

Post-seismic Natural Risk Approach in the Urban Areas of Quindío (Colombia)

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A 6.2 Richter magnitude superficial earthquake occurred on 25th January 1999 affecting importantly 8 of the 12 urban areas of the State of Quindío, the smallest in Colombia. This event has been until September 1999 the most harmful earthquake in Colombia because its influence over urban areas 80 years old in average, including Armenia the most important city in the State with 250.000 inhabitants. This earthquake has been called Quindío Earthquake.

Before the earthquake occurrence, the state of art of the technical information included urban landslides and flooding hazard mapping, seismic building vulnerability analysis and qualitative risk zoning developed by several governmental organisations.

In brief the organisations referenced in the title, identify the intensity, the infrastructure damage and post-seismic risk analysis and mapping of Quindío Earthquake, as an opportunity to evaluate and calibrate the analysis models employed before, just comparing the theoretical results with the real effects after the earthquake.

Although this research is in progress, its results will be the comparison, analysis and evaluation of pre-seismic and post-seismic hazard, physical vulnerability and natural risk reports and maps to redesign their corresponding models. The resulting risk map will synthesise the areas with specific combination of hazard and vulnerability factors and characteristics that control the probable risk and damage.

The results will be ready around December 2000.