

Case Studies in Latin America (Antofagasta, Guayaquil, Tijuana)

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Introduction

In 1996, the United Nations secretariat of the International Decade for Natural Disaster Reduction (IDNDR) launched the RADIUS initiative to assist in reducing the effects of seismic disasters in urban areas, particularly in developing countries. Working in close collaboration with local people in nine cities around the world, the project evaluated the seismic risk of those cities, prepared risk management plans based on those evaluations, and most importantly, raised awareness of the local community on seismic risk. Significant progress was made towards incorporation of the entire community in risk management activities. Citizens and institutions participated actively throughout the project, and committed efforts were made to set up conditions that will allow the establishment of long-term initiatives to reduce seismic risk. The project made good use of existing information and counted on the knowledge, insight and expertise of local people to ensure that the results reflect local conditions.

This report describes the implementation and achievements of the RADIUS initiative in the Latin American cities of Antofagasta (Chile), Guayaquil (Ecuador) and Tijuana (Mexico). GeoHazards International, a non-profit organization working to reduce earthquake risk in the world's most vulnerable communities, was in charge of the implementation of RADIUS in Latin America.

The RADIUS initiative

The RADIUS case studies were designed with the specific objective of initiating long-term risk management processes in the cities where the project was implemented. The case studies had three main tasks:

- ◆ Assessment of the city's seismic risk and development of an earthquake scenario describing the effects of a probable earthquake on the city;
- ◆ Preparation of an action plan based on the results of the risk assessment, describing activities to reduce the city's seismic risk; and
- ◆ Creation of conditions that will facilitate the institutionalization of risk management activities in the city.

In order to produce realistic results and raise the awareness of the communities on the seismic risk, the project ensured that representatives of all sectors of the society were actively involved throughout the project. Furthermore, the project ensured that the general public was well informed about the project's achievements and activities through coordination with the local media.

The project's main activities were collection of existing data, estimation of potential damage, and preparation of an action plan. Because the active participation of the community was crucial to the project's success, the programme of activities included repeated meetings in which key representatives of the community were first informed about the project's progress and then were asked to comment.

RADIUS in Latin America

Three cities were selected in Latin America for the RADIUS initiative: Antofagasta (Chile), Guayaquil (Ecuador) and Tijuana (Mexico). These three cities make up an interesting and diverse group. Antofagasta is a relatively small city of 220,000 inhabitants, whose existence is dependent on mining. Antofagasta last experienced a destructive earthquake (Ms 7.3) in 1995.