

ADANSONIA DIGITATA

Farmers' preferences

Franzel et al (2008) reported on a farmer preference survey in four Sahelian countries: Burkina Faso, Mali, Niger Senegal. Farmers scored *Adansonia digitata*, also called baobab, as the most important indigenous species in Niger and Senegal and among the top five in Mali and Burkina Faso. In the miombo woodlands of Southern Africa surveys found that farmers considered it to be among the top 20 most important indigenous species in Malawi, Zambia, Zimbabwe and Tanzania.

A study by Nzung'ya (2007) on environmental perceptions and attitudes of local communities towards sustainable harvesting of Baobab in Zimbabwe, involved interviews with 100 respondents from Nyanyadzi and Gudyanga wards in eastern Zimbabwe. It reported that soil conservation was ranked to be the most important benefit that baobab offers to the community of Muwusha, whilst food and income were ranked second and third respectively. The baobab tree was not perceived as a very important firewood source within the area (Table 1)

Table 1: Attitudes and Perceptions of Local People in Nyanyadzi and Gudyanga Wards in Zimbabwe on the Importance of the Baobab Tree

Uses	Mean score on importance
Control of soil erosion	3.58
Source of food	3.53
Income source	3.42
Employment source	3.31
Source scenic environmental aesthetic beauty	3.03
Source of forage for livestock	2.49
Cultural, traditional and religious inspiration	2.49
Medicine	1.59
Firewood	1.05

Source: Nzung'ya 2007 (1= Not Important, 4= Very Important)

Extent of adoption

Simitu and Oginosako (2005) reported that in Kitui district in Kenya baobab trees exist both on the farm and in the wild. Trees on farm existed prior to land ownership. Other small trees are growing on some farms. Establishment is thus by natural regeneration and nobody ever planted a baobab tree. They, however, take care of the trees by clearing bush around them and protecting the small ones from destruction by domestic or wild animals. The trees are scattered all over the farm. On average, each farm has 7 trees, but most of the trees are found in the wild (uncleared bush).

A study by Jama (2008) on indigenous forests in the drylands of East and Central Africa reported that baobab density ranges from 0 to 60 stems per hectare in the natural woodlands and declines

to 0 to 2 trees per hectare on farms. The lower density on farms is attributed to the free grazing of wildings and fires. Knowledge on genetic variability within the region is also limited.

Marketing

One kilogramme of Baobab seeds costs USD 0.7 in the Kitui area of Kenya (Simitu 2005). Typical prices in the Sahel region are shown in table 1.

Table 1. Typical prices for products in the Sahelian region

Product	Price per kg (USD)
Fresh Leaves	0.06- 0.18
Dried Leaves	0.09- 0.18
Dried Leaves for export	2.73
Powder from dried leaves	0.23- 0.27
Whole fruit sold locally	0.18- 0.46
Whole fruit sold for export	6.4

Source: DFID, ICRAF, IFPRI (2006)

Sidibe (2002) notes that baobab products on the whole, are sold in local, informal markets. The products commonly sold are leaves (fresh and dried), fruits, craft products and bark (fibre) products. Intermediaries also operate and trade in the larger urban markets. The market chains and infrastructure, however, are poorly developed and inconsistent and as such it is difficult to assess the demand and supply factors which underlie the market. The study notes that, harvesting and marketing of baobab products are not the primary activity for most people. Marketing of baobab products is a secondary means of income generation for most people and can provide a much needed buffer in times of drought and famine.

There is a small export industry, particularly for cosmetics. Some larger companies are becoming more interested in the 'ethnic' and 'exotic' products which raise a good price in the international market. The export trade for baobab is still very small; however a few products are now available in Europe and the USA.

Further reading

DFID, ICRAF, IFPRI (2006) Baobab; *Adansonia Digitata Field Manual for Extension Workers and Farmers*. Practical Manual No. 4

Franzel, S., Akinnifesi, F., and Ham, C. (2008). Setting priorities among indigenous fruit species: Setting priorities among indigenous fruit tree species in Africa: Examples from southern, eastern and western Africa In Akinnifesi, F.K., Leakey, R.R.B., Ajayi, O.C., Sileshi, G., Tchoundjeu, Z., Matakala, P., and Kwesiga, F.R. (eds) *Indigenous Fruit Trees in Southern Africa: Domestication, Use, and Commercialisation* (Wallingford, UK: CAB International), pp. 1-27.

Jama, B.A., et al (2008). Comparing the "Big Five": A framework for the sustainable management of indigenous fruit trees in the drylands of East and Central Africa. *Ecological Indicators*, Vol. 8 pp 170-179.

Nzengy'a, M.D. and Mutasa, K. (2007) Environmental Perceptions and Attitudes of Local Communities towards Sustainable Harvesting of Baobab in Zimbabwe in *New Perspectives in Forestry Education*. ANAFE.

Sidibe, M., Williams, J.T. (2002) *Baobab Adansonia digitata*, A monograph.

Simitu, P. & Oginosako, Z. (2005) Socio-economic survey of *Adansonia digitata* and *Tamarindus indica* in Kitui. A paper presented at the Regional workshop, KEFRI Kitui, Kenya 20-24 June 2005. World Agroforestry Centre –Eastern and Central Africa Regional programme (ICRAF ECA).

Simitu, P. (2005) Utilization and commercialization of dryland indigenous fruit tree species to improve livelihoods in East and Central Africa. Proceedings of a Regional workshop, KEFRI Kitui, Kenya 20-24 June 2005. World Agroforestry Centre –Eastern and Central Africa Regional programme (ICRAF ECA) ECA Working paper No.7