

Effects and Causes of Landslides at Suduhumpola in Kandy District

Wijeratne, S.

Department of Geography, University of Ruhuna

samanwijeratne@yahoo.com

Suduhumpola East and West Grama Niladari Divisions are the worst affected areas of landslides in Kandy District. Although, physical factors such as, slope of the land, nature of soil, landforms, rainfall, vegetation are the causes of landslides, the more affective reasons for the increase of landslides were human activities. In 2000-2012, there were 57 landslides reported and also three deaths, total damage of 52 houses and 22% of houses were partially damaged. The main cause for the worst destruction in these Grama Niladari divisions was the gradient of the areas is more than 30 degrees of 75% of the area. Another cause for these landslides is informal constructions such as housing schemes, business places, cooperation's, industries etc. According to the data produced by National Building Research Organization (NBRO) during the period of 2000-2012, there were 19967 informal constructions made in Kandy area. When considering the risk of landslides in Kandy district in the central hills, it is clear that Suduhumpola is the most vulnerable and also, that are more destructive too. Irregular constructions in this area are the main reason for the development of the risk of the landslides and it is about 90%. Accordingly, Suduhumpola East and West have been identified as high risky areas. As a result, many of the affected families were decided to be evacuated from the risky areas because of the rapid increase of landslides. The importance of the present study lies in the fact that the identification of causes and impacts of landslides in the risky areas in Kandy district have become a moot point in reminiscing the life style of the people in the area. The data were collected using a questionnaire including causes and effects of landslides and mitigation options. In addition, aerial photographs and satellite images were used to compile the maps in the risky areas. The data which were collected from the above mentioned methods were analyzed using SPSS and Geographical Information System (GIS).

Key words: Causes; Effects; Disaster, Landslide, Risk.