

# QualiTtree

## Research based local tree oil production in West Africa

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### LOCAL KNOWLEDGE

#### Goal

Use local knowledge to improve quality and sustainable exploitation of existing and new native oils.

#### Results

Sixteen species (useful oil species for locals): VP, EG, CP, LL, PB, BS, AD, BoA, DM, BA, SB, KS, AA, DO, LM & RS.

#### Goal

Identification of oil composition of native tree species with an economic and nutritional potential.

#### Results

Fatty acid (FA) composition has been determined for 17 species and 4 groups of oils identified:

- 1: Oils rich in saturated and monounsaturated FA.
- 2: Oils rich in saturated, di- and triunsaturated FA.
- 3: Intermediate between Group 1 & 2.
- 4: Oils characterized by high content of monounsaturated lipids.

### OIL COMPOSITION

#### Goal

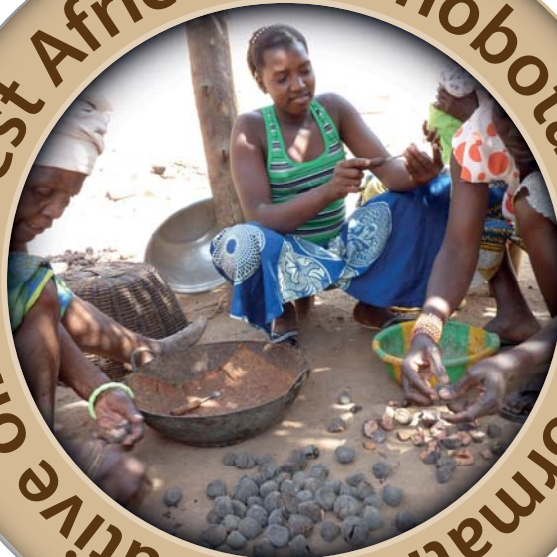
Assessing resource availability of native oil trees in local communities to ensure sustainable production.

#### Results

Most useful species are declining in the local environment: CP, PB, KS, AA & RS (tree planting is necessary to ensure sufficient resources of native species).

### RESOURCE AVAILABILITY

### Ethnobotanical information on native oils in West Africa



#### Goal

Tree planting and sustainable management of oil producing native trees.

#### Results

Plantations initiated for 5 native species: CP & BA (Mali) & CP, BA, LM, SB & PB (Burkina Faso).

### TREE PLANTING

#### Goal

Development and amelioration of local research-based industrial oil production and marketing.

#### Results

Training on improved CP-oil production (Burkina Faso). Consideration for production: PB, AA, SB & LM

### OIL PRODUCTION

#### Goal

Capacity building of a new generation of specialists in sustainable oil production in West Africa.

#### Results

- 6 PhD- and 3 master students (in progress).
- 9 master students and four forest engineers (educated).
- Local communities trained in seed collection, storage and improved oil production.

### CAPACITY BUILDING

#### Tree species

*Adansonia digitata* (AD); *Azelia africana* (AA); *Balanites aegyptiaca* (BA); *Blighia sapida* (BS); *Borassus akeassii* (BoA); *Carapa procera* (CP); *Combretum aculeatum* (CA); *Daniellia oliveri* (DO); *Detarium microcarpum* (DM); *Elaeis guineensis* (EG); *Hannoa undulata* (HU); *Khaya senegalensis* (KS); *Lannea kerstingii* (LK); *Lannea microcarpa* (LM); *Lannea velutina* (LV); *Lophira lanceolata* (LL); *Maranthes polyandra* (MP); *Parinari curatellifolia* (PC); *Pentadesma butyracea* (PB); *Raphia sudanica* (RS); *Sclerocarya birrea* (SB); *Sterculia setigera* (SS); *Vitellaria paradoxa* (VP) *Ximenea americana* (XA)

