

# The ethnobotany of baobab and tamarind

## A regional study in West Africa



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# The Domestication and Development of Baobab and Tamarind (DADOBAT)

The DADOBAT project aims at developing sustainable production systems of baobab and tamarind in three West African countries based on characterisation, conservation and use of local genetic resources. Issues of new crop/niche development are addressed through a holistic research approach and multidisciplinary research activities. Results from the ethnobotanical field study inform the DADOBAT partners about local preferences and conditions guiding further research towards the development of new, sustainable cropping techniques and improvement of processing the two trees' products. This is expected to have a positive impact on food security and income generation in the countries involved in the project. This project is funded by the European Union (6th framework, INCO-DEV). <u>www.dadobat.soton.ac.uk</u>

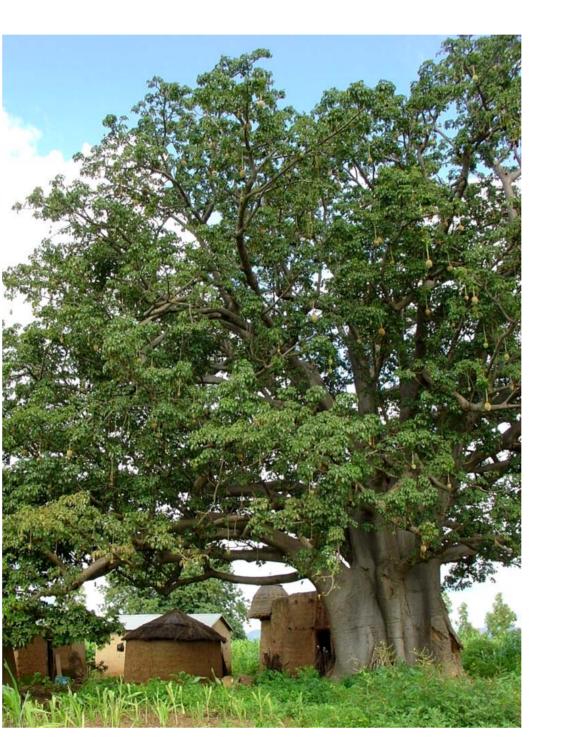


# Ethnobotanical field research in Benin, Mali and Senegal

Semi-structured and structured interviews, group discussions and participatory research methods were conducted with 220 informants from 11 ethnic groups throughout Benin, Mali and Senegal covering 4 agroecological zones (Soudano-Guinean, Soudanean, Soudano-Sahelian, Sahelian). Indigenous uses and management of baobab and tamarind were documented, including:



#### *Tamarindus indica* L.



Adansonia digitata L.

Nutritional, medicinal, ethnoveterinary and spiritual use
Handcraft and construction

• Cultivation, harvest, post-harvest processing, storage. A total of 300 different uses were recorded for the baobab and 250 uses for the tamarind tree. All parts of the trees are used.







Left: The problem of overharvesting is displayed in an educational poster (IER, Mali). Middle: A woman with a long cane to harvest baobab fruit (Benin). Right: The effect of overharvesting the leaves in the lower part of the tree: fruiting occurs only in the upper undisturbed part of the crown (Mali).

#### Processing of fruit pulp into 'crème de baobab' (Mali)



Processing of fresh leaves into baobab sauce (Mali) All pictures by C. Van der Stege

### Conclusions

Rural populations in the West African Sahel use baobab and tamarind tree products almost daily as main ingredients in their diets, medicinal, ethno-veterinarian and medico-magical applications. Baobab and tamarind products are highly valued on local and regional markets increasing the pressure on existing tree populations, which are continuously overharvested. At the same time baobab and tamarind are rarely planted. Local communities should be supported through the wider dissemination of local knowledge and assisted in blending local with modern crop management techniques as part of a participatory tree domestication (Tchoundjeu et al., 2006; Leakey et al., 2003) strategy. Existing agricultural systems, such as farmed parklands could be diversified by integrating more indigenous trees. In addition to scientific publications, dissemination manuals have been developed and will be the basis for workshops in the local communities, as organised by our African project partners.

#### References

Tchoundjeu, Z.; Asaah, E.K.; Anegbeh, P.; Degrande, A.; Mbile, P.; Facheux, C.; Tsobeng, A.; Atangana, A.; Ngo-Mpeck, M.L.; Simons, A.J. (2006), Putting participatory domestication into practice in West and Central Africa'. *Forest, Trees and Livelihoods*, 16, 53-69. Leakey, R.R.B.; Schreckenberg, K., Tchoundjeu, Z. (2003) 'The participatory domestication of West African indigenous fruits'. *International Forestry Review*, 5 (4), 338-347.



Please find further details on project partners and staff at: www.dadobat.soton.ac.uk