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**Analysis of Environmental and Socioeconomic Impacts Caused by Destruction of Mountain Forest in Upper Watershed: Uma Oya**

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**Abstract**

According to environmental economics, the mountain forests cannot be evaluated as good in a market, but it plays an essential role in the economy. However at present, the extent of the upper watersheds destructions are increasing. Therefore the aim of this study is to analyze the environmental and socioeconomic impacts which are caused by the destruction of mountain forests in upper watersheds at Uma Oya. We used direct observation and non-structured interviews with 200 residents and 5 Grama Niladaries to collect primary data. The upper watershed project reports and scholarly articles were used secondary data. Deforestation and forest fire are the main reasons for destructing mountain forests of the selected DSDs, causing both long and short-term impacts. Soil erosion is a long-standing problem in Uma Oya upper watersheds where the significant portion of the area is used for cultivation practices causing severe erosion. The eroded soil mixes with the water in Uma Oya and the water gets brown color throughout the year. The presence of eroded soil particles affects to the water quality. North-East monsoon period intensifies erosion and also soil deposits to low-laying areas. During the dry season, the water sources are drying rather than past years due to the destruction of the forest cover in the upper Uma Oya watershed. This causes to long-term impacts on the unique biodiversity and the climate of the area. 95% of people in these DSDs depend on agriculture as their main livelihood, which affects by the long-term destruction of mountain forests in upper watersheds due to water scarcity during the dry season. This also causes difficulties in supplying water to households. The upper watershed areas in Uma Oya are identified as landslide-prone areas majorly due to the forest destructions. All these factors lead to economic losses to the farmers throughout the year. The findings of the study confirmed that the mountainous forests at upper watersheds in Uma Oya continue to degrade over time and cause environmental and socioeconomic impacts such as a decrease in water capacity, soil erosion, decreased crop yield, property damages, and life-threatening. Therefore it is a responsibility to preserve the upper watersheds in Sri Lanka which survive our future generation.

**Keywords:** Upper watersheds, Mountain forests, Soil erosion, Landslides, Crop yield