

Watershed degradation leads to accelerated ecological degeneration, reduced economic opportunities and increased social problem. In Sri Lanka, about 0.6 million hectares of land in Sri Lanka have been estimated as degraded land. This study focuses on the Siyambalagoda Oya catchment, which is a sub basin of the Nilwala river basin. The basin covers 118 km² of land. The main objective of this study is to identify causes and consequences of watershed degradation. Data collection methods involve, field questionnaire surveys, field observation, air photo interpretation, and discussion with officials and community based organizations.

Natural causes such as high intensity and duration of rain, high stream density and steep stream gradients have contributed to degradation. Man-made causes such as deforestation, encroachment of stream reservations, inappropriate land management and institutional and socio-economic issues have substantially contributed to degradation. Forestland decreased by 50 percent during the last three decades. Many increased demand for building materials, inadequate forest management and protection are major causes of deforestation.

Uncontrolled land use changes have triggered watershed degradation in many occasions. The growing need for new agricultural land has also led to illegal encroachment on forestland. Especially tea growing area increased by about 50 percent during the last three decades.

Socio-economic reasons such as lack of incentives for people's participation and limited awareness of importance of watershed management at all levels of society and government, land tenure problems are identified as causes of watershed degradation. Adverse consequences such as drying of 38 natural streams, accelerated soil erosion and rapid disintegration of the self-sustained agro-ecosystem in the study catchment were identified as causes of degradation. Therefore, recommendations are made to adopt watershed management action for protection of the environment.