

**CONSERVATION OF INDIGENOUS TREE SPECIES BY  
LOCAL PEOPLE AROUND MABIRA FOREST  
RESERVE, CENTRAL UGANDA**

BY

**DENIS OCHAN**  
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BACHELOR OF TOURISM  
MAKERERE UNIVERSITY

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## **ABSTRACT**

Unsustainable exploitation of forests has led to loss of indigenous tree species. The extent and nature of the loss is, however, not clearly known around Mabira Forest Reserve. This study assessed the conservation of indigenous tree species by local people around the forest reserve within different land uses. The objectives were: to determine tree species diversity in different land use types around Mabira Forest Reserve, to assess the practices used by local people to conserve indigenous tree species, to relate the conservation practices to socio- economic characteristics of the local people, and to determine the constraints and propose strategies for the conservation of indigenous tree species outside protected areas. Trees over 10 cm diameters were inventoried in 77 randomly selected grid points in the forest, mixed cropping fields and sugarcane plantations. A total of 105 questionnaires was also administered to randomly selected household heads in 30 villages within enclaves. These data were supplemented by three focus group discussions held with key informants to validate responses. The results show that the forest reserve had significantly more species (28), than the mixed cropping (16), as well as the sugarcane plantations (14). The highest tree diversity ( $H'=3.03$ ), was also recorded in the forest, followed by the sugarcane, and mixed cropping land uses respectively. The sugarcane plantation land use system was very similar in species composition (62%) to the forest reserve, while mixed cropping had only 30% similarity with the two. The trees were used for firewood, building poles, fruits, medicine, and contributed to rainfall, moderate temperatures and fertility of soils. Generally, the conservation of indigenous tree species by local people is sustainable, and can be improved through strategies such as planting on-farm, collaboration of all stakeholders, distribution of seedlings, and provision of farm inputs.