PANAMA
COUNTRY PROFILE

Its inter-oceanic geographical position makes Panama the commercial centre of the region, not only by attracting foreign investment, but also in the generation of an important tourist industry. Despite the country’s solid economic development, more than a third of the population lives in conditions of poverty or social exclusion and these people are the most vulnerable to disasters.

5.6.1 SELECTED RTU

RTU Panamá Este
Panama City and the metropolitan area it forms part of have experienced a rapid expansion process, particularly in the eastern and western parts of the city. This RTU is made up of different areas and activities including residential areas, business centres, wooden shacks (frequently destroyed by fires) and low-lying areas prone to recurrent flooding. The large urban development projects on land reclaimed from the canal (formerly US military bases), the canal expansion project and the construction of a subway system will all influence the dynamics of the city and the nature of risk.
This region, made up of the districts of Volcán and Boquete (Province of Chiriquí), is a mountainous area in the west of the country, through which several rivers flow into the Pacific. The area is prone to floods and landslides and has a medium-to-high degree of seismic risk. The cultivation of coffee for export is the main economic activity in the area and in recent years, there has been a strong process of urban expansion due to the influx of foreign and national immigrants attracted by the climate and proximity to beaches on the Pacific coast. As a result, there has been significant growth in the hotel industry, the development of new residential areas and an expansion of services to meet the needs of a growing population.

This western region lies within the river basins of the Sixaola and Changuinola rivers (Province of Bocas del Toro) near the border with Costa Rica. Here, the population is largely rural, indigenous and dedicated to farming activities. In the Changuinola district, most of the population is Ngöbe and Bugles, Bokota, Naso Teribe and Bri Bri. The area is prone to earthquakes and floods, reporting the greatest damage from this type of phenomenon in the country. Nevertheless, this region benefits from a number of risk and environmental management projects, including initiatives focused on the bi-national Sixaola river basin.

### 5.6.2 RISK DRIVERS

**Chart F: Questionnaire Results in Panama by Risk Driver**

<table>
<thead>
<tr>
<th>Risk Driver</th>
<th>Maximum Score</th>
<th>Minimum Score</th>
<th>Average Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental Degradation</td>
<td>4.15</td>
<td>4.12</td>
<td>4.14</td>
</tr>
<tr>
<td>Socioeconomic Conditions</td>
<td>4.39</td>
<td>4.12</td>
<td>4.14</td>
</tr>
<tr>
<td>Territorial Organization</td>
<td>4.14</td>
<td>4.12</td>
<td>4.14</td>
</tr>
<tr>
<td>Governance</td>
<td>4.12</td>
<td>4.12</td>
<td>4.14</td>
</tr>
</tbody>
</table>

Source: DARA
RISK DRIVER 1: Environmental Degradation
In the three RTUs, overexploitation of soil, deforestation and the overexploitation of water resources are identified as the environmental degradation factors that most hinder effective risk reduction. Regarding the performance of government authorities to protect the environment, local authorities are generally more efficient than their national or subnational counterparts in controlling environmental degradation, although there is a lack of technical and professional capacity and financial resources limiting their good performance. In relation to climate variations, significant changes have been perceived over last 10 years in drought and precipitation cycles and average and extreme temperatures.

RISK DRIVER 2: Socioeconomic Conditions
In the three RTUs, particular socioeconomic conditions are thought to hinder risk management, including poverty, unemployment, limited access to water and drainage services, lack of communications infrastructure and food insecurity. The social protection mechanisms and financial support needed to reduce poverty and food insecurity are generally considered deficient in all three RTUs.

RISK DRIVER 3: Territorial Organisation
Certain conditions related to territorial organisation prevent effective risk reduction in all three RTUs including: land occupation in unsafe and fragile areas in both urban and rural contexts; and unsuitable location and poor quality of housing, mainly in rural areas. Regarding the inclusion of DRR initiatives in land use plans, it was felt that there are inadequate funds to do so and that these plans are insufficient in the three RTUs.

RISK DRIVER 4: Governance
High levels of bureaucracy, lack of coordination among different levels of government, non-compliance with regulations, centralisation in decision-making and corruption are identified as governance issues that inhibit effective risk control and reduction in all three RTUs. Additionally, although legal instruments exist to promote DRR, their application is deficient. Moreover, citizen participation in the development and application of local development plans is low.
In the Panama workshop, the participants validated the questionnaire results and identified a number of recommendations for effective risk management common to all three RTUs:

- Improve knowledge and citizen participation to demand the implementation, compliance and continuity of DRR initiatives.
- Increase institutional coordination to improve monitoring and implementation of DRR programmes in an integrated manner.
- Promote education, disaster culture and training programmes to improve short/medium/long term planning and establish a basis for greater inter-agency participation.
- Channel more resources to local governments for an adequate environmental management. If the problem is approached at a municipal level, there is more likelihood of continuity, monitoring and adaptation to the local environment.

Some specific actions identified in each RTU to improve conditions and capacities for DRR:

**RTU Boquete**
- Place more emphasis on the collaboration of local authorities with DRR responsibilities with local NGOs.
- Develop specific DRR policies and guidelines at the local level (for example, municipalities need to generate their own risk maps).
- Improve the systematisation of information and existing programmes and coordination among institutions.

**RTU Changuinola**
- Implement a land use plan.
- Strengthen institutions and local governments through DRR training.
- Promote the empowerment of civil society.

**RTU Panamá Este**
- Promote integration of DRR in local government plans so that they deal with risk in an integrated manner.
- Strengthen institutional coordination.
- Promote community plans and projects for environmental conservation and natural resource management.

Recent improvements in socioeconomic conditions due to the growth in tourism in the RTU Boquete may be creating unrealistic optimism. The area has a high risk of flooding, and growth of urban settlements in riverbeds may create problems in the future if appropriate regulations are not applied. In the RTU Changuinola, the factor that most impedes effective risk management is the lack of communications infrastructure and location of many settlements scattered throughout this area. This inaccessibility makes it very difficult to provide social development and capacity building programmes to reduce disaster risk. In the RTU Panamá Este, particular emphasis needs to be placed on the implementation of regulations to control the growth of irregular settlements located in marginal areas of the city at risk from flooding.