COMMERCIALISATION AS AN INCENTIVE AND THREAT FOR GNETUM SPP (ERU) IN CAMEROON

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SUMMARY

Gnetum is the most exploited and commercialized vegetable in Cameroon (Besong, 1998). This forest vegetable plays a key role in the livelihoods of the people of Cameroon, particularly in that of the local communities. Gnetum, commonly referred to as Eru, is a threatened species in all areas of Cameroon where it grows. Gnetum is very important in terms of its social, cultural, medicinal, nutritional and, above all, economic values. Eru provides employment to many women and children who collect and sell it throughout the year. The leaves form part of the diet in almost all the social strata in Cameroon, particularly of people from Manyu Division. In addition, Eru is known to be high in protein (Schippers, 2000) and has a medicinal value. Large quantities are shipped to Nigeria for local consumption and for export to Europe and the USA.

INTRODUCTION

There are two species of Gnetum found in the forests of Cameroon. While Gnetum africanum has small leaves and is more available, and therefore more popular and widely consumed, Gnetum buchholzianum has larger leaves. The larger leaves make this Gnetum species easier to harvest, asking less time to shred and more easily filling a market bowl or dish—with small number of leaves (Nkefor & Ndam, 2000). Gnetum is commercialized in different forms: leaves, shredded and as prepared food in the markets, workplaces, public schools and other places, according to the consumption habits of the buyers/consumers. Gnetum grows still wild in Cameroon (not cultivated). It is harvested by whosoever can afford to do so, particularly by those who live in the communities around the forests where Gnetum is found. Because of its economic importance and its very strong demand - particularly from neighbouring Nigeria and Gabon, children and women from the Gnetum-growing communities harvest and sell Gnetum.

GNETUM COMMERCIALIZATION

Like other indigenous vegetables, Gnetum is commonly sold in bundles, and women are the major traders. A woman can harvest up to 100 bundles in a day. These are sold locally at 100 FCFA per bundle. This woman earns 10000 FCFA per day, which is higher than the defined average threshold for poverty alleviation in Cameroon (Cameroon Human Development Report, 1998).

SA'A is a community near Yaounde, the capital of Cameroon. SA'A and neighbouring villages are the source of most of the Gnetum that is exported through the coastal seaport of Idenau in the South West Province of Cameroon to Nigeria. Studies carried out by the Mount Cameroon Biodiversity Conservation Centre, showed that wholesalers go to SA'A and buy all the Gnetum harvested for at between 100-150 FCFA (0.15-0.22 USD) per bundle. Each bundle is estimated to weigh 1 kg. The
Gnetum is packed and transported in buses and on their carriages to Idenau for export to Nigeria. It has been estimated that on average a bus carries between 1.7 tons to 2.5 tons of Gnetum. About 30 buses of Gnetum are going weekly to Idenau. Consequently Gnetum exported from the Idenau coastal port alone (to Nigeria), is calculated to generate an annual revenue of 1,060,800,000 - to 1,560,000,000 FCFA (1,500,000 - 2,200,000 USD).

A study carried out in the local markets in Fako Division of Cameroon, shows that women are, as usual, the main sellers of Gnetum, mostly selling it in shredded form. These sellers buy from nearby markets and from middle-women who buy from the major collection/contractual points in the villages. Depending on the size of the market and also on the season, a middle-woman trading Gnetum buys between 15 to 20 bundles a day to shred for selling in the small/village market whereas the seller in the town/bigger market buys and sells 30 bundles of shredded Gnetum. One bundle of Gnetum is equivalent to 3 bowls/dishes with shredded leaves. The shredded Gnetum is sold at between 200 FCFA and 300 FCFA per bowl. Therefore, a seller of Gnetum in these markets can make 144,000FCFA or more per month, during the wet season, and twice the amount during the dry season.

**LINKAGE OF GNETUM TO USE AND CONSERVATION OF AGRO BIODIVERSITY.**

As is clear from the market study, trade in Gnetum is very important in Cameroon. The study also showed that there is an increasing demand and supply of Gnetum. The increase in demand is the result of an increase in the population. In the last 20 years the population of Cameroon has doubled although the growth rate remains constant (2.83%, Cameroon Human Development Report, 1998), which has doubled the population over the last 20 years. Economically, Gnetum contributes to poverty alleviation. It provides employment and income for many, especially the vulnerable (women and children). Culturally, the leaves form part of the diets of almost all of the social strata in Central Africa and Nigeria. Gnetum is very nutritious. It is very rich in protein, minerals and contains the eight essential amino acids. It can therefore be used to fight malnutrition. Gnetum has medicinal uses as well. In addition to treating enlarged spleen, sore throat, piles and high blood, it is used to treat nausea, arrow poison; to hasten maturation and to ease childbirth. The leaves are also used in the production of a commonly exported whisky to Nigeria (Mbah & Mih, 2001).

One may wonder how the many uses of Gnetum can be linked to conservation of agrobiodiversity. Obviously, the Gnetum’s resource base is threatened. With a constant source of supply and the fact that harvesting is a widely spread practice, occurs frequently and is destructive (through the cutting down of its shade cover and support base), Gnetum species risk to become extinct. Different from other forms of agrobiodiversity, i.e. crop varieties, wild and semi growing plants that are used for food and agriculture can be lost to overexploitation. With such loss, not only are valuable genetic resources lost, but also the livelihood security of people who are in a vulnerable position is directly affected. The irony of the situation is that these same people are the ones who harvest and commercialise the Gnetum produce, thereby undermining their own resource base. To counteract this risk of extinction the government of Cameroon has put in place a policy to control its harvesting through community forest management. Research Institutes, conservation projects,
farmers, non-governmental organisations (NGOs), and community based organisations (CBOs) together are making increased efforts to conserve Gnetum (Ndam et al. 2001).

Cultivation of wild and semi-wild growing food plants is generally considered a viable strategy for these resources. Shiembo in 1997 recommended vegetative propagation for Gnetum cultivation. Mount Cameroon Bio-diversity project has a genebank of the two Gnetum varieties, and has developed a simple and low-cost technology for propagation of Gnetum cuttings. A method for the sustainable harvesting of Gnetum has also been developed. Individual farmers and farmer groups have been trained to produce their own planting materials and adapt their harvesting techniques. Some farmers are already producing Gnetum in their farms. The National Institute of Agricultural Research for Development (IRAD) in collaboration with related institutions and farmers are testing the production of Gnetum in agroforestry systems. This particular production technology is recommended since Gnetum, apart from being shade tolerant, is a climber and therefore requires support.

RECOMMENDATION

Despite all the strong market forces and the many incentives that make Gnetum attractive and a successful vegetable in Cameroon the technologies for cultivated production are still experimental, while the demand for it continues to rise. Bulk production remains a problem. The production period of Gnetum and thereby the realisation of benefits take a long time. The threat on Gnetum’s resource base is still there. Therefore our recommendations are three fold, all to be implemented through participatory/partnership approaches:

i) Research: conduct agronomic and economic trials, and establish germplasm and genebanks.

ii) Training: of a) technical staff (long and short-term training, b) other stakeholders (farmers, extensionists, researchers, conservationists and policy makers). They should be trained in the various aspects of conservation, including the cultivation of Gnetum (conservation by cultivation), market and post harvest issues

iii) Extension: introduce and adapt on-station generated technologies to enhance adequate use and conservation of Gnetum as a means to preserve agrobiodiversity by all stakeholders.

Important constraints are, however, that there are many threatened wild and semi-wild growing plants in Africa that are used for food and agriculture, while resources are scarce.

Gnetum is a typical example in Cameroon. Therefore the challenges that can provide incentives for a sustainable use for Cameroon are:

- for Government to make more farming land available.
- to domesticate through ex-situ cultivation.
- to conserve in-situ by creating many germplasm collections and gene banks.
- to match the production of Gnetum with the high population growth, a major investment is required for commercial farming.
- to explore other propagation methods like tissue culture.
- to develop strategies to accelerate Gnetum production through seeds.

REFERENCES


