

## ABSTRACT

Agroforestry Systems (AFS) are integrated land use systems involving trees, agricultural crops, and animals simultaneously or sequentially, with the objective of sustainably increasing their total productivity per unit area. Despite strong literature evidence describing the benefits of agroforestry to livelihoods in other parts of the world, there is little information as such in Soin Ward of Kericho County, where sugarcane competes with tea as a major cash crop. This study aimed at classifying agroforestry systems and evaluating their socio-economic benefits in Soin Ward, Kericho County, Kenya. The study adopted a qualitative research design through the administration of pretested questionnaires on types of agroforestry systems, the scale of production, land utilisation, preference of trees and sugar cane varieties and their interactions with 384 respondents in lower, upper, and midland parts of Soin Ward. Four (4) classes of agroforestry systems were identified that comprised (48.2% agrosilvopastoral, 31.6% agrosilvicultural, and 20.2% silvopastoral); (16.2% protective and 83.8% productive); (45.7% subsistence and 54.3% commercial), and integrated farm-based agroforestry 47.4%, homestead (6.8%), animal farm (31.4%), dairy farm (1.4%), and forest land (13%) respectively. The majority of the respondents (42.7%) preferred *Grevillea* tree species for blending with sugarcane in a treesugarcane agroforestry system in comparison with cypress (29.4%), eucalyptus (15.1%), casuarina (12.6%), and calliandra (0.2%) respectively. Sixty (61.7%) plant trees along the boundary, 24% as woodlot, hedge raw (8.9%), intercropping/mixed (3.1%), and alley cropping (2.3%). Direct benefits from the identified agroforestry systems include; income (67.6%), food (8.3%), and employment (24.1%). Indirect benefits include provision