

# GUATEMALA

## COUNTRY PROFILE

5.3

In recent years, Guatemala has suffered a severe economic downturn, and the current international crisis has only worsened the situation by significantly reducing exports, remittances, foreign direct investment and tourism. In addition, poverty, insecurity, crime, social inequality and malnutrition indicators have all increased.

During the preparation of this study, the three selected RTUs in Guatemala experienced two simultaneous events: the eruption of the Pacaya Volcano (May 27, 2010), which brought ash and sand fall that affected Escuintla and the

Metropolitan Area of Guatemala; and Tropical Storm Agatha (May 28-30, 2010), which was accompanied by floods and landslides in all three selected RTUs. Given the context, it was impossible to organise a workshop in Guatemala.

### 5.3.1 SELECTED RTU



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## RTU Área Metropolitana de Guatemala (MAG)

This RTU includes the northern area of the Chinautla and Las Vacas rivers, and part of Guatemala City and Chinautla (Department of Guatemala). Hazards are of low or medium intensity, but have a high recurrence and loss potential particularly phenomena such as floods and landslides.

There are also high intensity hazards such as earthquakes, but they usually have low recurrence rates. This RTU is an urban area with a high population density and industrial concentration, it lacks a sewage system, has precarious settlements and a high level of environmental pollution.

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## RTU Altiplano Occidental

This RTU consists of the basin of Lake Atitlan and the municipalities of San Andrés Semetabaj, Santa Catarina Palopó and Panajachel (Department of Sololá). The inhabitants of this RTU are mainly indigenous, devoted to subsistence farming and trade on a small scale. Over the years, small urban centres have developed that are primarily focused on tourism and the production and marketing of

handicrafts. In this area, hazards of low or medium intensity with high recurrence and great loss potential predominate, particularly during the rainy season (floods caused by overflowing rivers and landslides). However, these less hazardous phenomena combine with high intensity hazards, as demonstrated by the heavy damage caused by Tropical Storm Stan in October, 2005.

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## RTU Costa Sur

This RTU consists of the middle and lower sections of the Achiguate river basin and parts of the municipalities of Escuintla, Masagua and San José (Department of Escuintla). In this area, sugar cane production and extensive cattle ranching are the dominant economic activities, but there are also small and scattered groups of peasants engaged in small-scale production of basic grains and the cultivation of vegetables and fruits for consumption or local trade. The population in this RTU is exposed to floods from the overflow of rivers

and streams; a hazard that is considered of low-to-medium intensity, but with high recurrence and a huge loss potential. In the area, there are active volcanoes (Santiago, Fuego, Pacaya) that could cause instability of the rivers and flooding if they erupted at the same time during the rainy season. However, with the growth of new urban centres (mainly in Escuintla), flooding is also caused by the lack of a sewage system and the discharge of waste into streams and rivers, presenting serious environmental and health risks.

### 5.3.2 RISK DRIVERS

#### RISK DRIVER 1: Environmental Degradation

With regard to this risk driver in the three RTUs, the overexploitation of water resources, the overexploitation of land and deforestation are identified as the main conditions hindering effective risk management. In recent years, there have been significant climate variations in the three RTUs,

especially in the precipitation cycles and, to a lesser extent, in the frequency and intensity of storms and hurricanes. Government authorities, especially within the federal government, do not intervene effectively to ensure environmental protection.

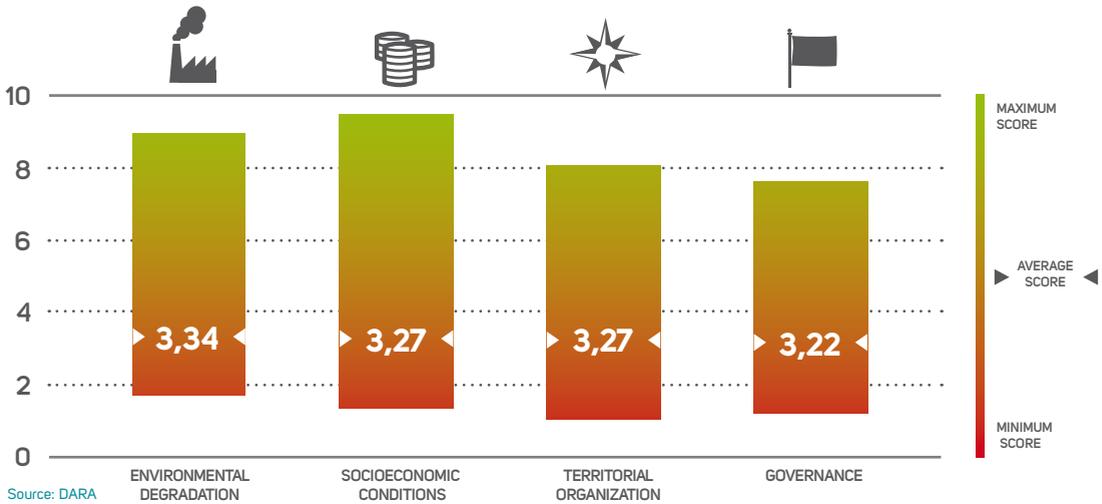
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#### RISK DRIVER 2: Socioeconomic Conditions

Poverty, environmental pollution, unemployment, limited access to health and education and deficiencies in road infrastructure are the socioeconomic conditions that most hinder risk management in the three RTUs and government

interventions to deal with these processes are insufficient. Initiatives to improve risk management at the local/subnational level are also insufficient in all three RTUs.

CHART C: RESULTS OF THE QUESTIONNAIRE IN GUATEMALA BY RISK DRIVER



### RISK DRIVER 3: Territorial Organisation

In the three RTUs, urban and rural development processes have occurred in such a way as to prevent risk reduction, with occupation of land in unsafe and fragile areas and inappropriate location and poor construction of housing being the most

critical factors. The inadequate incorporation of DRR in local land use plans and public investment and the lack or inadequacy of construction codes, are also noteworthy.

### RISK DRIVER 4: Governance

The aspects of governance that are most detrimental to effective risk management in the three RTUs include the poor coordination and communication among different levels of government and their limited capacity. High levels

of bureaucracy, centralisation in decision-making, corruption and the infringement of the law are also highlighted as being problematic, although existing legislation to control or reduce disaster risk is considered efficient.

FLOODED AREAS ARE GREATER DUE TO THE LACK OF DRAINAGE AND WASTE SPILLING INTO TRIBUTARIES AND RIVERS, PROVOKING SERIOUS ENVIRONMENTAL AND HEALTH HAZARDS

### 5.3.3

### SUMMARY

Major deficiencies hindering disaster risk reduction are identified in the three RTUs. The RTU AMG faces multiple challenges associated with urbanisation and high population density, high levels of poverty and irregular settlements threatened by frequent floods and landslides. In particular, environmental factors, such as the overuse of water, are highlighted as major causes of health problems in disaster.

In the RTU Altiplano Occidental, environmental protection measures are being undertaken thanks to the presence of NGOs promoting sustainable development in the area. However, road infrastructure is considered inadequate and is provoking inappropriate land use in areas prone to flooding and landslides.

The factor in the RTU Costa Sur that most hinders risk management is the lack of enforcement of construction codes and, thus, poor quality housing in an area with high population growth. It is also important to highlight the increased risk of floods associated with the influence of the agricultural export sector. Decisions to divert the trajectory of certain rivers, the production of waste and the construction of dykes to protect private farms, have led to flooding in surrounding rural communities and increased environmental pollution. Here it is worth mentioning that federal and municipal government authorities are unable or unwilling to control these processes.



Destroyed buildings and other structures in Central America during the hurricane season.  
Source: USAID