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Effect of Landslide in Southern Part of the Up Country Area :With Special Reference on Haldumbulla and Imbulpe Divisional Secretariat Divisions

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Landslides are normally associated with intense monsoon and inter-monsoon rains. Nearly 13,000 km² (20 % area of the country) in ten administrative districts (Badulla, NuwaraEliya, Matale, Kandy, Kegale, Rathnapura, Kalutara, Galle, Matara and Hambanthota) are considered as landslide prone. Haldumbulla and Imbulpe divisional secretariat divisions have been selected as the study area of the study. It is located in Ratnapura and Badulla districts.

The main research objective is to identify landslide risk areas of the selected area. The research was carried out with the weights and ratings decided on considering spatial analysis and 3D analysis with creating a model by ArcMap 10.3 software. Generally, Slope Angle, drainage pattern, rainfall, land use, soil type, Bedrock Geology, joint patterns are effective factors for landslide. This research was considering the complex nature of landslide potential decided based on the variations of slope angle, drainage pattern, rainfall, land use factors. Landslide hazard zonation maps are useful in planning human settlements, infrastructure and other development activities and investments in mitigation. It may be very important to investigate the increase of landslides, property damage and loss of life etc. Hazard zonation maps of the area to identify the degree of the risk of the area of the site from natural hazards. Finally, identified risk areas from this study using the above main criteria. Recommended for slopes within 8- 60% construction of houses suitable to the slope angle and minimum damage to the slope. Slope should be protected against erosion and degradation -natural vegetation cover -economical and as landscape function. The risk maps could be utilized for human activities, policy makers, identifying economical mitigatory measures and issuing landslide early warning.

Key words: *Landslide, Hazards, mitigation*

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