Mass Movements Hazard Zonation with Fuzzy model (Case Study Shahrestanak Bsian)

Preparation of landslide susceptibility maps is important for engineering geologists and geomorphologists. However, due to complex nature of landslides, producing a reliable susceptibility map is not easy. Among various models, a research study with objective of recognizing factor affecting landslide and determination of lands with potential to occurrence was conducted to prepare landslide zonation map for the Shahrestanak watershed using fuzzy method. In order to determine the most important factor affecting landsliding differently, prepared digitally using aerial photos with scale of 1:50,000 for the year of 1357 and 1390 respectively together with field checks using GPS. Then Preparation of landslide susceptibility map using Fuzzy logic method. Results of this study show that considering numerous factors for landslide evaluation at the same time in comparison to the other prevalent method and investigation showed that most recorded landslides in the area have occurred in zones marked as susceptible in the offered model.

Keywords: Mass Movements, Modeling, Zoning, fuzzy model, Shahrestanak Bsian.

Link to the paper: https://www.civilica.com/Paper-ICEGE07-ICEGE07_188.html