can often occupy land regardless of its suitability, including areas of environmental value and/or high-risk areas including those vulnerable to flooding, landslides and earthquakes.

Efforts are being made to incorporate DRM criteria in a number of different initiatives currently underway. At the regional level, strategic development plans are being put in place, in particular in high-profile or high-risk industrial areas, such as the mining sector and the tourism sector and whilst these do not replace the need for detailed land-use plans they do facilitate work in this direction. Additional projects under discussion or in implementation support municipal-level planning and administration, including the drafting of land-use plans and incorporation of disaster risk considerations.<sup>103</sup> Work on a land-use act is underway, and this will be central to additional future advances in this area.

### Land settlement

The SN-PMRD has a clearly defined responsibility regarding the identification of communities in high-risk areas, and the management of measures to reduce their exposure. Under the implementing Regulations for Implementation of Law 147-02, the Institute of Housing is responsible for developing interventions in the resettlement of at-risk communities, and the provincial and municipal PMR committees are responsible for reporting the existence of high-risk human settlements to the regional committees to secure funding for mitigation or resettlement measures.<sup>104</sup>

The Environment Act also addresses the issue, prohibiting human settlement in high-risk areas such those prone to flooding, landslides, or areas contaminated with dangerous substances, as well as highlighting the role of the MMARN in supporting municipal-level urban planning. The Act also highlights the State's responsibility in finalizing and financing resettlement plans from the national budget, although additional details are not provided as to how this will be done.<sup>105</sup>

A stronger policy, planning and legal framework for land-use management will go some way to assist in defining which areas are suitable for human settlement. An additional draft bill for Housing, Human Settlements and Buildings yet unapproved of as of the drafting of this report, seeks to address this issue through providing more concrete legal, economic and financial measures to guarantee the fundamental and constitutional right to safe housing. Included is the creation of a new entity replacing and upgrading the Institute of Housing to ministry level, requiring the drafting of public policy and regulations on low-cost and safe housing for the poor, as well as improvements to rural services to assist in the slow-down of migration towards urban areas.

<sup>103</sup> IADB, Disaster Prevention and Risk Management Programme, World Bank/DGODT.

<sup>104</sup> Decree No. 874-09, art. 15, point 3.

<sup>105</sup> Law No. 64-00, art.s 110-112.

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# Chapter 5

## Community level analysis

## Community engagement and empowerment

Community-based approaches to DRM address the close link between poverty and vulnerability, recognizing that it is the poorer communities that are the most vulnerable and have the least capacity to reduce their disaster risk. Broad consensus exists that effective DRR measures must cover not only support to communities in the face of disasters, but also work on longer-term initiatives to build community resilience and to reduce future vulnerability.<sup>106</sup> Effective DRR therefore involves not only a multi-disciplinary, but also a multi-level approach, incorporating a wide range of comprehensive and inter-connected development strategies, and covering actions from large-scale mitigation works such as the reinforcement of public infrastructure, to supporting the growth of social networks and institutions that are at the frontline in any crisis situation.

Over the last decade, the central government has been gradually building the legislative framework and developing new ways to modernize the democratic system, to devolve decision-making about local issues to the relevant authorities and promoting the participation of communities most affected by these decisions. Whilst progress has been made, many stakeholders feel that power is still too centralized and concentrated with government, and the vision of what should be decided centrally or locally, especially with regards to DRM, is still sometimes unclear. The strengthening of civil society participation within the SN-PMRD could also serve to ensure that local level initiatives are clearly linked to regional and national processes.

The work of NGOs in supporting at-risk communities has been vital in activating and consolidating local systems and structures, to raise awareness and to strengthen local capacity. Community engagement and empowerment are fundamental to local DRM. Community involvement is not only vital to develop frontline capacities, but also to increase ownership and thus the sustainability of longer-term initiatives, without which relatively short-term or pilot projects are not a complete success. Empowered community-level organizations, volunteer groups and other civil society actors that participate in decision-making, planning and implementation are fundamental to ensure that services are better targeted to local needs, as well as providing popular consensus, support and legitimacy for legal, policy and planning instruments.

## Rights-based approaches to disaster risk reduction

Growing awareness at the international level has led to the promotion of rights-based approaches to disaster risk reduction, stimulating legislative change incorporating the notion of citizens' right to safety and often including the right to protection against natural and man-made hazards, even when not explicitly referred to in international human rights instruments.

In the new Dominican Republic Constitution of January 2010, the right to protection is linked to general social, economic and cultural rights including the right to life, the protection of human dignity, the right to liberty and personal security and the right to an adequate standard of living, including food security, housing, health, work and education. Dominicans' rights to safety are also enshrined in the right to a healthy and safe environment that can support their development.<sup>107</sup> Whilst the Constitution does not address protection against natural or man-made hazards per se, the DRM Act

<sup>106</sup> A Framework for Community Safety and Resilience, IFRC, 2007.

<sup>107</sup> Constitution of the Dominican Republic, 2010, art.s 37, 38, 54, 59, 61, 62, 63 and 67 (i).

does address the issue, with the right to life and personal physical integrity, as well as the protection of material goods, productive means and the environment from possible disasters and/or other adverse events listed as the first general principle intended to guide national DRM policy.<sup>108</sup> The duty of the state to provide security and protection for its citizens is also implicit within these instruments.

Still, precise obligations regarding rights enforcement and protection, accountability for disaster losses, damage reparation as well as rehabilitation and reconstruction are not defined under existing legislation.<sup>109</sup> Additional key areas are apparently not covered, including legal provisions for the prosecution of public or private entities that through neglect, or omission, contribute to increased disaster exposure and loss, as well as norms or guidelines for compensation packages for affected families and communities.

While cases have been brought to the European Court of Human Rights establishing the responsibility of the state in taking preventative and mitigation measures to safeguard human life in the face of both natural and man-made disasters, as yet there is no established jurisprudence in the Dominican Republic or elsewhere in Latin America on this matter.<sup>110</sup> For example, where municipal authorities may declare certain areas unfit for human settlement if administrative or operative measures are not taken to prohibit settlement then linkages can clearly be made between the adoption of necessary measures and ensuing damages, opening up considerable space for the legal right to demand that necessary measures are taken to avoid loss of life, property and livelihoods.

Over the last decade, and in particular following the most recent large-scale events, the principle that the population has a right to protection has garnered strength at the national level. However key actors acknowledge the continued need to raise awareness on citizens' rights to assistance and protection before, during and after disasters, as well as the need to deepen public discussion on the nature, causes and measures that can be taken to reduce disaster risk.<sup>111</sup> Although SN-PMRD responsibilities from prevention through to recovery are outlined, it is clear that greater emphasis still needs to be placed on the implementation of actions that can be taken to reduce disaster exposure and increased public pressure to demand the same. Increased public participation in the expression of the right to protection from disasters, could clearly contribute to the implementation or reform of disaster risk management legislation, and the strengthening of DRM in the Dominican Republic.

### Community participation

The participation of community, professional and business organizations and other elements of civil society is indispensable to direct public policy and to ensure that the needs and priorities of the most vulnerable and marginalized groups are met. Understanding this importance, the right to participation in public life is expressed in the Dominican legislation. Whilst the formation of laws is the responsibility of the

<sup>108</sup> Law No. 147-02, art. 1.

<sup>109</sup> Law No. 147-02, art. 27.

<sup>110</sup> The case of Öneriyildiz against Turkey where a methane explosion in a public landfill site near Umraniye Valley, Estambul damaged near-by homes and led to the death of 39 community members (2004). The case of Budayeva et al against Russia in which a series of mudslides from 1999-2000 eventually led to the burial of the city of Tyrnauz despite continued repeated warnings from the National Meteorological Institute, *The Responsibility to protect*, Haydée Marin, ECHO, 2010, pp. 19-20.

<sup>111</sup> Conclusions from the Technical Seminar, Disaster Risk Reduction Forum / Forum on the Prevention and Mitigation of Natural Disasters, 2010.

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president, senators, members of parliament, the supreme court of justice and the electoral court, the new Constitution provides space for citizens to propose draft laws to the national congress for approval.<sup>112</sup>

Participation is also a core component of the first pillar of the proposed National Development Strategy, with foreseen interventions including the strengthening of legal and institutional frameworks to facilitate citizen participation as well as the promotion of citizen involvement in the formulation, implementation and evaluation of public policy. Also included, and with particular reference at the municipal level, is the raising of awareness on democratic principles to improve citizen-state relations, to increase shared responsibility in the development of public policy and in the expression of rights and responsibilities.<sup>113</sup>

The DRM Act provides for the participation of both community-based and civil society organizations within the SN-PMRD, with three representatives from the community, business or professional associations designated by the president to participate in the National Council, which oversees and directs the SN-PMRD.<sup>114</sup> Civil society participation is also contemplated at sub-national levels, with two representatives from community or business associations to be chosen to participate in the regional, provincial and municipal PMR committees.<sup>115</sup> Provision is also made for discretion to convene additional representatives from civil society who could support the integration of community disaster-related needs and bolster community support for initiatives taking place within their particular geographical area.<sup>116</sup>

Whilst the DRM Act and its implementing Regulations clearly outline the participation of both community actors and civil society organizations, details regarding their precise functions are not covered leading to a lack of clarity. Although the auxiliary role of the Dominican Republic Red Cross is clearly defined under Law No. 41-98, and the DRM Act calls for its inclusion as a permanent member of the National Council, CTN, and regional, provincial and municipal PMR committees, the role of other non-state actors is not clearly defined. This has contributed to gaps in coordination and systematization of valuable baseline information, as well as results and lessons learnt from on-going or completed initiatives.

Although participation in central and sub-national decision-making bodies is defined, provisions regarding community consultation and input into policies and plans are less clear. At the national level, stakeholders acknowledge that the Emergency Plan requires greater input from non-state actors, and wide consultation is being sought on the draft DRM Plan. At the municipal level and in areas supported by external DRR initiatives, communities do participate in municipal PMR committees and in the elaboration of municipal-level plans where developed.

### Civil society organizations

The legal framework for the formation of civil society organizations, including non-governmental and community-based organizations, is composed of the Not-for-profit

<sup>112</sup> Popular legislation must be presented by at least 2 per cent of the registered electorate to be viable for presentation to Congress. Constitution of the Dominican Republic (2010), art. 97.

<sup>113</sup> Specific objectives and action lines of the National Development Strategy, 2010-2030, Annex 1.

<sup>114</sup> Law No. 147-2, art. 9, point 26.

<sup>115</sup> Id., art. 14, paragraph I.

<sup>116</sup> Id., art. 14, paragraph II.

Associations Act (Law No. 122-05) and its implementing Regulations.<sup>117</sup> These aim to provide a legal identity and regulate the functioning of NGOs, seeking on the one hand to promote greater transparency and safeguard the “public interest,” while on the other hand, an environment that supports the development of NGO interests and civil participation as a constitutional right of the liberty of expression and association.

Under this Act, a not-for-profit organization is defined as “the agreement between five or more people with the aim of developing or realizing activities for social good or public interest, without seeking gain fiscal or monetary gain,” and covers organizations that provide services to third parties, including social or technical assistance, economic development, education and research, human rights and community organizations.<sup>118</sup> The Act applies to some 10,000 diverse and often dispersed groups and organizations that are characterized by their not-for-profit goals, as opposed to the state or the private sector. Often seen as “agents or promoters of change,” they complement or supplement state services in the social sphere through the implementation of programmes or projects, seeking at the same to act as the expression of, and vehicle for, citizen participation.

As a sub-group, NGOs are included within the Not-for-Profit Associations Act and are not given separate treatment within the not-for-profit sector. With no general consensus on a single definition of an NGO, roles and functions vary considerably with the term taking not only a legal character, but also an important social, and often political dimension. Acting directly at the community level or executing programmes with external funding through intermediaries, work includes operational functions as well as advocacy initiatives to influence public policy and practice in general.

Registration for national and international NGOs takes place through the Office of the Attorney-General for the judicial department in Santo Domingo at the National District level or through the relevant attorney-general of the departmental appeals courts.<sup>119</sup> Depending on the type of service offered, each organization must also by law be acknowledged by the relevant sectoral ministry or state agency.<sup>120</sup> Included within the Act are norms regarding donations, taxation, information-sharing and general administration, as well as sanctions for the failure to comply with minimum basic requirements outlined in the law. Organizations must also naturally follow sectoral norms and regulations corresponding to the area(s) in which they operate.<sup>121</sup>

Special provisions are made for community-based organizations in the application of standards and in the fulfilment of requisites for their registration. Taking into account particular organizations on a case-by-case basis, the Regulations indicate that modifications can be made according to the type of service offered, so long as certain guarantees are observed.<sup>122</sup> Although some community-based organizations are duly registered at the local level, it is clear, that many do not have the means to legalize their association under this Act.

The Not-for-Profit Act provides for the setting up of a National Centre to Advance and Promote Not-for-Profit Associations to support the participation of this sector in national,

<sup>117</sup> Decree No. 40-08 on the Rules for the application of Law No. 122-05.

<sup>118</sup> Law No. 122-05 on the Regulation and Promotion of Not-for-Profit Associations in the Dominican Republic, arts 2 and 11.

<sup>119</sup> Id., arts 3 and 16.

<sup>120</sup> Decree No. 40-08, art. 153.

<sup>121</sup> Law No. 122-05, art. 44.

<sup>122</sup> Decree No. 40-08, art. 158.

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regional, provincial and municipal development programmes. After considerable delay, this office was formed in 2009 and, as of late 2010, efforts have been taken to disseminate the legal framework for not-for-profits.<sup>123</sup> The full application of this law will clearly be of fundamental support to the development of community-based DRR initiatives, as well to the finalization and roll-out of the country's National Development Strategy.

### Community empowerment through disaster risk reduction programmes in the Dominican Republic

Communities are at the front line when facing natural hazards and their effects. Whilst repeated floods, landslides or other events can make people feel helpless, communities can be more resilient and cohesive when dealing with these hazards, and empowerment through the adoption of different DRR tools and methodologies can assist them to deal with future potential risks.

The Community Based DRR (CBDRR) projects developed in the Dominican Republic with the support of NGOs, the Dominican Red Cross, Oxfam Intermón, Plan International and other partners incorporate a strong community empowerment approach, under which through capacity development, members understand the risks that they face, decide on their own goals and strategies for disaster risk management and participate in developing the measures needed to reduce their exposure to disaster risk, as well as contributing required resources.

Whereas previous disaster management initiatives were the exclusive concern of government officials, empowerment efforts encourage participatory efforts in addressing disaster risk and in advocating for community concerns. Community ownership is central to these projects, assisting communities to develop self-help processes and to prioritize and lead DRR activities. Typically aiming to increase participation, these projects seek to involve all stakeholders, including vulnerable groups, and to strengthen links among the relevant actors to improve services provided to the community.

### Local initiatives in mainstreaming DRR

Work at the community level starts with a detailed participatory assessment by community members and project partners reviewing the potential hazards, risks and vulnerabilities. Through the drawing of maps of household and community resources, communities reach an understanding of the root causes and the nature of the risks they face and the resources that can be harnessed to reduce disaster risk as well- designed projects provide information that can assist communities to prioritize specific short and longer term activities to keep their risk low. Communities then translate this information into actions by developing specific targeted initiatives to reduce risk, either using available community resources or through external assistance via the local PMR committees and other actors.

Following detailed participatory assessment, different preparedness and mitigation measures are identified by community consensus to reduce the impact of hazards. The community of Cañada de Papoi in Barahona municipality, for example, suffered from repeated and frequent flooding caused by a waterway running directly through the community fed by the River Tunino. Following the VCA process, the community identified as a priority the need to construct a 72-metre channel to direct and contain

<sup>123</sup> Support to Civil Society Initiatives Programme (PRIL, EU).

waterflow to protect homes near-by. Funding was raised in partnership between the community, the Dominican Red Cross and the town council. Local authorities provided specialist engineers and heavy equipment, whilst the community provided additional human resources and light tools. Complementary actions included the raising of awareness amongst community members in the use of the surrounding land and its unsuitability for future construction.

Mitigation activities undertaken in communities vulnerable to flooding in the El Limón municipality in Independencia province included the organization of clean-up days with participating community members and local institutions to remove rubbish from public and private areas, including drains and irrigation channels that, when blocked, caused further flooding. This initiative served to stimulate active participation amongst all actors at different levels strengthening a platform for future related activities.

Training includes core subjects to build disaster preparedness capacity, such as community first aid, evaluation of damages and needs, temporary refuge management, as well as components of community-based health, such as health and hygiene promotion, and specific disease prevention campaigns such as cholera, dengue and malaria. Work also involves the development of community emergency plans tailor-made to the most prevalent hazards faced by each community. The testing of these plans through mock drills serves to facilitate first-hand learning and improvements to each plan, at the same time involving key institutions such as the Civil Defence, Dominican Red Cross, Fire Brigade, Police, Armed Forces, Ministry of Health amongst others, in ensuring a coordinated response and greater understanding of local needs with regards to preparing and responding to situations of disaster.

### **Community and institutional capacity building**

Although the DRM Act makes provisions for community participation in decision-making bodies of the SN-PMRD, community organizations are not implicitly included as “actors” within the System itself. Different community-based DRR projects have facilitated the formation of community PMR networks breaching this gap at local level and integrating community actors into the SN-PMRD.

The networks meet on a monthly basis to facilitate community-level activities during “peace-time”, and continuously during situations of emergency. Overseen by a community board and coordinator elected by the community, team members assume responsibility for different key areas, including training and information; prevention, mitigation and response; health, temporary refuge management, security, and damages and needs assessments. Formed of elected community members representing different interest groups, these networks serve to identify, coordinate and channel community concerns to the municipal PMR committees within their area.

Existing legislation does not set out specific requirements regarding the use of information on risks, hazards and vulnerabilities collected at community level, and local networks therefore assume the responsibility for sharing local level results, linking community plans with municipal plans and ensuring that information regarding local risk and needs are contemplated within the SN-PMRD. These networks also facilitate linkages between different stakeholders to identify specific prevention, preparedness and mitigation measures to reduce the impact of future hazards and to advocate for

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support from the government, NGOs and other organizations. With the presentation of clear proposals following the VCA process, these links allow target communities to access funding, as well as stimulating self-help processes to reduce their exposure to disaster risk.

At the institutional level, CBDRR projects have also played a fundamental role in the formation, activation and strengthening of municipal PMR committees, providing valuable training and supporting inter-institutional linkages between the different governmental and non-governmental actors involved. This work has been essential to the development of the National System at local level, demonstrating how community-based initiatives themselves have stimulated consolidation of the SN-PMRD from the “bottom-up” driving forward positive change despite the absence of a clear legal mandate.

Questions of sustainability are frequent, given that community participation is voluntary and that member priorities naturally change, something that the community empowerment driven process itself addresses through the promotion of community ownership of DRR initiatives. In all communities visited, community networks continued to meet on a frequent basis despite project closures, coordinating with institutions working in related areas and ensuring on-going activities in areas requiring little financial resources, such as community clean-up days. Systems and team members remained ready and in place should a situation of emergency occur. Empowered communities were able to continue to press for change, acknowledging moreover, the joint responsibility of all actors in addressing disaster risk, promoting community awareness and action, as well as the continued need to ensure that community voices are heard within the SN-PMRD.

The networks clearly allowed communities to assume collective ownership of DRR, building confidence to face and adapt to on-going challenges as one in a series of steps in a continued empowerment process. The cases of individual community members are particularly relevant. In four of the six communities visited, network members had secured positions as community leaders, mobilizing the community in preparedness, mitigation and response activities as a result of their participation in community DRR activities, as well as securing positions in municipal-level government entities. Not only does this clearly place the community at the forefront of managing its own affairs, securing greater participation in decision-making bodies, it also serves to support longer term and sustainable ownership of DRM initiatives, and thus the consolidation of CBDRR in the Dominican Republic.

### Community information

Access to information is a prerequisite for community empowerment. One of the reasons people feel powerless is a lack of information in accessible languages, formats and locations on services that directly affect them. Through the Freedom of Access to Public Information Act (Law No. 200-04), the government seeks to ensure that citizens have a general right, with some exceptions, to information held by the public sector including line ministries, local councils, schools, hospitals and so on.<sup>124</sup>

Some institutions have established central units providing public access to information and websites exist with documents on-line and in the public domain. There is considerable information regarding disaster risk, but there is, as yet, no centralized information

<sup>124</sup> Law No. 200-04, General Law on the Freedom of Access to Public Information.

system managing such data, as noted above. There is also a substantial amount of information collected locally, but there is a great variation in how much is made available, and also in its quality, accessibility and usefulness to citizens. Similarly, and as noted by stakeholders, information from CBDRR projects including project results, as well as training or sensitization materials is not always easily accessible either amongst partners or to the general population.

The mainstream media, including national and local broadcast, print, on-line and more recently, SMS, also have a vital role to play to not only transmitting disaster warnings or alerts, but also longer term prevention and preparedness campaigns. Whilst the importance of a range of different channels, including community radio and websites, is recognized as alternate ways of promoting information, as yet there is no apparent guiding framework for DRM initiatives in the media. This gap is recognized, however, with proposals for the drafting of a national DRM communications strategy to direct work in the area and to formalize the role of the media in handling often sensitive information both during times of crisis and in longer term prevention and preparedness initiatives.<sup>125</sup>

### Disaster risk management education

Present throughout the country and with high rates of community participation and involvement, the education sector plays a very specific and targeted role in DRM. The General Education Act (Law No. 66-97) includes direct reference to the role of the state in providing and promoting information and training on disaster risk and its reduction, promoting values that serve to conserve and protect the environment, as well as recognizing the role of education centres in the promotion of community organization for the stimulation of positive societal change.<sup>126</sup>

The Ministry of Education (MINERD) is a key actor in promoting DRM concerns and particularly in supporting the shift of emphasis away from response towards prevention, preparedness, mitigation and recovery. DRM is included as a strategic and cross-cutting objective of the second ten-year Education Plan (2008-2018), with goals to ensure that schools are protected from natural hazards, teaching includes hazard awareness and risk reduction, and that schools are prepared to serve as centres for CBDRR. The Ministry has drafted a Strategic DRM Plan, and established a risk management unit at the national level convening an inter-institutional commission composed of different actors to work on the development and implementation of activities. Some actions underway include the partial preliminary structural assessment of schools in vulnerable areas, the on-going development of alert protocols and guidelines for the standardization of school security plans, as well as the elaboration of achievement indicators for the inclusion of DRM into national primary school curricula.<sup>127</sup>

Whilst some progress has been made, however, both the aforementioned law and development plans have only been applied partially to date, with scarce resources available for general basic improvements to education or for the consolidation of effective DRM practices in education centres at local level. External cooperation has been vital to implementation so far, with recent initiatives in the sector including the development of school security plans, teacher and student training and the elaboration of

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<sup>125</sup> CNE.

<sup>126</sup> Law No. 66-97 on general education.

<sup>127</sup> National Congress.

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teaching materials.<sup>128</sup> School authorities and partner organizations acknowledge that much remains to be done. The Hispaniola earthquake of January 2010 had a marked impact highlighting the need for alert systems and evacuation plans, mitigation works and strategies to cope with the absorption of Haitian students from families directly and indirectly affected by the earthquake and its aftermath. In general, stakeholders noted that efforts to date had been largely reactionary, focusing on hazards related to recent disasters and that there remains a clear need to strengthen longer-term multi-hazard approaches tailor-made to the specific risks that each school faces and to ensure an approach that is coherently mainstreamed within the different education levels. Given the complexity of the system, which requires substantial investment in core components including, teacher-training, adequate training materials and basic physical infrastructure, these challenges are considerable.

Clearly the overall education system has to be taken into account when reviewing the implementation of DRR goals with general and systematic improvements required in this sector. Under the General Education Act, all citizens are entitled to a minimum and obligatory basic education lasting for a period of eight years and normally starting at the age of six. Latest figures indicate that even though substantial progress has been made over the last 20 years, the Dominican Republic falls short of reaching universal primary education, with 75.8 per cent of children completing primary education in 2009.<sup>129</sup> Whilst the new Constitution of 2010 provides for obligatory pre-school education –which may have a positive influence on primary school attendance– the government does not foresee that it will reach this Millennium Development Goal by the year 2015.<sup>130</sup>

Challenges in rural areas are particularly acute, with the consequences of poverty clearly reflected in schools. Some only offer education to third or fourth years, whilst around an estimated 70 per cent of middle schools are forced to share facilities, and often conflicting timetables with primary schools, creating competing pressures on limited physical space and reducing the quality of education received in these areas. Although the General Education Act outlines that no less than 4 per cent of GDP should be allocated to yearly public spending on pre-school, primary and secondary education and the new Constitution notes that investment in the sector should be “increased and sustainable,” spending has continually failed to meet these targets.<sup>131</sup> The presentation of the Draft Budget Bill for 2011 in October 2010 sparked increased debate on the matter, with civil society demands to honour commitments led by the Coalition for Dignified Education (Coalición Educación Digna) made up of 203 national NGOs and groups.<sup>132</sup> The current amount allocated (2.37 per cent) and annual public sector budget remain under review as of February 2011 and until the basic minimum is invested in the general education system, it is likely that advances in the strengthening of DRM in the education sector will continue to take place at a tentative pace.

<sup>128</sup> MINERD supported by actors such as UNICEF and UNDP, as well as Plan International, World Vision, Oxfam Intermón and Save the Children under the DIPECHO VI Programme of the European Commission. The DGODT is also developing initiatives in the education sector under its Disaster Prevention and Risk Management Programme with support from the IADB.

<sup>129</sup> Millennium Development Goals: 2010 Monitoring Report, Ministry of Economy, Planning and Development, 2010, p. 47.

<sup>130</sup> Constitution of the Dominican Republic, art. 63 and Millennium Development Goals: 2010 Monitoring Report, Ministry of Economy, Planning and Development, 2010, p. 20.

<sup>131</sup> Law No. 66-97, art. 197 and the Constitution of the Dominican Republic, 2010, art. 63, point 10.

<sup>132</sup> According to a GALLUP poll taken at this time, 91 per cent of the population felt that the 4 per cent of GDP for spending on education was necessary. GALLUP-Hoy in ‘Senate approves budget without 4 per cent for education,’ Latin America Education International, 2010.

## Incentives for reducing disaster risk

Existing legislation does not make explicit provisions for incentives for communities to actively reduce their exposure to disaster risk although communities are clearly motivated through participation in CBDRR projects –or on their own– to undertake measures to reduce their risk. Knowledge and learning clearly stimulate public awareness and are important stimulants for local-level risk reduction, and additional incentives can play a vital role in promoting DRR practices. Solid legal instruments, adequate enforcement mechanisms and applied sanctions can clearly provide both incentive and disincentive, motivating or preventing specific activities that affect levels of disaster risk. Additional instruments including micro-insurance can assist in transferring risk from individuals to more sustainable market-based mechanisms, whilst loans and the payment for services rendered either from the private sector or built into medium or longer term development projects can also serve to shift perspectives as well as provide valuable funds for DRR.

## Land-use management and relocation

With few or no land-use plans at the provincial or municipal levels, planning at the local level for the most part takes place without consolidated or clear processes. Although some orders regarding land-use are issued by municipal authorities, in many cases insufficient human and financial resources enforce necessary sanctions greatly weakening the impact of current legislation. In two of the communities visited, land had been assessed and declared unsafe for human settlement by the local town council due to previous and on-going landslides. However, a lack of regular inspections and sanctions, as well as viable alternatives, means that not only do many families remain in place but also that new settlement continues to occur in high-risk areas already classified as unsuitable for human settlement.

Few formal provisions currently exist to assist in the relocation of families from these areas. Although some can seek shelter with family or friends for most, there is little solution than staying put and remaining vigilant. In the community of La Torre on the banks of the River Yuna, some families had moved in with family once their homes had become unstable due to land slippage. Other families remain with land fissures threatening the foundations and stability of their homes, risking quite literally being caught as their homes slip into the river. Leaders from the district of El Limón recount how some families living in highly vulnerable flood-prone areas had sought to relocate to safer ground within their own community, despite no formal assistance. Three families were able to relocate by renting out their properties to Haitian immigrants newly arrived and homeless in the area. While these families had found a solution, it is clear that risk has merely been transferred to other more vulnerable community members, with an increasing number of families seeking similar solutions as migration to the region continues to rise.

A particular recent case highlights government assistance in relocating families from high-risk zones after an event has taken place. In February 2009, heavy and sustained rain caused the Licey River to overflow and led to multiple landslides, including an avalanche as a carbon deposit mine (caliche) collapsed, burying over 100 homes and

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businesses, damaging over 250 homes and displacing some 2,500 people from the El Chorro, Los Cocos, El Vaticano, Loma and Arroyo del Toro sectors in the municipality of Tamboril in Santiago province. Earlier visible signs including fissures to constructions alerted evacuation from the area and, remarkably, no lives were lost.<sup>133</sup> In December 2010, the National Institute of Housing started work on building the first 256 new homes for 400 affected families on secured land nearby. Providing a solution to the plight of the displaced families, the case also serves to highlight the continued reactive stance of the government. To date, insufficient emphasis has been placed on reducing the risk of families located in clearly vulnerable areas, with few concrete mechanisms in force to ensure that they are not located in such areas in the first place.

Community disaster preparedness projects have assisted families to prepare for, and to some extent, mitigate the risk of future events. However, it is clear that vulnerability to future disaster will not be significantly reduced unless measures can be taken to assist families to move to safer areas. As long as there are few affordable options for families for relocating or otherwise reducing their exposure to disaster risk, many will therefore have to continue to rely on external assistance once a catastrophe has occurred.

### Building code implementation

As noted above, out-dated building codes have been replaced with new building codes in 2011. These have been in circulation and used by large, commercial construction companies since 2010. The authority to enforce building codes, to supervise and monitor smaller public works and private construction has been devolved to local municipal authorities but implementation remains sporadic. Some ad-hoc inspections are carried out in the larger municipalities but implementation has not visibly begun in many smaller municipalities, and there was little or no supervision in the more marginalized communities visited.

Sanctions include the suspension, closure or demolition of projects that infringe regulations, as well as fines for the perpetrators.<sup>134</sup> All stakeholders acknowledged the need for increased enforcement mechanisms, particularly in the light of the Hispaniola earthquake which highlighted the vulnerability of many of the country's public and private buildings to seismic risk. At the national level, the MOPC lamented the lack of qualified engineers in the public sector to carry out inspections and the lack of funds required to ensure the effective implementation of enforcement mechanisms at the local level, indicating that in practice "many people can construct what they want, where they want" with no legal recourse.

### Environmental protection

Closely linked to disaster recovery and livelihoods support programmes, are initiatives that either solely focus on, or incorporate elements of environmental protection and/or climate change adaptation.

Central to environmental protection are proposals for the payment of local populations for environmental services, based on the principal that those who generate these services should be compensated for providing for them. In exchange for the protection of natural resources, service providers have the means to a productive livelihood with

<sup>133</sup> CNE / Project starts for affected in Carlos Díaz, El Sol de Santiago, 21 January 2011.

<sup>134</sup> The violation of regulations (R-001 and R-004) will lead to the application of sanctions as outlined in chapters V-VI of Law No. 687 (1982).

dignity. Included here are projects that seek to protect river basins and river sources, as well as forestry conservation initiatives. The Environment Act outlines the role of the MMARN in defining the value of environmental services provided by the nation's natural resources (including, carbon fixation, green-house effect reductions, climate stabilization and sustainable energy usage) as well as in the drafting of norms and necessary mechanisms to pay for environmental services. Work is underway in pilot projects, including the payment to locals for the preservation of forests and adequate management of water resources in the North Yaque River basin. Financing mechanisms, regulations and monitoring systems for a broader application of this approach are being finalized.<sup>135</sup>

Additional projects have included initiatives to support recovery processes from recent events, including Tropical Storms Noel and Olga in 2007, such as reforestation projects employing local staff to clean up, plant, maintain and manage forests damaged by the storms, as well as on-going works to mitigate the risk of flash-floods and landslides in deforested areas in the Enriquillo Region.<sup>136</sup> Whilst some locals are employed temporarily on a daily basis, some permanent positions exist, in particular where projects have been combined with longer-term food security initiatives in surrounding unprotected areas, activating local production for subsistence and commercial ends. Stakeholders acknowledge, however, the limited market for environmental services and the need for land-use plans that provide incentives for resource use, a solid legal framework to ensure adequate monitoring and adequate financial resources.

Tentative steps have also been taken to provide incentives for environmentally sustainable practices such as clean production and water and energy saving. Carbon payments under the Clean Development Mechanism are another potential source of funding for environmental services overseen by the National Council for Climate Change and Clean Development Mechanism, although the organization required for the monitoring and verification of community carbon sequestration payments would most likely limit meaningful community participation in such schemes.

Alternate measures, include sanctions to deter the use or dumping of pollutants, as well as sanctions against environmental degradation as outlined in the Environment Act, under the application of "he who pollutes, pays." The Act clearly outlines the norms for the application of sanctions, and institutional arrangements for their enforcement at the provincial, municipal and local levels. To date, the Ministry has established provincial offices in all 32 provinces to oversee actions and mandates within their territories and some efforts have been made to establish municipal-level environmental management offices. Discussions with stakeholders indicate that inspections do take place and the enforcement of sanctions is applied in specific cases, in particular in large development projects that could adversely affect the environment, or in national protected areas, although not in a necessarily systematic manner.

Of particular concern, however, as expressed by both governmental and non-governmental actors alike, was the apparent ease with which environmental laws are side-stepped. For example, rapid deforestation of large areas in Independencia province for charcoal production has remained largely unchecked, with convoys by-passing multiple road-blocks and a coalition of authorities to cross the border to Haitian markets. As one concerned community member noted, "We all have to work together to put an end to

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<sup>135</sup> GIZ and MMARN.

<sup>136</sup> FUNDESUR.

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this practice that is putting in jeopardy our communities. This is a joint responsibility that will fail unless we all do our part.” Clearly, it is not only stronger institutional and regulatory frameworks that are necessary, but also the commitment to enforce them.

Incentives can clearly provide alternate channels to reduce disaster risk at local level, in particular in supporting the security and safety of vulnerable populations, as well as in areas that support longer-term livelihoods and food security. It is clear however, that local priorities and needs must be clearly analysed if effective incentives are to be found. For most families, difficult choices have to be made with limited resources and incentives must provide affordable or profitable solutions to be ultimately viable.

Analysis of legislation related to disaster risk  
reduction in the Dominican Republic

# Chapter 6

## Conclusion

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The Dominican Republic has advanced in the development and progressive implementation of DRR legislation over the last decade. These advances have been fundamental for the integration of DRR considerations into development planning and in the consolidation of a more integrated approach to the protection of vulnerable populations. Considerable efforts have been made to elevate DRR as a priority within national plans, and work is on-going to strengthen legal and institutional frameworks, and their application at national and sub-national levels. Much progress has already been made with vital support provided by external partners, and both governmental and non-governmental efforts are continuing in this area. These efforts address core concerns raised by both internal and external stakeholders in what is clearly a continued and long-term effort to ensure that the country's national system is strengthened in the face of considerable risk.

The government has demonstrated a positive approach to working towards elevating DRR as a national priority and in the incremental mainstreaming of DRR into sectoral policies and plans. Through the creation of multi-sectoral national systems for planning and investment and disaster risk management, it also seeks to establish planning mechanisms clearly focused on human development and disaster risk.

Although gaps do exist in the legal framework for disaster risk reduction and in the institutional capacity for its implementation, there is clearly potential within existing legislation, as well as on-going efforts to address current gaps in particular, in the areas of land-use management, building regulation and environmental management. There are also a number of good practices developed through specific targeted DRR projects by national and international NGOs, UN agencies and donors that serve to support the consolidation of disaster risk management in the Dominican Republic.

### Legal and policy framework

The Disaster Risk Management Act of 2002 and its implementing Regulations provide a comprehensive overarching framework and a broad based and holistic approach to interventions in the management of disaster risk through the disaster management cycle. The Act outlines the policy basis for DRM as well as key policy instruments including the establishment of a national system to both guide and structure the work of actors working in DRM issues at national, regional, provincial and municipal levels, in addition to national and sub-national emergency and disaster risk management plans, information management and financing mechanisms.

Work is currently on-going to draft the country's DRM policy, as well as initiatives to develop and finance the National Fund for Disaster Prevention, Mitigation and Response, revise the national Disaster Risk Management Plan, and develop local-level plans, with the support of external partners. The finalization of these core instruments will clearly be of vital importance to the strengthening of DRM at all levels and the revised DRM Plan, in particular will be helpful in addressing some of the gaps in specific areas.

The key gaps in the existing legal framework for DRR follow:

- Important steps have been taken in the integration of disaster risk considerations in development planning but there are areas that are not always clearly cross-referenced or compatible with others, including overlapping issues relating to roles and mandates.

- A clear DRR approach is not clearly incorporated into some key areas of the disaster management cycle, including recovery and rehabilitation for which detail regarding specific responsibilities and functions is currently lacking, although revisions to the forthcoming DRM Plan may resolve the issue.
- As yet, there is a lack of adequate legislation and means for its implementation in important areas, in particular, regarding building and construction, land-use and urban planning, as well as the resettlement of communities in at-risk areas that contribute considerably to the vulnerability of the population.
- The DRM Act and its implementing regulations do not contemplate enforceable duties on the civil service or punishment for non-compliance raising issues regarding legal authority and accountability.
- Although some sectoral laws, for example, construction and environmental management, do include standards regarding sanctions, there are currently insufficient enforcement mechanisms to ensure that they are applied comprehensively at the local level. The experience from the current focus on enforcement in selected and often high-profile areas clearly provides useful reference for the development of a more systematic approach requiring additional and sustained investment in human, material and financial resources.

### **Institutional arrangements for disaster risk reduction**

The DRM Act and its regulations provide a good basis for a solid multi-disciplinary and multi-sectoral institutional framework for disaster risk reduction, with defined coordination mechanisms at all levels, as well as roles and responsibilities covering core areas, including risk identification and evaluation, early warning and alerts, as well as responsibilities related to mitigation works, building and construction, land-use management and resettlement.

Efforts are on-going to strengthen awareness of roles and responsibilities among stakeholders and in capacity building to ensure that assigned functions are in place at the national and sub-national levels. Notably, principal responsibilities for DRR have been decentralized to the sub-national level and an increasing focus has been placed on the need for the continued development and strengthening of governance systems at this level through targeted projects in selected high-risk areas implemented by the government and supported by external partners. The creation and support of sub-national PMR committees and community networks and their integration into other initiatives at different levels, in particular, has been vital to current progress in the strengthening of local DRM as well as providing a clear blue-print and valuable lessons for the development of sub-national disaster prevention, mitigation and response mechanisms in other regions.

In recognition of the importance of developing partnerships with a range of relevant actors, important advances have been made to foster broad-based dialogue between the government, donors and civil society through the launching of the National Platform for Disaster Risk Reduction and the organization of national and international DRM fora to support coordination and action and to maintain dialogue on policy and planning.

The main gaps in current institutional arrangements are as follows:

- There are currently insufficient funding allocations to national system coordination bodies and actors for the completion of assigned tasks as outlined under the

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DRM Act, as well as to local authorities for the fulfilment of essential services including local mitigation works.

- As yet, there appears to be marked confusion and/or misinterpretation of roles and responsibilities amongst some national system actors at both national and sub-national levels, in particular with regards to prevention, mitigation and preparedness.
- Although the DRM Act acknowledges the participation of non-state actors, there is as yet a lack of binding legislation or clear policy –beyond some institutional procedures– regarding functions, responsibilities, coordination and information-sharing with the media, private sector and civil society.

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Recognizing the importance of incorporating an inclusive approach to DRR, current legislation makes clear provision for the participation of civil society at all levels of the national system, encouraging community representatives and other elements of civil society to participate in policy setting, planning and implementation coordination mechanisms, as well as their involvement in local-level decisions regarding the management of disaster risk.

The development of community-based initiatives has been vital to the engagement and empowerment of local populations, assisting communities to take ownership of DRR within their own communities. The inclusive community networks established under these programmes have been integrated into the national system at the municipal level, creating space for active community involvement in local decision-making, and in the articulation of community needs and concerns to ensure that local services are better targeted to meet local needs. Notably, initiatives developed under CBDRR projects have also served to strengthen and stimulate the activation of municipal-level PMR committees thus consolidating the national system from the ground-up and acting as an important driver of positive change. Pioneered by the Red Cross Red Crescent Movement actors and partner NGOs, the interventions serve as a useful reference for the development of extended community-based initiatives in the Dominican Republic.

Additional selected best practices across sectoral ministries include:

- In education, the General Education Act highlights the role and duty of the state to provide information on disaster risk and the strengthening of schools as centres of CBDRR, and sectoral plans which actively address DRR, incorporating actions from school safety to teaching on hazard awareness in national curricula.
- In environmental management, the Environment and Natural Resources Act notes in particular the role of the state in defining the value of environmental services provided by national resources (such as carbon fixation or climate stabilisation), as well in launching pilot community-based projects paying local residents for the provision of forest preservation or water management services.

Specific gaps at the community level include the following:

- Current legislation clearly provides for the participation of community-based organizations and civil society, including the Red Cross, in the decision-making bodies for DRR of the national system at the national, regional and municipal levels. To date, however, there is little reference regarding specific roles and responsibilities in core areas, including local level prevention, preparedness and

mitigation activities, leading at times to problems in coordination and information-sharing and a lack of valuable systematised results from these actors.

- Legislation includes important provisions regarding Dominicans' rights, including the right to protection from disasters; however, there are, as yet, no clear provisions on state obligations regarding rights reinforcement, accountability for disaster losses and damage repairation.
- There is a need for continued efforts to raise citizen awareness on the right to protection before, during and after a crisis takes place, as well as on the nature, causes of disaster risk and measures that can be taken to reduce exposure, and continued public pressure on the government for the fulfilment of these basic rights.
- There is lack of adequate sanctions –or the means for their enforcement– at the local level, in particular regarding land-use, construction and environmental management, which could act as important incentives for the reduction of disaster risk.

Significant advances in the development of the legal and institutional framework for DRR have been made over the past decade. Although important gaps remain, work is on-going in the development of legal, policy and planning instruments to support the strengthening of DRM in the Dominican Republic in what is clearly a long-term and incremental process. The principal challenges over the medium term identified by stakeholders are:

- The consolidation of an effective integrated approach to disaster risk management is adopted by all system actors at all levels including greater emphasis on medium and long-term targeted interventions in disaster prevention and mitigation.
- The strengthening of institutional capacity for the implementation of existing legislation in particular at local level.
- The strengthening of civil society participation within the system and in the roll-out of sustainable community-based DRR initiatives that are clearly and comprehensively linked to national and sub-national processes.

# Annex A

## List of consultations

### National Government

- Civil Defence (Defensa Civil)- Major General Luís A. Luna Paulino, Executive Director of the Civil Defence / President of the National Emergency Council; Mr. Modesto Berroa de Aza, Legal Department;
- National Emergency Commission (Comisión Nacional de Emergencias)- Ms. Nerys Vanderhorst, Executive Secretary
- National Technical Committee for the Prevention and Mitigation of Disaster Risk (Comité Técnico Nacional de Prevención y Mitigación)- Ms. Mercedes Feliciano, Coordinator of the Technical Committee for the Prevention and Mitigation of Disaster Risk / Director of the Disaster Risk Management Unit, Santo Domingo Autonomous University (Universidad Autónoma de Santo Domingo, UASD)
- National Emergency Operations Centre (Centro de Operaciones de Emergencia)- Brigadier General Juan Manuel Méndez García, Director
- Ministry of the Environment and Natural Resources (Ministerio de Medio Ambiente y Recursos Naturales)- Mr. Jean Alexei, Lawyer, Legal Department
- Ministry of External Relations (Ministerio de Relaciones Exteriores)- Dr. Miguel Pichardo Olivier, Sub-secretary of State / Vice-Minister of External Relations / Head, Legal Department
- Ministry of Economy, Planning and Development (Ministerio de Economía, Planificación y Desarrollo)- Mr. Nelson Toca, Vice-minister of Planning; Mr. Franklin Labour, Director General of Land-use Planning and Development; Mr. Omar Rancier, Responsible for Land-use and Development Policy and Plans;
- Ministry of Public Works and Communications (Ministerio de Obras Públicas y Comunicaciones)- Eng. Mayobanex Escoto, Vice-Minister of Roads and Bridges
- Armed Forces (Navy)- Vice-admiral Abelino Cabrera, Navy of the Dominican Republic; Captains Emilio Recio and Jesús Abelino, Naval Officers
- National Congress- Ms. Guadalupe Valdez, National Senator (previously Vice-minister for Community Participation, Ministry of Education)
- National Council for Climate Change and Clean Development Mechanism (Consejo Nacional para el Cambio Climático y el Mecanismo de Desarrollo Limpio)- Mr. Omar Ramírez Tejada, Secretary of State/ Executive Vice-President of the National Council; Mr. Victor García, Director of the National Climate Change Office; Ms. Hanna Viuhko, Programme Support
- Dominican Federation of Municipalities (Federación Dominicana de Municipios, FEDOMU)- Mr. Rafael Almonte, General Adviser to the Executive Directorate; Ms. Beatriz Alcántara, Responsible for Territory Management
- Dominican League of Municipalities (Liga Municipal Dominicana, LMD)- Dr. Antonio Santos, Director, Inter-municipal Relations

### Local Government

- Independencia Province- Governor Marco Manuel Santana Pérez; Mayor Remedios Antonio Pérez Medrano, Town Council, Limón District, Jimani Municipality; Mayor Pascual Peña Benítez, Town Council, La Descubierta District, Jimani Municipality; Mr. Domingo Peña, Regional Representative, National Institute of Water Resources (INDRHI); Ms. Nelina Trinidad, Director, Jimani High School; Commander Idelfonso Medrono, Jimani Police Force; Lieutenant Colonel Sebastian Miguel Peña Pérez, Jimani Fire Brigade
- Barahona Province- Dr. Luís Antonio Peña, Representative of the Governor; Mayor Noel Octavio Suberví Nin, City Council, Barahona Municipality; Mr. Angel Macias, Director Public Urban Works, City Council, Barahona Municipality; Dr. Miguel Melo, Regional Director for the Environment, Ministry of Environment and Natural Resources
- Duarte Province- Mayor Wellington Torres, Town Council, Guaraguao District, Villa Riva Municipality
- María Trinidad Sánchez Province- Mr. Beronico Rollins, Assistant to the Mayor, Town Council, Sánchez Municipality; Mr. José Gabriel Stephen, Provincial Director, Ministry of Agriculture; Dr. Sara Green, Director, Provincial Hospital 'Dr. Alberto Gavireaux,' Ministry of Health and Social Assistance; Mr. Daniel Fermin Saely, Responsible Operations, National Federation for Assistance to Fire Brigade

### United Nations

- UN OCHA- Mr. Martín Acosta, National Disaster Response Adviser
- UNDP- Ms. Ana María Pérez, Responsible, Crisis Prevention and Recovery; Mr. Benjamin Batista, Regional Coordinator for Barahona and Adjacent Areas, Post-Disaster Recovery Programme

### Community leaders and members

- Palmerito, Limón District, Independencia- Mr. Ofelio Rosario, Secretary of the Manos Amigas Neighbourhood Board; Ms. Mercedes Antonia Guzman, President of the Community Network for Disaster Prevention, Mitigation and Response; Mr. Jesús María Sánchez, Responsible for Community Refuge Management
- Papoi, Barahona- Mr. Ramon Antonio Reyes, Carpenter
- Canoa, Barahona- Ms. Margarita Pérez, President of the Women's Association
- La Plazoleta, Sánchez- Ms. Juana Altagracia Ceped, President of the Community Network for Disaster Prevention, Mitigation and Response
- La Torre, Sánchez- Mr. Rafael Vicente Mejia, Member of the Community Network for Disaster Prevention, Mitigation and Response

### NGOS, donors and academic sector

- European Commission Directorate General for Humanitarian Aid (DG-ECHO)- Mr. Jocelyn Lance, Responsible for the Caribbean Regional Office; Ms. Gina Sosa, Programme Officer
- Foundation for the Support of Development in the South-East (Fundación de Apoyo al Suroeste, FUNDESUR)- Mr. Luís Dario Peña Feliz, Responsible, Community Development Division; Mr. José Manuel López, Responsible, Agriculture Division; Mr. Luís Dario Cuevas, Responsible for Agricultural Projects

## Annex A

- Technical Institute of Santo Domingo (Instituto Tecnológico de Santo Domingo, INTEC)- Ms. Lourdes Meyreles, Professor of Social Sciences / Associate Researcher and Coordinator of the Disaster Risk Management Programme, FLACSO

### Red Cross and Red Crescent Movement

- IFRC- Mr. David Fisher, Coordinator, International Disaster Response Laws, Rules and Principles (IDRL) Programme (Geneva); Ms. Isabelle Granger, IDRL Coordinator for the Americas, Americas Zone Office (Panama); Mr. Nelson Castaño Henao, Disaster Risk Management Coordinator, Americas Zone Office (Panama); Mr. Benoit Porte, Regional Disaster Risk Management Delegate, Latin American Caribbean Regional Representation (Santo Domingo)
- Spanish Red Cross Society- Mr. Arnold San Román, Head of Delegation
- Dominican Red Cross Society, National Headquarters- Arq. Gustavo Lara Tapia, Executive Director; Arq. Lidia Comery, Director of Organizational Development and Disaster Risk Management; Ms. Mariela Moronta, Responsible, Mitigation Projects; Mr. Teo Marmolejos, Focal Point for Community Preparation; Mr. Júlio Urbaz, Regional Coordinator of Prevention, Mitigation and Response Committees
- Dominican Red Cross Society, Regional Branches- Ms. Noelisa Paula de Díaz, President, Barahona Branch; Mr. Socrates Feliz, Disaster Risk Management Coordinator, Barahona Province; Mr. Alejandro Nin Castillo, President, Jaquimeyes Municipal Branch; Ms. Nena Jimenez de la Paz, President, Canoa Branch; Mr. Miguel Angeles Espinal, Relief Director, Canoa Branch; Mr. Jesús Alberto Hernandez, Responsible for the Regional Logistics Coordination Centre for Disaster Prevention and Preparation in the Bajo Yuna Region; Mr. Negro Cordero, Relief Director, Sánchez Branch

### Legal Advice

- Albuquerque and Albuquerque Consultant Solicitors- Mr. José Manuel Albuquerque Prieto

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# Annex C

## Selected legislation relevant to disaster risk reduction

### Global treaties and agreements

- Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (1989)
- United Nations Framework Convention on Climate Change (1992)
- United Nations Convention to Combat Desertification in those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa (1994)
- Kyoto Protocol to the United Nations Framework Convention on Climate Change (1997)
- Hyogo Framework for Action 2005-2015: Building the Resilience of Nations and Communities to Disasters (2005)

### Regional treaties and agreements

- Constitutional Agreement of the Coordination Centre for the Prevention of Natural Disasters in Central America (CEPRENAC, 1993)
- Agreement between Member States and Associate Members of the Association of Caribbean States for Regional Cooperation on Natural Disasters (1999)
- Strategic Framework for the Reduction of Vulnerability and Natural Disasters in Central America (1999)
- Agreement to Create the Special Committee on Natural Disasters, 5<sup>th</sup> Ordinary Meeting of the Ministerial Council, Association of Caribbean States, Panama (1999)
- The Havana Consensus, adopted by the Seminar Workshop for National Authorities: Risk Management Policies, Systems and Experiences in the Caribbean (2005)
- Launching of the Early Warning System for the Central American Region, Belize and the Dominican Republic (2008)

### National legal instruments

All laws are archived electronically by the Legal Consultancy of the Legislature (Consultoría Jurídica del Poder Legislativo). The Gaceta Oficial is the official source of law-reporting, and reports all statutes and laws passed by Congress, as well as some decrees and regulations enacted by the Executive Branch. The Gaceta is published by the Legal Consultancy of the Legislature with some decrees available from 2004 at <http://www.consultoria.gov.do/consulta/>

- Dominican Republic Constitution (adopted on 26 January 2010)

### Disaster risk management

- Law No. 5110, on the creation of the Fire Brigade, 1912.
- Law No. 257, establishing the National Office of Civil Defence (1966).
- Decree No. 2045, establishing the Commission of the National Civil Defence (1968).

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- Decree No. 2784, establishing the National Commission known as the National Emergency Plan (1981). Repealed by Law No. 147-02 on disaster risk management.
- Decree No. 159, modifying articles 3 and 4 of the Decree No. 2784 (1981)
- Decree No. 360, establishing the Dominican Republic Emergency Operations Centre (2001). Repealed by Law No. 147-02.
- Decree No. 361, establishing the National Emergency Commission (2001).
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- Decree No. 715, establishing the National Office for Seismic Assessment and Vulnerability of Infrastructure and Constructions (ONESVIE, 2001).
- Law No. 147-02, on disaster risk management (approved by Congress in September 2003).
- Decree No. 932-03 approving the Implementing Regulations of Law No. 147-02.
- Decree No. 874-09 approving the Implementing Regulations of Law No. 147-02.
- Decree No. 1080 declaring the 22th of September of each year as day of disaster prevention and emergencies (2003).

### Planing and public sector investment

- Decree No. 685-00, on the System of Planning and Decentralisation, adopting regionalisation as a tool for national government coordination, programming, implementation and follow-up of regional development plans.
- Decree No. 710-04, creating ten development regions.
- Law No. 496-06, creating the Secretariat for Economy, Planning and Development.
- Law No. 498-06, on planning and public investment.
- Law No. 423-06, on public sector budgets establishing draft budget bills and the Law on Public Expenditure.
- Decree No. 493-07, on the rules for the implementation of Law No. 498-06 on planning and public investment.
- Preliminary Draft Bill, National Development Strategy, 2010-2030

### Sub-national and local governance

- Law No. 166-03 on the transfer of funds to municipal authorities.
- Law No. 176-07, on the National District and Municipalities.
- Law No. 170-07, establishing the System of Participatory Municipal Budgets.
- Law No. 341-09, modifying Law No. 176-07 on the National District and Municipalities.

### Construction

- Law No. 675, on urbanization, public order and buildings (1944).
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- R-001 - Regulations for seismic analysis and design in structures (Decree 201-11) Manual on design against wind (2000)

### Urban planning

- Law No. 6232, on urban planning (1963).

### Environment

- Law No. 64-00, on the environment and natural resources.
- Law No. 202-04, on protected areas.

### Climate change adaptation

- Decree No. 601-08, establishing the National Council for Climate Change and Clean Development Mechanism.

### Water management

- Law No. 5852 on the control and distribution of surface water (1962).

### Support and regulations of NGOs

- Law No. 41-98, on the Dominican Red Cross.
- Law No. 122-05, on the support and regulation of Not-for-Profit Associations in the Dominican Republic.
- Decree No. 40-08, on the application of Law No. 122-05.

### Education and information

- Law No. 66-97, on education.
- Law No. 200-04, on the freedom of access to public information.

### Plans and strategies

- National Emergency Plan (2001)
- National Disaster Risk Management Plan (2006)
- National Development Strategy 2010-2030 (Proposal, 2010)
- Ten- year Education Plan (2008-2018)
- National Plan for the Reduction of Seismic Risk in the Dominican Republic (Draft, 2010)

# The Fundamental Principles of the International Red Cross and Red Crescent Movement

**Humanity** / The International Red Cross and Red Crescent Movement, born of a desire to bring assistance without discrimination to the wounded on the battlefield, endeavours, in its international and national capacity, to prevent and alleviate human suffering wherever it may be found. Its purpose is to protect life and health and to ensure respect for the human being. It promotes mutual understanding, friendship, cooperation and lasting peace amongst all peoples.

**Impartiality** / It makes no discrimination as to nationality, race, religious beliefs, class or political opinions. It endeavours to relieve the suffering of individuals, being guided solely by their needs, and to give priority to the most urgent cases of distress.

**Neutrality** / In order to enjoy the confidence of all, the Movement may not take sides in hostilities or engage at any time in controversies of a political, racial, religious or ideological nature.

**Independence** / The Movement is independent. The National Societies, while auxiliaries in the humanitarian services of their governments and subject to the laws of their respective countries, must always maintain their autonomy so that they may be able at all times to act in accordance with the principles of the Movement.

**Voluntary service** / It is a voluntary relief movement not prompted in any manner by desire for gain.

**Unity** / There can be only one Red Cross or Red Crescent Society in any one country. It must be open to all. It must carry on its humanitarian work throughout its territory.

**Universality** / The International Red Cross and Red Crescent Movement, in which all societies have equal status and share equal responsibilities and duties in helping each other, is worldwide.



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