

Project Update: April 2021

I. BACKGROUND

This preliminary report covers the first part of the research project activities conducted by NGANSOP TOUNKAM Marlène and her team, within the framework of her Rufford Small Grant, "Distribution and natural regeneration of *Garcinia kola* Heckel, a highly solicited vulnerable Non-Timber Forest Product in the Belabo Communal Forest, Eastern Cameroon". The main aim of the study is to provide baseline data for developing a conservation and sustainable management strategy for *G. kola*, a highly exploited, vulnerable non-timber forest product (NTFP).

The specific objectives of the project were as follows:

- Objective 1: Evaluate the level of anthropogenic pressure on the resource.
- Objective 2: Characterise the ecological niche of the species.
- Objective 3: Evaluate the density of species in their natural habitat.
- Objective 4: Evaluate the natural regeneration capacity of the species.
- Objective 5: Evaluate the effect of fruit harvesting technique and intensity on the regeneration of the species.
- Objective 6: Elaboration of conservation strategy and management plan of species.

II. ACTIVITIES

The activities for this first phase of the project consisted mainly of:

(1) Introduction of the project and its objectives in Belabo Subdivisional Officer and the Belabo Council authorities, selection of villages peripheral to the Belabo Communal Forest to be considered in the study.

(2) Focus group discussions with producers involved in *G. kola* value chain in the selected villages and in Belabo markets.

(3) Individual interviews with the producers involved in the collection and marketing of *G. kola* in selected villages.

These activities will permit us to respond fully to objectives 1 and 5, and partly to objectives 2, and 6 of the projects.

III. METHODOLOGY

For the realisation of the first step, we initially met with the Belabo Subdivisional Officer who issued us an authorisation to officially operate within the timeframe of our project in the area. We then met with the administrative and local authorities of the Belabo Council and villages, to introduce the project, its objectives and the various implications for the populations and for the sustainable management of *G. kola* in the communal forest. Twenty-four villages were selected in collaboration with the council authorities.

We then proceeded with the socio-economic surveys through focus group discussions and individual interviews with all stakeholders involved in *G. kola* value chain using separate questionnaires. Information was obtained on the collection,

use, marketing and conservation (fruiting, harvesting periods, harvesting methods, quantities harvested, harvesting frequency, harvesting sites, quantities harvested per stem, contribution to the livelihoods of the population, and local population's knowledge on regeneration and constraints) of the species in the selected villages. The project was introduced in 24 villages (Table 1).

Table 1: Distribution of villages bordering the community forest according to ethnic group

Ethnic group	Villages	Number of villages
Pôl	Mbethen I, Mbethen II, Yoko-betougou, Viali, Bombi, Kano, Mambaya et Yambeng	8
Bobilis	Ndoumba-olinga, Ndemba I, Ndemba II, Yanda, Dondi, Ndjangane	6
Kepere-Deng-Deng	Tamtcheck, Sakoudi, Mbambo, Mbaki I, Mbaki II, Satando, Ebaka I et Yebi	8

IV. PRELIMINARY RESULTS

During these months, 24 focus group interviews were conducted in selected villages. Household surveys were conducted with 130 producers and 12 traders involved in the gathering and marketing of *G. kola* in the Belabo Council Forest.

Preliminary results revealed that:

- The main collectors identified are farmers and hunters.
- The main parts of *G. kola* collected are fruit, bark and root.
- The various parts of *G. kola* mentioned above are used to ferment palm wine (bark), raise libido in humans (roots and seeds), and treat indigestion and gastric pain.

The harvesting locations cited are forests and farms. Harvesting distances vary according to the collectors and range from 2 to 15 km from the village. The main fruiting periods are from April to May, and from September. The main harvesting months for seed are June to August and September to December. Bark and root are harvested all the year, with collection frequencies varying from two to three times a week.

As for the commercialisation, selling prices vary according to the product and its quality (fresh, dried or powder). The selling prices of the seeds vary between 25 and 50 FCFA per seed. One kg of seed is sold at 1500 FCFA in the high production period and 2000 FCFA in the low production period. The price of bark varies according to the collector and the thickness of the bark and costs between 200-300 FCFA.

Concerning organisation of value chain, the products are generally consumed (seeds) by the populations or used for the manufacture of alcoholic drinks or sold on the spot in the villages. The semi-wholesalers in the markets of Bertoua and Belabo buy bark from the collectors and seeds from the wholesalers. However, seeds sometimes come from Yaoundé, Douala and Manfé towns.

It appears that *G. kola* harvesting is unsustainable. Respondents revealed that trees are usually debarked for bark collection, and sometimes completely uprooted, these two parts are mainly used as fermenting agents for local alcoholic beverages.

According to the respondents, *G. kola* fruits are highly consumed by rodents, and this is one of the main difficulties encountered by the population in seed gathering. The results also reveal that the relative scarcity of *G. kola* stems from unsustainable exploitation is also one of the difficulties in the production/collection and marketing of *G. kola* in Belabo locality.

V. PLAN FOR FUTURE MONTHS

For the next months, our field activities will consist of:

- (1) Carrying out the botanical inventory in Belabo Council Forest - during the socio-economic survey, we identified the favourable season for botanical survey to be the short dry season, from mid-May to mid-August.
- (2) Carrying out a consultative workshop to collect other inputs for the development of *G. kola* sustainable management strategy and to empower local managers and keys stakeholders with sustainable management practices.
- (3) Finalisation of report and submission.



Left: *Garcinia kola* seeds. Right: *G. kola* bark.



Left: Main root of *G. kola* uprooted by collectors. Right: *G. kola* bark powder packaged for marketing.



Left: Group discussion. Right: Household survey.



Left: Household survey conducted by the team leader. Right: Focus group discussion.



Left: G. kola packaged for marketing. Right: G. kola seeds packaged for marketing.