



Geological Hazard Assessment Methodology in Georgia

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Geological Hazards (Landslides, Debrisflows, Earthquakes et. al) have always caused and still creates a threat to the important part of the population, make complicated their engineering-agricultural activities and damage the existing infrastructure facilities.

Catastrophic events may be triggered by earthquakes, extreme hydro-meteorological events, probably on the background of global climate change, large-scale human impacts on the environment.

Georgia is a country in the Caucasus region, which is bordered to the west by the Black Sea, to the north by Russia, to the southwest by Turkey, to the south by Armenia, and to the southeast by Azerbaijan. The surface area of Georgia is 69,700 km², and its population is almost 4 million. Georgia belongs to the most complicated region among the world's mountainous countries with development scale of geological disaster processes (landslide, debrisflow/mudflow, rockfall, rock-avalanche etc.), recurrence of these processes, and with negative impacts to the agricultural lands and infrastructural facilities. Thousands of settlements, agricultural lands, roads, oil and gas pipelines, high voltage power transmission towers, hydraulic and melioration facilities, complexes for mountain tourism, etc. are periodically affected by geological disaster.

The scientific literature suggests a large number of methods for hazard inventory, susceptibility and hazard zoning. Several methods are used for Geological Hazard Assessment: Qualitative, Quantitative, Spatial Multi Criteria decision making et al. In Georgia different researches were conducted for the purpose of Geological Hazard Assessment.