Quantifying school community resilience in Nepal

Jitendra Agarwal1, Rishi Ram Parajuli, Maria G. Xanthou, Anastasios G. Sextos

ABSTRACT

Well-being of school children lies at the heart of any efficient pre- and post-disaster risk management and hazard mitigation policy. Resilience of educational communities as response to natural and man-made hazards requires the safety and protection being gradually built towards resilience enhancement. Pre- and post-disaster management efforts usually focus on the sustainability of school infrastructure and on policies targeting shelter, recovery, and reconstruction. As a key concept to human welfare, community resilience pertains to every aspect of human existence (psychological, physical, social, financial, and environmental). It results from the synergy among society, infrastructure, economy, and environment within the geographical limits of a specific area. Community preparedness in dealing with shocks and stresses is related to this synergy. Towards this goal, this paper addresses the need to examine community resilience enhancement through a multidisciplinary, participatory, and critical approach. Our methodology is based on a bottom-up inclusion of all major contingents and stakeholders of Nepalese educational communities such as students and parents, teachers, headteachers, and school management committees. The medium for including endusers, decision- and policy-makers alike is an e-tool our project team has developed for evaluating resilience according to the major stakeholders' experience, knowledge, and preparedness. The e-tool is a mobile app with sets of questions that our research team put together to address different aspects of community resilience, and which were aligned with different weightages for every stakeholder group. Every question is also assigned an importance level under a specific resilience aspect category. The responses of all stakeholders contribute to an overall education resilience index in the form of quantifiable and qualitative result. An automated score resulting from this e-tool, after being used as an app, provides an overview of the current school resilience status, which could be received by the school head or the state agency. The app can be easily and equally used by all members of a school community in order to conduct and complete the survey. This method of measuring community resilience contributes to the school self-assessment at scale and, ultimately, track their resilience for policy and planning.