Geodynamic processes and expected geo-ecological complications in Southern Highlands of Georgia

George Gaprindashvili

E-Mail: george.gaprindashvili@tsu.ge Department of Geography, Ivane Javakhishvili Tbilisi State University, 0179, Tbilisi, I. Chavchavadze 3

Management and forecasting of natural disasters is one of the most important tasks for modern civilization. The studies of landslides, snow avalanches, mudflows, rockfalls, erosion, flashfloods, floods, and other egzo-dynamic processes were reinforced in the second half of the 20th century, when it become obvious that for the protection of the population and engineering-industrial facilities from disasters wasn't enough for solving the most important socio economic, demographic, environmental and political problems.

The Southern highlands of Georgia with its geographical location, geomorphologicallygeological complexity, diverse of landscape and climate, increasing capacity of sustainable development, are one of the most unique regions. Here are passed the important transit facilities, such as the Baku-Tbilisi-Ceyhan oil pipeline and the South Caucasus gas pipeline, as well as Georgia - Turkey and Georgia - Armenia Interconnector highways, the construction of the Baku - Tbilisi - Kars railway.

The aim of the research is to study and evaluate the territories of Southern highlands of Georgia damaged by natural disasters by using the modern methods, to determine the regulation of their origins, identifying causing of natural and anthropogenic factors, forecasting of natural disasters development, development of effective mitigation and neutralization measures.