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Influence of Agroforestry on Rural Income and Livelihood of Smallholder Farmers in the Semi Arid Region of Sub Saharan Africa

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Abstract

Semi arid lands typically suffer from sustainable land use challenges including climate variability, declining agricultural productivity, low economic prowess and poor livelihood conditions. In order to sustainably address these challenges, agroforestry has been fronted as a critical entry point allowing for the integration of trees on farms and diversification of production in agricultural landscapes. Nevertheless, the contribution of agroforestry to socio-economic and rural livelihood in several developing countries remains debatable. This study determined the influence of agroforestry on rural income and livelihood of smallholder farmers in Machakos County (Kenya). The study was conducted using stratified, random sampling. Data were collected using questionnaires and interviews. Results showed that agroforestry was adopted by 82% of the respondents as a strategy for livelihood improvement in the region. Total income was higher among adopters from timber, fuel wood, posts/poles and fodder. Adopters also had more money to spend on food, clothing, education, medicine and basic needs as a result of revenues from agroforestry. The overall gross revenue, net returns above variable costs and total costs were also higher among adopters compared to the non adopters due to sales of agroforestry products. The study recommends adoption of agroforestry as a strategy to boost rural income and livelihood.

Keywords: Agroforestry, Socio-economic, Rural income, Livelihood, Machakos, Sub Saharan Africa