Effect of Socio-Economic Factors on Adoption of Soil Conservation Measures in Kurundu Oya Sub Catchment

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ABSTRACT. Human induced soil erosion continues to be a major issue in terms of crop production and river water quality of the Upper Mahaweli Catchment Area (UMCA). Although the direct causes of soil erosion are well known, the underlying root causes are embedded in socio-economic conditions in the society. Many researchers have pointed out that the problem of low adoption is associated with incompatibility of the technology with the prevailing socio-economic condition of the community. Therefore, an attempt was made to identify the constraints to adopt soil conservation measures in the study area. The study consisted of three steps including a questionnaire survey, in depth interviews and transects walks. According to the results of the study, the investment on soil conservation measures is likely to increase with the farm income, level of awareness and the ownership security of the land. It was identified that even the encroachers (people who encroached the state lands) can be mobilized towards soil conservation to a certain extent through awareness programs. The capacity of the extension service has to be strengthened in order to make the farming community aware of soil conservation. Land alienation programs could make effective changes in soil conservation by giving social values to the land owner through a more secure land tenure system.

INTRODUCTION

Human-induced soil erosion poses a great threat to sustainability of soil and water resources in the Kurundu Oya sub catchment of the Upper Mahaweli Catchment Area (UMCA). Middle and upper parts of the sub catchment are among the areas mostly affected by soil erosion (Kumarihamy and Dayawansa, 2009). Human-induced soil erosion in the UMCA was accelerated during the colonial period with the introduction of plantation agriculture. The evidence of the first attempt made to control soil erosion dates back to 1873, when the Secretary of State ordered that, no land above 5000 feet should be alienated (Madduma Bandara, 1997). Then the Forest Ordinance (1907) was enacted by the colonial administration, mainly to restrict encroachments by peasants. The Soil Conservation Act (1951) was introduced to make provisions to acquire sensitive lands for conservation purposes, to control exploitation of forest lands and to provide assistance to owners of lands in sensitive areas. Several donor-funded projects have been implemented to address the issues of the land degradation in the UMCA during the past two to three decades. Some of these projects were Land Use Planning Projects in 1983, Upper Mahaweli Management

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