



Empowering citizens about emerging technologies for resilience building to landslide risk reduction in mountainous rural parts of Nepal

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Recently, the concept of citizen science has emerged as an approach to link the knowledge of local people and scientists for innovative solutions to environmental problems. The concept is helpful in better understanding natural hazards by sharing insights across disciplines. However, in the context of Nepal, local communities are often implicitly seen as an end users rather than knowledge producers. This has led to undermining the chance to utilize local knowledge for resilience building to natural disasters. Here, in the Landslide EVO project, we present an innovative approach of harnessing the power of local stakeholders to collect landslide risk information by training local communities, school students and mobilizing local volunteers. These volunteers are trained on collecting information related to precipitation, rock type, and their impact on landslides and water discharge in nearby streams, as well as implications on understanding landslide risk. Moreover, we equip these communities with the necessary instruments to monitor environmental changes at their local level. The information collected from these activities will be utilized by scientists to suggest a possible best landslide early-warning system. Moreover, the information co-generated jointly by local communities and scientists will be crucial for local government bodies to plan activities related to landslide risk reduction. Through the first two years of project implementation, we have found that using local citizens in risk reduction activities not only increases efficiency of data collection, but also helps these communities to reduce their vulnerability to frequent disasters by understanding the underlying risk.