

## **SOCIO-ECONOMIC IMPACTS OF INTEGRATED EARLY WARNING IN LANDSLIDE PRONE VILLEGES OF MATALE**

**I.A.K. Ranaweera**

Postgraduate Institute of Science, University of Peradeniya, Peradeniya, Sri Lanka

### **ABSTRACT**

Recent media records as well as studies conducted by the National Building Research Organization (focal agency for landslides in Sri Lanka) landslides are becoming a more prominent disaster which impairs the wellbeing of communities in the mountainous Reagents. Some devastating landslide incidents have lost lives and have caused major economic losses. There is an obvious increase in such incidents in the recent past. Available disaster information in Sri Lanka exhibits an escalation of impacts of such hazards during the past few decades.

When consider the possible solutions for the problem several aspects are available for consideration. Landslides have caused devastation mainly in private infrastructure facilities than public properties but the authorities were obliged to spend public funds in millions for landslide mitigation as well as relocating of communities. However due to complex reasons structural mitigation of landslides and relocating could not be identified as feasible solutions. Nevertheless applying such solutions for hundreds of landslide prone areas is somewhat impractical. Landslide early-warning together with emergency preparedness will be helpful for saving many lives in vulnerable areas. On the other hand proper early warning and emergency preparedness would generate remedies for socio-economic problems amalgamated with relocation and structural mitigation through engineering.

This study attempt to find out socio-economic advantage of a community based landslide early warning system as a method of coping with landslide hazard. The main objective of the study are to a Identify the causes influencing people to live with risk in landslide-prone vulnerable slopes and Identify socio-economic importance of community based early warning integrated with emergency preparedness as a solution for landslides risk reduction. Hence this study includes a basic data collection survey in lands slide prone villages of Matale District.

When comparing with options of structural mitigation of landslide prone sites and relocating of vulnerable families, the option of supporting to live with hazards come in to focus due to practical implementation problems related to first two options. A community based landslide early warning system together with communal planning for risk reduction were identified as immediate remedial intervention for landslide hazards in mountain areas of Sri Lanka. This is mainly due to community participation, ownership, and simplicity of implementation. In addition least economic and social costs are observed in community based early warning systems. Community preparedness for community based early warning method was observed. Hence such a system was identified as a method which supports communities to cope the risk of landslides in vulnerable areas.