

An economic assessment of on-site effects of soil erosion in potato lands in Nuwaraeliya District

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It has been emphasized that soil erosion was an environmental issue in the Nuwara-Eliya district over the past three decades. The reasons adduced for the soil erosion have been sloppy landscape, high rain fall and improper land uses. Of these, the improper land use can be sited as the main reason for soil erosion in the past three decades. Therefore on-site soil erosion along with potato cultivation points to serious environmental issues of the present day. The Universal Soil Loss Equation (USLE) has been used to assess the rate of soil losses and the Replacement Cost approach was used to assess on-site cost due to soil erosion.

According to the analysis, the loss of soil with potato cultivation was 15.28 metric tons in Maha season and 9.5 metric tons in Yala season.

The economic value of the soil lost along with the potato cultivation was Rs. 3555 per hectare in Maha season and Rs. 3625 per hectare in Yala season. This cost must, be added on to the productive cost. However since this is not done, this problem will be a serious issue in the future. Therefore the potato growers themselves will have to take appropriate measure to minimize the adverse effect of soil erosion.

Key words: Soil erosion, Environmental issues, Replacement cost approach

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