

The objective of this study was to assess household tree planting for fuelwood production and investigate current constraints to tree establishment in Kiambu, Thika and Maragwa Districts of Central Kenya. The study was undertaken through household survey in Kiambu, Thika and Maragwa Districts of Central Kenya. The districts were purposively sampled on the basis of various factors which include diverse ecological conditions and population densities among others. Sampling of the households was done using multistage stratified random sampling technique where stratification was based on the weights in socio-economic and climatic activities as indicators. The results of the study showed that over 90% of the households in the three districts have planted trees in their farms and tree planting was found to be positively correlated to household farm size. Boundary tree planting was the most preferred as compared to woodlots which had the least preference. *Grevillea robusta* and *Eucalyptus* species were the most preferred tree species. Inadequate land was the leading major obstacles to tree planting in the three districts with 74, 60 and 57% of the household respondents followed by scarcity of seedlings with 16, 33 and 28% in Kiambu, Thika and Maragwa districts, respectively. The third most important constraint was tree establishment cost. The household land size ownership varied among the districts with a range of 1.9 to 3.6 acres. The small household land holdings indicate the need to integrate woodfuel production with farming systems as agricultural sector has a key role in supplementing wood production. The study was concluded by recommending development of decentralised woodfuel planning with site specific implementation strategies in the study area as there were varying tree planting parameters among the districts. Establishment of tree nurseries was also recommended for a sustainable seedling production.