

Abstract

Kenya experienced extraordinarily heavy rainfall between May 1997 and February 1998 due to the El-Nino weather phenomenon. This period of about 10 months heavy rainfall caused widespread landslides and floods which were experienced in various parts of the country. Normally mid-December to late March is the driest and hottest season in Kenya. However, during this period, the season turned out to be the wettest with one of the heaviest precipitation events recorded in the country in the past several decades. Research investigations have revealed that the landslides were a result of four major factors. The factors included, geology and soils of the landslide prone areas, high relief, steep slopes with poor anchorage for slope stability, continuous heavy precipitation which resulted into oversaturation of rocks and soils. The effects of the El-Nino-triggered landslides in Kenya were enormous. Although statistical data about landslide destruction are not presently quantified, human and animal fatalities and plant destruction were enormous. [Fertile](#) farmlands, roads, railway lines, bridges, telephone and power lines were relocated and destroyed. Soil erosion which increased from higher surface runoff and surface exposure filled rivers with sediments. The sediments were transported to the hydro-electricity producing dams which eventually became clogged and power generation stopped. The national economic loss to the country is estimated at about US \$ 1 billion and will take a long time to recover.