Traditional Knowledge on Tree Management and Forest Restoration of Mabira Central Reserve, Uganda

MULUGO, L.W. [1]
NABANOGA, G.N.[1]
TURYAHABWE, N. [1]
EILU, G. [1]
GALABUZI, C.[1]
TABUTI, J.R.S[1]
KAKUDIDI, E. [1]
SIBELET, N.[2]

Introduction: Tropical forest degradation and loss has escalated worldwide and Mabira forest is not exceptional (Figure 1). Efforts are needed to reverse this situation by combining traditional forest management with new innovative approaches. This study was undertaken to identify appropriate forest restoration measures based on traditional forest restoration and tree management practices of local people around Mabira Forest Reserve (MFR).
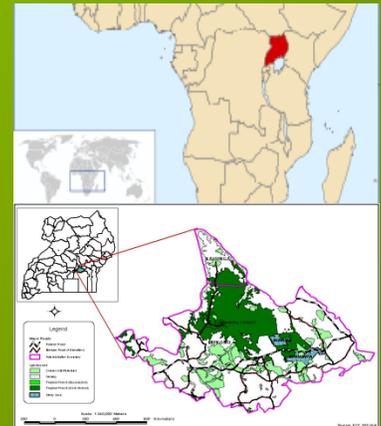

Figure.2: Location of Mabira Forest Reserve

The study area and methods

The study was conducted in Mabira forest reserve located between 0° 22′ and 0° 35′N and 32° 56′ and 33° 02′E in Mukono and Kayunga districts (Figure 2).The forest reserve has 27 enclaves inhabited by over 17,314 households. Data were collected using 83 household interviews, 6 focus group discussions and participatory field visits with key informants.

Results

Traditional forest/tree management practices in and around the reserve include (i) bark slashing (Figure 3), (ii) thinning, (iii) pruning (iv) pollarding (v) weeding, (vi) slashing, (vii) watering, as well as pest/disease management for on-farm trees. Forest restoration practices include enrichment planting, forest boundary planting and subconscious tree planting/retention on-farm (Figure 4). Up to 57% of the respondents planted/retained trees on-farm. The commonly planted species (e.g. *Ficus natalensis* and *Albizia glaberima*) belonged to the families of Moraceae (55%) and Fabaceae (35%). Women were more involved in forest restoration than men (Figure 5). The age group most involved in restoration/conservation activities was 35-47 years (Figure 6).

Figure 1: Degraded sites in Mabira Forest Reserve

Figure 4: Tree deliberately retained on-farm

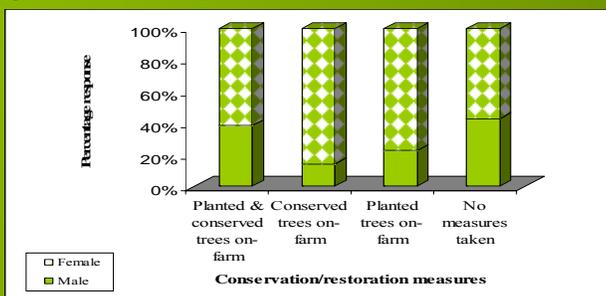Figure 3: Slashed bark of *Persea americana* to prevent rotting of young fruits

Figure 5: Conservation & restoration measures undertaken by communities in and around MFR disaggregated gender
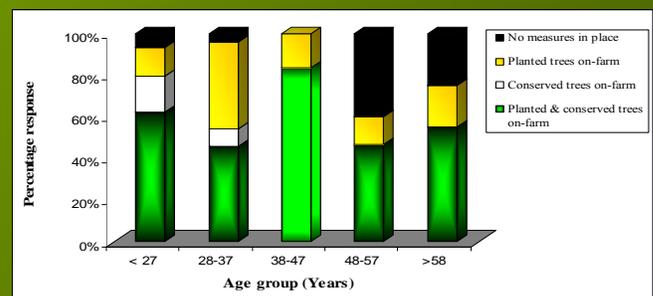

Figure 6:Conservation & restoration measures undertaken by communities around MFR disaggregated by age group

Conclusion and recommendations

Despite ongoing deforestation; planting, retaining and managing trees on-farm for short-term products and long-term investments were practiced and should be encouraged to promote restoration. Traditional knowledge is used to guide the choice of trees for on-farm planting. e.g. *Albizia glaberima* for nitrogen fixation and *Ficus natalensis* as a key stone specie and these should be promoted to enhance restoration.

[1] Faculty of Forestry & Nature Conservation, Makerere University
[2] CIRAD, TA 60/15.73, Rue J-F Breton 34398 Montpellier Cedex 5, France

http://foreaim.cirad.fr

For further information
mulugo@forest.mak.ac.ug
2nd World Agroforestry Congress, 23rd-28th Nairobi-Kenya