Agroforestry Systems and Practices and Its Adoption in Kilombero Cluster of Sagcot, Tanzania

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Abstract : Agroforestry systems and practices are perceived to improve livelihood and sustainable management of natural resources. However, their adoption in various regions differs with the biophysical conditions and societal characteristics. This study was conducted in Kilombero District to investigate the factors influencing the adoption of different agroforestry systems and practices in agro-ecosystems and farming systems. A household survey, key informant interviews, and focus group discussion was used for data collection in three villages. Descriptive statistics and multinomial logistic regression in SPSS were applied for analysis. Results show that Igima and Ngajengwa villages had home garden practices dominated, as revealed by 63.3% and 66.7%, respectively, while Mbingu village had mixed intercropping practice with 56.67%. Agrosilvopasture systems were dominant in Igima and Ngajengwa villages with 56.7% and 66.7%, respectively, while in Mbingu village, the dominant system was agrosilviculture with 66.7%. The results from multinomial logistic regression show that different explanatory variable was statistical significance as predictors of the adoption of agroforestry systems and practices. Residence type and sex were the most dominant factor influencing the adoption of agroforestry systems. Duration of stay in the village, availability of extension education, residence, and sex were the dominant factor influencing the adoption of agroforestry practices. The most important and statistically significant factors among these were residence type and sex. The study concludes that agroforestry will be more successful if the local priorities, which include social-economic need characteristics of the society, will be considered in designing systems and practices. The socio-economic need of the community should be addressed in the process of expanding the adoption of agroforestry systems and practices.

Keywords : agroforestry adoption, agroforestry systems, agroforestry practices, agroforestry, Kilombero
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