

**ON-FARM TREE/SHRUB SPECIES DIVERSITY, DISTRIBUTION AND
UTILIZATION IN ASURET SUB COUNTY, SOROTI DISTRICT**

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ABSTRACT

A study of on-farm tree/shrub species diversity, distribution and utilization by the local community of Asuret sub county, Soroti district was conducted from October 2008 to September 2009. The objectives were to (1) examine the diversity and distribution of tree/shrub species on-farm (2) identify tree/shrub species used and prioritized/preferred by the local communities; (3) assess the management and conservation of on-farm tree/shrub species and (4) assess the potential, opportunities and challenges of promoting on-farm tree/shrub species growing. To collect data, a structured questionnaire was administered to 60 randomly selected respondents to identify on-farm tree planting activities, management and utilization. Naturally growing spared/retained and/or planted tree/shrub species were identified, counted, and recorded from twenty four plots measuring 40 x 40 square meters established along transects on farmlands. Two transects were established in each parish hence, a total of six transects of 160 meters long were used. Data were entered in MS Excel and analyzed for tree/shrub species diversity and dominance. Weighted ranking was used to show the tree species preferred by farmers. On-farm tree/shrub diversity was relatively high with ($H'=3.131$ and $J' = 0.800$). Over 90% of the respondents retained/protected naturally regenerating tree/shrub species particularly *Tamarindus indica*, *Vitellaira paradoxa*, *Ficus sycomorus*, *Acacia hockii*, and *Albizia zygia*. On-farm tree/shrubs were spared/retained or planted to provide fruits, fuel wood, fodder, medicine and to enhance conservation of soil and water. The available opportunities included availability of land (38.3%), willingness and interest to plant trees (21.6%) time and labour (16.7%), extension services (NAADS) (10%) and willingness of farmers to learn and to be trained (5.0%). The major challenges identified by farmer households in managing and conserving tree/shrub species in the area included pests and diseases(05%), shortage of quality planting materials and tools (3.3%), limited land (3.3%), labour (3.3%) and poverty levels (3.3%)