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Institution : PGIA

Designation :

Title : *Impact of Land Tenure on Investment in Soil Conservation Measures in Kurundu Oya Catchment*

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Background:

With the enactment of the Crown Lands Ordinance in 1840 and increasing population, land has become a scarce resource in the Kurundu Oya catchment. This has resulted in encroachment on protected lands, forest reserves, etc. In addition, there are privately-owned lands and lands given under Swarnabumi or Jayabumi grants and various other types of lands. These lands have been utilised for agricultural production without adopting proper soil conservation measures, resulting in soil erosion, loss of soil fertility and deterioration of water quality.

Objectives:

This study assesses the impact of land tenure on investment in soil conservation measures in Kurundu Oya catchment, which, among other factors, affects land degradation.

Research Methodology:

The study is based on primary and secondary data. The primary data on land tenure and soil conservation measures were gathered by doing a questionnaire survey for 45 households, growing non-plantation crops, selected by using stratified random sampling. Stratification was based on the location of the households in the catchment area. Fifteen farmers from each, Mahakudugala, Kumbalgamuwa and Kalaganwatte, representing high forest area and the two sides of the catchment area respectively were selected for the survey. The secondary data included topographical and soil data of Walapane area. Proportions of the relevant variables were estimated to describe the situation, and matrix ranking done to identify factors related to adoption of soil conservation measures.

Research Findings:

Cultivation of vegetables such as beans, chillies, tomatoes, maize, etc. is the main economic activity. Nearly half of the land holdings are less than one hectare. These lands are under Swarnabumi or Jayabumi grants or permits given under land development ordinance (LDO). Nearly one third of the lands are privately owned, and 20% of lands are given under Swarnabumi or Jayabumi grants. Encroached lands are about 11%. Average monthly income of households varies from Rs 3000 to 4500.

The awareness and the level of adoption of soil conservation measures were low. More than two thirds of farmers were not aware of soil conservation measures. High costs were the main reason for poor adoption. The results of the matrix ranking showed that the level of erosion in encroached lands was very high while privately-owned and granted were moderately to highly eroded. On an average, 56% of lands were highly eroded and 38% were moderately eroded.

Nearly one third of private land holdings and 20% of granted lands adopted soil conservation practices, whereas it is only 7% in the encroached lands. The most common method of soil erosion control are contour bunds mainly due to its low cost and easiness.