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Abstract

Majority of farmers in the Coast Region of Kenya practice the agri-silviculture farming system as a source of their livelihood and well-being. However, most of them grow trees and agriculture crops on smallholdings that are characterized by a limited resource base calling for the adoption of enterprises with the potential of optimizing production and economic returns. Thus, financial assessments were carried out for both the trees and agriculture crops to establish profitable ones. The study was carried out as a cross-sectional survey using a questionnaire to collect data from smallholder farmers with woodlots and field crops selected using stratified random sampling procedures. The results reveal that woodlots were more profitable at their biological rotation than commonly grown field crops. Woodlots had average annual net earnings of US$364.46 per acre spread uniformly over their biological rotation. On the other hand, annual earnings from highly ranked field crops averaged US$177.39 per acre. It was, therefore recommended that farmers be encouraged to engage in woodlots but inter-crop them with field crops at the initial stages of establishment to help diversify, and optimize their incomes and food self-sufficiency at the farm level. Farmers are also advised to mechanize and use other technologies that minimize labour usage that was observed to be the highest cost component in woodlot establishment.