Landslide Hazard Zonation: A Case Study at Bahia de Caraquez - Ecuador, South America

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Landslide hazard zoning for an area of 12 Km^2, in the hillsides around the city of Bahía de Caráquez, in the coastal region of Ecuador was carried out by using the Mora and Vahrson method. Based on a Geographical Information System, landslide hazard in the area was grouped into three categories. This method was calibrated based on actual observed landslides driven during the 1997-1998 El Niño event and results obtained by the Mora-Vahrson method. The calibration procedure was based on modifying the range and weight of the parameters used in the method under actual geomorphologic and hydrological conditions of the study area. The zoning provides some recommendations for a better management and planning of land use for urban development.