

## MICROZONATION AND ITS APPLICATION TO URBAN AND REGIONAL PLANNING FOR DISASTER MITIGATION IN PERU

J. Kuroiwa<sup>1\*</sup>, J. Alva<sup>2</sup>

### ABSTRACT

The microzonation methods and techniques systematically developed after the Peru 1970 earthquake, and the experience in applying them to land use planning for disaster mitigation, were first applied in regional development planning in 1986.

During the 1970s, a general microzonation method (G.M.) was developed, but it was found to be too costly and sophisticated for a developing country like Peru. In 1979 after the Arequipa earthquake, a simplified method was developed to be applied for small towns (SM1). During the 1980s a second simplified method was developed for medium size cities (SM2).

In 1989 an important project was started for the newly created Grau region, the first to be organized and to elect its new authorities in Peru's process of regionalization. It seems that a region in Peru with some tens of thousands of km<sup>2</sup> is the most adequate political, administrative and geographic unit to include disaster mitigation measures in its economic and social development process.

The method being developed and the experience being accumulated in The Grau region is going to be used as a model for Peru's other 11 new regions. The 12 regional plans plus measures to be applied at the national level, combine to form "Peru's National Program for Disaster Prevention and Mitigation" - the main country project for the IDNHR.

The goals by the end of the decade are two: a) all constructions to be made in the country should take into consideration disaster mitigation measures, and b) all Peruvians, including those living in the most remote areas, should know how to protect themselves and their properties.

<sup>1</sup>Professor of Civil & Earthq. Eng. CISMID. FIC. UNIV. Lima

<sup>2</sup>Professor of Geotechnical Eng. Director of CISMID. FIC. UNIV. Lima

\*Presenting Author Underlined