SUSTAINABLE DEVELOPMENT UNIT ■ LATIN AMERICA AND THE CARIBBEAN

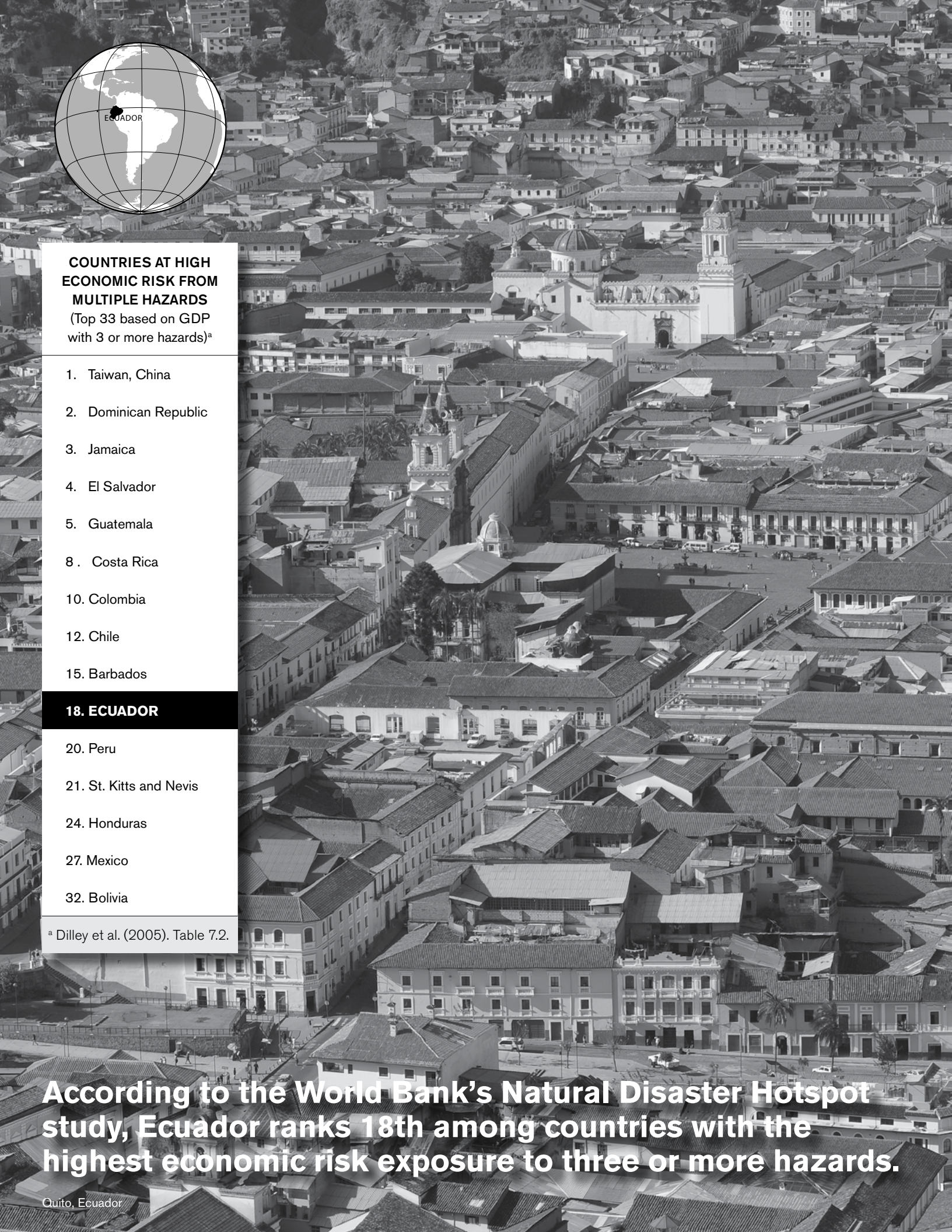
Disaster Risk Management in Latin America and the Caribbean Region:

GFDRR Country Notes

Ecuador

THE WORLD BANK

GFDRR
Global Facility for Disaster Reduction and Recovery



COUNTRIES AT HIGH ECONOMIC RISK FROM MULTIPLE HAZARDS
(Top 33 based on GDP with 3 or more hazards)[a]

1. Taiwan, China
2. Dominican Republic
3. Jamaica
4. El Salvador
5. Guatemala
8. Costa Rica
10. Colombia
12. Chile
15. Barbados
18. ECUADOR
20. Peru
21. St. Kitts and Nevis
24. Honduras
27. Mexico
32. Bolivia

[a] Dilley et al. (2005). Table 7.2.

According to the World Bank's Natural Disaster Hotspot study, Ecuador ranks 18th among countries with the highest economic risk exposure to three or more hazards.

Quito, Ecuador

ECUADOR

Natural Disasters from 1980 - 2008[b]

Affected People

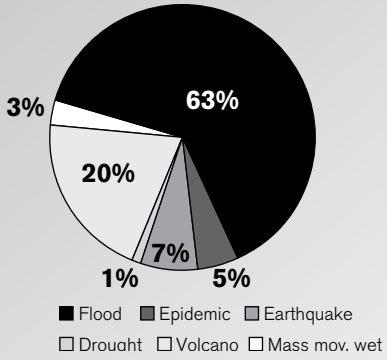
Disaster	Date	Affected (Number of People)
Flood	1982	700,000
Volcano	2006	300,013
Flood	2008	289,122
Flood	1992	205,000
Flood	1983	200,000
Earthquake*	1987	150,000
Volcano	2002	128,150
Epidemic	2000	100,000
Mass mov. wet	1993	75,020
Flood	2006	57,670

Economic Damages

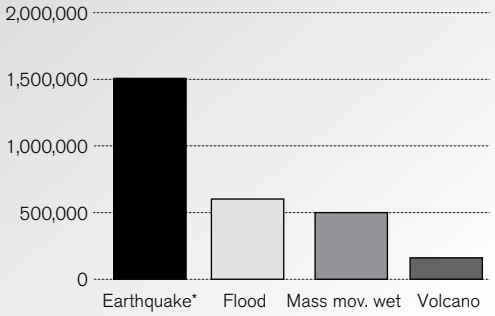
Disaster	Date	Cost (US$ x 1,000)
Earthquake*	1987	1,500,000
Mass mov. wet	1993	500,000
Flood	1997	271,000
Flood	1982	232,100
Volcano	2006	150,000
Flood	2008	45,000
Flood	1992	20,000
Flood	1989	15,000
Flood	2002	13,000
Volcano	2001	10,975

Statistics by Disaster Type[b]

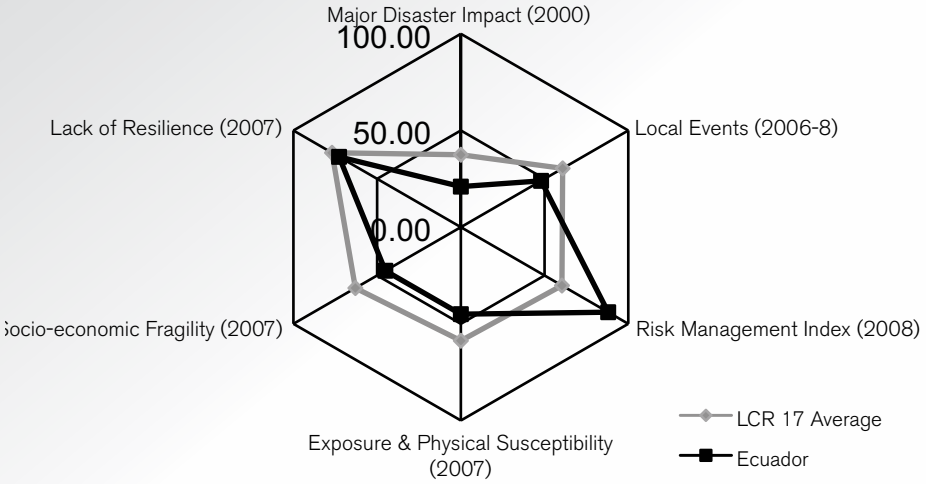
Population Affected by Disaster Type



Economic Damages / Disaster Type (1000s US$)



Relative Vulnerability and Risk Indicators[c]



[b] UN (2009). http://www.preventionweb.net/english/countries/statistics/?cid=53. Source data from EM-DAT. Data displayed does not imply national endorsement.

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

DISASTER RISK PROFILE

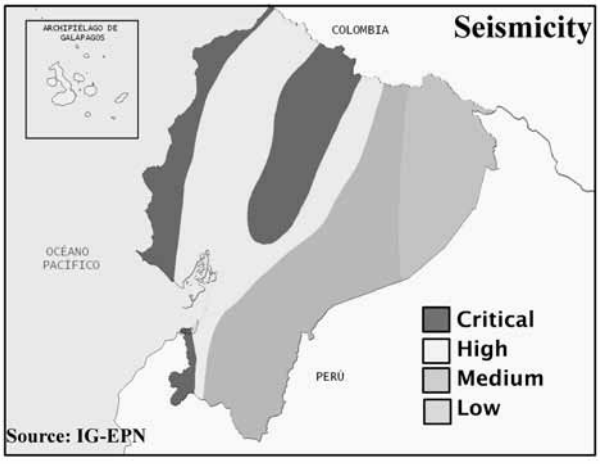
According to the World Bank's Natural Disaster Hotspot study[2], Ecuador ranks 18th among countries with the highest economic risk exposure to three or more hazards. 66% of the population lives in urban areas and 96% of this population lives in the coastal and mountainous regions, exposed to seismic, volcanic, flood, landslide, and El Niño hazards. The volcano Tungurahua is currently active. Floods and landslides occur frequently and affect the population as well as the productive sectors.

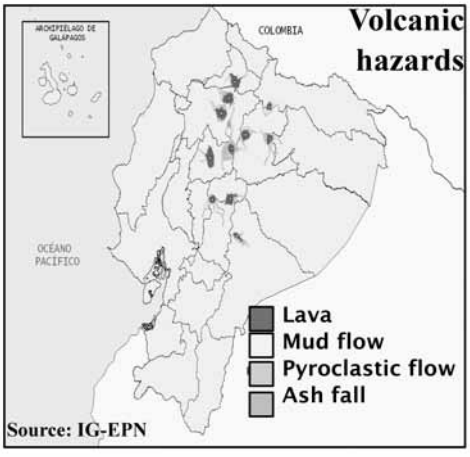
Geological Hazards

Ecuador is a highly seismically active territory. The subduction zone of the Nazca and the South American plates has been the source of the major earthquakes of Esmeraldas (1906, 1958, and 1979) and Caraquez Bay (1998). Likewise, the continental fault system which crosses the country in the northeast direction and in the foothills of the Cordillera Real has caused strong earthquakes (1541, 1987). The largest cities in the country (on the coast and in the mountains) are located in areas with high seismic risk (See Figure 1). Quito, the capital, is also in a high-risk area.

Ecuador is home to the greater part of the Northern Volcanic Zone of the Andes range. 41 main volcanoes are distributed in four alignments: the Eastern Range (10), the Inter-Andean Valley (15 volcano junctions), the Cordillera Real (12), and the East (4). An eruption of the Cotopaxi volcano is the most complex volcanic risk scenario for Quito, the capital city. The volcanoes Tungurahua, Pichincha, and El Reventador have all been active within the past decade. Tungurahua is currently (2010) active as well. Due to these events over the past 10 years, the country has had to deal with population resettlement and very important economic losses, mainly in the agricultural and livestock sectors.

Figure 1. Seismic and volcanic hazards in Ecuador (taken from the Instituto Geofísico de la Escuela Politécnica Nacional IG-EPN).





[2] Dilley et al. (2005). Table 7.2.

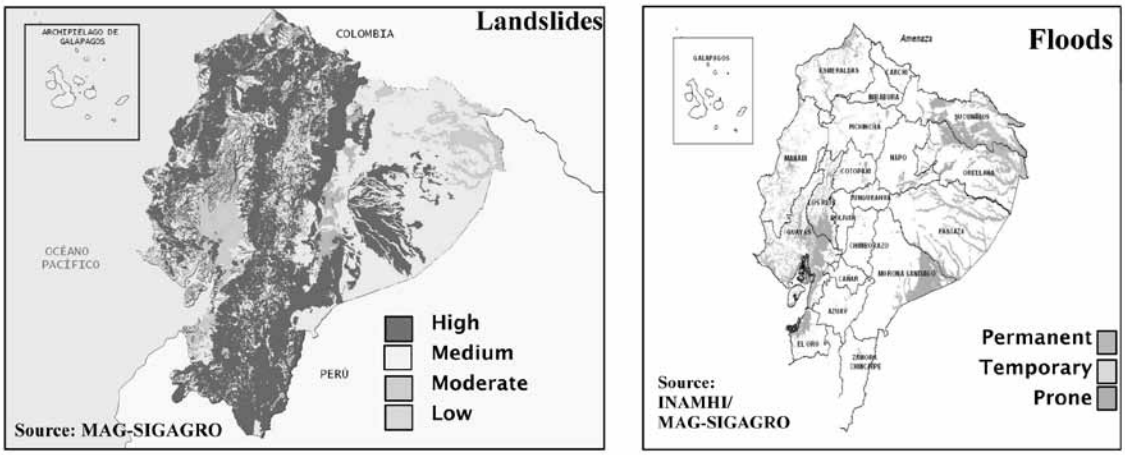
Hydrometeorological Hazards

Ecuador is highly vulnerable to the El Niño phenomenon due to the concentration of the development and the population on the coast and in the mountains. This alteration of the ocean-atmospheric system develops mainly in the Equatorial Pacific. The El Niño of 1997-1998 caused damages in the order of US$280 million, equivalent to almost 15% of the Gross Domestic Product (GDP) in the year 1997.[3] This phenomenon especially increases the frequency and intensity of floods on the coast, and of landslides and storm surges in the mountains. According to the historical records of events[4], the most affected sectors in the central and the eastern regions of the country are health, education, agriculture, and road infrastructure.

The floods are very frequent and have caused major emergencies in the past few years. As is typical of the Andean region, the hydrological regime in the three natural regions (the mountains, the coast, and the jungle) has particular conditions which favor the occurrence of floods. In Ecuador, the major floods have been associated with the El Niño phenomenon (1982-1983 and 1997-1998), affecting especially the coastal region and causing major human and economic losses. Periods of intense rains also cause significant floods, the most recent along the coastline in 2008.

The concentration of development in the mountains leads to the fact that landslides form, a phenomenon that frequently affects urban areas and infrastructure. After floods, landslides are the second most frequent hazard phenomena. In the last two decades, they have caused several river blockages with important losses (Pisque River, 1990; Paute River, 1993; Chanchán River, 1999; Guasuntos River, 2000)[5]. The road infrastructure is also often affected.

Figure 2. Landslide and flood hazards in Ecuador
(taken from the Instituto Nacional de Meteorología e Hidrología – INAMHI).



[3] *"Las lecciones de El Niño 97-98 Ecuador", Corporación Andina de Fomento.*
[4] http://www.desinventar.net.
[5] Rivera Magno. *Consecuencias de los deslizamientos en el Ecuador. IV Jornadas en Ciencias de la Tierra.*

Main determinants of vulnerability to natural events

The concentration and growth of the population in the urban areas increases the level of exposure to adverse natural events. The city populations have continued to grow over the past ten years. In 2001, 61.2% of the inhabitants were living in urban areas (approximately 7.6 million), and it is estimated that in 2009 the number could be around 66% of the population (around 9 million).[6] 96% of the urban population is distributed in the coastal and mountainous regions, where most of the natural hazards are concentrated.

Weaknesses in the policies and land use planning instruments, in combination with migration towards the urban areas, result in inadequate localization of the population. Despite the fact that the Metropolitan District of Quito and a few other cities have made advances in their urban regulation strategies, the country's land use planning in general has not had the legal and institutional framework needed for the consolidation of sustainable development policy and practice. The available regulatory instruments are insufficient and do not adequately incorporate risk reduction criteria. The peripheral urban areas of low value expand because of unregulated informal and unplanned settlements, which have great weaknesses in terms of their location and safe construction.

Environmental deterioration of the river basins and the expansion and intensity of farmland use have entailed an increase in the frequency and intensity of phenomena like landslides and floods. The main causes of degradation of hydrographic basins, which results in changes in the water cycle (behavior of surface and underground currents) and the equilibrium in the surface processes of erosion, meteorization, and landslides are as follows: the accelerated loss of biological diversity (2,180 species endangered due to the destruction of their habitats)[7], deforestation (238,000-340,000 hectares annually)[8], expansion of the agricultural frontier[9], and environmental deterioration due to hydrological contamination and inadequate disposal of industrial and residential waste.

There are a number of weaknesses in the reduction of the existing vulnerabilities and in the planning of new development in the productive sectors. There is an accumulated delay in the evaluation of vulnerability of constructed infrastructure with respect to seismic and volcanic risk in particular. The hydrocarbon sector, which represents between 10-14% of GDP, has an important part of its facilities in the province of Esmeraldas, which is an area with high seismic hazard. However, the facilities were built decades ago according to seismically resistant design parameters inferior to those currently defined in recent studies specific to the region.

Ecuador's current institutional and policy situation is very favorable for structural changes in the area of disaster risk management.

DISASTER RISK MANAGEMENT FRAMEWORK

Ecuador's current institutional and policy situation is very favorable for structural changes in the area of disaster risk management. The new Constitution includes specific aspects of disaster risk management,

[6] National Institute of Statistics and the Census (*Instituto Nacional de Estadísticas y Censos, INEC*).
[7] International Union for Conservation of Nature (IUCN), in its Red List of Threatened Species (2006).
[8] Ministry of Environment et al. (2001).
[9] Modernization Program of Agricultural Services (2001).

creating the Technical Secretariat of Risk Management (*La Secretaria Técnica de Gestión del Riesgo*), which replaces the Civil Defense (*Defensa Civil*), and initiating the organization of the new Decentralized National System of Risk Management (*Sistema Nacional Descentralizado de Gestión del Riesgo*, SNDGR). The results achieved through this process over the upcoming years will be decisive in establishing the long-term disaster risk management conditions in the country.

However, Ecuador faces very important challenges to reduce its seismic and volcanic vulnerability. These two phenomena constitute the highest risks of the country and the vulnerability accumulated over the course of decades is very high. The reduction and management of these risks will require important changes in urban regulation, building codes and regulations, critical investments in structural reinforcements, and land use planning in the areas exposed to the volcanic phenomenon.

The revision and strengthening of the land use planning system in Ecuador is essential to effectively reduce underlying hazards and related risks. The land use planning system in Ecuador requires the integration of disaster risk reduction criteria into the policies, strategies, mechanisms and instruments of the planning institutions. Improved technical capacity, information generation, and development of methodological instruments are critical elements to facilitate this process.

Capacity building of local governments is a necessary condition for consolidating and effectively implementing Ecuador's disaster risk management system. Because of the decentralized nature of the new 'Decentralized' National System of Risk Management, the provinces, districts, and parishes should assume the responsibilities for management and control of risks in their respective territories.

ACTIVITIES UNDER THE HYOGO FRAMEWORK FOR ACTION

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

The new constitution of Ecuador has set the foundation for consolidating disaster risk reduction as a policy integrated into the country's overall development. The Constitution of September 2008 includes specific aspects for risk management related to planning, environmental rights, land use planning, decentralization, participation, and security.[10] Unlike those of all other Latin American countries, this new Constitution offers the legal and political foundations for the development of a new system that will incorporate the lessons learned from the past and make use of the modern approaches to risk management from the development perspective. The upcoming years will determine the development of the institutional organization, the complementary standards, and the financial instruments necessary to make the said constitutional regulations a reality.

The Technical Secretariat of Risk Management is the key governmental institution for heading the new approach and vision of risk management. In the new institutional organization, this secretariat replaces the former Civil Defense and assumes the management and coordination of SNDGR.[11] It is responsible for creating policies, strategies and regulations to promote capacities oriented at identification, analysis, prevention, and mitigation of risks with the goal of facing and managing disaster events, as well as of recovery and reconstruction

[10] Constitution of Ecuador. Title VII, System of Well-Being. Chapter I, Inclusion and Equity. Section 9, Risk Management.
[11] Constitutional Executive Decree of the President of Ecuador No. 1046, April 26, 2008.

of social, economic and environmental conditions affected by eventual emergencies or disasters.

The risk management institutional development, legal framework, and policies should create capacity for attending to short, medium, and long-term needs. One of the main challenges for the government in this process of the political and administrative reorganization is maintaining an adequate balance for capacity building at all levels, which would on the one hand guarantee the results in the long run, and on the other allow for the management of short-term needs. Because of the high frequency of events such as floods and landslides, the lines of action related to risk mitigation and emergency response are currently of highest priority.

The capacity building of the local governments is a necessary condition to consolidate the system. In general, the new Constitution and the political reform promote the decentralization of the functions of the State. With respect to risk management, the provincial, district, and parish levels have direct responsibility in risk management and consequently should develop their own institutional organization and technical and operational capacity according to national regulations and plans. Thus, significant efforts are necessary in the areas of technical strengthening, information systems, local capacity building, and communication, among others.

HFA Priority #2: Disaster risk assessment and monitoring

The monitoring system of volcanic activity has been strengthened to confront the volcanic eruptions of the past ten years. The recent eruptions of the Pichincha, El Reventador and Tungurahua volcanoes required the government, with international cooperation, to make important investments in the modernization and expansion of the monitoring equipment network, administrated by the Geophysical Institute of the National Polytechnic School (*Instituto Geofísico de la Escuela Politécnica Nacional*, IG-EPN). The level of current development of this system in Ecuador is comparable to that achieved in developed countries like Japan or the United States.[12]

Ecuador has increased the capacity of its national technical institutions and of some local governments to evaluate disaster risk. In the past decade institutions like the IG-EPN, the IRD[13], the *Instituto Nacional de Meteorología e Hidrología* (INAMHI), and the National Secretariat of Planning and Development (*Secretaría Nacional de Planificación y Desarrollo*, SENPLADES) have made important strides in the evaluation and modeling of hazards, vulnerability, and risks.[14] In the same way, the Quito Metropolitan District has developed specific studies on this topic and continues to progress in the strengthening of its technical capacity.

It is necessary to expand the scope of the monitoring systems and apply advanced technological tools for modeling and evaluation. Despite the advances already achieved, coverage of the seismologic and hydrometeorological network still needs to be amplified, and hazard, vulnerability and risk studies need to be expanded, especially with regard to seismic vulnerability of essential buildings and the infrastructure of the productive sector.

[12] http://igepn.edu.ec.

[13] A French public institution of science and technology research with presence in Ecuador since 1974.

[14] See *Informe Nacional para la conferencia mundial sobre la reducción de desastres* (National report for the world conference on disaster reduction in Kobe-Hyogo, Japan, January 18-22, 2005).

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

There is some experience with education projects in emergency response. The country lacked official plans and programs for the inclusion of risk management in school curricula until shortly before the current reform. However, through Civil Defense, and especially with international cooperation, numerous pilot projects were carried out which form an important precedent for the design of a new policy in this sector. The emphasis of these training efforts was on emergency plans and the Ministry of Education is currently designing specific content for the curricula.

Establishing a culture of prevention and preparedness for disaster risk is one of the priorities of the new agenda. The National Strategy for Risk and Disaster Reduction being formulated by the Technical Secretariat for Risk Management defines the promotion of risk prevention in civil society through communication strategies, education, citizen supervision mechanisms, and information dissemination, as one of its most important policies. This policy will be supported by the implementation of an Information System to support these objectives.

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

Projects on environmental management and recovery of hydrographic basins have contributed to a reduction of disaster risk. The principal investments for landslide and flood risk mitigation were made through projects of hydraulic recovery of basins and environmental recovery of degraded areas. One of the most notable projects was carried out by the Quito Metropolitan District through the Quito Metropolitan Sewerage and Drinking Water Company (*Empresa Metropolitana de Alcantarillado y Agua Potable de Quito*, EMAAP-Q) on the slopes of Pichincha (34 recovered streams) with financing from the Inter-American Development Bank (IADB). At the national level, projects to highlight include the coastal resource management program and the protection of the water systems in Chimborazo and Tungurahua from ash fall, among others.

The majority of risk reduction projects have had local and community focus. Over the last decade, numerous risk reduction projects have been implemented at the parish and district levels through international cooperation. Especially notable were the projects promoted by the Ecuador Association of Municipalities (*Asociación de Municipios del Ecuador*, AME) for development and land use planning, and for environmental management. The results of these projects yielded important lessons learned, which can be very useful in the current planning process.

In the current process of institutional reorganization, it is crucial to incorporate risk management into the new policies, strategies and instruments of the Development Plan and land use planning, and to build local capacity for its implementation. The government's task to design and implement the new planning systems, and to include effective disaster risk reduction mechanisms, is significant. Some of these instruments include updating and adopting building codes and regulations, generating baseline information for the regions[15], zoning of hazard and/or risk areas and definition of specific regulation of land use and occupation, development of methodological guidelines and training for formulation and implementation of development plans, territorial/land use plans, and implementation of monitoring and evaluation mechanisms.

[15] Physical, economic, and population information.

Cotopaxi Volcano, Ecuador

Seismic vulnerability reduction of the infrastructure in the hydrocarbon sector and of the essential buildings in the main cities is a priority. Because of the direct or indirect impact which can be generated by any of these systems on social and economic stability in the country, it is imperative to press forward in the process of determining the current seismic vulnerability of key buildings and of the different components of the hydrocarbon production, and to take on the necessary vulnerability reduction measures. Because of the level of investment required for this, it is necessary to carry out a cost-benefit analysis and to prioritize such interventions.

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

International cooperation has supported projects in this area over several years.

International cooperation has invested the most in this topic in support of Ecuador's Civil Defense. European Commission's humanitarian aid department (ECHO), through its program for Disaster Preparedness (DIPECHO), along with its partners, has implemented more than 20 projects since 2000. The Red Cross of Ecuador, the PREDECAN project[16], the Swiss, Spanish, and US partners, and the US' Comando Sur have been other partners in important projects. The United Nations system has offered support for the strengthening of Ministries of Education and Health, and for SEMPLADES, through the Pan-American Health Organization, UNDP and UNICEF. Even though there are no consolidated numbers available, it is estimated that at least the local populations and institutions in more than 60 districts have participated in disaster preparedness projects, benefiting at least 600,000 people. The provinces that benefited most from these projects are Esmeraldas, Manabí, Los Ríos, El Oro, Tungurahua, Chimborazo, Cotopaxi, Pichincha, Zamora, Loja, and Bolívar.

[16] Prevention of Disasters in the Andean Region.

The response to a 2008 flood disaster demonstrated new possibilities and capacities in the current institutional context. In 2008, the unexpected increase in rainfall produced the most extensive floods registered in the last few decades along the Ecuador coastline. 13 of the 24 provinces of the region and 275,000 inhabitants were affected and 170,000 hectares of crops were lost, among many other impacts.[17] The response to this disaster was carried out in the transition of the new Technical Secretariat of Risk Management and the new Ministry of the Coast. The latter assumes the leadership and coordination of emergency response and recovery. The final result was a successful process which demonstrated a great capacity for response in a region that generally has had inadequate conditions for timely organization and coordination.[18]

The implementation of the capacity building strategy of the Decentralized National System of Risk Management requires a great effort both institutionally and from the local governments. Despite the advances achieved in the past years by the Civil Defense, it is now necessary to design an emergency response capacity-building strategy adjusted to the new institutional structure and organization, and integrate the functions and responsibilities at territorial levels. Because of the decentralized character of the risk management system, the capacity development at subnational levels requires adequate resources and should remain a priority.

It is necessary to develop a comprehensive financial strategy to attend to post-disaster situations. Risk transfer is one of the main propositions for the SNDGR. Similar to other aspects analyzed, it is important to promote the design of a financial protection strategy on the basis of the results of risk analyses and models and the fiscal considerations of the Government of Ecuador.

KEY DONOR ENGAGEMENTS

Existing Projects with Donors and International Financial Institutions	Funding Agency / International Partners	Allocated Budget and Period (US$)	HFA Activity Area(s)
Emergency grant for Tungurahua and Litoral	IADB	400,000 2008	5
Strengthening of the Technical Secretariat of Risk Management (US$5 million IADB loan and US$1.25 million counterpart financing)	IADB	6.25 million 2006-2011	1,4
Humanitarian assistance for Tungurahua and Litoral	UN (FAO, UNDP, UNICEF, IOM, OPS)	3.76 million 2008	5
Emergency preparedness and response	European Commission's Humanitarian Aid Department (ECHO)	2.6 million 2007-2008	5
Andean program	PREDECAN	16.12 million 2005-2009	1, 3, 4
Quito community safety project	World Bank (GFDRR) UNDP	980,000 2009-2012	1, 3, 4
Protection of slopes in Quito South III (Loan for the Environmental Sanitation Program III)	IADB	42 million 2008-2013	4
South-South Cooperation for City Collaboration: Kathmandu, Makati and Quito	World Bank (GFDRR)	400,000 2009-2012	1, 3, 5

[17] Ministry of the Coast, "Ecuador 2008, response to the coastline floods", with the support from Pan-American Health Organization and UNDP.

[18] Ministry of the Coast, "Compilation of protocols, operative proceedings, and functional structures used for response to the effects of the Ecuador coastline floods of 2008."


Banos, Ecuador

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

Given Ecuador's disaster risk profile and its existing framework for disaster risk management, the key priority in Ecuador is to continue to build institutional capacity and ensure long-term vulnerability reduction at local levels. Strategic actions are needed in the following areas to enhance disaster risk management in Ecuador: (i) identification and monitoring of risks, (ii) reduction of vulnerabilities at the local level, and (iii) strengthening of institutional capacity for strategic planning and coordination at national and local levels.

In light of an agenda as broad as the National Strategy for Risk and Disaster Reduction of Ecuador, it is necessary to prioritize and focus support on policies and projects with high impact.

Access to knowledge and advanced technological tools are critical to guarantee the availability of information for decision-making in the current process of institutional change and reorganization. The design and implementation of a probabilistic risk assessment initiative[19] would offer an exceptional opportunity towards this objective. It would help the country to better understand, communicate and support disaster risk management.

Ecuador has a very high deficit in the programs of seismic vulnerability reduction in key buildings and the infrastructure of the hydrocarbon sector. The advances in the assessment and design of medium- and long-term programs which could be achieved with support from GFDRR funds will have a very high impact.

In practice, the incorporation of disaster risk management into development plans and territorial/land use plans is often limited by the lack of information and/or practical methodological tools accessible to non-expert technicians. Ecuador has an opportunity to grow in this direction and GFDRR's support would be very effective.

Institutional development and risk management frameworks should create capacity to attend to short-, medium-, and long-term needs. Emergency and disaster response capacity building is a short-term

[19] Similar to the CAPRA initiative in Central America.

need which should be guaranteed by the Technical Secretariat of Risk Management.

Capacity building of local governments is an essential line of action to ensure that the decentralized system in Ecuador is viable and effective. As its name suggests, the Decentralized National System of Risk Management (SNDGR) assigns the primary responsibility for risk management to the local level and secondarily to higher levels of government.

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

Indicative Program for GFDRR Funding (Projects and engagement areas being considered for GFDRR funding)	Implementing Agency / International Partners	Indicative Budget and Period (US$)	HFA Activity Area(s)[1]
DRM capacity building of local governments in priority areas of the national strategy, e.g. technical assistance, training, tools, etc.	Municipalities UNDP	1.3 million 2009-2012	1, 3
Development of a Risk Assessment Platform for Ecuador to advance technological tools and information systems available for risk evaluation	Technical Secretariat of Risk Management, UN ISDR, PREDECAN	914,000 2010-2011	2
Technical assistance to incorporate risk reduction into Ecuador's new planning system e.g. updating codes, regulations, generating risk information, training, tools, etc.	Technical Secretariat of Risk Management, Secretary of Planning, UNDP, PREDECAN	700,000 2009-2012	1, 4
Technical assistance to reduce seismic vulnerability by supporting the design and prioritization of programs for structural reinforcement of essential city buildings and infrastructure of the hydrocarbon sector	Technical Secretariat of Risk Management, UNDP	1.1 million 2009-2012	4
Support the design and formulation of programs to manage and recover hydrographic basins	Sectoral Ministries	700,000 2009-2011	4
Support emergency/disaster response capacity building activities at territorial and sectoral levels	Technical Secretariat of Risk Management, Sectoral Ministries, UNDP, Disaster Preparedness Programme of the European Commission's Humanitarian Aid Department (DIPECHO)	270,000 2009-2010	5
Initial Budget Proposal:		**US$4.984 million**	

Additional consideration should be given to financial protection against disasters. Initial discussions with the Government of Ecuador have confirmed interest in technical assistance to study and design necessary mechanisms to ensure comprehensive financial protection in Ecuador.

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

Global Facility for Disaster Reduction and Recovery

1818 H Street, NW
Washington, DC 20433, USA

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

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