



Geoethical Issues in Landslides Hazard Zonation

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Landslide hazard zonation is a common geoscientific practice for assessing potential from slope instability problems. Several different approaches and techniques have been applied by various researchers to classify hilly terrains into different degrees or probabilities of landslide hazards. But the study of landslide hazard zonation practices in India reveals that most of these approaches use same factors and approaches for landslide processes. However, the causative and controlling factors for different types of landslides have been found to be different depending on the material (rock, debris or soil) involved in the movement as well as the failure process (fall, topple, slide (rotational, wedge, planar), flow and spread. Each of these landslide process is governed by different factors but during the landslide hazard or susceptibility zonation by many of the geoscientists, same set of factors have been used. Such approaches not only enhance the errors in landslide hazard assessment but also increase the uncertainties in terms of landslide processes. These kind of landslide hazard or susceptibility zonation maps can not be used reliably by the planners, administrators, development agencies, communities and other stakeholders. The approach is likely to affect the credibility of geoscientists among the society. Hence, it is proposed that landslide process specific zonation maps should be generated to classify the hilly terrains into different degrees of hazards. It will also help in establishing responsible factor for each landslide process more accurately and estimating potential landslide hazards with greater reliability.