Processing and Trade in INDIGENOUS FRUITS

Forestry Sub-Sector Studies - Briefing 7 - January 2005



This series of briefing notes provides summary information on the various parts of the forestry sector. The studies, commissioned by DWAF, focus on the role that each sub-sector can play in promoting poverty eradication. DWAF recognises the importance forests and forestry play in people's livelihoods and aims to create an environment that will increase forestry's impact on local-level development.

Introduction

- Many edible indigenous fruits are nutritious, tasty and contribute to the food security of rural households. But there are very few indigenous fruit products available in the shops.
- The indigenous fruit sub-sector can be described by the following characteristics:
 - Indigenous fruits have in general a very short shelf life.
 - Harvesting is primarily from wild growing resources and there is no significant cultivation of indigenous fruits.
 - The local market for processed indigenous fruit products is virtually non-existent due to latent demand, but there is a growing export market.
 - Very limited if any local marketing of indigenous fruit products.
- There are very few commercial processors of indigenous fruit products. A number of fruits, such as marula, are processed locally. Rural communities collect and supply fruits to commercial or home industry processing and retail operations.
- There are however potentially lucrative economic opportunities associated with the processing of indigenous fruits, and marulas in particular.

Fresh Fruit for Consumption

- A critical element in the commercial fruit trade is the inability to store fresh fruit for extended time periods.
- A number of indigenous fruits have been analysed and found to have very limited potential for cold storage and fresh marketing.

 Fresh fruit trading is therefore restricted to the supply of raw material to fruit processing operations.

Local communities delivering marulas to the Mirma enterprise in Phalaborwa



Current processing of indigenous fruits

- The main commercial processing enterprises process indigenous fruit into alcohols and fruit juices, jams and chutneys, and oils for cosmetics or cooking.
- These enterprises rely on local community collectors to supply them with fresh fruit for processing. For example:
 - It is estimated that Mirma (involved in the production of Amarula Cream) buys marula fruits from 364 traders and bought an estimated 2200 tonnes of fruit in 2002. At a price of R0.25/ kg, this equates to local incomes of R500 000 being generated from the sale of the raw fruit.
 - In 2003 Marula Natural Products bought approximately 235 tonnes of marula from 42 communities at a price of R 0.35/ kg. This equates to local incomes of R82 250 being generated from the collection and sale of the raw fruit.
- There are also a number of smaller cottage industry operations processing mainly marula jellies and jams for sale on the local market through farm stalls and at game lodges.
- Entrepreneurs from rural communities should therefore be encouraged to become involved in this sector by establishing their own processing and marketing outlets for indigenous fruit products. These business operations should focus on the production of high quality jams, jellies and preserves for both the local and export markets.



Marula Natural Products trucks delivering marula fruit collected and purchased from local communities



Value-adding

- Current value adding activities include the following:
 - Liquor production (Distillation Amarula Cream Liqueur, Distell Corporation)
 - Marula oil (Mirma Products and MNP)
 - Marula nuts (Mirma Products)
 - Making of fruit jams at cottage industry level (sold at farm stalls)
 - Production of indigenous fruit beers for local consumption (informal beer traders).
- The main by-product from the marula fruit pulp processing is marula kernels. These can either be packaged and sold as snacks or processed to extract the oils. For example:
 - During the off-season Mirma employs a group of women to extract the kernels from the marula nuts. These kernels are then roasted and sold as snacks in the local shops (a small 250g packet of kernels sells for about R13).
 - One of the main products of Marula Natural Products is marula oil. MNP has been supplying dried marula nuts back to households for extraction of the kernels. MNP pays R26 per kg for extracted kernels from which they then extract oil. Four tonnes of oil produced in 2001 were reportedly sold on national and international markets and generated an income of R451 885, and a profit of R57 885.
 - The economic benefit to the communities

The labour intensive sorting, cleaning and peeling of marula fruit at one of the processing enterprises





- from the production of marula oil is estimated at R290 000/annum.
- An estimated 2 400 people from 42 communities are directly involved in these value adding activities.

Constraints to Sector Growth

Some of the biggest constraints and blockages in the development of the indigenous fruit sub-sector include:

- The variation in and seasonality of fruit yields
- High perishability of fresh fruit (which cannot be cold-stored as with apples)
- The fruits are sold at relatively low prices and, due to high perishability, cannot be sold outside the production areas where better prices can be obtained
- The supply of indigenous fruit exceeds demand during the fruiting season, with the result that the suppliers are price takers and they have no leverage to increase prices
- Latent local demand for indigenous fruits and products
- Competition from cheap exotic fruit products (e.g. orange juice) and artificially flavored products.

Business Opportunities for Processing and Trade in Indigenous Fruits

- There is currently only a strong focus on the processing of products from marula. There are however other fruit species available that could be developed.
- Opportunities for new and innovative products should be explored and flagship products from other species could be developed and marketed.
- Enterprises should focus on diversifying the product range by using pulps from indigenous species to produce a range of fruit juices, yoghurt, confectionery and preserves.
- The main interventions should focus on initiating partnerships between the existing commercial fruit (indigenous and exotic) processors and poor communities who have direct access to fruits occurring naturally in the rural areas.
- Through such partnerships the business capacity of the larger processors can be used to "push" the products into the market, while communities and small scale entrepreneurs can be involved at various stages in the supply chain.













This study was sponsored by DFID and a copy of the full report on indigenous fruits can be obtained from the Director: Participative Forestry, Department of Water Affairs and Forestry, Pretoria; Tel: 012 336 7718/7719; Fax: 012 336 8937; e-mail: lea@dwaf.gov.za