



Zonation and classification of landslide hazards in Lavijrud watershed, Northern Alborz

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Landslide is natural hazard which causes sever damage every year in northern Alborz range. In order to decreasing damage of landslide, is necessary landslide zoning map is prepared. Study area in this paper is lavijrud watershed that setting in the northern Alborz and Mazandaran province. Methodologically, first landslide affecting factors of area were studied; then, the most important factors including lithology, slope, landuse, precipitation, distance from fault, road and hydrological network, aspect and altitude range were investigated. Next, map of landslide distribution was prepared. Then, information layers concerned with each factor were prepared using GIS (Arc view, Ilwis and Arc Info). The factors quantify and give them weights. Moreover using with cumulative curve, the landslide factors are classified and landslide frequency was determined for ranking. Eventually, according to weight earned by each factor as well as rank values, the zoning model using with overlaying method was finalized. The results show this model is appropriate for determining landslide prone areas, and its hazard in northern Alborz range.