



## **Characteristics of a large-scale landslide triggered by heavy rainfall in Tarmaber area, central highlands of Ethiopia**

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Landslides and landslide generated ground failures are common hazards in the hilly and mountainous terrains of the highlands of Ethiopia. One of the areas that have been affected by recent large-scale landslide is the Tarmaber area, central highlands of Ethiopia. The localities “Yizaba Wein” and “Shotel Amba”, with an estimated total area of 35 square kilometer, were completely affected by a single major deep-seated landslide. The first cracks were observed on August 21, 2005 but the major incident of the landslide took place on September 13, 2005 and the slope instability problem still remains very active. More than 3000 people have been displaced and 1250 dwelling houses have been demolished as a result of the landslide. In addition, 1 church, 4 Mills, and one satellite elementary school have been completely destroyed. The landslide has also devastated about 1500 hectare of agricultural land and caused damage to the natural environment. To understand the causes and triggering mechanisms of the large-scale landslide a comprehensive study was carried out which included geological, geotechnical and geohydrological investigations. This paper discusses the characteristics of the large-scale landslide and presents options for further collaborative landslide research in Ethiopia.