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**LANDSLIDE HAZARD IDENTIFICATION IN
NUWARA ELIYA DISTRICT AND SOME
MITIGATION MEASURES**

A PROJECT REPORT PRESENTED BY

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ABSTRACT

The study was undertaken in landslide- affected and- prone locations of Nuwara Eliya District such as Rikillagaskade, Padiyapalella, Napititenna, Mahawewa and Meeriyagolla villages. The purpose was to examine current stability conditions of selected landslide types and provide suitable mitigation measures.

In the laboratory aerial photographs of the study area (1:40,000) were examined. Landslide Hazard Zonation Maps (1:10,000) were studied and Global Positioning System (GPS) maps were developed for the study area and surveying of the landslide was done in selected areas.

Landslide types (slides, slumps, earth flows, subsidence) were identified in recent as well as old landslide deposits with emphasis on the morphological, structural and geological aspects. The stability conditions of gneissic and other rock outcrops and landslides around a major school of the area as well as other locations were investigated. The mitigation measures in place were studied and necessary modifications such as construction of cut-off drains, surface drains, stone fences, retaining structures and gabion baskets were suggested for selected sites in consultation with affected villagers. The villagers, school children and officials in the study area were educated about potential dangers, signals, and possible locations of landslides.

The study highlights the importance of recognizing old landslide sites and such unstable locations should be avoided in constructions practices. The highly weathered gneisses too are not suitable for construction. Quartzites, charnockite and marble are suitable for construction but geological, structural and morphological aspects of the sites should be carefully studies.