

## Community Based Landslide Investigation and Treatment in the Earthquake Affected Areas, Nepal

**Authors :** Basanta Raj Adhikari

**Abstract :** Large and small scale earthquakes are frequent in the Nepal, Himalaya, and many co-seismic landslides are resulted out of it. Recently, Gorkha earthquake-2015 has triggered many co-seismic landslides destroying many lives and properties. People have displaced their original places due to having many cracks and unstable ground. Therefore, Nepal has been adopting a pronged development strategy to address the earthquake issues through reconstruction and rehabilitation policy, plans and budgets. Landslides are major threat for the mountain livelihood, and it is very important to investigate and mitigate to improve human wellbeing factoring in considerations of economic growth, environmental safety, and sustainable development. Community based landslide investigation was carried with the involvement of the local community in the Sindhupalchowk District of Central Nepal. Landslide training and field orientation were the major methodological approach of this study. Combination of indigenous and modern scientific knowledge has created unique working environment which enhanced the local capacity and trained people for replication. Local topography of the landslide was created with the help of Total Station and bill of quantity was derived based on it. River training works, plantation of trees and grasses, support structures, surface and sub-surface drainage management are the recommended mitigative measures. This is a very unique example of how academia and local community can work together for sustainable development by reducing disaster risk at the local level with very low-cost technology.

**Keywords :** community, earthquake, landslides, Nepal

**Conference Title :** ICSRD 2020 : International Conference on Scientific Research and Development

**Conference Location :** Chicago, United States

**Conference Dates :** December 12-13, 2020