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Urgent Mitigation Strategies for Landslide Dam Hazards. : A Case Study in Taiwan.

Chjeng- Lun Shieh, Yun-Chung Tsang

National ChengKung University, Taiwan (shieh@dprc.ncku.edu.tw / Fax: +886-6-3840260 /
Phone: +886-6-3840251-662)

Landslide dams are natural dams that form when the massive earth or rock of a landslide blocks a river channel. If the dam suddenly collapse with a rapid release of the impounded waters, large surges or debris flows are occasionally generated, the downstream may suffer serious inundation and cause diastaters. After the event, not only engineering countermeasure is utilized to reduce the damage, but also a complete hazard mitigation plan should be proposed as soon as possible.

A landslide dam sites at the watershed of Lung-Chuian stream in Haituan village, Taitung County (Taiwan) was discussed in this study. In this research, An economic and simplified method is proposed to evaluate the evolution of the damming ,delineate the inundation potential area and establish the warning criteria for landslide-dam-break . It can provide the information for emergency response plan. The method proposed in this study can be applied to hazard mitigation management of the similar landslide dam cases in other regions.

Keyword: *Warning criteria of rainfall, hazard zone mapping, landslide dam*