

Changing Crop Pattern in Central Highlands of Sri Lanka; Reasons and Consequences (A Case Study of Aranayaka Samasara Mountain area)

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The case study discusses changing crop pattern in central highlands of Sri Lanka and the case focused to Aranayaka Samasara mountain area. Especially it has drastically been changed the ecosystems of central highlands without concerning the land condition and their consequences. Disasters, which have been occurred in central highlands, have also been increased with the intensity and the number of disasters and Aranayaka landslide, which was occurred on 17 May 2016, is one of the best evidence. The case study paid attention about three crops as Tea, Rubber and Home Gardens. The main objective of the study is to identify the pattern of crop changes in the study area. There are two specific objectives as find out reasons and consequences reference to the crop pattern changes. This case study proves the significance of cropland management of hilly areas in Sri Lanka

The study found the cropland pattern of the area had changed within last 50 years of period. The area encompassed by major Tea and Home Gardens with minor Rubber lands. Apart from that, the area had exposed to the excessive land preparation, and took very limited remedies as application for the conservation of slopes plus extreme land uses denoted near steep slopes of the area as remain poor land management system. When concluding with all above results the changes of crop pattern has changed without concerning the fragile environment of the area and just concern short-term benefits from the harvest of the croplands. The major consequence due to this crop pattern change is, the area has exposed to disaster as landslide and made unstable banks.

These results were taken by applying both cartographical and ground level analysis. Cartographical analysis based on land covers in 1956, 1981, 1992, 2012 and 2016. Arc Map 10.1 used as a Geographic Information System (GIS) tool and relevant Geoprocessing techniques were applied. The ground level analysis verifies the story of cartographic contrast changes.

Keywords: Aranayaka, Central Highlands, Changing Crop Pattern, Land Cover Changes, Sri Lanka

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