Slope stability hazard evaluation and mitigation scheme for Sohbat Charra slide zone District Battagram

Muhammad Abid Khan, Khan Shahzada, Bashir Alam, Muhammad Javed and Amiad Naseer

Department of Civil Engineering University of Engineering and Technology Peshawar

On October 8th, 2005 Kashmir earthquake, the emergency response to Allai and its surrounding areas was severely affected by the hazard generated due to Sohbat Charra slide zone. Keeping in view the earthquake disasters of the October 2005 due to land sliding, in this study the stability of slopes at Sohbat Charra slide zone at Allai District Battagram have been evaluated by taking soil and rock samples from the site and testing them in the laboratory. The input parameters needed for the analysis mainly included, the shear strength parameters i-e cohesion, angle of internal friction and unit weight of the formation materials, which were obtained from laboratory tests. Software Slope/W part of GeoStudio, 2004 and standard charts have been used for the analysis of slope. On the basis of soil properties and slope stability analysis of the site, suitable measure has been suggested for stabilizing the Sohbat Charra slide zone and thus to mitigate future problems due to earthquakes scenario in the area.