



## Enhancing the Contribution of Non-Wood Forest Products to Food Security in Central Africa (GCP/RAF/479/AFB)

### 1. INTRODUCTION

Central Africa is among the world's major reservoirs of biological diversity. The biological resources are exploited by 70 million persons to satisfy their subsistence needs, income generation and employment. In general, due to rapid population growth, the agricultural production of the region is insufficient and does not cover all food needs of the population.

Non-wood forest products (NWFP) became more important in Central Africa during the economic crisis of the mid 1980s which caused the decline of the international prices of cocoa and coffee and induced farmers to diversify their incomes sources by exploiting increasingly NWFP for consumption and mainly for sales. The devaluation of the CFA Francs in January 1994 increased the prices of pharmaceutical products and made urban and rural households to turn to medicinal plants to cure common ailments.

FAO NWFP projects in Central Africa show that NWFP are very important for the livelihoods of rural communities as food, medicine, household equipment, tools and provide income and employment for women, young people and indigenous communities. Therefore there is a need to take these products seriously as an important component of household livelihood and food security strategy. In addition, FAO projects showed that NWFP contribute to the Millennium Development Goals (MDG) in the sense that sales of NWFP by local populations enable them to purchase food (MDG1), buy cloths (MDG1), pay for children education (MDG2), and pay for medicinal products to improve the health of household members (MDG4 et 5).

Governments of Central Africa have defined programs on food security and nutrition but NWFP have seldom been reflected. The overarching argument coming from past NWFP projects is that policy makers need to pay more attention to NWFP in their poverty reduction and food security strategy. Below are few results obtained from the partnership between the Central African Forests Commission (COMIFAC) and FAO on NWFP in Central Africa.

### 2. HISTORY OF FAO SUPPORT ON NWFP IN CENTRAL AFRICA

FAO has a long standing experience on providing technical advice on NWFP management and related policy formulation in Central Africa. FAO NWFP experience in Central Africa began in 2003 with: TCP project entitled *institutional support and sustainable management of Non-Wood Forest Products in Cameroon*. This project laid the foundation of several follow up sub regional projects.

- The first one entitled *Enhancing food security in Central Africa through the sustainable management and use of Non-Wood Forest Products* was carried out from July 2005 to September 2008 and involved Cameroon,

Equatorial Guinea, Central African Republic, Congo, Democratic Republic of Congo, and Gabon. It was funded by the German government.

- The second sub regional project *Mobilization and capacity building of small and medium enterprises involved in Non-Wood Forest products value chains in Central Africa* funded by the European Commission was carried out from January 2007 to June 2011 and included Cameroon and the Democratic Republic of Congo.
- The third sub regional project *Enhancing the Contribution of Non-Wood Forest Product to poverty alleviation and food security in Central Africa countries* funded by the German government was carried out from October 2009 to April 2013 and involved Congo, Gabon and Central African Republic.
- The fourth sub regional project *Enhancing the contribution of Non-Wood Forest Products to food security in Central Africa* funded by the African Development Bank (ADB) through the Congo Basin Forest Fund (FFBC) involves Burundi, Chad, Equatorial Guinea, Rwanda, Sao Tome and Principe. This project started on February 2014 and will end in January 2017.

All these field projects were supervised by COMIFAC and implemented in collaboration with Central African Governments.

### 3. INTERNALISATION OF COMIFAC GUIDELINES ON NWFP

FAO through project *Enhancing food security in Central Africa through the sustainable management and use of Non-Wood Forest Products* has helped COMIFAC to produce Sub regional guidelines for sustainable use of NWFP of plant origin in Central Africa. In October 2008, COMIFAC ministerial council requested FAO to help COMIFAC countries to "internalize" these guidelines into their national legal frameworks. Review of legal and institutional framework guiding the NWFP sector have been carried out in Congo, Gabon, CAR, Cameroon and Democratic Republic of Congo and proposed improvement of by-laws and/or articles made for more inclusion of NWFP as a mean to reduce poverty, improve food security and nutrition and provide employment for youth, women and indigenous people. In Gabon, a Directorate in charge of NWFP was created in May 2011. In CAR, two services were created in April 2012: a service for promoting NWFP and another for the valorization of NWFP. FAO support will be provided during the next three years to Burundi, Chad, Equatorial Guinea, Rwanda and Sao Tome and Principe. The Sub regional guidelines of COMIFAC have been edited twice: the first edition was made in 2010 and the second in 2014. In addition to the improvement of the regulatory and institutional framework guiding the NWFP sector, important results were obtained on marketing and domestication of NWFP that are discussed below.

#### 4. *RICINODENDRON HEUDELOTII* (NJANSANG) IN CENTRAL AFRICAN REPUBLIC: Valorization and Community marketing



*Ricinodendron heudelotii* is a tropical African tree with a significant stands in the Lobaye region in the South-West of Central African Republic. 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. Nine one day trainings on the gathering and processing of *Ricinodendron heudelotii* were organized by project GCP/RAF/441/GER **Enhancing the contribution of NWFP to poverty alleviation and food security in Central African countries** to enable local communities 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. Over 400 persons participated in the training sessions, including 30 percent of women and 17 percent of indigenous populations.

Subsequently, various groups of producers were mobilized for a first community sale where 500 kg of nuts were bought at XAF1000/kg (2.2 USD/kg). Nearly, 500 persons were involved (producers, traders, authorities, etc...). Thus local populations were able to obtain XAF 50,000 per 50 kg bag of *Ricinodendron heudelotii* sold (110 USD). The Minimum wage is about 40 USD in Central African Republic.

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

Despite the quantity sold by the local populations, an important part of the nuts gathered were 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. *Ricinodendron heudelotii* 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 countries of Central Africa. In the Lobaye pilot site in Central African Republic, 11 hectares of *Ricinodendron heudelotii* have been planted by 120 women. Furthermore, because of the consumption of this product, the expenditure on food has been reduced for more than 1500 households.

#### 5. DOMESTICATION OF *GNETUM* SPP IN CONGO AND CENTRAL AFRICAN REPUBLIC



*Gnetum* spp. is a leafy vegetable rich in protein. It contributes significantly to local livelihood of rural communities, especially women and has a high medicinal value. The leaves have also high nutritional value;

beside their protein content, the leaves contain also essential amino acids and mineral elements. The high value of the trade has led to intensive commercial pressure implying that *Gnetum* spp. are increasingly scarce due to overharvesting. In Congo and Central African Republic, rural households have to travel longer distances to harvest *Gnetum* spp. compared to 5 to 10 years ago. In Gabon, in the area from Oyane to Remboue passing through Fourplace, *Gnetum* spp is becoming more and more scarce. Therefore domestication became a key strategy to enable farmers to plant *Gnetum* spp. in their home gardens and other relevant ecological niches to increase production. Two domestication trainings were organized in Congo and CAR involving men, women and indigenous communities. In Congo, several nurseries have been created and *Gnetum* spp plants produced. As a result, more than 400 *Gnetum* spp plants have been planted in farmer's fields. In CAR, seven small and medium forest enterprises (SMFE) are involved in the production of *Gnetum* spp. plants and their planting in community fields. In Gabon, domestication training was organized in Oyane.

#### 6. DOMESTICATION OF *IRVINGIA GABONENSIS* IN GABON

*Irvingia gabonensis* is a very important NWFP. It produces fruits which extraction gives kernel rich in proteins, calcium, iron, and lipids. Communities in the pilot site of Woleu Ntem of Gabon have been trained in domestication techniques of *Irvingia gabonensis*. As a result, various nurseries have been created and entertained by local communities. Furthermore, marcots have been developed for early fruiting of *Irvingia gabonensis*. This experience will enable communities to produce high quality planting materials thereby increasing productivity in terms of quality, size and quantity of fruits.

#### 7. PERSPECTIVES

In terms of perspectives, FAO will carry out the following activities:

- Continue the implementation of FAO project **Enhancing the contribution of NWFP to food security in Central Africa** in Burundi, Chad, Equatorial Guinea, Rwanda, and Sao Tome and Principe.
- Help COMIFAC finalize its program on forests for food security and nutrition in Central Africa. This program is a result of the implementation of the recommendation made during FAO international conference on forests for food security and nutrition held in May 2013.
- Continue to lobby for more inclusion of NWFP in poverty reduction and food security strategy developed by governments of Central Africa.

