

Rural livelihood and women involvement in the Non Wood Forest Products sector of Central Africa

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Abstract

*This paper discusses the participation of women in capacity building trainings related to the valorization of *Ricinodendron heudelotii* (Njansang), beekeeping, domestication of NWFP (Non Wood Forest Products) and the Market Analysis and Development (MA&D) approach. In general women are more involved than men in the collection, processing and marketing of NWFP; however, this paper shows that women are less involved in capacity development training of actors involved in the NWFP sector in Central Africa. This can be due to several factors including the lower literacy rate compared to men;*

the difficulty of married women to participate in capacity development training that last several days away from home; men's involvement in the NWFP sector as a result of growing poverty and difficulty to secure minimum wage jobs in urban areas; access to land which is difficult for women in many countries of Central Africa;

The paper concludes that women should be more involved in all activities related to the development of the NWFP sector in Central Africa. This will not only empower them but will also improve the welfare of the family.

Keywords: *Non Wood Forest Products, valorization, domestication of NWFP, Market Analysis and Development (MA&D)*

Résumé

*Cette contribution fait le point sur la participation des femmes dans le renforcement des capacités liées à la valorisation de *Ricinodendron heudelotii* (Njansang), l'apiculture, la domestication et l'approche Analyse et Développement des Marchés (ADM). En général, les femmes sont plus impliquées que les hommes dans la collecte, la transformation et la commercialisation des Produits Forestiers Non Ligneux (PFNL) en Afrique centrale. Cependant, cet article montre que les femmes sont moins impliquées dans les formations visant le renforcement des capacités des acteurs du secteur des PFNL en Afrique centrale. Cela peut être dû à plusieurs facteurs dont le faible niveau d'éducation comparé aux hommes ;*

la difficulté que les femmes mariées ont pour participer à des formations qui durent plusieurs jours loin du domicile conjugal, l'implication de plus en plus importante des hommes dans le secteur des PFNL résultant de la pauvreté croissante et la difficulté d'accéder à un travail salarié en zone urbaine, l'accès à la terre qui est difficile pour les femmes dans plusieurs pays d'Afrique centrale. L'article conclut que les femmes doivent être mieux impliquées dans toutes les activités de développement du secteur des PFNL en Afrique centrale. Cela pourra non seulement augmenter leur pouvoir mais également améliorer les conditions de vie de la famille.

Mots clés : *Produits Forestiers Non-Ligneux, valorisation, domestication, Analyse et Développement des Marchés (ADM)*

1. Introduction

It has been shown that women dominate the production, processing and commercialization of Non Wood Forest Products (NWFP) in Central Africa (Ndoye et al., 1998; Tieguhong et al., 2009; Awono et al., 2010). Furthermore, women contribute more than men to the well-being of the household with their production and revenue from NWFP (Tieguhong et al., 2011). However, since the economic crises of

mid-1980s and 2008-2009 and the devaluation of the CFA Francs in 1994, men have been more and more interested in the NWFP sector due to growing poverty in rural areas and lower employment opportunities in urban areas (Tieguhong et al., 2009). This contribution aims at documenting the participation of women in capacity development training within the FAO Project GCP/RAF/441/GER "Enhancing

the contribution of NWFP to poverty alleviation and food security in Central African countries” funded by the German government. Women involvement in the valorization of *Ricinodendron heudelotii* (Njansang) in Central African Republic (CAR), in the training on beekeeping in Congo, on the Market Analysis and Development (MA&D) approach in Congo, CAR and Gabon allowing local communities to set up Small and Medium Forest based Enterprises (SMFE), in the domestication of *Gnetum spp.* in Congo, CAR and Gabon and in the domestication of *Irvingia gabonensis* in Gabon are presented. Few lessons and way forward are discussed in order to increase women involvement in NWFP activities aimed at developing their capacity and entrepreneurial skills and improving their livelihoods while ensuring the sustainable management of NWFP in Central Africa.

2. Material and Methods

This paper draws on selected capacity building training carried out in 2011 and 2012 within the framework of the FAO Project GCP/RAF/441/GER “Enhancing the contribution of NWFP to poverty alleviation and food security in Central African countries.” The men and women involved in the various trainings were members of the SMFE in six pilot sites in Gabon (Estuaire and Woleu-Ntem), Central African Republic (Lobaye and Ouham) and Congo (Obala and Madingo-Kayes). The criteria used in selecting participants involved in the trainings were the following:

- a) Motivation and willingness to work with other members of the group or enterprise;
- b) Dynamic and designated by other members of the group;
- c) Experience in the production and commercialization of NWFP;
- d) Knowledge of the local language;
- e) Ability to read, write in French and to make basic calculations;
- f) Willingness and capacity to present the results of the training to other members of the group;

3. Results

Valorization of *Ricinodendron heudelotii* (Njansang) in CAR

The Lobaye pilot site in CAR has a high potential of Njansang trees which are not exploited by local communities because they do not know its nutritional, economic value and its valorization

techniques. The kernels of Njansang are sold in countries like Cameroon (Ngono and Ndoye, 2004) and in regional and international markets (Tabuna, 2000). From 20 to 30 November 2011, Project GCP/RAF/441/GER organized several trainings in the valorization of Njansang involving 131 women out of 457 participants, representing 29 percent of the total number of participants. The training modules focused on strategies for harvesting the product, fermentation, depulping, crushing and packaging for the market. Each trained participant was supposed to train other members of the communities who did not have a chance to be included in the training. The trainings on valorization techniques of Njansang enabled women to improve food and nutritional security of their households and to get revenues through sales of the Njansang nuts to traders (Bokoto de Semboliet al., 2012). Beside a group sale organized in April 2012, a great portion (more than half for Bantou families and up to almost all for Baka families) of the nut production was consumed locally.

Beekeeping in Congo

Traditionally in Congo, collection of honey was done by felling trees colonized by bees, which is not sustainable. Modern beekeeping is a very important livelihood activity in Central Africa. Project GCP/RAF/441/GER organized two trainings on modern beekeeping involving 12 women representing 19 percent of the total number of participants. The training modules included the definition and importance of bee farming, description and biology of bees, production and conditioning method of honey which enabled the participants to learn how to make beehives of type Langstroth.

Market Analysis and Development in Congo, CAR, Gabon

The MA&D approach promotes rural enterprise development. It enables community based organizations to develop income generating activities and to manage natural resources in a sustainable way. The merit of the approach is to enable rural communities to identify potential NWFP and to develop markets that generate incomes without degrading the resource base (Tieguhong et al., 2012). The MA&D approach has four phases (FAO, 2011) but the training carried out through the project focused on phase three, the elaboration of the enterprise development plan (EDP). This was due to the fact that the baseline studies carried out by the project covered phases one and two of the MA&D approach.

Table 1. Number of women trained in the MA&D approach through ProjectGCP/RAF/441/GER

Pilot site	Training participants	Male participants	Male participants%	Female participants	Female participants %
Abala	37	28	76	9	24
Madingo-kayes	36	32	89	4	11
Lobaye	39	29	74	10	26
Ouham	41	30	73	11	27
Estuaire	17	12	71	5	29
Woleu-Ntem	27	22	81	5	19
Total	197	153	78	44	22

Source: FAO Project GCP/RAF/441/GER

Note: Abala and Madingo-Kayes are in Congo; Lobaye and Ouham are in CAR; Estuaire and Woleu-Ntem are in Gabon

Table 2. Number of women involved in small and medium forest based enterprises (SMFE) created through project GCP/RAF/441/GER

Pilot site	SMFE	SMFE members	Male members	Male members %	Female members	Female members %
Abala	39	626	357	57	269	43
Madingo-Kayes	10	125	86	69	39	31
Lobaye	30	500	338	68	162	32
Ouham	45	700	427	61	273	39
Estuaire	11	189	56	30	133	70
Woleu-Ntem	32	501	198	40	303	60
Total	167	2641	1462	55	1179	45

Source: FAO Project GCP/RAF/441/GER

Table 1 presents the number of participants trained in the different pilot sites in Congo (Abala, Madingo-Kayes), in CAR (Lobaye, Ouham) and Gabon (Estuaire, Woleu-Ntem).

As the table shows women involvement in the MA&D training varies between 11 and 29 percent with an average of 22 percent, which is quite low given the role women play in the production, processing and marketing of NWFP. The number of women members of the 167 SMFE created through the MA&D approach is 1179, representing 45 percent of the total members (table 2). It is worth noting that in Gabon, the percentage of women involved in the SMFE created exceeds that of men and vary between 60 to 70 percent. These percentages are interesting because they are similar to the percentage of women members of SMFE in Cameroon which was estimated at 61 percent (Tieguhong et al., 2012). In Congo on average the

percentage of women is 18 percent while it is 27 percent in CAR. In Gabon, the group sale organized on *Gnetum spp* in September 2012 in the Woleu-Ntem pilot site included 17 women out of 22 participants.

Domestication of *Gnetum spp.* in Congo, CAR and Gabon

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 (Ndoye and Awono, 2010).

According to Mialoundama (1993), *Gnetum spp.* leaves have high nutritional value. They are an important source of protein, 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, CAR and the Estuaire province of Gabon, rural households have to travel

Table 3. Number of women trained in domestication of *Gnetum spp* through Project GCP/RAF/441/GER

Pilot site	Training participants	Male participants	Male participants %	Female participants	Female participants %
Abala	29	21	72	8	28
Madingo-kayes	17	14	82	3	18
Lobaye	41	39	95	2	5
Estuaire	40	22	55	18	45
Total	127	96	76	31	24

Source: FAO Project GCP/RAF/441/GER

longer distances to harvest *Gnetum spp.* compared to 5 to 10 years ago. Therefore domestication becomes a key strategy to enable farmers to plant *Gnetum spp.* in their home gardens and other relevant ecological niches to increase production. Three domestication trainings were organized in Congo and CAR in 2011 and in Gabon in 2012. In the three countries on average women represented 24 percent of the participants. In Gabon, women represented 45 percent of participants while the percentage was 26 in Congo and only 5 in CAR (table 3).

Domestication of *Irvingia gabonensis* (bush mango) in Gabon

Irvingia gabonensis is an important NWFP in Central and West Africa. The fruit is similar to mango and is used as food. Its kernels or seeds are used as condiments by rural and urban households. They also have medicinal properties as they reduce weight and improve the control of diabetes (Leger, 2011). The domestication training organized in the province of Woleu-Ntem in northern Gabon involved 21 women representing 29 percent of overall participants. The training modules focused on techniques of vegetative propagation (rooting of cuttings, grafting, and marcotting).

4. Discussion

In general, women are included in the different trainings organized by Project GCP/RAF/441/GER but the level of participation should be improved in all the three countries of the project. In Gabon the number of women involved in the SMFE is more important than that of men and is comparable to what has been observed in Cameroon (Tieguhong et al., 2012). In the other countries, the involvement of women is very low despite the fact that they dominate production, processing and marketing of NWFP (Mialoundama et

al. 2008). Several reasons could explain this low level of participation of women:

- a) literacy rate between men and women in rural areas, which tends to be higher for men than women, thereby affecting their ability to read and write in French and do simple calculations;
- b) difficulty for married women to attend training sessions that last several days. Married women have to get permission from their husbands to attend trainings in capacity development. Therefore, training courses lasting several days away from the villages will less likely be attended by married women;
- c) men's continuous search for economic opportunities and employment due to the economic crisis and growing poverty in urban and rural areas: as a result, men have difficulties getting minimum wage jobs and turn more and more to NWFP (Tieguhong et al., 2009);
- d) discriminated tenure for women who cannot plant trees which may discourage them from attending domestication trainings. Access to land is problematic for women in several countries in Africa. Furthermore, women do not inherit land to plant trees. The only possibility for women access to land is through their husband if they are married;
- e) degree of gender awareness of the project team.

5. Conclusion

As shown in this contribution, women are less involved in capacity development trainings than men despite the fact that they are more present in collection, processing and marketing of NWFP. Furthermore, women use their production and revenues for the well-being of the family more than men (Tieguhong

et al., 2011). For this reason, they should be more targeted in all activities related to the NWFP sector. The more women are empowered, the more likely the family welfare will be enhanced. This means that investing in women is positively correlated with improvement in household well-being. Therefore women need to be more involved in the valorization of NWFP, domestication and enterprise development in FAO NWFP Projects.

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