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The Efficacy of the Soil Conservation Technologies Adopted in Mountain Agro-Ecosystems in Uganda

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Chapter

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Abstract

This study examined the efficiency of soil conservation practices, under current cropping systems in Kasese district, Mt. Rwenzori. A longitudinal transect design was used in this study. Transects of 100 m wide were drawn on 6 selected ridges, within which 102 peasant farms with different conservation technologies were selected. The severity of erosion on the selected farms, assessed from the areal extent of physical erosion indicators, was used to determine the efficiency of the soil conservation technologies in controlling erosion. The results indicate that terracing, found on 57.8% of the selected peasant farms, was the most dominant soil conservation practice on the Rwenzori Mountain slopes, followed by trash bunds, water diversion channels, water collection ditches, and mulching. It was, however, evident that despite the adoption of soil conservation practices by some farmers, soil erosion remained high, especially on farms where one conservation practice was solely used. It is therefore recommended that a more comprehensive soil conservation strategy, involving the use of agronomic soil management and mechanical methods of soil conservation, be emphasized in the Rwenzori highlands.

Keywords

Erosion Conservation technologies Adoption and efficiency

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