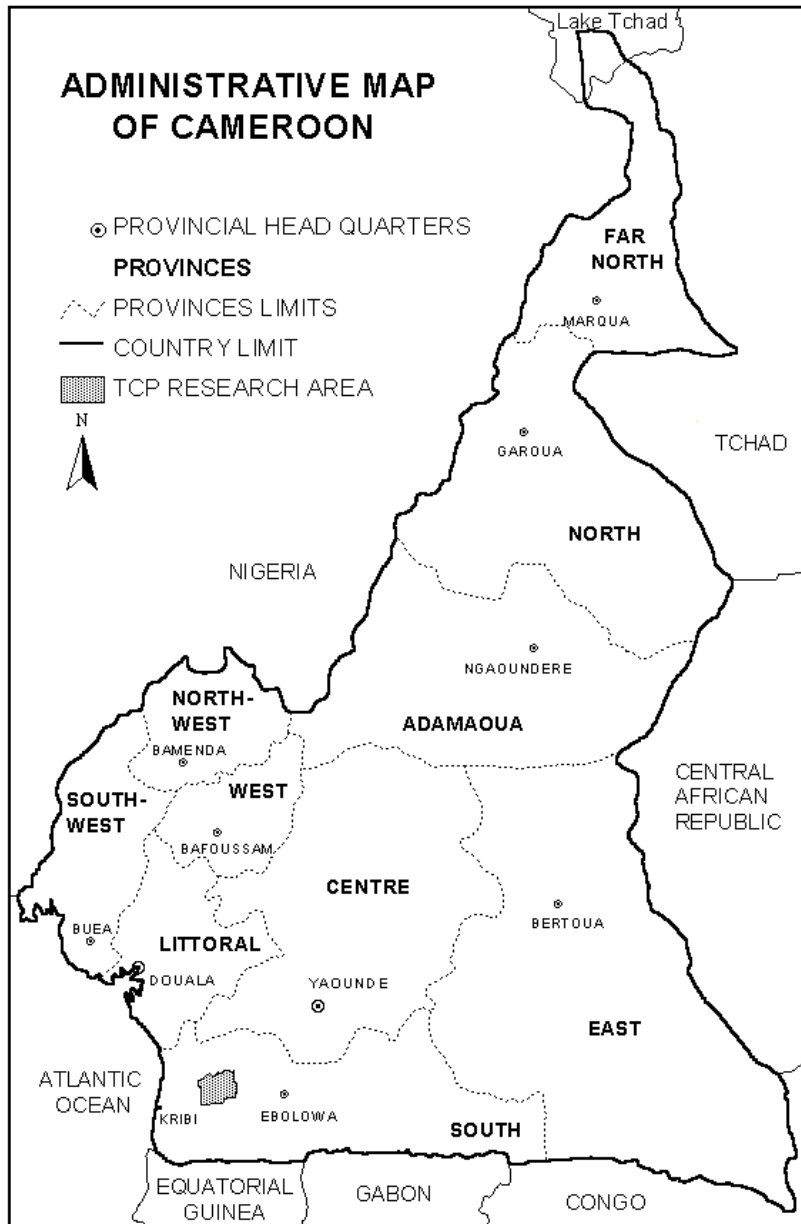


**THE ROLE OF COMMUNITY INSTITUTIONS IN THE MANAGEMENT OF NON-TIMBER FOREST
PRODUCTS IN THE BIPINDIAKOM II REGION OF SOUTH CAMEROON**

internal report

(not for citation without prior consent of the publisher)

Ntenwu Terence Noah Mugwachu
September, 2000



DEDICATION

This report is dedicated to my spiritual father Mr. Awemo Cornelius (RIP). He inspired me most.

“We are dust and on to dust we shall return”. “God gave, God has taken back, Blessed be the name of the Lord”.

ACKNOWLEDGEMENT

The present report is the result of a study on exploitation and management of a selected set of six Non Timber Forest Products (NTFPs) in the tropical rain forest of South Cameroon. It was part of the research project “The role of community institutions in the management of NTFPs in Cameroon” and carried out within the framework of the Central African Regional Program for the Environment (CARPE) with support of the Biodiversity Support program (BSP), a consortium of World Wildlife Fund, The Nature Conservancy and World Resources Institute, with funding of the United State Agency for International Development (USAID). The project was implemented by the Tropenbos Foundation with logistical assistance of the Tropenbos Cameroon Programme (TCP) in collaboration with the International Institute of Tropical Agriculture (IITA), the Centre for International Forestry Research (CIFOR) and the ECOFAC project.

None of the above mentioned organizations bear responsibility for the research findings, which are the authors' own.

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ABBREVIATIONS

CARPE	Central African Regional Program for the Environment
CGIAR	Consultative Group on International Agricultural Research
CIFOR	Centre for International Forestry Research
DGIS	The Dutch Directorate-General for International Co-operation
FAO	Food and Agricultural Organisation of the United Nations
HFEC	The Humid Forest Eco-regional Centre
IAC	International Agricultural Centre
IDRC	International Development Research Centre
IITA	International Institute for Tropical Agriculture
ITTO	International Timber Trade Organisation
IUCN	International Union for the Conservation of Nature
KNP	Korup National Park
NTFP	Non-Timber Forest Products
MINEF	Ministry of Forests and the Environment (Cameroon)
ONADEF	National Bureau for the Development of Forests (Cameroon).
SIDA	Swedish International Development Authority
TCP	Tropenbos Cameroon Programme
TFRIS	Tropical Forestry Projects Information System
UNEP	United Nations Environmental Program
UNDP	United Nations Development Program.
USAID	United States Agency for International Development
WUR	Wageningen University and Research Centre
WWF	World Wide Fund for Nature

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1 INTRODUCTION

1.1 Background of the study

The humid tropical forest in general and the humid forest of the south of Cameroon in particular are extremely useful and precious ecosystems for humanity. They play an important role in the regulation of the green house effect, in maintaining a climatic equilibrium and constitute a reservoir of biodiversity (van Gernerden & Hazeu, 1999). At the level of the state, the importance of the forest is directed at generating income through the commercialisation of timber and other products of the forest. At the level of the rural and urban populations, it is the centre of life as it provides food and revenue derived from the exploitation and sale of Non-timber Forest Products (NTFPs) (Tchatat, 1999; Ros -Tonen, 1999; Falconer, 1994).

NTFPs sounds like a new concept but it is not. For millions of people all over the world, NTFPs have played a major part in their livelihoods for many centuries. If there is anything new about NTFPs, it is their discovery by urban-based development and environmental organisations. As Falconer (1994) mentions, forests form an integral part of the rural economy, providing subsistence goods and services as well as items of trade. NTFPs exclude commercially exploited timber, but include all other products gathered from the forest and men-made forest like land use systems whether exploited for commercial or for subsistence purposes. They therefore include such diverse products as animals and plant species providing food, medicines, building materials and equipment. They are of particular importance to the rural people who have access to few resources beyond the common forest (Falconer, 1994).

Communities often claim regulative authority over NTFP resources and maintain regulative institutions to control access to and ways of use of NTFPs. These institutions can have an organisational form with well-defined roles and structures (i.e. village councils, village communities) or not (i.e. local knowledge, kingship relations). On the other hand NTFP resources are subject to the authority of state agencies and regulations. While access rights on NTFP species for different local population groups are predominantly derived from customary tenure arrangements. Outsiders (i.e. logging companies, state, etc) may rationalise and justify claims to acquire or to maintain access to and control over forest resources with elements of other regulatory frameworks, such as exploitation contracts provided by the government.

1.2 Aim of the study

Generally, the study was carried out in order to get a better understanding of the role and dynamics of community-based institutional and regulatory frameworks with regard to NTFP resource exploitation and management. It was particularly focused on the relations between increasing commercial value of NTFPs and exploitation and management intensities on the one hand, and the social sustainability of community based institutions on the other.

Specifically, it is meant to:

- Identify the various actors and the types and rate of use of different NTFP resources Identify the sets of rights to control, have access to and exploit NTFP resources that these actors assert and realise. Attention is paid to the distribution of rights over the concerned actor groups, restrictions and obligations with regard to NTFP use and the institutional structure or legal framework that guarantees and protect these rights and harvest regulations in normative theory and social practice

- Determine historical trends in the development of the diversity of rights to control and to exploit NTFP resources in relation to changes in the cultural and economic value of NTFPs and exploitation pressure
- Investigate the local perceptions on the efficacy of existing community based management institutions and opportunities to rehabilitate, adapt, strengthen or renew these institutions
- Determine implications for NTFP resource management strategies

1.3 Research questions

Four sets of questions have been identified. The present study tries to provide answers to these questions so as to meet up with the research objectives.

- I. Firstly, identification of various direct actors and their use of different NTFP resources. Who are exploiting which NTFPs, in what ways and for what purposes (i.e. home consumption, commercialisation, and other social and economic purposes).
- II. Secondly, identification of sets of rights to control, have access to and exploit NTFP resources that these actors assert and realise. How are such rights acquired and how are they distributed over the concerned actor groups; what restrictions and obligations in regard to NTFP use do right holders have; how it changes and which institutional structure or legal framework guarantees and protects and harvest regulations in normative theory and social practice? Special attention will be given to the historical development of the diversity of rights to control and to exploit NTFP resources. Moreover, attention will be paid to the cultural and economic value of the various NTFPs, both at the present as well as the past.
- III. Thirdly, what are the local perceptions on the efficiency of the existing community based management institutions concerned and the options to rehabilitate, adapt, strengthen these institutions or create new regulating institutions, and;
- IV. Fourthly, what are the implications for new NTFP resource management strategies?

1.4 Conceptual clarification

Non-timber forest products or NTFPs in this study refers to all wild tree species including introduced species, which can be found in the forest environment. In the expression “Community management” the concept of community relates to a local territory within which people have a specific type of social interactions and a sense of shared identity (Wiersum, 1996). Thus, a community can relate either to a village as a whole or to a more specific social unit at local level such as a clan or lineage. Community management include a set of rules and practice found in the village, which concern NTFP management.

In order to answer the question - *What is the value of community institutions for sustainable management of NTFPs* – we need to understand the construction of different sets of rights on various categories of NTFP resources held by various actors. In Cameroon the major actor groups are: governmental agencies, such as MINEF, national and international non-governmental conservation and development organisations, international research programs such as TCP, commercial logging operators and of course the local populations. In this study, property rights on NTFP resources, whether derived from state laws or customary forest tenure regulations are conceptualised as bundles

of rights held by different people and vested at different levels of social organisation. Apart from the customary, traditional or standard institutions, there are also newly introduced institutions like the church, local initiative groups and clubs. In practical and analytical terms, three categories of rights must be considered separately: **a)** the right to exclude or control, **b)** the right to access, and **c)** the right to dispose (see chapter 4). In what ways different bundles of rights are constructed and differ from each other and even conflict with each other are empirical questions.

1.5 Methodology

1.5.1 Selection of research site

The study in general has been carried out in three areas. They include the Dja Biosphere Reserve ¹, the Lekie area (IITA/CIFOR)², and finally the Bipindi-Akom II region (TCP) presented in this report. These three sites were selected with taking into consideration their comparability with regard to ecological conditions and local utilisation of the six selected NTFPs, but different in respect to four factors that can have an impact on the intensity of NTFP resource exploitation and management: (a) availability of NTFP resources; (b) market access (i.e. degree of isolation); (c) population density and (d) presence of non governmental and private agencies (e.g. development and conservation organizations, logging companies). In each site three representative research villages were chosen.

1.5.2 Selection of research villages and respondents

In each of the three sites, three villages were selected, according to the following criteria:

- Site specific;
- Availability of socio-economic basic data;
- No part of an administrative structure above village level;
- Maximum number of inhabitants not above 500;
- Ethnic origin of inhabitants more or less homogeneous.

The characteristics of the Bipindi-Akom II region hold an intermediate position compared to the Dja reserve and the Lekie area. It is a logged over forest area with low population density, few market facilities and difficult accessible. A complementary characteristic is the presence of a TCP and several NGOs working on forest management in this area.

A sampling/ranking exercise was carried out to select households using the criteria; *“the relative dependence of households on revenue got from NTFP exploitation”* in order to select a balanced sample of respondents in each of the research villages.

All households in the village were enumerated and numbered. Cardboard papers were numbered from 0 to 10 in order to be used for counting the score.

¹ The Dja Biosphere Reserve is located along the Dja river in the central-southern and eastern provinces of Cameroon, 243-km south-east of Yaounde and 5 km west of Lomie. The river Dja almost encircles the reserve, forming its natural boundary, except to the southwestern part. The Dja reserve was protected as a ‘réserve de faune et de chasse’ by law No. 319 of 25 April 1950, and later as a ‘réserve de faune’ under the National Forestry act Ordinance no 73/18 of 22 May 1973. It is internationally recognised as a Biosphere reserve under UNESCO’s Man and the Biosphere Programme in 1981 and inscribed on the World heritage List in 1984. Proposed as a national park. Dja is one of the sites identified by IUCN/WWF Project 1613

² This site is under the International Institute of Tropical Agriculture (IITA). It was founded in 1967 as an international agricultural research institute. Cosponsored by the, World Bank, FAO, UNDP, UNEP, CGIAR, one of its major investments is to promote the maintenance of the forest through sustainable utilisation of NTFPs.

Three well-known villagers who had a good knowledge of the activities of all households were asked independently to classify the importance of the income of the different households from NTFP gathering of plant resources by giving notes from one to ten.

After calculating the average of the notes, the households were regrouped in three classes of a. low (0 – 4), average (4 – 7), and high (7 – 10) degree of dependency on the revenue from NTFPs. In each of the three villages Ebiminbang, Ebom, and Nyangong, 33 households were selected, from which 13 people in the categories of a high and low degree of dependency, while 7 people were interviewed from the average.

1.5.3 Set of selected NTFPs

The selected NTFP species were expected to be found and commonly used and marketed in at least two of the three sites. Moreover, they had to be extracted from various habitats and their exploitation had to represent different levels of risks for unsustainable harvesting. The following NTFP species were included in the study:

- | | |
|-----------------------------------|----------------------------|
| (1) <i>Irvingia gabonensis</i> | (4) <i>Garcinia lucida</i> |
| (2) <i>Elaeis guineensis</i> | (5) <i>Garcinia kola</i> |
| (3) <i>Baillonella toxisperma</i> | (6) <i>Coula edulis</i> |

1.5.4 Working plan

In order to study 'The role of community institutions in the management of NTFPs in Cameroon, a wide range of documents were reviewed and compiled in the form of an annotated bibliography (Ntenwu, unpublished). Most of the literature study was done in The Netherlands at the WUR, Leiden University but also at the British council, and the TCP libraries and the Universities of Dschang & Yaounde I in Cameroon. Publications on internet sites were also consulted. This took place in the month of August 1999. In september, an intensive workshop was held to set down grow nwork for data collection during the field work which took place from october to november 1999. It all culminated with the November workshop meant to lay the groundwork for data analysis.

1.5.5 Methods of data collection

The survey method included interviews with individual villagers based on questionnaires. The questions covered NTFP utilization and its purposes, the relative and absolute importance of the six selected NTFP species, and the construction of different sets of property rights to the selected NTFP species. Semi-structured interviews were carried out targeting individuals and groups to obtain information on socioeconomic conditions in the pilot villages, as well as on their social and political organization. In total, 99 villagers were interviewed more or less equally divided amongst the three villages.

Structured interviews

The questionnaires were structured and divided in two parts. The first part was meant for village identification, carried out among a group of nine people (two times) in each of the villages. The core respondents involved the village chiefs, notables, old women, elite sons and daughters of the village. The interviews enabled the researcher to characterise the research villages. The second part was directed at the identification of community institutions of NTFP management and to get an understanding of the way in which NTFPs are used in the research villages and the relative importance of the six selected NTFP species for the local population. It was further meant the get an insight into the construction of different sets of property rights on the selected NTFP species from a dynamic perspective. The ranking method described (see 1.5.4) was used in order to identify to respondents.

Informal interviews and participatory observations

Informal interviews were conducted on farms, markets and along village roads. The reason for the informal interviews was give room to those who could provide information but could not withstand

long hours of interview by the researcher. Thus this was mostly done while walking, farming, or sharing a drink. This provided vital information on diverse ideas concerning NTFPs and was more relaxed for the villagers.

Table 1: Distribution of respondents by gender

Village	Ebimimbang	Ebom	Nyangong	Total
Sex				
Male	25	21	23	69
Female	8	12	10	30
Total	33	33	33	99

Source: Field work 1999

Table 2: Distribution of respondents by age.

Village	Ebimimbang	Ebom	Nyangong	Total
Age group in years				
20-29	3	9	10	22
30-59	24	20	18	62
60+	6	4	5	15
Total	33	33	33	99

Source: Field work, 1999.

In all the villages, majority of the interviews were conducted with men. In cases where a couple agreed on an interview, often the men answered the questions. Additionally, some of the men are so suspicious and jealous that they would not want to see their wives discussing in close range and for a long time with another man³. In consequence, most of the women interviewed in all the villages were widows, unmarried or divorced women. We also selected some women purposefully because of their old age so as to count on their experience especially in cases of old and abandoned NTFPs that were used in the past but not today. There were also particular cases of women who were known for their high rate of NTFP sales. It was also noticed that some of these women are actively involved in NTFP commercialisation but do not gather themselves. They often buy NTFPs from other villagers and these products are sold in neighbouring cities.

Most of the questionnaires were directed to people between the ages of 30 to 59 and in a few cases above 60 and below 20 years. The age group from 30 to 59 include the most active section of the local population. Often those people are married and engaged in income generating activities such as NTFP commercialisation. Furthermore, people belonging to this group often can express themselves easily in French. The people above the age of 60 were especially knowledgeable with regard to cultural matters like rites, sacrifices, and rituals.

1.5.6 Problems encountered

The major problem during the field studies for this research was the difficult access of the area, due to the deplorable road conditions, aggravated by harsh weather conditions. Some interviews were therefore either postponed or appointments totally failed.

Many of the respondents wanted compensation before giving any response. This was not done because it could negatively affect future researchers without means of such remuneration. Also, it was assumed that information given voluntarily could be more authentic than information The

³ For future research targeted to women in this region, female researchers are preferable. Local women will be hardly suspicious of female researchers as they assume that their status is so high compared to their men.

structured questionnaires were also time consuming given the limited time for the research (Four months), with a fieldwork period of only 35 days.

The villagers were at times very reluctant to give information. They complained that the research projects do not sufficiently sensitise the population. In the case of Ebom, the inhabitants of Ebom II complained that most projects only showed interest to a part of the village, i.e. Ebom I. In consequence, the researcher had to spend much time convincing the interviewees before questioning. Given that most of the population involved were either illiterates or could talk neither French nor English, questions had to be translated into the local language. In some cases, translations were good but responses very different due to poor interpretation by the interviewees. This led to repetition. In cases where the intervention of a third party could not solve this problem of interpretation, questions were postponed for another day.

2. SITE AND VILLAGE CHARACTERISATION

2.1 Research site

2.1.1 Location

From an administrative point of view, the study area is part of the South Province and is subdivided into the departments Océan and Ntem. The site covers an area of 200,000 ha and is located between 50 km and 100 km from the coast (Foahom and Jonkers, 1992). The area includes two former logging concessions of the company WIJMA-Douala SARL⁴ (GWZ). The selected research villages in the Bipindi-Akom II (TCP) site include *Ebimimbang*, *Ebom*, and *Nyangong* (see figure 3). Administratively it belongs to the department Ocean

2.1.2 The physical environment

The climate of the TCP research area is humid tropical, typical of southwest Cameroon⁵. The most important geological structure is the Precambrian shield. The shield consists for a large part of metamorphic and old volcanic rocks. The metamorphic rocks consist mainly of gneisses, migmatites, schists and quartzites (Franqueville, 1973). The site is geomorphologically diverse. In the western part plains dominate whereas the eastern part is mountainous. The altitude ranges from 40 m to 1000 m in the eastern part. The central area is intermediate in both landform and altitude. The soils are chemically poor and vary from deeply weathered clay soils to sandy clay (Van Gernerden & Hazeu, 1999). The hydrology just like the whole of southwest Cameroon, is characterised by a high drainage density, due essentially to the climate which is particularly humid (Franqueville in Van Gernerden & Hazeu, 1999).

The vegetation in the area forms part of the Guineo-Congolian domain consisting of the humid evergreen forest (Letouzey in Jonkers and Foahom, 1992). It includes tropical lowland rain forest, sub-mountainous vegetation and some swamp forest. This is interspersed with fields, fallow lands, secondary forest and logged-over forest.

⁴ 'WIJMA-Douala SA.R.L. (GWZ)', a forest exploitation company from The Netherlands started its logging activity in this region during the nineties. Until recently, logging was the main activity in the area but stopped in 1998, when the concession of this company expired.

⁵ Rainfall occurs throughout the year with two distinct minima and maxima distinguished in the annual pattern which are associated with the N-S movements of the Intertropical Convergence Zone over the area (van Gernerden and Hazeu, 1999). The humid seasons. Although rainfall occurs almost throughout the year, there is a distinct seasonal variation in precipitation resulting to four seasons. A long and heavy rainy season from September to November, a shorter and less extensive rainy season from April to May, A long dry season from December to March, and a short dry season from July to August (Fines, Lescuyer, Tchatat, 1999; van Gernerden and Hazeu, 1997).

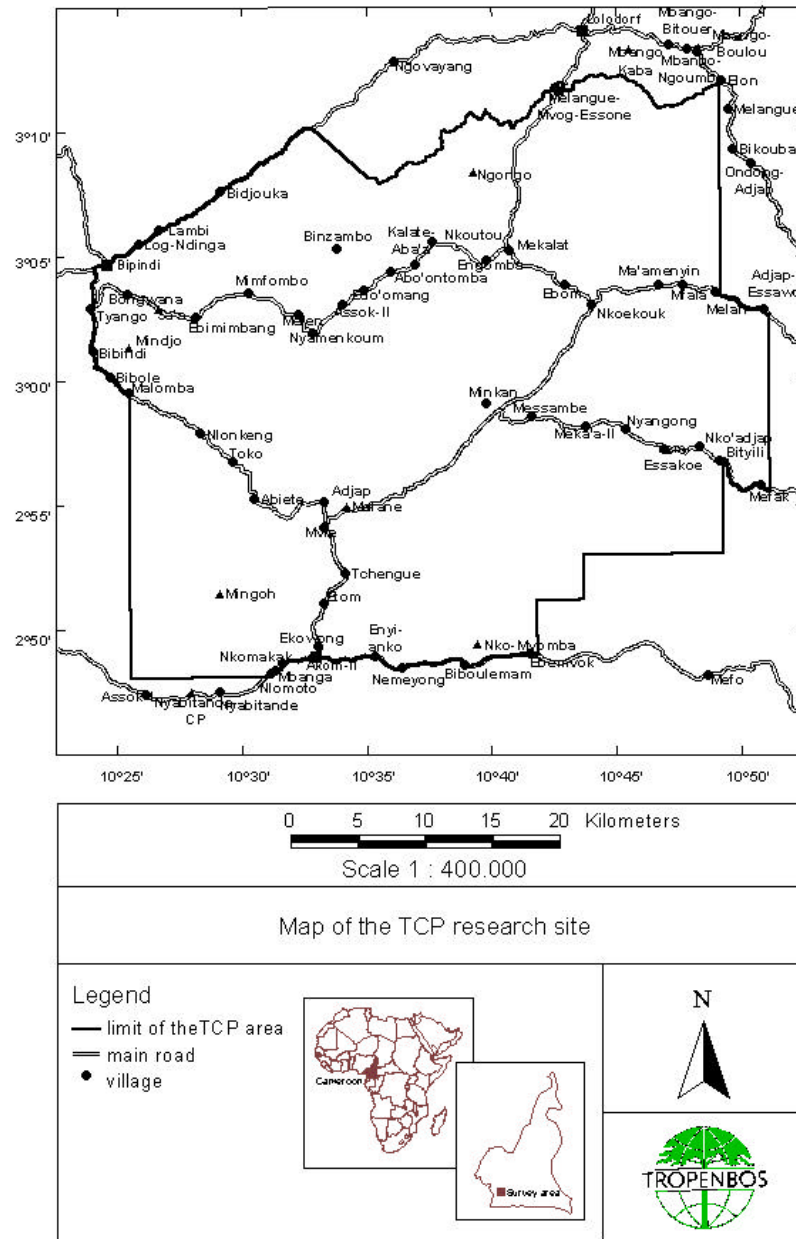


Figure 2: Map of the study area of the Tropenbos Cameroon Program.
 Source: Adapted from TCP Econ2 Project (1999)

2.1.3 The human environment

2.1.3.1 Population: density and settlement pattern

The TCP research site has a population of about 15000 persons in 66 villages including pygmy settlements (Fines, Lescuyer, Tchatat, 1999). As such it is sparsely populated (5-10 habitants/km²) and most people live along the roads especially along two roads which connect Bipindi with Akom II and Efoulan (Foahom & Jonkers, 1992).

The major ethnic groups in the area are Bantu⁶ and Pygmy people. Within the Bantu population, the Bulu form the most important group and they dominate the southern part of the area while the northern part has a more diverse population, consisting of Ngoumba, Fang and some Bassa. These are all sedentary farmers who practice shifting cultivation of food crops and cocoa growing. The Pygmy people inhabiting the coastal forests of Cameroon identify themselves either as Bakola (sg.: nKola) or Bagyeli (sg.: nGyeli)⁷. The Bagyeli or Bakola live in small groups (about 30 persons). Formerly, they lived in a nomadic way in low, round huts made of branches, leaves and bark. Nowadays, each group has a more permanent camp, to which the group regularly returns (Loung *et al.*, 1990) The number of Bagyeli or Bakola living in the area between Lolodorf and Campo is estimated at 3,400 people (van den Sandt, 1986 and 1992; Loung, 1992).

The main activities of the pygmies include hunting and gathering.. Each group moves through the forest following defined circular routes. Most Bagyeli groups have a special relationship with a Bantu village (Loung *et al.* (1990) speaks of “village de rattachement” (Foahom & Jonkers, 1992). The Bagyeli villages depend largely on exchanges with the Bantu villages to obtain agricultural products. They are not self sufficient for their basic food.

2.1.3.3 Market access.

The TCP research site is surrounded by a few towns, which are the main distribution and marketing centres for the local population from the villages. The two main markets for agricultural products and NTFPs include the markets of Kribi (for Ebimimbang) and the market of Ebolowa for Ebom and Nyangong. There are also markets in the smaller towns like in Lolodorf (for Ebom) and Bipindi (for Ebimimbang)

2.1.3.4 Other infrastructures

Apart from the towns of Kribi, Ebolowa, and Lolodorf, which offer medical facilities (e.g. hospitals, pharmacies), drinking water, electricity and secondary roads, the rest of the area still suffers from lack of these facilities. All roads leading to and within the TCP area are dirt roads. Two governmental roads delimit the TCP research area, the Kribi-Bipindi-Lolodorf-Ebolowa road in the northwest and the Kribi-Akom II-Ebolowa road in the south. In addition, many smaller roads have been constructed for timber exploitation. The condition of these roads is, however, variable as maintenance is carried out by the logging companies and ceases once their activities are transferred to other regions. Footpaths connecting villages are found throughout the area. Transport by boat over the rivers is not possible for long distances due to the presence of rapids and waterfalls.

⁶ Neolithic ‘Bantu’ speakers originated from the Benoue valley in Nigeria where they began their expansion heading south around 3000 BC splitting in a Western and a Eastern Branch. The Western Bantu expansion continued from the banks of the Sanaga to the valleys of the upper Ntem and Woleu rivers of northern Gabon and Rio Muni. This late western Bantu expansions took place over two fronts. The internal relationship with the Ewondo, Bane, Bulu, Ntumu, and Fang languages make up this southern expanse (Vansina, 1990,: in van den Sandt, 1997).

⁷ This name Bakola and Bagyeli which all identify the pygmies of south-west Cameroon stems from the fact that certain groups call themselves Bakola while others call themselves Bagyeli (Loung, 1987 adapted from van den Sandt, 1997).

The number of schools in this area is also limited. Ebom and Ebimimbang have only a primary school while the village of Nyangong has a primary and a secondary school. The major problem is, however, the inadequate facilities in the existing schools. In Ebimimbang, some pupils need to stand due to lack of benches and frequently for periods of a couple of months there are no teachers available due to not paying salaries.

The health situation is also deplorable, as there are no health care facilities in the villages of Ebom and Ebimimbang. In Nyangong, there is an infirmary though not equipped. For medical attention the population of Ebimimbang have to go to Bipindi while the people of Ebom have to go to Lolodorf.

There exist a variety of religious groups in this area belonging to at four major religious organisations active. The EPC (Eglise Protestante Camerounaise), the Neo-Apostolic church, the EPCO (Eglise Protestant Camerounaise Orthodox), and the Catholic Church are the most prominent. There are also other religious groups, which form a minority. These include the Adventists, True church of God, and The Witnesses of Jehovah.

2.1.4 Land use

The most important form of land use in this area is the shifting cultivation. It is practised by the Bantu people and more and more by the Bagyeli population as well. Other activities include gathering, fishing and hunting of small mammals and reptiles (porcupines, Antelopes, and monkeys, etc). There are no large industrial plantations in the area. But cash crops are grown on plantations owned by families who sell their products to wholesalers that come weekly during harvesting period. Food crop cultivation is mostly practised less than 5 km away from the houses. One of the reasons for this is because animals destroy fields, which are not located along roadsides or near houses. Cocoa plantations are sometimes situated at more than 5 km from the houses. Food crops include maize, cassava, cocoyam, and plantain. Cocoa is the only cash crop of economic importance.

NTFPs are an important source of food, construction materials, agricultural and household utensils, medicine and cash for the local population of this region. The gathering of NTFPs is for the Bantu people supplementary to agriculture. For the BaGyeli pygmies, it is the basis of subsistence. The Bagyeli spend a part of the year in hunting camps. Traditionally, the Bagyeli provide Bantu farmers with forest products and receive agricultural products in exchange. Biesbrouck (1996) mentions that agriculture remains a low priority activity especially when compared to hunting. Surveys on NTFP collection have been carried out in the TCP research area. Some 500 plant species were recorded in this area alone and provided a total of nearly 1200 different uses (Van Dijk, 1999). The trade in NTFPs is an important source of income for the local people.

2.2 Village Characterisation

Before the foundation of Ebimimbang there were no people living at this location. In 1909, a group of people settled at this site, after leaving the place known as Ebimimbang I due to frequent inundations. The Sa'a Pygmy settlement is now located on a small section of this former site (van den Sandt, 1997). At present, people still claim rights over this formerly occupied land. The boundaries of the village lands are formed by mountains, rivers, secondary forests and other natural features.

Contrary to Ebimimbang, Ebom has never changed location. the area was in a first instance occupied by Ngoumba people who were chased away in the late 18th century when the village was founded. There is no particular incident related to the evacuation of the Ngoumba from this area, but history has proven that majority of pre-colonial tribal conflicts were solved by war. Nowadays, the Ngoumba have no access rights to land and other resources. Most of the boundaries of the village are water

courses, which have hardly known modifications since they were marked by the ancestors. An example is the river *Bibo'o* which separates Ebom I from Ebom II. This separation by river *Bibo'o* is not like a limitation to access rights. Inhabitants of Ebom I own farmlands of the secondary forest in Ebom II and *vice versa*. So this river seems to be just a land mark and not actually a limitation.

The inhabitants of Nyangong settled at this present site while migrating towards the coast in search of salt. Since there were already traders bringing salt up to this area, they found no reason to continue their migration. Instead, they took the challenge to engage into conquest with the Ngoumba's who occupied this site at this time. Beaten in the war the Ngoumba's had no choice than moving southwards. Also, there were people of the neighbouring village Meka'a who lived before on the land which belongs nowadays to the people of Nyangong and some families lived in parts of the forest which are labelled today as *Fos afan/Bilik* (Old secondary forest) before joining their brothers in the village (van den Berg, pers. comm.). The founders of Nyangong were; Bidoung Efoua, Engamba Obam, Elebia Ntolela, Bengondo Akombo, Sakoutou Jean, Betolo all from the "*Yetotan*" clan. In Nyangong there are some natural signs that indicate that the Ngoumba had passed through the village. These marks are some famous hills and rivers, which were named by the Ngoumba. As "Pa Zamedjo" explained;

'Famous hills (SA'abong, Bezabelab, Bingalanda), and rivers (Oboo, tyango, Nyangong) are still known in Nyangong nowadays by the same name which were given by the Ngoumba before the war. This does not give them any guarantee of access rights to the village lands. Even in the virgin forest they have no rights to mark plots or gather NTFPs. Nobody is allowed to sell or even lend land to them in the village no matter the reason.'

The boundaries of Nyangong were marked by the founders after the Ngoumba had left. These limits have had no modifications so far and are formed by rivers and other natural features similar to the other villages of the site.

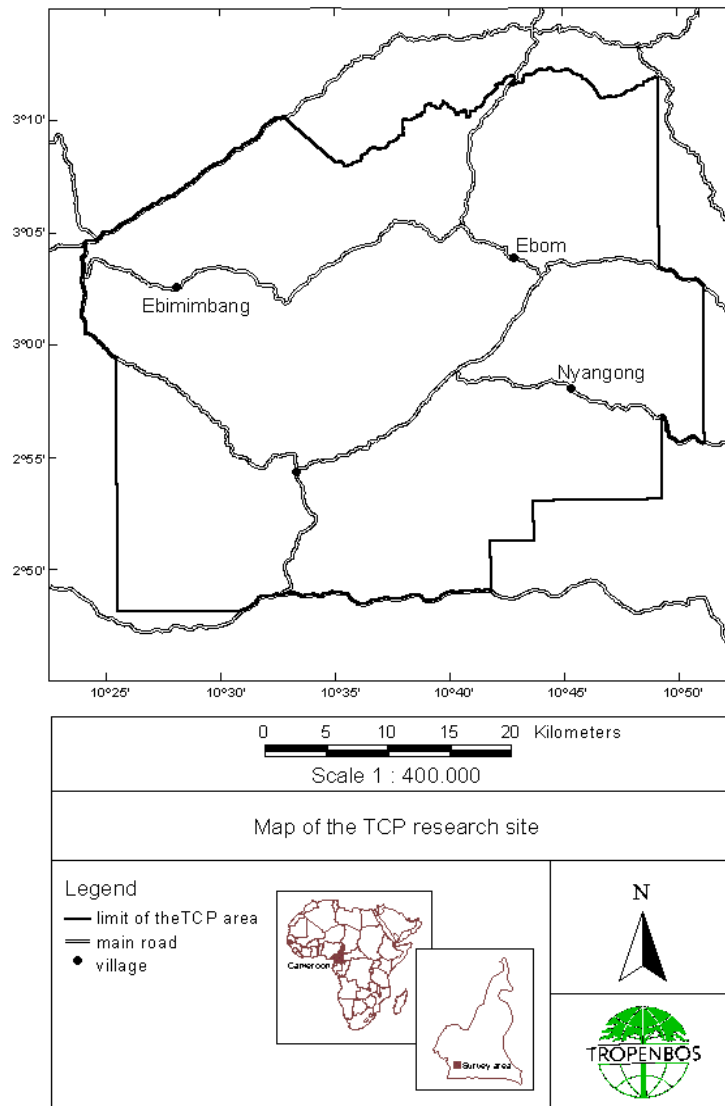
2.2.1 Location of the research villages

Ebimimbang is located in the western part of the TCP research site, in the district of Bipindi. The inhabitants belong to three ethnic groups: The Fang, form by far the majority, but there are also some Ngoumba and Bulu people. The people lived in the village since 1909 when it was known as Ebimimbang I. Today, it has changed site and the present site is referred to as Ebimimbang II. The reason for this change of site was due to the fact that the first area was very swampy and thus rendered agriculture difficult. The present chief of this village is Nkane Jean Marcel. He is considered as an interim chief. He is not accepted by about 80% of the inhabitants since he came to power through an administrative order and not by the vote of the inhabitants.

Ebimimbang is surrounded by the villages Mimfoumbou, Bongwana, and Nyaminkom. They are all between 1 and 3 km's away. Secondary forests and small rivers separate them. The limits of the village are marked by natural and man-made boundaries. Between Ebimimbang and Bongwana is located the former WIJMA camp. Between Ebimimbang and Mimfoumbou is a small river known as "*Bibobola*". These limits have not had modifications since the ancestral past except in the case of the form of limit. Between Ebimimbang and the neighbouring villages, there have been hardly land disputes. Recently, a conflict arose between the *Yembi* family (Ayong) of Ebimimbang and the Bulus of Mimfoumbou concerning land boundaries.

The village of Ebom located in the North east of the TCP research site belongs to the district of Ebolowa. Ebom is divided into two parts; Ebom I and Ebom II. A secondary forest separates the two sections of the village. Despite this division, they are still governed by one chief known as *Chief*

Figure 3⁸ : Map of TCP study area indicating the three villages of the research



Atuba Djomo. This village was founded about two centuries ago and belongs to the village grouping (groupement) known as *Ngonebock Abo'ontomba*. The research villages in the Bipindi-Akom II

⁸ Source: Adapted from TCP Econ 2, project 13, 1999

(TCP) site include Ebimimbang in the west of the TCP site, Ebom in the north east, Nyangong in the east

Ebom has several neighbouring villages in the direction of Kribi and Ebolowa, all Bulu. Logging companies have exploited most of the forest around this village, and only recently WIJMA finished her exploitation in the surroundings leaving the population unsatisfied. The major problem was caused by the fact that WIJMA promised compensation that is still not paid today. The temporal support that the population received from this company mostly in kind lasted very shortly and was seen as flattery.

Nyangong is located in the east of the TCP research area and in the district of Ebolowa. It is one of the villages in the *Sonkot Minkane* grouping (groupement) and all the inhabitants here belong to the Bulu ethnic group. The actual chief is *Sakoutou Jean*. This village was founded in the 2nd half of the 19th century before colonisation. Nyangong is located in a very hilly landscape..

Nyangong originally consists of a unique clan named the Bulu “*Yetotan*” In contrast Ebimimbang and Ebom where various ethnic groups and clans are represented.

2.2.2 Accessibility

Accessibility in all the villages is actually very poor. The condition of the roads has a seasonal character and sometimes the roads are impassable. Since a majority of the people of these villages lives on agriculture, harvesting of NTFPs, hunting, fishing, and cocoa cultivation, they need a market to sell all these products. The nearest markets are Kribi, Bipindi, Lolodorf, and Ebolowa.

Table 3: Accessibility of markets

Parameters of comparison	Ebimimbang		Ebom		Nyangong
	Kribi	Bipindi	Lolodorf	Ebolowa	Ebolowa
Distance on foot before meeting a market (in km)	12	-	20	-	60
Distance + condition of the road	-	-	-	-	-
Transport cost/head (in CFA francs)	-	-		1300	1500
Transport cost /sac (in CFA francs)	-	-		1000	1000

Source: field work, 1999.

Key

- + = good
- + - = average
- = poor

From the table above, the distance on foot before meeting the first market from Nyangong is three times longer than that of Ebom but the transport fares per person and per sac are almost the same.

This is because of the fact that few vehicles come to Ebom and only once or twice per week when the roads are good. The transport fares are determined by the owners of the few vehicles. Being a monopoly situation, they raise the prices whenever they want and the villagers have no choice since there are no other options.

Respondents in Ebimimbang could not provide any fixed price for transportation to Bipindi because there is no regular transportation between Ebimimbang to Bipindi. Most often the vehicles from Kribi (about 60km from Ebimimbang) end at Bipindi. Rarely, cocoa buyers who come to the village, sometimes clandestinely transport villagers going to the market but for very irregular fares. Some transport vehicles also pass through the village from Assok destined for Kribi and not Bipindi. However, some villagers profit from this occasion to transport their products to Kribi at the cost of 2500 Frs. CFA per person and 1000 Frs. CFA per sac. Also, vehicles of some organisations and forest exploiters (Tropenbos, USAILD, WIJMA) sometimes transport the villagers of Ebimimbang to Kribi and Bipindi. Further some people prefer to pay 200frs CFA for a boat in order to cross river Lokoundje when they travel on foot from Ebimimbang to Bipindi.

The shortest distance between a market and a village is that between Ebimimbang and Bipindi which is about 12 km. The market takes place two times a week on the average. The distance from the villages to the market is travelled mostly on foot, except in the case of Bipindi-Kribi and Nyangong-Ebolowa where clandestine vehicles are more or less much frequent. Sometimes, the farmers and harvesters benefit from the lorries of cocoa buyers to transport their goods to the towns for marketing.

2.2.3 Demography - In and out migration

For the three villages studied, the Bulu form the majority ethnic group in Ebom and Nyangong while the Fang dominate in Ebimimbang. The Bulu of Ebom are known as Bulu-*Essakoi* while those of Nyangong are the Bulu-*Yetotan*. These clans were named after the family names of their first ancestors. The majority of the Fangs people of Ebimimbang belong to the Essawo clan. There are also other clans like the Essewong, and the Esseng.

Table 4: Demographic situation of the three villages

Villages	Ebimimbang	Ebom	Nyangong
Parameters			
Permanent inhabitants	275	300	250
Temporal inhabitants	50	120	150
Immigrants since 1988	12	15	3
Total	337	435	403

Source: -Fieldwork, 1999.

The table above summarises the demographic data of the three villages. None of the villages has a population of more than 500 inhabitants. Ebom is the largest village with 435 inhabitants followed by Ebimimbang with 403 inhabitants and Nyangong with 337 inhabitants. This total population includes non-permanent inhabitants who only come to the village temporarily for holidays, funerals, traditional rites and treatment, and traditional weddings. There are some rich 'elites' (people born in the village but living and working in the city) who own farms and regularly come to check workers

they employ. Also included are those people who have been living in town, but who have returned to the village after retirement or dismissal from work. These are called immigrants in the text.

Comparatively, Nyangong has more 'elites' in the city than the other villages, which explains the large number of non-permanent inhabitants. This increase has taken place during recent years partly caused by the high recruitment rate of young males (between the ages of 20 to 30) in the military service. Also, it is accessible to Ebolowa by vehicles, which ply often through the village contrary to Ebimimbang where transport vehicles mostly end at Bipindi. With the case of Ebimimbang, some former employees of the WIJMA decided to settle in the village a few years back. Some are married to girls from the village. These were also included to the list of immigrants during the research.

The non-permanent inhabitants of the three villages are businessmen and -women, civil servants, baby nurses, and students mostly from cities like Douala, Yaoundé, Kribi, Garoua, Bipindi, Lolodorf, (for the case of Ebimimbang), Douala, Yaoundé, Lolodorf (for the case of Ebom), and Douala, Yaoundé, Ebolowa, Kousseri (for the case of Nyangong).

2.2.4 Local economy

Like most of the rural areas of Cameroon, the population of Ebimimbang, Ebom and Nyangong practice a multitude of activities amongst which agriculture is the most important. The basic economic activities in the three villages are similar. Table 5 shows the importance of different economic activities in terms of time investment and revenues obtained.

Agriculture is one of the first and most important activities of the local people (along side hunting and gathering) in this region. Food crop cultivation has the highest input in time for both men and women in all the villages. Food crops include cassava, banana, plantains, cocoa-yams, groundnuts, maize, a variety of vegetables. This agriculture is practised using mainly traditional methods. It is merely directed at home consumption while the surplus is sold to either strangers who pass through this village or to neighbouring towns like Kribi, Lolodorf and Ebolowa.

Though second in descending order of importance cash crop cultivation has similar input in time thanks to the fact that it's a constant⁹ source of income. This activity is carried out more intensively by men than by women, although many women support their husbands at many occasions. In addition, most widows continue to work on the farms of their late husband with the assistance of the children. Generally, the marketing of cash and food crops are significantly higher and more pronounced than the marketing of NTFPs. The importance of wage labour is considerably low.

A minority of the working population is involved in arts and salaried activities. A great proportion of about men concentrate on cocoa cultivation, and hunting, while women mostly take part in food crop cultivation, and harvesting of NTFPs. However, some of the men and women are flexible in terms of these activities. Hunting has been quite profitable for home consumption, as it has served as meat to most of the families for a long time. Small commercial activities is a new spirit entering into the villagers as small provision stores and clandestine beer parlours start appearing in some sections of the village.

⁹ The word constant in this sense means that it has always produced since it was introduced by the colonial authorities. If not because of the fall in world prices of cocoa which has brought down the price of one kg from 600 Frs. CFA to 250 Frs. CFA, this commodity would have more input in time and more yield in terms of revenue.

Table 5: The importance of activities in terms of input in time, and revenues.

Villages	Input in time				Revenue							
	Eb'bang N=33		Ebom N=33		Nyangong N=33		Eb'bang N=33		Ebom N=33		Nyangong N=33	
Activities	*M N=25	**F N=8	M N=21	F N=12	M N=23	F N=10	M N=25	F N=8	M N=21	F N=12	M N=23	F N=10
Agriculture (Food crops)	9	4	6	6	10	4	12	3	11	6	7	4
Plantation Agriculture ¹⁰	6	2	10		11	2	8	2	6	2	9	1
Hunting	4		2	2		2		1	2	1	3	3
Gathering	2	1	3	4	1	2	3	1		3	4	1
Fishing	2	1										
Arts	1											
Small-scale commerce	1				1			1	2			1
Others ¹¹	-	-	-	-	-	-	-	-	-	-	-	-

Source: Field work, 1999

Eb'bang = *Ebimimbang* *Male **Female

Like most of the rural areas of Cameroon, the population of Ebimimbang, Ebom and Nyangong practice a multitude of activities amongst which agriculture is the most important. The basic economic activities in the three villages are similar.

One would notice from the figures above that agriculture (food crop cultivation) has the highest input in time for both men and women in all the villages. This is one of the first and most important activity of the local people (along side hunting and gathering) not only in this region but the whole country since the ancestral past. The fertile soil of partly volcanic origin is also an encouraging factor to this activity. This confirms the saying that "agriculture is the mainstay of the economy of Cameroon. Some of the food crops include cassava, banana, plantains, cocoa-yams, groundnuts, maize, a variety of vegetables. This agriculture is practised using mainly traditional methods. It is merely directed at home consumption while the surplus is sold to either strangers who pass through this village or to neighbouring towns like Kribi, Lolodorf and Ebolowa.

Though second in descending order of importance cash crop cultivation has similar input in time thanks to the fact that it's a constant¹² source of income. This activity is carried out more by men than by women. Some women no doubt would support the men in many occasions while a few widows continue to work on the farms of their late husbands with the assistance of the children. Generally, the marketing of cash and food crops are significantly higher and more pronounced. The importance

¹⁰ Plantation agriculture here is basically cocoa growing. There are no other cash crops grown in these study villages.

¹¹ There is an activity said to be carried out by young men between the ages of 20-40 in Ebom and Ebimimbang which the research did not base any attention on. This, according to rumors is the local extraction of gold. Up till now there is no ocular proof of this activity but some people say this is what has diverted the attention of some young people away from the other activities.

¹² The word constant in this sense means that it has always produced since it was introduced by the colonial masters. If not because of the fall in world prices of cocoa which has brought down the price of one kg from 600 Frs. CFA to 250 Frs. CFA, this commodity would have more input in time and more yield in terms of revenue.

of wage labour is considerably low. A minority of the working population is involved in arts and salaried activities. A great proportion of about men concentrate on cocoa cultivation, and hunting, while women mostly take part in food crop cultivation, and harvesting of NTFPs. However, some of the men and women are flexible in terms of these activities. Hunting has been quite profitable for home consumption, as it has served as meet to most of the families for a long time. Small commercial activities is a new spirit entering into the villagers as small provision stores and clandestine beer parlours start appearing in some sections of the village.

2.2.5 Social organisation of the research villages

Ebimimbang is a Fang village and has seven different clans distributed unevenly in five quarters of the village, of which the Esseng clan is the largest. Ebom is a Bulu village and the majority of the inhabitants belong to the Essawo clan. The village has five main quarters which are: Elong-Ngass, Mvog Meli, Mvog-Aveb, Mvog Mboushi, and Mvog Meka Nyangong over which the various clans are.

The social organisation in all the three research villages has a patrilineal character. A man's home is in his father's village and a woman goes to live in her husband's village. The patrilineage, known as *nda bot* by both the Bulu and the Fang, contains usually descendants from an ancestor one or two generations removed from the present oldest man. The *nda bot* which in this report is known as compound is part of a larger group, referred to as *mvog*, which consists of the descendant of a common ancestor. The Compound as used in the report is an enclosed area containing a group of buildings. The occupants of these buildings are descendants of one generation sometimes known as «relatives» and married to wives from other villages or other compounds. They also always have one leader which is the «compound head». The members are thus known as the «Compound members». A *mvog* can indicate a group of houses, meanwhile in another context it might be used as a synonym for the house (van den Berg, pers. comm.). In this present study, *mvog* represents a group of houses often forming a quarter. The largest social unit is the *ayon* or clan.

In the Bulu as well as the Fang society, authority is traditionally vested in the elders. Their actual power is restricted to their kin and depends mainly on individual capabilities and personal achievements. To become a village chief or leader, a man thereby needed to prove his courage in hunting expeditions and warfare and to prove his wisdom and persuasive power in public debate and dispute settlement within village meetings (Geschiere, 1992: in van den Berg & Biesbrouck, in press). In the three villages studied, the village chiefs are considered merely as local representatives of the state and its laws. Officially, a village chief is in charge of the transmission of administrative directives to his people and of assuring their execution; the collection of taxes, the maintenance of public order, the promotion of socio-economic and political development, and the settlement of conflicts (van den Berg, 1996).

Power to command people are most tangible at the level of the house (Geschiere, 1992, in: van den Berg & Biesbrouck, in press). Traditionally, no authority structure exists above *Nda bot level* (van den Berg, 1996). The *nda bot* is commanded by a family head or *mbi ntum* (usually the oldest man in the *nda bot*) together with the old men of the family. His main obligation is to keep together the family, protect and enlarge their properties. He is also the mouthpiece of the family. His authority concerns mostly his *nda bot* and is not absolute. He decides on important matters that concern the family as a whole. For example, the distribution of family lands, presiding over funeral ceremonies, and settling of disputes within the family. The head of the family is a representative of the village head at the family level. He translates and interprets these problems of the family to the family in cases where it's above his level.

The village elite who have succeeded to build up their lives in the cities usually enjoy considerable prestige in the family, as well as in the village community. They are always consulted in important family matters and often play an active role in village affairs in collaboration with the *notables* (van den Berg, 1996). The village council (made up of *notables*) assists the chief in the execution of his duties. These men are nominated by the village chief himself and are usually the different lineage heads of the village.

2.2.5.1 Socio-political organisation and the management of forest resources

The chief according to the organisation of traditional rules in Cameroon is of the third grade/degree. This follows a classification of chiefs according to their powers. In these villages the chief comes to power through succession. An exceptional situation was found in Ebimimbang where the chief came to power through a sub-prefectorial appointment instead of succession after the death of the former chief on the 12th of August 1998. For the case of Ebom, the actual chief ATUBA DJOMO is a descendant of the founder of the village from the Essawo clan, the clan to which the majority of people belong in this village. In Nyangong this is the case as well. The village chief, SAKOUTOU JEAN, is a descendant of SAKOUTOU ATUBU and EKA'ABAN.

Different levels of social organisation play a role in local management of natural resources. Members of the *compound* play important roles in regulating the access to fields, fallow lands, and cocoa plantations. Individuals control access in their own agricultural fields and plantations. Agricultural land that was not obtained by inheritance, but appropriated by forest clearance is controlled by the individual. He derives this right from the principle of first occupancy¹³. In the three villages studied and throughout the entire Bipindi-Akom II region, the *nda bot* holds collective rights for its members over the fields and fallow lands that were inherited (van den Berg and Biesbrouck, in press). Tiayon (1999) calls these lineage lands a *patrimony*. The *nda bot* has the right to exclude non-members from using these lands.

In daily practice, the *nda bots* are the significant units in managing natural resources. The *nda bot* has permanent exclusive rights on well-defined parts of the lineage lands and natural resources. If the members agree, they could allow strangers and 'outsiders' to borrow, lease or take care of some section of it. There is also the possibility of individual men to start building their own patrimony after marriage. In the course of time as the number of his descendants increases, the group will form a separate *nda bot*. The *nda bot* then controls access on valuable trees found on the *patrimony* except for those trees that have been appropriated by an individual.

The village plays a role in the management of the high forest area within the village boundaries, with the exception of those resources already appropriated by smaller entities. Usually, natural elements of the landscape such as rivers and hills mark the boundaries of the forest area related to the village. The exploitation of NTFPs by non-native villagers is tolerated in case a native villager allows them to do so. There is a tendency towards exclusion of non-natives of the village from the exploitation of the forest. However, the effectiveness of the control over these forest areas depends on the distance between these areas and the village concerned. In spite of the fact that there are no special security groups, quarter members play a role in regulating access to forest resources by keeping watch on strangers so that they do not move in unnoticed into the forest. It is not difficult to recognise who belongs to the village or not.

¹³ The first person to put an axe or machet into a section of the high forest controls access to that section but both trees and land still remain property of the village and not individual property.

2.2.5.2 Associations and co-operatives

There are numerous associations, clubs and co-operatives found in villages of the study site. However, these multitudes of associations focus merely on activities related to agriculture. It is only recently that they have started to engage in other activities especially with regard to the commercialisation of NTFPs. Examples are the G. I. C (Group d'Initiative Commun) which is the only form of co-operative found in this site, 'Group des Orphelins' I and II, 'Etoile du matin', Esseyons voir, FANY (Femmes actives de Nyangong). Most of the associations have small funds and their meetings take place either weekly or monthly. The funds are partly meant to support members in difficult times and secondly they are used as a means of saving money, distributed to members at the end of the year. Some associations like the Etoile du matin have a religious structure, investing only in spiritual and cultural activities of the church. Further, Nyangong has the 'Association des Femmes Active De Nyangong'(FANY). This association has been created recently, with the objective to establish a market in the village in order to avoid the profits made by the 'buyem sellams' (literally: buy them-sell them) and to have an influence on price fixing. As the name indicates, only women participate in this association and their age ranges from 25-50. This age group includes the most active women in this village. Apart from their first objective of creating a market, they have plans to enlarge it to a community development institution. In this case, they would ask the men to support their initiative. During the research, no associations were identified in any of the villages studied who have a role in NTFP management.

2.2.5.3 Local knowledge

Old people consider the forest like a place of initiation, sacrifice, point of concentration and invocation of mystical forces. Witch doctors or 'suit sayers' and other magicians use NTFPs from the virgin forest or *Fut afan* during invocations in order to obtain supernatural effects.. An example is the use of 'Obato an' (*Rauwolfia vomitoria*) in washing new born babies besides the stream in order to protect them from witches and frequent convulsions. of the bark of "Oveng/Essingang" (*Guibourtia tessmannii*) is well known to be useful against witchcraft.

The forest is also a place of sacrifices to the ancestors who are believed to guide the village. The notables of the village condemn each type of exploitation in the forest without offering sacrifices to show appreciation to the 'gods'. The absence of sacrifices is believed to raise the anger of the 'gods' and in consequence lead to low yields.. An example of such a sacrifice is burning a cock together with some gathered NTFPs or agricultural products under a large tree in the forest where the ancestors are believed to inhabit. It is forbidden to cut these kinds of trees.

3 NTFP EXPLOITATION

The local population practises a mixture of activities as food and cash crop cultivation, animal husbandry, NTFP gathering and fishery. The largest part of the production is directed at home consumption, and mostly only the surplus is sold. The quantities marketed are restricted. Most people sell forest products to buy in turn goods that could not be locally manufactured.

3.1 Utilisation of NTFPs

In the south of Cameroon, both Bantu and Bagyeli societies rely to a great extent on NTFPs. Many NTFPs are important sources of food. Bushmeat and fish, for example, are the most important sources of protein in the daily diet. For the construction of houses and for household and agricultural equipment, people depend completely on forest products. Traditional medicine plays an important role, as the "modern equivalents" of health care are poorly accessible. The interviews and informal discussions revealed that everyone consumes at least some NTFPs..

3.1.1 The NTFPs identified

Table 6 reflects the names and type of products used from the most frequently used NTFP species. The figures present the number of times a species was mentioned by the respondents and as such it provides some indication on the importance of the species. The following use categories were adopted: *plant forest food, plant medicines, fuel wood, building materials, fishing/farming/hunting equipment, local alcohol production and cultural and religious uses.*

Forest food (plants)

In all the three villages studied, NTFPs contribute significantly to the diet of many rural households. The local people gather fruits, barks, roots, leaves from the undisturbed forest, fallow lands and cash crop plantations. These foods are used in cooking as they add flavour to sauces and are sometimes consumed directly, especially by children. They are often rich in protein, vitamins and minerals. The species used as food include the condiments derived from *Ando'o (Irvingia gabonensis)* and *Ezezung/Njangsang (Ricinodendron heudelotii)*; *fruits from Mvout (Trichoscypha acuminata)* and *Tom (Dacryodes macrophylla)* and *the nuts of Abe afan (Cola verticillata)* and *Ewomen (Coula Edulis)*

Plant medicines, customs and rituals

Both in rural and urban areas forest medicines are still frequently used. Some people prefer always the forest medicines above their pharmaceutical equivalents, others take them whenever 'modern drugs' do not appear to be effective. This is particular the case for treating typhoid fever. The use of the medicines is often combined with ritual and mystical practices, especially with new born babies. In some cases, plants are used as a protection against witchcraft, others as stimulants, anti-poisons and addictive drugs.

The inhabitants of all the three villages studied use common known plant treatments in addition to those prescribed by specialist healers. Many common medicines used regularly as first aid are found in the village periphery or in bush fallow rather than in the undisturbed forest. However, for a particular ailment, or at the request of a healer, people will travel great distances to find specific forest medicines (Falconer, 1994). Some examples of NTFPs used as medicine include *Essok or Garcinia Lucida*, which is an anti-poison, *Onyae*, or *Garcinia kola*, which is believed to be an aphrodisiac. Other medicinal plants include *Ekouk (Alstonia boonei)*, *Ebam (Picralima nitida)*, and *Ajtek (Pausinystalia johimbe)*.

Table 6: Most frequently used NTFPs in the three study villages

Uses	Food	Medicine	Fuel-wood ¹⁴	Construction wood	Equipment ¹⁵	Wine and alcohol	Cultural and religious use	NU*	TFU**
NTFP species									
<i>Garcinia lucida</i> (Essok)	3	4			1	37		4	45
<i>Irvingia gabonensis</i> (Ando'o) ¹⁶	50			1				2	51
<i>Garcinia kola</i> (Onyae)	16					15		2	31
<i>Elaeis guineensis</i> (Alen)	56	4				25	10	4	95
<i>Baillonella toxisperma</i> (Adjap/Moabi)	4	2		1	3		3	5	13
<i>Coula edulis</i> (Ewomen)	20	1	2	10	2			5	35
<i>Ricnodendron heudelotii</i> (Njansang)	22							1	22
<i>Alstonia boonei</i> (Ekouk)	1	31					1	3	33
<i>Funtumia elastica</i> (Ndamba)		5	12	3	3			4	23
<i>Macaranga Spp</i> (Assas)			15					1	15
<i>Massularia acuminata</i> (Zo'o)					16			1	16
<i>Paussinystalia johimbe</i> (Atjek)	15							1	15
<i>Strychnos aculeata</i> (Mfass)					21			1	21
<i>Sacoglottis gabonensis</i> (Bidou)						20		1	20
<i>Trichoscypha acuminata</i> (Mvout)	17							1	17
<i>Xylopi staudtii</i> (Nkalla)			12	15	9			3	36
<i>Lophira alata</i> (Azobe/ Akoga)				8	3			2	11
<i>Guibourtia tessmannii</i> (Oveng)	2	14			6		21	4	43
<i>Poga oleosa</i> (Angale)	10	6						2	16
<i>Dacryodes macrophylla</i> (tom)	20							1	20

Source: Field work, 1999

*Nu-Number of uses

**TFU-Total frequency of use

¹⁴ Fuel-wood refers particularly to wood locally used in the kitchen for cooking food. It is sometimes also used in roasting fish.

¹⁵ Industrial wood refers to that used in fabricating fishing, farming, and hunting equipment.

¹⁶ This result is as of the time when it was produced. Ando'o has not been producing since five years as earlier mentioned

Fuelwood

Wood is the main source of energy for the inhabitants of Ebimimbang, Ebom, and Nyangong. It is collected from the fields and fallow. Not all wood is used. A clear preference exists for species as *Assas* (*Macaranga spp.*), *Assam* (*Uapaca spp.*), and *Atondo* (*Harunga madagascariensis*).

Building materials, utensils/ and industrial inputs

More than 20 tree species were mentioned to be used either for the construction of houses or for the fabrication of farm, fishing and hunting equipment. Food storage barns in local kitchens, livestock pens and other farm buildings are made from a variety of forest trees such as raphia and oil palms or bamboo. Example of wood include *Nkala* (*Xylopiia staudtii*), and *Zo'o* (*Massularia acuminata*), *Mfass* (*Strychnos aculeata*), *Bibolo* (*Lovoa trichilioides*) and *Adjap/Moabi* (*Baillonella Toxisperma*).

Fabrication of alcoholic drinks

Palm wine and locally distilled alcohol '*Odontol*' (made from fermented palm wine) are the most popular alcoholic drinks throughout the study area. Palm wine is mainly extracted from *Alen* (*Elaeis Guineensis*). Added in the recipients to the palm wine (locally known as 'white stuff') is the bark of *Essok* (*Garcinia lucida*), which acts as an anti-poison. The nuts of *Onyae* (*Garcinia Kola*) are chewed as an aphrodisiac believed to keep one awake. There is a strong urban demand for *Onyae*.

3.1.2 The actors involved

The table above shows that *Alen* (*Elaeis guineensis*) provides the most frequently used and sold NTFPs of all. This is mainly because it's the highest multiple use species. The fruits are used for cooking and to produce palm oil by local means of transformation mostly by women as earlier explained. These very nuts could be eaten casually after boiling, sucking the raw palm oil or also broken to eat the hardened yolk with a coconut-like taste. When dried, the bark and the chaffs of these fruits serve like fuel for cooking. Secondly, the juice that comes out of the trunk is known as palm wine. This juice is most often consumed and sold as fresh palm wine, or it is transformed under the process of distillation adding other ingredients like sugar and water. The final product of this process is called *Odontol* or *ha'a*. Men are mostly involved in tapping and selling palm wine in its original and natural stage while women are mostly involved in the distillation of the local whisky. The rate of exploitation of this species is similar in all the three villages studied.

Ando'o is highly commercialised but less consumed due to its local monetary value and the pains involved in the harvesting, transportation, and transformation. A sac of *Ando'o* of about 30 kg will cost about 90 000 rancs CFA. This quantity is got mostly in a good season¹⁷. In terms of actors involved, women are more involved in the exploitation and transformation of *Ando'o* than men.

The consumption of the bark of *Essok* (*Garcinia lucida*), goes hand in hand with the production of palm wine. It is the most popular and frequently used type of bark added in the recipients. The bark acts as an anti-poison and it also strengthens the taste of the wine. Some people say it prevents stomach aches, which could result from palm wine over-consumption. Villagers from Ebimimbang mostly buy *Essok* from the neighbouring *Sa'a* pygmy settlement or from Ebom. The collection sites of *Essok* are far away from Ebimimbang. For the *Bagyeli* of *Sa'a*, this is not a problem. They sometimes collect the product on their gathering and hunting trips.

Adjap is simply less exploited generally, be it for household use or for the market. As most of the households interviewed complain, it's the most tedious in terms of labour input during

¹⁷ The good and the bad seasons mostly refer consecutively to a time of high yield and a time of low yield or no yield at all. For example, All the three villages complain that since 1997 *Ando'o* has been scarce. Thus, this period of about 4 years is termed a bad season. So there is no specific duration of the terms in this species.

transformation. The collection of the fruits of Ewomen known as 'Komen' is mostly left in the hands of children.. In all three villages, 80 % harvested is consumed by children while a negligible 20 % is meant for the market.

3.2 Set of selected NTFPs and their importance to the local population

3.2.1 Utilisation/transformation/conservation

Essok (*Garcinia lucida*)

Among the three villages studied, Essok is exploited in Ebom and Nyangong. The species is mostly found in the virgin forest and hardly on appropriated land. Steep hill slopes are the most favourable habitat for these trees. Mostly the bark is harvested, although the fruits are also consumed. The bark is used in the palm wine production and is known to be an anti-poison. It also intensifies the alcoholic content of palm wine as Mr. Jean Ossa a native of Ebimimbang testified. Though the people of Ebimimbang hardly exploit Essok, they are also frequent consumers of the bark. They buy it from people of Ebom and the neighbouring pygmy settlement of Sa'a. It also can be obtained as a gift from friends or relatives. The long distance to the exploitation sites is the main reason why the people of Ebimimbang hardly exploit Essok.

Ando'o (*Irvingia gabonensis*)

This is one of the most exploited and traded NTFPs among the six species in all the three villages of the TCP site. It is found in many parts of Central and West Africa in both secondary land types as in the virgin forest. In the TCP area, the people of Nyangong exploit the largest quantities, followed by Ebom and Ebimimbang. Mostly the almonds and rarely the fruits are sold.

Onyae (*Garcinia kola*)

The nuts of Onyae are harvested and sold in small quantities in all the three villages of the TCP research site. The trees are found on appropriated land and in the virgin forest. The nuts are known to be a stimulant (aphrodisiac). They keep one awake and they are often consumed complementary to palm wine drinking.

Alen (*Elaeis guineensis*)

This is the oil palm tree, well known for its multiple products and functions and various products are frequently exploited consumed, transformed, and sold in the three villages. The fruits are used in the preparation of soups and sauces and to produce cooking oil, while the sap provides palm wine, which in turn is used to distil an alcoholic beverage called Odontol. Alen is mostly found in appropriated land and in particular the falak (home garden), and in the Fos afan/bilik (secondary forest).

Ewomen/komen (*Coula Edulis*)

This tree is common in the surroundings of all the three villages. The nuts are consumed mostly as a snack. The nuts are often harvested and consumed by children. The virgin forest is its preferred habitat.

Moabi/Adjap (*Baillonella Taxisperma*)

The nuts of the Moabi tree can also be used to produce a cooking oil. The species is exploited more frequently in Ebimimbang and Ebom, but always in very small quantities. Although the oil is highly appreciated and very valuable, not many people are involved in the exploitation due to the tedious and time consuming work. A very small quantity is marketed.

Table 7: Frequency of utilisation, and commercialisation of the selected NTFPs.

Name of NTFP	Frequency of utilisation N = 99	Frequency of commercialisation N = 99	Actors involved and degree of implication N = 99
Essok	+	+/-	Men (+); Children (-); Sa'a ¹⁸ (+/-)
Ando'o	-	+	Men (+/-); Women (+)
Onyae	+/-	+/-	Men (+/-); Women (+/-)
Alen	+	+	Men (+); Women (+)
Moabi/ Adjap	-	-	Women (-)
Ewomen	+/-	-	Women; (-)Children(+/-)

Source: Field work, 1999.

NB

+ = **much**; +/- = **moderate**; - = **little**

- Essok (*Garcinia Lucida*)
- Ando'o (*Irvingia Gabonensis*)
- Onyae (*Garcinia Kola*)
- Alen (*Elaeis Guineensis*)
- Ewomen/komen (*Coula Edulis*)
- Moabi/Adjap (*Baillonella Toxisperma*)

3.2.2 The techniques of harvesting for the six NTFPs

Essok (*Garcinia lucida*)

The technique used for the harvesting of the bark of Essok (*Garcinia lucida*) consists of decorticating the bark from a standing tree with the help of a machete or a stick. In contrast to other areas in the South of Cameroon, in all the three villages the technique of felling a tree before decorticating is rarely applied.

The fruits are collected either by direct picking the fruits from the branches or by gathering the fallen fruits underneath the canopy.

Furthermore, the roots are sometimes also used for bark harvesting. The exploiters do this by digging into the soil using spades for big trees. Small trees are completely removed out of the soil. This technique is also rare in all the three villages studied.

A respondent in Nyangong explained that until recently people decorticated the trees all around the stem, leading to the death of the trees As a result of ongoing research in a neighbouring village, however, many people adapted their way of harvesting by exploiting only a part of the bark¹⁹.

¹⁸ Sa'a is a pygmies settlement a few kilometres from Ebimimbang. This is the only settlement that of interest was given during the research period though very little due to time constrain.

¹⁹ Research by N. Guedje within the framework of the TCP on the sustainability of the harvesting of *Garcinia lucida*.

Ando'o (*Irvingia gabonensis*)

The fruits of the bush mango tree are gathered and peeled in the field, after which the almonds are dried at home. Sometimes, and mostly in the case of appropriated land, the undergrowth under the canopy of the trees is cleared in order to facilitate the collection.

Onyae (*Garcinia kola*)

The bark as well as the nuts of Onyae (*Garcinia kola*) are harvested. For the harvesting of the bark, the same techniques are used as described above for the exploitation of Essok. The ripe fruits of Onyae, easily recognised as they turn into a dark orange colour, are picked from the tree or they can be collected once fallen down. The fruits are left to rot, where after it is easy to take out the seeds.

Alen (*Elaeis guineensis*)

This tree species produces both palm wine and palm oil. The bunches of fruits are cut from the trees. This is done after cutting a few branches of the tree in order to facilitate the process. Palm wine tapping starts with felling the tree, after which the leaves are removed. A knife is used to bore a hole at the point where the juice is to be extracted. After about three days, a recipient is placed at the outlet to collect the sap. The sap is mostly collected every morning and evening. During each of these visits, the outlet is cleaned using the knife in order to open the vessels. The tapping of a tree can continue for about one month and is similar in all the villages studied in this region.

Moabi/Adjap (*Baillonella toxisperma*) and **Ewomen** (*Coula edulis*)

The ripe fruits of both *Baillonella toxisperma* and *Coula edulis* are collected once fallen down from the tree. In the case of *Baillonella toxisperma*, the undergrowth under the canopy is often cleared. The fruits are left to rot, after which the seeds are collected. The fruits of *Coula edulis* are stocked and peeled at the moment of consumption.

3.2.3 The rate of utilisation and commercialisation of the selected NTFPs

In the three villages studied, all six NTFP species are exploited but the level of commercialisation is rather low. From table 8 it can be concluded that only Ando'o and Alen (both palm wine and palm oil) are frequently traded. The other species are merely exploited for home consumption.

18 out of the 21 male respondents or 85% in Ebom and 13 out of the 23 (56%) in Nyangong exploit Essok. The majority of harvesters, only sell a small part of the harvest and the largest share is used for home production of palm wine. Further, the table shows that in Ebom and Ebimimbang, an average number of 6 bags are exploited in a season meanwhile more people (men) exploit in the former than in the latter.

Only few people, and uniquely in Nyangong, are actively involved in Onyae (*Garcinia kola*) harvesting. The quantities harvested are small and the maximum amount gained by selling mentioned was only 200 F CFA.

The trade in various NTFPs from Alen (*Elaeis guineensis*) is the most important in terms of both the number of people involved as well as the income generated.

The quantities of palm wine produced in Ebimimbang are higher than in Ebom but the revenue got per season in Ebom is higher than in Ebimimbang. This is because of the easy²⁰ access from Ebom to Lolodorf where the demand is higher than Bipindi which is the closest market to Ebimimbang (see

²⁰ The distance from Ebom to Lolodorf 20 Km is almost two times the distance from Ebimimbang to Bipindi 12 Km but it is easier for people of Ebom to go to Lolodorf than people from Ebimimbang to go to Bipindi. As earlier mentioned in 2.2.2,

Table 8: The rate of utilisation and commercialisation of NTFPs

Parameters of comparison	Ebimimbang N=33	Ebom N=33	Nyangong N=33
Garcinia Lucida (essok)			
-number of women exploiting ²¹	-	-	-
-number of men exploiting	-	18	13
-number of exploiters who sell	-	4	2
-number of bags ²² /sacs/buckets exploited in a good season	-	6 bags	6 bags
-ratio commercialisation/auto-consumption	-	1:2	1;2
-Revenue/season/exploiter (in CFA francs)	-	-	-
Irvingia gabonensis (Ando'o)			
-number of women exploiting	3	12	6
-number of men exploiting	21	11	17
-number of exploiters who sell	24	23	23
-number of bags/sacs/buckets exploited in a good season	2 sacs	2 sacs	3 sacs2:1
-ratio commercialisation/auto-consumption	2:1	2:1	20.000-60.000
-Revenue/season ²³ /exploiter (in CFA francs)	10.000-30.000	10.000-44.000	
Garcinia kola (Onyae)			
-number of women exploiting	-	-	4
-number of men exploiting	-	-	3
-number of exploiters who sell	-	-	5
-number of bags/sacs/buckets/ exploited in a good season	-	-	2 buckets
-ratio commercialisation/auto-consumption	-	-	1:1
-Revenue/season/exploiter (in CFA francs)	-	-	1000-2000
Elaeis guineensis (Alen) – wine			
-number of women exploiting	-	-	-
-number of men exploiting	23	18	20
-number of exploiters who sell	23	16	20
-number of bags/sacs/buckets/litres exploited in a good season	15-200 litres	30-150 litres	200 litres
-ratio commercialisation/auto-consumption	1:2	1:1	1:1
-Revenue/season/exploiter (in CFA francs)	30.000	30.000-60.000	70.000
Elaeis guineensis fruits/oil			
-number of women exploiting	8	10	6
-number of men exploiting	-	-	-
-number of exploiters who sell	8	10	6
-number of bags/sacs/liters exploited in a good season	-	-	-
-ratio commercialisation/auto-consumption	1:1	1:1	1:1
-Revenue/season/exploiter (in CFA francs)	-	-	-
Coula edulis (Ewomen/Komen)			
-number of women exploiting	-	-	-
-number of men exploiting	-	-	-
-number of exploiters who sell	-	-	-
-number of bags/sacs/buckets exploited in a good season	-	-	-
-ratio commercialisation/auto-consumption	-	-	-
-Revenue/season/exploiter (in CFA francs)	-	-	-
Baillonella toxisperma (Moabi/Adjap)			
-number of women exploiting	-	-	-
-number of men exploiting	-	-	-
-number of exploiters who sell	-	-	-
-number of bags/sacs/buckets exploited in a good season	-	-	-
-ratio commercialisation/auto-consumption	-	-	-
-Revenue/season/exploiter (in CFA francs)	-	-	-

there is no regular transport from Ebimimbang to Bipindi contrary to Ebom where a few transport vehicles pass through from Ebolowa and Lolodorf.

²¹ “Exploiting” in this sense refers particularly to those who go to the forest to gather the NTFP. This term in the text is quite different from “using” which refers to those who consume. The products consumed can also be obtained by purchase or as a gift. Some people buy and others are uniquely involved in selling and never go to the forest to gather. These people are considered as users and not as exploiters.

²² A bag of essok has a weight of 30 kg.

²³ The figures presented refer to the harvest during a good production season. This was only the case four years ago.

Source: fieldwork 1999, NTFP management.

table 3). The fact that Lolodorf is a bigger town than Bipindi both in Population and infrastructure could be a reason for the higher demand in Lolodorf. The inhabitants of Ebimimbang always left with palm wine unsold are pushed to increase their consumption in order to avoid waste. This accounts for their ratio of commercialisation to auto-consumption, which gives 1:2. Kribi would be a good market for palm wine from Ebimimbang but for the constraint of distance, high transport fares, poor roads, and absence of transport vehicles reaching the village. Comparatively Nyangong has a lesser problem of transporting palm wine to Ebolowa as retailers even come themselves to the village to buy. On the contrary, women concentrate in the transformation of palm nuts to palm oil using local technology.

“In a funeral, marriage ceremony, and when a new baby is born, women are expected to bring food made with palm oil while men are expected to bring along palm wine”.

As the table indicates, only women are involved in the production and commercialisation of the fruits and oil of Alen. Although men do assist in harvesting and transporting the bunches, the exploitation of the fruits is considered as a women’s business.

3.2.4 The localisation and accessibility of the six selected NTFPs

The figure above gives an impression of the location of the five land categories in the study villages. The village settlements are often linked by a main road. Most of the houses are built along the roadside, forming a linear settlement pattern. Behind the houses the home garden is located. In the home garden many NTFP species can be found, like palm trees or (*Elaeis guineensis*) Alen, and (*Coula edulis*) Ewomen/komen, and also exotic fruits like coconuts, papaw, pineapples and oranges. Behind the home garden, the landscape consists of a mixture of food crop fields and fallow land, cocoa other cash crop plantations and patches of the old secondary forest. Secondary forests usually mark also the limits between villages. The undisturbed high forest is mostly the furthest land category from the village settlements.

According to the respondents in the three villages, the undisturbed high forest (*fut afan*) is a preferred habitat for *Essok* (*Garcinia Lucida*), *Ando’o* (*Irvingia gabonensis*), *Onyae* (*Garcinia kola*), and *Moabi* (*Baillonella toxisperma*). *Ewomen/komen* (*Coula edulis*)²⁴, and *Alen* (*Elaeis guineensis*) are mostly found in the other four land categories (e.g. fields and fallow lands, old secondary forest, cash crop plantations and home garden). However, trees of *Alen* are sometimes, though rarely, found in the *fut afan*. As Mr. Mba Michel of Ebimimbang explained:

“The thick forest suppresses very much its growth and most often it remains pre-mature”²⁵. Some of these palm trees in the fut afan are used for tapping palm wine. Thus, it means that this pre-maturity affects only the production of the fruits because they are shaded by the taller trees”.

The best habitat for *Essok* (*Garcinia lucida*) is the undisturbed high forest and particularly on steep slopes. These areas have difficulties in accessibility, putting restrictions on the number of people involved in harvesting.

The palm tree or Alen (*Elaeis guineensis*) and Ewomen/Komen (*Coula edulis*) are found in all the land categories.

²⁴ Contrary to the results in this study (van Dijk, 1999:98) noticed that the “forest high altitude” is the preferred habitat for Ewomen/komen.

²⁵ ‘Pre-mature’ in this context means that the nuts hardly are ready for harvesting due to pressure from the bigger and taller trees with deeper roots which suck almost all the nutrients from the soil and shade the palm trees from sunlight.

The high forest and the cocoa plantations are indicated as the best habitats for the trees of Onyae (*Garcinia kola*). The trees of Onyae growing in the cocoa plantations stem mostly from transplanted seedlings.

The trees of Ando'o, occur in four land categories (the high forest, old secondary forest, food crop fields and agricultural fallow land, cocoa plantations and other cash crop plantations). During a season of good production as most respondents say, "*all roads lead to the Ando'o tree*".

3.2.5 Techniques of management

The palm trees (Alen) have been planted only recently and therefore are not yet productive. This means that they have neither reached the stage of producing nuts nor are they ready for tapping. In the past, villagers saw no need of planting or transplanting these trees. They believed that natural regeneration and seed dispersal by animals would provide sufficient new trees. It is only recently that people started noticing a decrease in availability. Moreover, some elites from the cities started introducing new varieties of oil palm trees, which grow fast, and have a higher fruit production

Table 9: The NTFPs planted and transplanted:

Village and technique of management	Ebimimbang N=18		Ebom N=22		Nyangong N=18		Total N = 58
	Planted	Transplanted	Planted	Transplanted	Planted	Transplanted	
<i>Garcinia lucida</i> (Essok)	-	-	-	-	-	-	0
<i>Irvingia gabonensis</i> (Ando'o)	-	28	-	21	-	26	75
<i>Garcinia kola</i> (Onyae)	-	-	-	-	-	-	0
<i>Elaeis guineensis</i> (Alen)	Y	Y	Y	Y	Y	Y	-
<i>Baillonella toxisperma</i> (Moabi/Adjap)	-	8	-	-	4	-	12
<i>Coula edulis</i> (Ewomen/Komen)	-	-	-	-	-	-	0
Total	0	36	-	21	4	-	

Source: field work, 1999.

Essok, is the only NTFP that cannot be found in several land types throughout the study site. It is mostly located on steep hillsides. The name 'Essok' which is of ancestral origin came about due to its location on a steep slope which use to be called Essok.

The techniques of exploitation, being very local have a negative influence on the exploitation pressure. For this reason, you would notice a very high exploitation pressure on almost all the products. This means there is no sustainable exploitation up till date because this pressure is

accompanied with a lot of wastes economically as well as sustainably costly. If Ando'o has not been producing for about four years now, it is partially due to over-exploitation though other ritual factors could not be neglected. Thus, failure in conserving this product has brought about scarcity and therefor negatively influenced consumption and commercialisation.

The tedious procedure involved in the transformation of Moabi/adjap scares a lot of villagers and thus the reason for its low exploitation pressure. This also confirms the fact that transformation and conservation of NTFPs influence their availability. Since producing oil from Moabi means a difficult task, it's available neither for consumption nor for commercialisation. Ewomen also has a low exploitation pressure due to the fact that only children mostly harvest this fruit for home consumption. Its not yet a commodity with high market value like Ando'o and Alen.

Irregular production, as well as insufficient and costly transportation have a negative impact on the commercialisation opportunities. Revenue from the sale of Essok and Ando'o by an average exploiter is approximately between 10 to 60,00 Frs. CFA meanwhile in a bad season virtually nothing is sold. Further, due to the few vehicles plying the roads linking these villages and the cities, the owners use their monopolistic powers to highly tax the villagers marketing NTFPs. In the case of Nyangong about 65 km from Ebolowa, each bag of either Essok, Ando'o, or Onyae costs 1000 F CFA while cost per head is 1500 Frs. CFA to and from the market. In view of the relatively high transport costs and the moderate prices received for most products, it is understandable that villagers are hardly interested in developing the trade in NTFPs.

Table 10: Evaluation of the importance of the six selected NTFPs

Species	Localisation	Accessibility	Techniques of exploitation	Utilisation	Transformation	Exploitation pressure	Technique of management
Essok	Fut afan	-	Barking	medicine	-	++	3 & 4
Ando'o	Fut afan, bilik	++	Cutting, gathering	eating	++	++	2, 3 & 4
Onyae	Fut afan, bilik	++	Cutting, gathering	Eating, medicine	++	++	3 & 4
Alen	Falak, Afup kaka, ekotok	++	Felling, tapping, cutting	Eating(palm oil), alcohol distillation	++	++	1, 2, & 3
Moabi/Adjap	Fut afan, bilik	++	Cutting	Eating (oil), industrial use (trunk)	++	++	1, 2, 3 & 4
Ewomen	Falak, Afup kaka, ekotok	++	Cutting, gathering	eating	-	++	4

Source: field work, 1999

Key

- i. Species
- ii. Localisation (land types)
- iii. Accessibility (- = less, ++ = average, +++ = much)
- iv. Techniques of exploitation
- v. Utilisation (forms and objectives)
- vi. Transformation (in terms of labour input) (- = less, ++ = average, +++ = much)
- vii. Exploitation pressure (- = less, ++ = average, +++ = much)

- viii. Technique of management, 1 = planting, 2 = transplanting, 3 = protection, and 4= controlled harvesting (including ritual aspects and taboos)

3.3 Trends in NTFP utilisation: new and abandoned NTFPs

Changes in the use of NTFPs do occur. The availability can change or people loose interest in certain products.

Although people never completely stopped utilising a particular product, situations of a reduced interest or a decrease in availability have been reported. The latter is the case for Ando'o (*Irvingia gabonensis*), which has not produced the last four years. Some people regard it as a natural, but others see it as a mystical phenomenon. These people stated the Gods of the trees are not happy because after harvesting the almonds for so many years, no sacrifices have been made. Others put the blame on the harvesters, as they over-exploit the resources and make use of poor techniques.

The lack of an appropriate infrastructure for transport and transformation of NTFPs has also reduced the exploitation of some products. The long distances from collection sites to the villages reduce the motivation of many people to continue the exploitation.

However, also new NTFPs are nowadays used.. An example is the condiment Njansang/Ezezag (*Ricinodendron heudelotii*), which is now frequently exploited in Ebimimbang. It is only recently that this product gained popularity in the village, but to day it is one of the most frequently used and commercialised NTFP in the region. The product is used in sauces and especially to prepare "Pepper soup" People from outside the area introduced the use of njansang and more and more 'buyem sellams' leave commands among the villagers as the demand in the cities is growing.

4 COMMUNITY INSTITUTIONS IN THE EXPLOITATION AND MANAGEMENT OF NTFPs

4.1 Community based regulatory institutions

4.1.1 Leadership and resource management

Local authorities have a great role to play when it comes to land²⁶ ownership and to control access to forest resources and in particular NTFPs. They include; the village heads, family heads, notables, and also the elite. In principle, all inherited land belonging to a family is not owned by the family head but by the whole family. In the case of self-acquired land by forest clearance, the individual who created the land controls access and allocates user rights and the right to economically exploit forest resources. But relatives also have user rights to NTFP resources provided the rights are given by the owner.

The village chief, notables, and elite

The chief who is head of the village is not a controller of property rights. He is considered as a local representative of the state and its laws and not as an exponent of their traditions (van den Berg, 1996). He, in collaboration with the notables, inform the people of their limits, and the consequences of violation. He also participates in conflict resolution. Sometimes acts like a moderator. The village chief is normally assisted by a village council which consists of the elders or notables of the village. These men are nominated by the village chief himself and are normally the different lineage heads of the village. The elite usually live in the urban centres and most often occupy important functions in the politico-bureaucratic hierarchy of the village. In contrast to the elders, they have a solid and stable base of authority which is essentially derived from their position within the urban elite. Their authority²⁷ is above all based on their role as mediators between the villagers and the outside world. Elite, who have succeeded to built up their lives in the cities usually enjoy considerable prestige in the family, as well as in the village community. They are always consulted in important family matters and often play an active role in village affairs. Although, initially the economic elite may act according to family and village interests and are often great defenders of local needs in the out side world, they are vulnerable to use their privileged position for their own personal interests (van den Berg, 2000).

The family head distributes the land to the members of the family and to the wives in case of a polygamous family. The wives later on take the responsibility to distribute the land in collaboration with their male children. However, women do not have individual rights to the land. Widows, on the other hand, do have independent rights to family land. When she dies, their eldest son takes over the responsibility. In some cases, obtaining and owning land, apart from that distributed by the family head is quite possible in natural forest areas (*Fut afan*). Men can expand their plots into the virgin forest depending on their strength to work. As long as an inhabitant of the village is capable of putting in labour, he/she has access rights to the natural forest. Whatever the formal principles of the kinship organisation, men and women have emphatically different positions in it and therefore, different access to resources (Geschiere & Gugler, 1998).

Authority in all the villages is vested in the elders. The actual power of the elders is however restricted to their kin and depends mainly on individual capabilities, such as knowledge of the traditions and division of property among the lineage and their members and not birth as such. For

²⁷ (Geschiere, 1982 states that the power of elites exceeds traditional limits and norms since they can command people who do not belong to their kin group.

this reason, the elders are neither equally respected nor equally consulted by the kin (van den Berg, 2000).

4.1.2 Conflict resolution mechanisms and institutions

Ebimimbang, Ebom and Nyangong follow similar procedures in conflict resolution. In general, conflicts in this area most often concern land problems, theft, adultery, violation of access rights both by natives and forest exploiters, and witchcraft. These are always locally settled except special cases. Family heads, village heads, notables, and head of village groupings are responsible for the resolution of conflicts at the local level. In the execution of his duties, the village chief is assisted by a village council, which in the Bulu area consists of the notables of the village who are in other words known as the wise men. These men are nominated by the village chief himself and are usually the different lineage heads of the village. Meetings of the village council serve two different purposes (van den Berg, 1996). Firstly, as a framework for dispute settlement. In principle, anyone who feels prejudiced can bring his or her case under the attention of the village chief and his council. Whether a case is actually judged depends on the character of the conflict and its previous history. The village chief acts as an administrative authority (*ngovina*) in this type of meetings, and he is therefore expected by his people to take a neutral position in the discussions. The meeting has an official character, as for instance, identity cards are controlled and the discussions and conclusions are written up in a report. The village chief presides the meeting while the notables perform the role of members of the jury. The village chief opens the meeting by explaining the dispute at issue. Next, the plaintiff and the accused are given the opportunity to explain their points of views, and witnesses are heard and cross-examined. Then a general discussion follows, after which the village chief and the jury will come with a conclusion. The character of the judgements in a village council has as an objective to convict one of the parties.

The village council provides a platform for deliberation on village matters. The ambiguous position of the village chief becomes most clear in this setting. Here the village chief acts amongst equals, and because of this position he is not able to impose any decision on the council (van den Berg, 1996). Effective command of the village chief therefore depends on his capability of getting all noses in the same direction. Since a meeting of the village council serves as a setting in which authority relations in the village are maintained and changed, this is not easy to realise. However, when tension continues to mount, the Sub-divisional Officer (SDO) and sometimes the Divisional Officer (DO) are also called to assist. It is only at this point that the government authority could decide to take the matter to court or not. This is the regular procedure though some people usually bypass the local authorities and report some matters directly to court. In this case the local authorities would punish the plaintiff for bypassing the local authorities.

There are also other court sessions that involve not only members of a village but several neighbouring villages under one grouping. This local court of village groupings is known as "*Tenu de palabre*". The functions of the chief in case of village groupings is the same as that of the chief in a village court. The cases examined here are mostly violation of access rights to land and other natural resources. For example;

A native of Nyangong called Zeh Mbo'osi Felix launched a complain against Elom Engozo'o Justin, Ondja'a, and Mvondo that the three accused attacked him in his house on the night of the 28th October 1999 at about mid night following a land dispute that had formerly been settled in favour of the plaintiff. After the court session held the three accused were not sentenced but asked to pay a sum of 25, 000 Frs. CFA to Mr Mbo'ossi.

At the family level, disputes are locally known as “family palaver”. Every member of the family can propose to organise a family palaver but the initiative is usually taken by the family head himself who usually also involves the elders and other members of the family. Other family heads can also be invited, as well as village chiefs but the latter always in their role as family heads. During family palavers, all family members have the right to speak. This gives them the opportunity to settle their grievances. The decision taken by the family heads and the elders are generally obeyed by the family members. In case of non-respect of decisions taken, a family member is expelled. In some exceptional cases people do oppose the decisions taken and go ahead to administrative authorities in the city.

4.2 Land tenure

Occupants of land consider themselves not as owners of the land and other forest resources. Rather, they assume to be guardians (*mba'ale*) of an ancestral heritage which needs to be protected and enlarged (van den Berg, 1996). This right or moral obligation rests collectively with the descendant or the founder of a clan and are in the past established by clearing the forest. In principle, the first to clear a part of the forest or make any labour investments to manage resources for productive purposes (*droit de hache*) has exclusive permanent user rights (*ibid*).

The family has permanent exclusive rights on well defined parts of the lineage lands, and it is at this level that the access to land of individual family members is controlled. Male family members acquire access to land by virtue of inheritance, marriage or by clearing land which has never been cultivated (high forest). This gives right to access for the resources in that plot cleared but the land remains entire property of the village and not the family. This means that the land cleared is not owned. Only the resources there in are owned. Another person could as well clear the same plot during a future harvesting season. Women's access to land is conditioned by male relatives. Unmarried women farm on their father's land and after marriage they farm on the land of their husbands. Land is still alienable, and under 'customary'²⁸ law family members are only allowed to lend land to third parties for the time of one cropping cycle. Although present feelings of land insecurity, opens up new discussions on land property, in alienation of family lands is still considered as an expression of the breakdown of the family (*ibid*).

4.3 Property rights of NTFPs in relation to land types

It is rare to find property rights to land separated from rights to trees which are found on the land, except in the natural forest areas. In all research villages, the distribution of property rights varies according to different land categories and specific NTFP trees species. The distribution also depends on how the land was acquired, i.e. forest clearance or inherited. There are five customary Bantu land categories; The Fut afan (Undisturbed high forest), The Fos afan /Bilik (Old secondary forest), The Afup & ekotok (Food crop fields and agricultural fallow land), The Afup kaka (Cocoa plantation and other cash crop plantations), and The Falak (Home garden). These land categories have similar locations in all research villages (see figure 4).

NTFPs are obtained by inheritance, discovery, spontaneous planting, but are sometimes only protected. In plots where ancestors had been harvesting, access rights automatically is obtained by the present generation. Their exploitation is always done by the whole family and user rights are

²⁸ 'Customary' courts only date back to the colonial attempts of setting up new forms of administration. Despite the somewhat artificial start of these courts, nowadays they definitely fulfill a need.

obtained from the family head. The family head is responsible for allocating user rights, controlling access, managing, reaping the profits, and deciding how the profit is to be shared for the benefit of the whole family.

In the undisturbed high forest, where land is acquired depending on how much labour could be invested, individuals, groups²⁹, or families appropriate trees but not the land on which the trees are found. Legitimate property rights on trees in this area belong to both the men and the women. In the fields and fallow lands, the trees and the land are all property of the occupant³⁰. In the case where the occupant lends the land to another person, this person is not allowed to use the trees located in the plot. He is also not allowed to plant new trees as tree planting in this area is a form of land appropriation. When trees grow on the cocoa plantation and fields, but also in home gardens, the trees belong to the individual or family who occupy the land

Lending NTFP tree resources to third parties, is uncommon in the area. Only land is lend to strangers who after cultivation and harvesting, are bound to quit the land. During the lending period any permanent crop and especially NTFPs are not to be exploited. It is the owner of the land that continues to exploit the NTFPs there in. So lending land for cultivation does not give right of access to NTFP tree species. Relatives, strangers, friends must obtain permission from the owner in case of self-acquired property and access can be granted as well as be denied. In case of inherited property, access is without permission though but organised.

The *Fut afan* (Undisturbed high forest)

In the *Fut afan*, land and other forest resources belong to different village communities. In principle, village inhabitants have priority access to land and NTFP resources which are believed to belong to their villages. However, often the local population exploits high forest areas which belong to a neighbouring village. This is often the case when there is no clear natural boundary (like a river) which separates the lands belonging to different villages in the high forest. NTFP resources are appropriated by those who first clear and mark a particular area, whether by individuals, groups (clubs or associations) or a family³¹. The right holders have property rights to NTFP resources but not to the land. The size of a plot acquired for harvesting NTFPs depend on their labour input. .

In the *Fut afan* therefore, there is no open access situation around NTFP resources as is often assumed. There exist marked areas which can only be exploited by the individual, head of the group, or head of the family who marked the plot. In the case of the group the right is given to another person only after consultation with the group. There is no right so far to dispose of neither trees or land in the *Fut afan*. Further NTFPs, in particular fruits of *Alen*, *Onyae*, or *Ewomen/komen* which are already fallen from the tree and are lying on the forest floor can be gathered by any person. This tenure arrangements is similar in all three study villages. In Ebom, in spite of the fact that it is known as Ebom one and two, there is no separation when it comes to aspects of basic property rights. They are both under one leader.

²⁹ Several clubs exist in the villages studied with the objective of joint labour investment. This could be in the form of clearing of farms and marking of trees in the high forest for harvesting of barks of *Essok*. These clubs together own farms and also NTFP trees together. They are referred to in this report as 'groups'.

³⁰ 'Occupant' refers to those who hold legitimate property rights on the land and trees in all land categories except the Undisturbed high forest where nobody holds property rights on the land. The land in the high forest is property of the whole village.

³¹ The 'family' here known as (*nda bot*) usually groups the descendants from an ancestor to two or three generations removed from the present oldest man (van den berg, 1996). An average Bulu house consists of brothers and their spouses and unmarried children, their father and his wives and often other members of the extended family, such as for instance a widowed or divorced daughter or unmarried brother or one of one of the spouses (pers. comm., van den Berg, 2000).

Further, when the plot that surrounds a tree has been improved in any form by a person (for example by clearing the forest undergrowth), that person maintains the property rights to that tree but not the land around it. When this tree has been used for harvesting in one season it does not, remain property of that person. It could be appropriated by another person in the coming harvesting season. This could be after a few months, one year, or more.

The *Fos afan* (Old secondary forest)

Closest to the undisturbed high forest is the old secondary forest,. In these old secondary forest sometimes old cocoa plantations can be found which are abandoned in the wild.. NTFP tree species found in these forest areas are usually inherited by family heads (*nda bot*) and used by all family members. In polygamous homes, each new wife is given her own section and in sometimes women are allowed to set aside some portions for their sons when they reach maturity³². In general, there is hardly burrowing or selling of land. In most cases an individual to whom the land is burrowed has no access rights to the trees there in. He also has no right to plant permanent trees. In very rare cases, land is sold.

The *Afup/Ekotok* (Food crop fields and agricultural fallow lands)

The food crop fields and agricultural fallow lands were created by the ancestors and have been mostly inherited by those who are now family heads or better still successors.

The *Afup kaka* (Cocoa plantation and other cash crop plantation)

Inherited cocoa plantations are hardly individual properties. They are always communal properties of the compound³³. Historical evidence obtained from the local people show that cocoa was one of the first crops cultivated in this area from the colonial era. Even before then, food crops like plantain and cassava already existed. In all the three villages studied, the cocoa plantations are considered as a treasure zone. Just like *Alen* is a multiple use species, so is the cocoa plantation a “multiple use land category”. It is in this land category that one can find *Elaeis guineensis*, *Irvingia gabonensis*, and *Coula edulis*. Some were planted meanwhile others are just recently transplanted (see table 6). These cocoa plantations were mostly self acquired about forty years ago after their initiation by the colonial masters³⁴(Germany). The plantations are hardly sold nor rented for cocoa has been the main source of revenue to most of the inhabitants of this region for many years. Renting or selling would be putting their source of income at a risk high risk. Only the close family members have the right to access in case of NTFP harvesting. This right to exclude is strictly put into practice in Ebom and Nyangong where only the Bulu’s own cocoa plantations and NTFPs there in.. Ebimimbang is more liberal to this aspect as strangers who later on married in the village after the departure of WIJMA now been cocoa plantations. This includes the Ngoumba’s, and the Bassa’s.

The *Falak* (Home garden)

The home garden belongs to the household (*nda bot*) and its members. Only these members have access rights on this land category. The legitimate property rights of the home garden rests in the hands of the household head. Strangers can hardly given the permission to exploit any tree species found in the home garden. In most cases, it is only the member of the compound that could harvest to distribute to friends or give as gifts to visitors or neighbours. Land in this category is hardly

³² At the age of 25 male children are considered matured. Parents already start asking for grand children. Their responsibility is shown by marriage, farm work (clearing), hunting, and recently NTFP gathering.

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³⁴ Cameroon was brought under German colonial rule in 1885. After the First World War it was divided between the British (southern Cameroon now South western and North Western provinces) and the French (the rest of the German colony). In 1960, the French Cameroon became independent. After a plebiscite in 1961, The British Southern Cameroon opted to unite with the former French Cameroon while the British Northern Cameroon joined Nigeria (Geschiere & Gugler, 1998).

burrowed. It provides the immediate needs of the compound members and contains mostly fruits and ingredients for cooking. As a native of Ebimimbang said, “*Entering the home garden of another family without permission is like interfering in the privacy of that person*”.

Table 11: Property rights to NTFPs according to land categorie

Land types		Basic property rights to NTFP resources			
		Right to exclude	Right to access	Right to dispose	
				Sell	lend
Home garden		household head	Close kin, members of household (<i>nda bot</i>)	-	-
Fields and fallow land	Self acquired	First occupant	Occupant, close kin	-	occupant
	Inherited	Lineage head	Close kin, members of compound	-	Lineage head
Plantation	Self acquired			-	Lineage head
	Inherited	Communal property	Lineage head	Lineage members, relatives (members of the same clan)	Lineage head
Old secondary forest	Inherited	Family head		-	
High forest		First occupant	Friends, relatives (from the same clan)	-	First occupant

Source: field work, 1999

4.4 Relationship between Bagyeli and Bantu tenure

There are clear parallels between Bagyeli tenure and tenure of natural resources by farming population in the area studied. Bagyeli tenure can only be understood in relation to villagers’ exploitation and management of same forest area and resources. Bagyeli share with villagers, membership of the social entities distributing collective rights to resources. Bagyeli residential units are considered a division of the nearby village. In addition to this, they share with villages the physical object of collective rights: in principle, villagers can use the same space and resources as Bagyeli. The Bagyeli share important parts of the normative framework, which is at the basis of the distribution of the various rights: both in terms of classification of space and in relation between the social entities and the objects (Biesbrouck, 1999).

Bagyeli management of natural resources is not identical to that by villagers. In Bantu tenure arrangements, the village plays a role in the management of the high forest area. Current Bagyeli tenure on the other hand provide them only with rights to forest resources in the high forest that is related to their camp. Usually their camps are affiliated to one Bantu village. As (van de Sandt, 1999) explained, the Bagyeli have acquired access to natural resources through their membership of a clan and lineage in the village³⁵. Often, Bagyeli camps are located on parcels of land that have once been allocated to them by farmers (van den berg & Biesbrouck, unpublished). In the 1930s, Owono Minko and the Atem-Ndong lineage members in Ebimimbang assigned certain parts of the forest to the Bagyeli kinsmen. In their shared history, the villagers and the Bagyeli have developed a complex set

³⁵ Pygmy settlements are always responsible to a particular village. It is possible that each pygmy settlement has ancestral connections to the village under which they are responsible. They are mostly neighbors. For example, the Sa’a pygmy settlement about 5 Km from Ebimimbang is considered by both villagers and researchers as part of Ebimimbang though isolated.

of arrangements to regulate the access to cultivated lands, fallow, and the forest. These arrangements seem to be largely based on the access rights to natural resources that apply in village society. The various norms of conducts are highly flexible and subject to a process of constant reinterpretation. From time to time, these norms are disputed and reaffirmed in particular contexts, for example within the lineage and occasionally also in the village council. At village level, no institutions seem to exist to administer the various access rights (van den Berg, 1995: 9, in van den Sandt, 1997).

The Bagyeli exploitation of forest resources is not geographically confined to the area around their camp. They are frequently mobile and usually make use of their rights as kin to resources in other parts of the forest. The Bantu villagers also have this opportunity, and many of them actually make use of this but their sphere of action with regard to use of forest products is usually confined to that of their village. In the case of institutions used by the Bantu and Bagyeli in resolving conflicts over natural resources, the Bagyeli hardly involve the village chief or the customary court. The Bantu use these institutions and even formal agencies at higher levels of administration. This might be because the Bagyeli hardly have access to the administrative institutions dealing with such conflicts.

Other arrangements between the Bagyeli and the Bantu concern cultivated land and fallow. The Bagyeli in Sa'a claim access to the lands where their village kinsmen are cultivating. They claim to be allowed to hunt birds and game (without traps), and to collect NTFPs (those already fallen and on the forest floor), as long as they do not take along cultivated food crops (van den Sandt, 1997). The Bagyeli also seem to hunt and collect NTFPs on the lands of non-kinsmen villagers but with the risk of getting serious conflicts if they bypass the rightful owner. In the case of forest resources in particular, both the villagers and the Bagyeli declared that the virgin forest is an open access. In reality, this does not seem to be the case because, villagers claim hunting rights, collecting rights, and clearing rights over particular parts of the forest. Most fruit trees and palms in the forest are claimed by women and men in the village. These claims are based on the fact that the trees are standing in the forest adjacent to their agricultural fields. Deeper in the forest, fruit trees are claimed because they are said to mark former settlement areas (van den Sandt, 1997). Families work on a certain direction from the road towards the virgin forest (see figure 4). A villager who has cleared a part of the forest acquires exclusive user rights to that part (see 4.1.2).

4.5 External influences

The impacts of actors (loggers, projects, NGOs, state agencies, etc) are wide and vary in function to both the activities of the actors and those of the local people. It is always good to note that the different actors who have carried out activities in this site are not appreciated in the same manner by the population in point of view of the effects that their operations provoke in the diverse subsistence activities. However, it is possible to determine a certain stability or constancy in the perceptions of the population in the effects of forest exploiters. The local people always have the feeling that their lands are at stake as far as the activities of forest exploiters continue. They assume that the scarcity of some NTFP species is due activities of forest exploiters. An assumption which is not far from the truth. Various groups of the local population are differently affected by the activities of logging activities or other measures influencing the availability of resources (NTFPs) for local use. Some are more likely than others to profit from their activities are while others suffer. Urban elite, village chiefs, and some notables who have the possibilities of influencing the out come of negotiations with the logging staff may have some profitable impacts. Finally, the negotiations between the logging companies and the villagers are distorted

WIJMA (Société néerlandaise d'exploitation forestière), is one of those actors whose activities have been felt both negatively and positively throughout this study site. Positively, the population faced

with the problem of accessibility was very impressed by the efforts made by this company in both construction and maintenance of their roads and bridges. This enabled them to transport food as well as NTFPs to the nearby cities for commercialisation. Additionally, due to the huge labour force that WIJMA had, a market for forest products was on the spot and people were not bound to travel distances in order to sell their products. On the other hand people still complain today of their plantations that were destroyed by this company. Some say that if Moabi, and Ando'o is becoming scarce today, WIJMA has contributed a great deal as well. Another forest exploitation company is the GWZ. This company extensively exploited a particular tree species known as *Azobe (Lophira alata)* It also destroyed many cocoa plantations. If one thing is quite painful today in the hearts of the local people, it is the fact that these companies promised compensations but did not meet up with their promise. This made the population feel exploited and cheated upon.

Other companies that have also influenced NTFP commercialisation include SUTROBUS and NICOLISH which were all under the ministry of public works and transport. They assisted in road maintenance, and construction of bridges in order to facilitate the transportation of products to nearby towns during market days.

TCP, is known by the villagers as a conservation project for environmental studies and forest protection. Not very far from the objective which is the conservation of the tropical forests and the promotion of their wise use, by generating knowledge and developing methodologies. According to the local population, TCP has introduced to them techniques of sustainable exploitation of some plant and tree species. An example is the barking of Essok which in the past the method of round barking killed the trees. Now the new method of spotted barking proves quite sustainable. TCP has also made them discover many other species of forest products which did not exist. An example is the *Atjek (Paussinnystalia Johimbe)*. This project has also assisted in maintaining their roads, constructed bridges, and transporting people to towns when possible for free.

5 GENERAL CONCLUSIONS

The following conclusions can be drawn from the results of this research:

The forest of south Cameroon constitutes not only timber products but also Non-Timber Forest Products, which are very useful to the local population as well as non-local population. These NTFPs serve especially as an economic buffer by providing subsistence products to the local population (direct actors) and opportunities for earning cash. It contributes to the revenue of households who engage in its exploitation. Though the local populations are the main consumers of NTFPs, it is increasingly becoming important to the urban population.

NTFPs used for household consumption include food products such as vegetables, fruits, nuts exudates, construction material, kitchen utensils, medicinal plants as well as fishing and hunting equipment. The nutritional and health role played by NTFPs is quite important. They provide vitamins, carbohydrates, and proteins to the local population. As the rate of economic hardship increases due to the economic crises and devaluation, medicinal plants become more useful and cheaper for the local people who can hardly afford modern pharmaceutical products. This belief and increasing importance could have a positive influence on the sustainable management of NTFPs.

The cultural importance of NTFPs cannot be neglected. Since the ancestral past, some plant species are always used to perform traditional rights. This includes pre-natal and postnatal sacrifices, marriage ceremonies, etc.

The most important places where NTFPs can be located include the Cocoa plantations, and the undisturbed high forest (though highly variable in abundance and distribution). There are various sets customary regulations that determine who should control, have access, and exploit these NTFPs. Most often, the way in which NTFP resources were originally acquired or created defines who has the right to access. In the analysis, 'property rights' has been used to mean rights to NTFPs. There is an important legal distinction between self-acquired property and inherited property. Family chiefs manage inherited property. In cases of self-acquired property, the property holder controls access, allocate user rights and have the right to alienate NTFP resource. Landscape elements (rivers, hills, and large trees) are used to mark inter-village boundaries in the undisturbed high forest. Bantu village communities use old inter-village boundaries in the undisturbed high forest today to defend exclusive access to land and other resources. While in the past Bantu farmers were only allowed to create farmland in the forest areas that belonged to their village only, it was accepted to carry out other subsistence activities in neighbouring areas. Today however, there is a strong plea among increasing numbers of Bantu people to exclude neighbouring villagers and Bagyeli pygmies from all types of utilisation of forest resources found on their village domains (van den Berg & Biesbrouck).

NTFP resources found in the undisturbed high forest can be subject to property claims without parallel land claims. Individuals create agricultural land around valuable NTFP trees in the undisturbed forest to establish individual property rights on a particular tree. Tree planting is also an individual form of land appropriation. Individuals hold property rights on the land adjacent to their fields in the undisturbed forest (and NTFP resources found on the land. Though land is generally acquired through first occupancy and inheritance, land could be burrowed or acquired as a gift. Women's rights to land are derived from the land rights of the male relatives (husband, father, brother, etc). Friends gain access to land through friendship relations with native villagers. Individual rights to self-created land are stronger than on inherited land. Holder of the right to control access to NTFP resources differ in relation to forestland types while rights to alienate parallels those to exclude.

In spite of all the subsistence value (economic, social and cultural functions), NTFPs has not been given an important place in forest management planning in south Cameroon. This has a negative effect because there is nothing to motivate the people and help to assure their long-term interest in the forest. NTFP management systems that sustain and develop the value of forests for the local population could favor a more active participation of these populations in sustainable management projects

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FAO Community Forestry

<http://www.fao.org>

Forests, Trees, and People Program and network

Internet site: <http://treesandpeople.lbutv.slu.se/>

Indigenous people; specific sites

<http://www.kribi.com/right.htm>

International Development Research Centre

Internet site <http://www.idr.ca>

International Union of Forestry Research organisations

<http://iufro.boku.ac.at/>

Land Tenure Centre, University of Wisconsin-Madison

Internet site: [http:// www.ewc.hawaii.edu](http://www.ewc.hawaii.edu)

Rainforest Action Network

<http://www.ran.org/ran>

The Humid Forest Ecoregional Centre

<http://www.cgiar.org/>

Tropical Forestry Projects Information System

<http://www.oneworld.org/>

USAID Environmental and Natural Resources Information Centre. (ENRIC)

<http://www.info.usaid.gov/enric/>

Virtual Library on Forestry

<http://www.melta.fi/info/vlib/Forestry.html>

World Conservation Union (IUCN)

<http://www.iucn.org>

World Resource Institute (WRI)

<http://www.wri.org>

World Wide Fund For Nature (WWF)

<http://www.panda.org>