



**Enhancing the Contribution of Non-Wood Forest Products to Poverty
Alleviation and Food Security in Central African Countries (GCP/RAF/441/GER)**

1. Ricinodendron heudelotii tree

Ricinodendron heudelotii is a tropical African tree that can grow up to an average 40 m in height and 120 cm in diameter with a thick base that extends into creeping roots. In the Central African Republic (CAR), tropical moist forests in the Lobaye region in the South-West are home to significant stands of *Ricinodendron heudelotii* (nzoko or bomboko in local languages and the vernacular name, essessang, in Cameroon and the CAR and a commercial name, njansang).



Picture: Leaves and fruits of *Ricinodendron heudelotii* (Picture: O. Ndoye – FAO NWFP Project)

2. Products derived from Ricinodendron heudelotii and their utility

In the majority of villages and until recently, the use of this tree by inhabitants of Lobaye was limited to the gathering of caterpillars. Its fruits were not valued by local communities because of ignorance about the utility of their kernels.

Implementation of the GCP/RAF/441/GER project made it possible to benefit from the diverse products derived from this tree as the project unveiled techniques for processing its fruits to extract kernels and highlighted their nutritive and commercial values.



Pictures (from left to right): un-cracked nuts, glistening kernels because dried in the sun, dark kernels because dried on a flake (Picture: B. Bokoto de Semboli – FAO NWFP Project)

In addition to the kernels, the tree's bark is used in traditional pharmacopoeia. The sap is generally used as eye-potion to relieve some eye disorders. Additionally, the shed of the tree is appreciated by inhabitants. It is also a host tree for edible mushrooms.

3. How to obtain the kernels

To obtain essessang kernels, the steps below are to be followed, taking much care at each stage:

- Gathering** under the tree the ripe fruits or nuts that are still in good condition (not attacked).
- Fermentation** of the fruits gathered to decay the pulp. The duration of the fermentation may go up to two weeks when the fruits are kept in open air and four days when the fruits are tied in polyethylene bags.
- Pulping** of rotten fruits: this consists in tearing off the fleshy and darkish envelop around the rotten fruits.

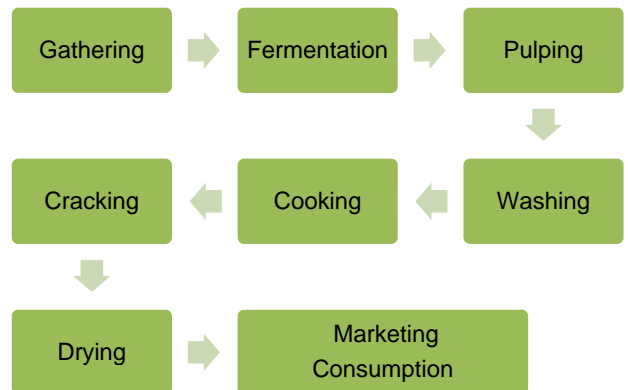


Diagram: procedure for obtaining essessang kernels

- Washing** of the rotten and pulped fruits. This is an activity that also requires a lot of care. It makes it possible to obtain very clean nuts for cooking. Generally, washing is done in streams near the house or in the forest. Sometimes, essessang is washed at home. In such case, the fruits are those collected from trees standing just behind the house.
- Cooking**: Cooking takes two to three hours depending on the quantity of essessang nuts, the utensils used and the intensity of the fire. The nuts are considered cooked when they develop cracks.
- Cracking**: This consists in extracting the kernels either by using a flattened nail that is inserted in the crack on the nut or by using two stones.
- Drying**: This is the last step before marketing. It should be noted that drying can be done in the sun (recommended) or on a flake. However, drying in the sun is preferable because sun-drying yields essessang of better quality (glistening), good flavour and good taste.

4. The economic potential of essessang nuts for the Central African Republic

Until now, the economic potential of essessang nuts has largely been unknown to inhabitants of Lobaye in the CAR whereas a 50 kg bag of essessang today costs between XAF 120,000 and XAF 150,000 on the market in neighboring Cameroon.

Accordingly, Cameroonian wholesale buyers were mobilized and community sales organized. This enabled the local populations to obtain XAF 50,000 per 50 kg bag of essessang sold.



Pictures (from left to right): A group of women presents its produce during the community sale. The prototype of a nuts cracking machine (Picture: B. Bokoto de Semboli – FAO NWFP Project)

5. The nutritional potential

Apart from the quantity sold by the local populations, an important part of the nuts gathered are consumed locally by more than half of the Bantu families and nearly all Baka (indigenous population) gatherers, who have discovered this new precious product for their own consumption.

Essessang nuts contribute to a balanced diet thanks to their richness in proteins, lipids, carbohydrates, calcium, iron, etc. They also contain 49 to 63 percent oil directly consumable or used in pharmacy. They are processed into powder or paste and used as a much appreciated cooking ingredient for various fish, meat and vegetable dishes in Central African countries.

6. Essessang value-adding activities carried out by the GCP/RAF/441/GER project

In a bid to promote the essessang sub-sector in the CAR, nine one-day training sessions were organized at the Lobaye pilot site of the GCP/RAF/441/GER project on the gathering and processing of essessang nuts. Over 400 persons participated in the training sessions, including 30 percent of women and 17 percent of indigenous populations.

Various groups of producers were mobilized for a first community sale in April 2012 where the 500 kg of nuts brought were bought at XAF 1,000/kg. Nearly 500 persons were involved (producers, traders, authorities, etc.).

Following these first experiences, other local communities expressed the need to acquire and apply the techniques for exploiting this non-wood forest product.

7. Recommendations

Following the pilot operations, a few recommendations may be formulated. They are addressed to the local populations, traders, NGOs and the State.

Recommendations to the local populations

- create mutual assistance groups to reduce unit production costs and increase the quantities produced;
- standardize the units of measurement and have scales available at collection points. This may help discourage dubious traders;
- organize knowledge-sharing opportunities to improve their production techniques and strengthen collaboration ties;
- organize community sales to enhance their negotiating power (Lobaye producers);

Recommendations to traders

- create associations;
- buy essessang from organized local populations to make it possible both to cut marketing costs and purchase huge quantities of essessang;

Recommendations to support organizations

- extend their areas of intervention to mobilize massive production from supply areas so that the innovations introduced and the actions implemented may be efficiently echoed on the markets;
- lay greater emphasis on communication and marketing by setting up market information systems (MIS);
- do regular price surveys on the markets to keep abreast with price trends;
- support finalization of the essessang nuts cracking machine sponsored by the GCP/RAF/441/GER project (the second prototype is currently being finalized);

Recommendations to the State

- improve road infrastructure in the rural areas;
- provide administrative assistance for the organization of community sales of essessang.

Literature:

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