



New approach to an old problem: understanding coping strategies for reducing landslide risk in Central Nepal

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Landslides are both a natural and human-induced phenomenon in the Himalayan landscape, creating alluvial fans and leveling out steep terrain that has been transformed over time by populations into productive terraces. In Nepal, landslides are also one of the major natural hazards after epidemics, killing over 100 persons per year according to official statistics. Landslides carry away homes, livestock and may make locations permanently dangerous for habitation. Yet people continue to live in landslide prone areas, usually because they have few other options, their assets are tied to a certain location or family links entice them to stay. Mountain populations in Nepal have thus developed a number of coping strategies for dealing with a variety of risks. Due to the remoteness of many localities and lack of government resources, responsibilities for disaster preparedness and response in mountain areas usually lie with the communities themselves. Until recently, the government has paid little attention to landslide risk, which is becoming increasingly problematic due to more intense rainfall, rural road building and more exposed populations. The goal of this research is to assist donors, NGOs and local government to better understand which type of community level investments have the greatest impact in reducing landslide risk for mountain populations.

To do so, we examine the economic, social, environmental and physical contexts that lead to disasters and possible strategies for reducing the impact of landslides on communities. Our methods are interdisciplinary, combining a geological assessment of landslides, with participatory social science research methods: participatory risk- and resources mapping, focus group discussions, transect walks and semi-structured household interviews. The study also field tests a methodology for assessing and mapping vulnerability and resilience of mountain communities.

We develop case studies of two communities in Central-Eastern Nepal to better understand their coping strategies, risk perceptions, causes of vulnerability, factors of resilience and their main concerns. The questions that we seek to answer are: How are people (households and communities) being impacted by landslides? How do people perceive landslide risk? What is being done by households, communities and authorities to cope with and mitigate landslides? Results show that the two villages studied in Dolakha district are both faced with high risk from landsliding but have adopted very different coping strategies due to a number of factors mainly related to ethnic status and access to resources. Causes of vulnerability also differ mainly due to education levels, organizational skills and community cohesion. The village with the highest levels of vulnerability is characterized by illiteracy, lack of access to land, low food security and an inability to organize a response to mitigate a dangerous landslide.