

## 1. IRVINGIA GABONENSIS

### Farmers preferences

Franzel et al (2008) carried out a priority setting exercise in Nigeria, Cameroon and Ghana, and found out that *Irvingia gabonensis* is the most preferred indigenous tree species in the humid lowlands of Nigeria and Cameroon. Eighty-six percent of respondents mentioned the species in both countries, with an average preference score of 7.8 in Nigeria and 6.0 in Cameroon (NB: 10 is highest score, 9 second score, etc)

In a study of under-exploited tree crops, Moss (1995) concluded that *I. gabonensis*, also called bush mango, was one of two species that ‘presented the best opportunities for development intervention’. Leakey (2000) lists *I. gabonensis* among the ‘Cinderella’ species that are ideal agroforestry trees because they are already recognised by local people and found in local markets. Since they are indigenous, they are well adapted to the region.

A study by Bisong et al (2009) on indigenous agroforestry initiatives for protected area management in Nigeria shows that irvingia is the most important indigenous tree species on the basis of socio-economic and agronomic performance.

### Extent of adoption

The irvingia trees occur naturally on farms in Cameroon (Atangana 2000), but are planted in home gardens in Nigeria (Ukafor 2001).

A study by Ayuk et al (1999) in the humid lowlands of Cameroon indicates that most farmers maintain mature bush mango trees that are already growing on their land and also transplant wild seedlings onto their farm or raise new seedlings.

### Economics of production

In Nigeria, 12-year old trees have yielded 1060 fruits (180 kg) per tree in high-rainfall areas, but in drier areas yields are less. On average good trees yield 100 kg of kernels per tree (Tchoundjeu 1998)

A study by Ayuk et al (1999) on the economic potential of irvingia in the humid lowlands of Cameroon, shows that there is price variation over the seasons– high prices at the start when availability is low, then reduced prices as the quantity of product increases, and finally a price increase as the products become scarce at the end of the season (Table 1).

Table 1: Mean annual production estimates and value of *Irvingia Gabonensis* in the humid lowlands of Cameroon

Variables	Fruits	Seeds
Production (Kg)	371	56
Sales (kg)	147	28
Consumption (Kg)	194	27
Other (Kg)	29	2
Prices (USD)		
Beginning season prices	0.194	1.086

Middle of season prices	0.066	0.526
End of season prices	0.106	0.76
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Production Values (USD)		
Beginning season prices	31.874	70.146
Middle of season prices	14.254	34.864
End of season prices	19.24	40.454

Source: Ayuk et al  
USD =500 FCFA

## Marketing

There is a demand for Irvingia products in urban areas as well as in rural areas, and much of the trade focuses on moving produce from rural areas into the towns and cities.

Irvingia trees are a valuable source of income for West and Central African farmers. The fruits are sold, but by far the most important product is the kernels, which fetch a price several times higher than the fruits. Irvingia kernel markets extend to local, regional and international levels and there is even inter-continental export. Ladipo (1997) reported that in 1975 the market for kernel products was worth about USD50 million.

Ayuk *et al.* (1999) report that in West Africa the main exporters are the humid lowlands of Cameroon, Nigeria and Côte d'Ivoire, while Gabon, Nigeria, Liberia and Sierra Leone are the main destinations of the product. The demand for kernels in Southern Nigeria alone is around 80,000 tonnes per year (Ndoye *et al.* 1997) and this country serves as both a source and destination for trade.

Ladipo (1997) mentions the sale of processed kernels to the United Kingdom and America, and Tabuna (1997) reports on the trade to Europe. According to Tabuna, there are markets for African NWFPs in France and Belgium which supply African immigrants with bush mango kernels, mainly from Cameroon and Congo. He estimates that there are 100,000 potential consumers in this market.

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