

# **MOUNT CAMEROON PROJECT**

## **MOKOKO AREA**

### **REPORT OF PARTICIPATORY LAND USE MAPPING IN THE BOA PLAIN AREA SOUTH WEST PROVINCE CAMEROON**

**BY**

**MOUNT CAMEROON PROJECT AND CARPE**

Compiled by:

- Ekwoge Henry
- Ebong Harrison
- VissiGodlove
- Paul Lontchi

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## ACRONYMS AND ABBREVIATIONS

CARPE	-	Central African Regional Programme for the Environment
CDC	-	Cameroon Development Corporation
CITERCRAF	-	Centre de Teledetection et Cartographie Forestiere
CNL	-	Centre for the Support for Native Lands
CoP	-	Chief of Post
D.O	-	Divisional Officer
INC	-	Institute Nationale de Cartographie
LBG	-	Limbe Botanic Garden
LFRMS	-	Local Forest Resource Management Systems
MCP	-	Mount Cameroon Project
MINEF	-	Ministry of Environment and Forestry
MRFR	-	Mokoko River Forest Reserve
NTFPs	-	Non-Timber Forest Products
SSI	-	Semi-Structured Interviews

## **TECHNICAL TEAM:**

- ◆ Mac Chapin - Centre for the Support for Native Lands (CNL), Washington DC (Consultant)
- ◆ Zeperin Mogba - Co-ordinator of Congo Basin – CARPE - IR<sub>1</sub>
- ◆ Ekwoge Henry - MCP Limbe, Social Development specialist (Supervisor)
- ◆ Ebong Harrison - MCP Buea, (Cartographer)
- ◆ Belmont Tchoumba - Centre Pour l'environnement et le Development (CED) Yaounde
- ◆ Paul Lontchi - INC Yaounde (Cartographer)
- ◆ Godlove Vissi - INC Yaounde (Cartographer)

## **Local Cartographers (Village Researchers):**

### **A. MOKOKO AREA:**

1. Lucas Diah - Ekombe Mofako village
2. Joseph Itoh - Ekombe Mofako
3. Ntonga Pius - Barombi Mokoko
4. Chief Elvis Kema - Barombi Mokoko
5. Nekena Felix - Illoani - Balondo
6. John Mbotaka - Illoani - Balondo
7. Onori Felix - CoP MINEF, Illoani
8. William Nghoh - Dikome – Balondo
9. Emmanuel Nghoh - Mbongo - Balondo
10. Asoh Fidelis - Bonjare Balondo
11. Okha Roy - Boa Balondo
12. James Itoh - Boa Balondo
13. Mambo Richard - Diongo Balondo

### **B. DJOUM / TIKAR**

1. Nyangonon Monasse - Djoum, village Mink'oo
2. Ntyam Alexis - Djoum, village Mfem
3. Bifane Emmanuel - Djoum, village Nkolenyeng
4. Tchimi Basile - Plane Tikar, village Bankim

## 1. INTRODUCTION:

This report is the product of a Participatory Mapping Exercise carried out in the Boa Plains (Mokoko) Area by Mount Cameroon Project in partnership with CARPE – IRI (Central African Regional Programme for the Environment) from December 1998 to February 1999.

The purpose of the Mount Cameroon Project is to increase the capacity of resource users and other stakeholders to implement a participatory strategy for sustainable use and conservation of forest resources in Mount Cameroon Region. A key issue for Local Communities and Project alike is to better understand and define resource use, land and resource tenure, and in particular the geographical extent and legal validity of rights to resource use.

Many of these issues are well understood and documented and negotiations with all the stakeholders are advancing. However, the maps for the area are still restricted to physical features, vegetation cover, political boundaries, gazetted forest Reserves and the leasehold boundaries of the Cameroon Development Corporation (CDC), a large industrial plantation parastatal Company. A clear gap is the mapping of local traditional land ownership and resource use tenure. Such maps would assist the Community to better express their concerns when negotiating land allocation with government, where competing demands for forest conservation, Plantation Development may compromise their own Community development aspirations. This exercise is particularly relevant with the imminent privatization of CDC and the participatory land use planning programme of the Mount Cameroon Project.

CARPE –IRI general objective is to “understand local Forest Resources Management Systems (LFRMS); identify ways to strengthen LFRMS characteristics that are currently or potentially favourable for forest conservation. CARPE intends to achieve its general objective by developing a research action programmes in the three sites in Cameroon representative of diversity of the Congo Basin.

- Arrondissement de Djoum (Lowland Forest)
- Tikar Plain (Forest Savannah Transition Zone)
- Mount Cameroon (Lowland and Montane Forest)

With the abundance of documented information and base maps for the Mount Cameroon region, and good working relations between the Project and stakeholders (communities, CDC, Government services). The Boa Plain area was chosen as an ideal site for testing the Participatory Mapping methodology in Cameroon and at the same time training staff from other regions in the method.

Participatory Mapping through Center for Native Lands (CNL) methodology leads to maps that are of high technical quality (at scale, drawn by professional Cartographers) but represent the local groups' view of the important resources, the conflicts, the denomination of sites, etc.

## 1.1 Objectives of Mapping:

From the point of view of the Communities, the resulting maps are potential tools for:

- ◆ Increasing sense of ownership and control of land and natural resources, thus improving their ability to participate in the management of such resources.
- ◆ Providing legal documentation and giving political weight to Community's perception of ownership and rights;
- ◆ Regarding the historical and socio-cultural significance of certain sites.

From, the point of view of MCP, the resulting maps are potential tools for:

- ◆ Raising awareness of the state of natural resources by communities/users;
- ◆ Natural resource management planning
- ◆ Land use Planning
- ◆ Finding an entry point for further discussion with Communities concerned
- ◆ Increasing security of tenure on land/forest is likely to facilitate subsequent discussions about resource management.

The exercise will contribute to the Land Use Planning and Resource Management Plan to be developed by MCP at the request of the Government of Cameroon. It will determine the land area used by local communities for subsistence activities, agriculture, hunting, gathering (fruits, medicine, rattan, firewood, timber, fuelwood) and areas covered by Commercial Plantations (CDC).

## 1.2 Background to Boa Plain Area:

### 1.2.1 Flora:

The Boa Plain area includes nearly 27.000 hectares (270km<sup>2</sup>) of lowland forest (Onge / Mokoko forest) and a further 4.000 ha of flooded forest, together with 11.000 hectares of mangroves and other marine vegetation types of the lowland forest. Some 9.000 hectares are within the CDC leasehold, both in the Plain and in the hills to the South.

The Eastern part of the hills was gazetted as the Mokoko River Forest Reserve in 1952 which covers an area of 9.100 hectares. It is a production forest and was last logged 5-10 years ago by Dimitriades, and Akem & Sons. Recently, a logging Company (Société Forestière des la Mvilla) applied for a permit to take timber from some 1.500ha of land on the Southern edge of the Plain to assist farm expansion, but the logging Company lost interest following an Environmental Impact Assessment (EIA) by MCP (MCP 1997b). The area is

subject to very steep rainfall gradient, with annual totals ranging from 6,000mm in the South to as little as 2,000mm East of Mbonge. While the Plain is composed of recent sandy and silty alluvium and is subject to seasonal flooding, the hills are a dissected plateau of old volcanic rocks with a few up-faulted sedimentary belts.

Overall, it appears the forests of the Boa Plain are of moderate conservation value. However, local communities value them highly for the supply of NTFPs, especially rattan, bush mango (*gabonensis*) Njansang (*Ricinodendron heudelotii*), Eru (*Gnetum africanum*) etc.

### 1.2.2 Fauna:

The Boa Plain Forests provide an extensive area of habitat between the hills and the mangrove swamps, suitable for species such as the forest Buffalo. Disturbance, hunting and forest clearance have now greatly reduced the value of the area to larger mammals, but hunters still value the seasonally flooded areas for bush pig, antelopes and crocodiles.

Hunting pressure is high from both local and outside hunters, including the forces of "law and order" who both hunt themselves and provide cartridges to hunters in return for bushmeat. MCP is in the process of assisting the villages around the Mokoko River Forest Reserve to set up a Wildlife Management Committee to begin to re-establish control over hunting and trapping in the area.

### 1.2.3 Land Use:

Land Use in the Boa Plains is changing rapidly due to both population increase and agricultural development, and land scarcities are increasingly being felt.

Land use is divided between natural, largely undisturbed forest, secondary (logged) forest, old fallows, plantations and small-scale shifting agriculture. Primary forest is held in common by the village, individual ownership rights only being conferred on land that is cultivated.

The boundaries of the Mokoko River Forest Reserve are well known and respected in most of the villages. However, the boundary is highly contested at Ekombe Mofako and Barombi Mokoko where the natives claim they were not signatory to the gazette document. Archives however indicate that these villages were under the Balondo Native Authority that was signatory. Communities enjoy access to the Reserve to exercise customary rights<sup>1</sup>.

CDC hold some 16,900 hectares in vicinity of Boa Plain of which only 3,700 ha have been converted to Plantation crops of oil palm and rubber. Some 4,000 hectares of CDC's underdeveloped holdings have been affected by clearance for food crop farming, i.e. the majority of the population of the Boa Plains is actively on CDC land, particularly the old banana plantation between Boa native and Boa

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<sup>1</sup> Customary rights: The right to collect all forest products including timber, except the protected species for personal use but not for sale.

Beach. The total amount of non-CDC land available for subsistence farming on the Plain is around 830ha including 500ha at the Southern end towards Betika.

Any significant plantation expansion by CDC on the Boa Plain would cause major social problems and would also shift farming pressure onto fragile hills to the South-East with negative repercussions as regards soil erosion and surface water supplies. The Mokoko River Forest Reserve also stands a risk of movements by food crop farmers and Plantation small holders.

#### 1.2.4 Livelihoods:

Some 90% of households on the Boa Plain are actively involved in farming, including both cash (cocoa, coffee, oil palm) and subsistence (cassava, egusi, yams, plantain, fruit trees, etc). Food crop are also sold to urban centers and have been an important commercial activity. Small-scale oil palm became an important source of income in the 70's (and is still on the increase), following the establishment of Community oil palm Plantations and oil mills by a German Clergyman (Father Groot) at Mbongo, Dikome and Iloani.

A major source of income for many natives is renting land to non-natives. Traditionally, land cannot be alienated outside the tribe, and therefore non-natives, especially Nigerians have no right to buy land. However, they can acquire it through co-habitation with or marriage to a native woman. Parts of the Mokoko River Forest Reserve have already been illegally sold at Ekombe Mofako. Renting bush is an easy way to acquire more cash.

The Boa Plain Forests currently supply the bulk of the timber and the NTFPs for the local communities. The forests are also used extensively to supply medicinal plants, wild fruits, vegetables and for hunting and trapping.

The mapping Project was limited to eight villages covering three clans (Balondo, Barombi and Ekombe) in Bamusso Sub-Division that share a boundary with Mokoko River Forest Reserve. The villages in question include: Ekombe Mofako, Barombi Mokoko, Iloani, Dikome, Mbongo, Bonjare, Boa and Diongo.



### 1.2.5 SOCIAL ANALYSIS:

S/N	NAME OF VILLAGE SETTLEMENT	ESTIMATED POPULATION FIGURES	HISTORICAL DATA SEASONAL FLUCTUATIONS	ETHNICITY	LAND USE	MAJOR LAND USE PROBLEMS/ CONFLICTS
1.	<b>Ekombe Mofako</b>	450 + (45 households)	Increase in population during cocoa season and Nigerian immigrants	Indigenous 85%, Nigerians 10%, other Cameroonians 5%	<ul style="list-style-type: none"> <li>▪ Subsistence and Cash crop farming – cassava, egusi, plantain, cocoa, oil palm.</li> <li>▪ Logging in communal forest and Reserve</li> <li>▪ Logging by Canoe Carvers</li> <li>▪ Traditional hunting and fishing</li> <li>▪ NTFPs collection</li> </ul>	<ul style="list-style-type: none"> <li>▪ Encroachment into Forest Reserve</li> <li>▪ Village Land shortage due to CDC expansion, land sales and soil infertility/flooding</li> <li>▪ Many outside hunters.</li> </ul>
2.	<b>Barombi Mokoko</b>	140 + (20 Households)	Increase in population during cocoa period	Indigenous – 20%, Nigerians – 10%, other Cameroonians – 70%	<ul style="list-style-type: none"> <li>▪ Subsistence/cash crop farming; (cassava, egusi, plantain, cocoa, oil palm</li> <li>▪ Logging in Communal Forest/Reserve</li> <li>▪ Traditional hunting</li> </ul>	<ul style="list-style-type: none"> <li>▪ Village land sales</li> <li>▪ Forest boundary dispute with Illoani. Illoani claim Barombi are settlers</li> <li>▪ Village land shortage due to CD expansion.</li> </ul>
3.	<b>Illoani</b>	1,600 + (190 Households)	Increase in population due to CDC expansion (labour force) and Nigerian immigrants	Indigenous – 60% Nigerians – 25%, Other Cameroonians – 15%	<ul style="list-style-type: none"> <li>▪ Subsistence/cash crop farming; cassava, egusi, yam, plantain, oil palm</li> <li>▪ Commercial logging by CDC/Community</li> <li>▪ Logging by Timber Company</li> <li>▪ Traditional hunting/fishing</li> </ul>	<ul style="list-style-type: none"> <li>▪ CDC encroachment on village land</li> <li>▪ Forest Boundary dispute with Barombi Mokoko</li> <li>▪ Many outside hunters</li> </ul>

4.	<b>Dikome</b>	350 (42 Households)	Increase in population due to Nigerian immigrants	Indigenous – 70% Nigerians – 25% Other Cameroonians – 5%	<ul style="list-style-type: none"> <li>▪ Subsistence farming – cassava, egusi, oil palm, etc. (Community oil Palm Plantation)</li> <li>▪ Logging by CDC/Indigenes</li> <li>▪ Traditional hunting/fishing</li> <li>▪ NTFPs collection</li> </ul>	<ul style="list-style-type: none"> <li>▪ Long standing forest boundary dispute with Mbongo</li> <li>▪ CDC encroachment on village land</li> <li>▪ Proposed Dikome Estate is considered communal forest by villagers</li> </ul>
5.	<b>Mbongo</b>	1,500 + (188 Households)	Increase in population due to CDC; Secondary school and Nigerian immigrants.	Indigenous – 70% Nigerians – 20% Other Cameroonians – 10%	<ul style="list-style-type: none"> <li>▪ Subsistence farming; cassava, egusi, yam, plantain, cocoyam</li> <li>▪ Community Oil Palm Plantation</li> <li>▪ NTFPs collection</li> <li>▪ Logging by Timber Company and Local Commercial logging</li> <li>▪ Hunting/Fishing</li> </ul>	<ul style="list-style-type: none"> <li>▪ Forest boundary dispute with Dikome</li> <li>▪ CDC Plantation expansion on village land.</li> </ul>
6.	<b>Bonjare</b>	200 (25 Households)		Indigenous – 90% Nigerians – 10%	<ul style="list-style-type: none"> <li>▪ Subsistence farming; cassava, egusi, etc</li> <li>▪ Past logging by Timber Company and CDC</li> <li>▪ Traditional hunting/fishing</li> <li>▪ NTFP collection</li> </ul>	<ul style="list-style-type: none"> <li>▪ CDC encroachment on village land</li> </ul>

7.	<b>Boa Village</b>	500 (63 Households)	Drastic increase due to Nigerian immigrants and Health Centre.	Indigenous - 65% Nigerians – 30% Other Cameroonians – 5%	<ul style="list-style-type: none"> <li>▪ Subsistence/Commercial agriculture: cassava, banana, plantain, egusi, oil palm, cocoa</li> <li>▪ Past logging by Timber Company</li> <li>▪ Community Timber exploitation</li> <li>▪ NTFP Collection</li> <li>▪ Traditional hunting/fishing</li> </ul>	<ul style="list-style-type: none"> <li>▪ Community encroachment on CDC old banana plantations</li> <li>▪ So many outside hunters</li> </ul>
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8.	<p><b>Boa Camps</b></p> <p><b>Kumundu Camp</b></p> <p><b>Bassa Camp</b></p> <p><b>Boa Old Camp</b></p> <p><b>Market</b></p>	<p>500 (63 Households)</p> <p>300 (38 Households)</p> <p>500 (63 Households)</p> <p>200 (25 Households)</p>	<p>Drastic increase due to Nigerian immigrants, availability of farmland (CDC abandoned plantations) and easy access through fishing Ports.</p> <p>Drastic increase due to Nigerian immigrants, availability of farmland (CDC abandoned plantations) and easy access through fishing Ports.</p> <p>Drastic increase due to Nigerian immigrants, availability of farmland (CDC abandoned plantations) and easy access through fishing Ports.</p> <p>Drastic increase due to Nigerian immigrants, availability of farmland (CDC abandoned plantations) and easy access through fishing Ports.</p> <p>Drastic increase due to Nigerian immigrants, availability of farmland (CDC abandoned plantations) and easy access through fishing Ports.</p> <p>Plantations and easy access through fishing Ports.</p>	<p>Nigerians – 100%</p> <p>Nigerians - 100%</p> <p>Other Cameroonians – 30% Nigerians – 70%</p> <p>Nigerians – 100%</p>	<ul style="list-style-type: none"> <li>▪ Subsistence farming – cassava, egusi, banana,</li> <li>▪ Fishing/hunting</li> <li>▪ NTFP Collection</li> <li>▪ Logging by Canoe Carvers</li> </ul> <ul style="list-style-type: none"> <li>▪ Subsistence farming: cassava, egusi, banana</li> <li>▪ Fishing/hunting</li> <li>▪ NTFP Collection</li> <li>▪ Logging by Canoe Carvers</li> </ul> <ul style="list-style-type: none"> <li>▪ Subsistence farming: cassava, egusi, banana</li> <li>▪ Fishing/hunting</li> <li>▪ NTFP Collection</li> <li>▪ Logging by canoe Carvers</li> </ul> <ul style="list-style-type: none"> <li>▪ Subsistence farming: cassava, egusi, banana</li> <li>▪ Fishing/hunting</li> <li>▪ NTFP Collection</li> <li>▪ Logging by canoe Carvers</li> </ul> <ul style="list-style-type: none"> <li>▪ Subsistence farming: cassava, egusi, banana</li> <li>▪ Fishing/hunting</li> <li>▪ NTFP Collection</li> <li>▪ Logging by canoe Carvers</li> </ul>	<p>-</p> <p>-</p> <p>-</p> <p>-</p> <p>-</p>
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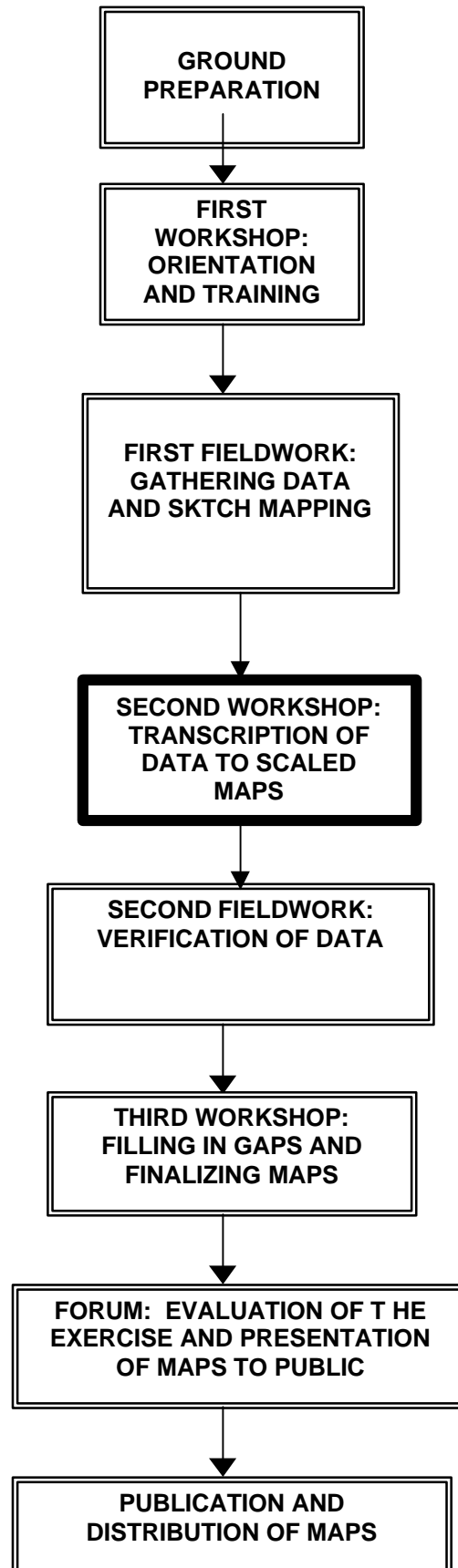
	<b>Motasen Camp</b>	100 (13 Households)	Drastic increase due to Nigerian immigrants, availability of farmland (CDC abandoned	Nigerians – 100%	<ul style="list-style-type: none"> <li>▪ Subsistence farming: cassava, egusi, banana</li> <li>▪ Fishing/hunting NTFP Collection</li> <li>▪ Logging by canoe Carvers</li> </ul>	<ul style="list-style-type: none"> <li>▪ Uncontrolled logging by Nigerians</li> <li>▪ Local Administration (DO) authorises indiscriminate Timber exploitation.</li> </ul>
	<b>Diongo Camps</b>		Drastic increase in population due to Nigerian immigrants, availability of farmland (CDC abandoned plantation) and easy access through fishing Ports.		<ul style="list-style-type: none"> <li>▪ Subsistence farming: cassava, banana, egusi, plantain, etc.</li> <li>▪ Hunting/fishing</li> <li>▪ Logging by Canoe Carvers</li> <li>▪ NTFP Collection</li> </ul>	-
	<b>Baba I</b>	250 (31 Households)	Drastic increase in population due to Nigerian immigrants, availability of farmland (CDC abandoned plantation) and easy access through fishing Ports.	Nigerian – 100%	<ul style="list-style-type: none"> <li>▪ Subsistence farming: cassava, banana, egusi, plantain, etc</li> <li>▪ Hunting/Fishing</li> <li>▪ Logging by Canoe Carvers</li> <li>▪ NTFP Collection</li> </ul>	-
	<b>Baba II</b>	250 (31 Households)	Drastic increase in population due to Nigerian immigrants, availability of farmland (CDC abandoned plantation) and easy access through fishing Ports.	Nigerian – 100%	<ul style="list-style-type: none"> <li>▪ Subsistence farming: cassava, banana, egusi, plantain, etc</li> <li>▪ Hunting/Fishing</li> <li>▪ Logging by Canoe Carvers</li> <li>▪ NTFP Collection</li> </ul>	-
	<b>Diongo Beach</b>	50 (6 Households)	Drastic increase in population due to Nigerian immigrants, availability of farmland (CDC abandoned plantation) and easy access through fishing Ports.	Nigerians – 100%	<ul style="list-style-type: none"> <li>▪ Subsistence farming: cassava, banana, egusi, plantain, etc</li> <li>▪ Hunting/Fishing</li> <li>▪ Logging by Canoe Carvers</li> <li>▪ NTFP Collection</li> </ul>	-

## 2. CONSTRAINTS

The following difficulties were encountered in the course of the mapping exercise:

- ❖ Selection of village researchers was difficult in some villages (e.g. Barombi Mokoko) because the local authorities insisted on using indigenes.
- ❖ Some people in Barombi contested the choice of village researcher whom they thought was incompetent and so refused to assist in the Mapping exercise.
- ❖ Some village researchers did not understand the process well. This meant the technical team had to make frequent visits to such villages to guide team. Also, village researchers from other villages who have a good knowledge of the forest were deployed.
- ❖ Note taking in exercise books was difficult for some village researchers, partly because they are not used to the art of writing.
- ❖ Field materials were not given adequate consideration during the planning phase, and some could not be secured. Cartographers hadn't proper materials; e.g. tubes, bags, etc.
- ❖ Fieldwork coincided with the Christmas feasibility period, so some Village researchers were involved in drinking at the expense of data collection. This needs to be considered for subsequent fieldwork in other areas.
- ❖ The technical team had to cover long distances on foot from Bonjare to Diongo because of the absence of bridges over some rivers. This made the exercise arduous.
- ❖ Work was interrupted on market days. These are very important days in the area and village researchers had to take part.
- ❖ Women were not selected as village researchers. This needs to be considered in other areas where this exercise is intended to be done.

## CORE STEPS IN PARTICIPATORY MAPPING



### **3. PARTICIPATORY MAPPING PROCESS:**

The mapping involved the following core steps:

#### **3.1 Ground Preparation:**

As a first step, MCP Staff working in Mokoko Area held meetings in all the Eight (8) villages in Mokoko Area involving Chiefs, Traditional Councillors, Elders, Women and Youths. The purpose of these meetings was to explain what the Mapping exercise was all about, find out if Communities were interested, select village researchers and finally to arrange field logistics (lodging, feeding, etc). selection of researchers was jointly done by Mokoko Field Staff (based on their understanding of the capabilities of individuals involved in previous activities in the area) and the traditional authorities.

Selection of village researchers was based on the following criteria:

- Should have a good knowledge of the forest
- Should be able to read and write
- Preferably indigenes who command respect in the Community

#### **3.2 First Workshop (3 Days):**

This was meant for orientation and training of village researchers (local cartographers). They were equipped with skills and basic principles of mapping. Also, it served as a forum for the Mokoko Researchers and MCP staff to agree on the objectives of mapping and familiarize participants with tools to be used for the mapping exercise. (See *Report on proceedings of the Participatory Mapping Training Workshop of November 23 – 25<sup>th</sup>, 1998*).

#### **3.3 First Fieldwork:**

After the Workshop in Limbe, the Mokoko researchers went back to their respective villages. Before the technical team arrived in the Mokoko area, the Researchers (local cartographers) met the traditional authorities and the entire Community and explained the workshop proceedings and mapping project to them.

##### **3.3.1 Introductory Meetings:**

These meetings were meant to test grounds, introduce the technical team to the Traditional Authorities (Chiefs, Traditional Councillors and the Council of Elders), and to finalize agreement on time and venue of the enlarged village meetings. These contacts were made in all the eight villages prior to the sensitization meetings.



### 3.3.2 Enlarged Village Sensitization Meetings:

Village sensitization meetings were held in all the villages to further explain the purpose and benefits of mapping to the local Community, the methodology and what was expected of Communities. Meetings were held in School premises, Community Halls, Chiefs' Houses and some in open air under trees. The Supervisor (Mokoko Field Staff) introduced the technical team at each meeting and the researchers (local cartographers) in turn introduced the Traditional Authorities and notables in the community.

The village researchers took a leading role in explaining the mapping project to the Community. A key selling point in their presentations was how the mapping Project would move them towards negotiating with Government for CDC to give back part of their leasehold land to the Community before the imminent privatization of CDC.

It was stressed that although maps of the region already existed, they had not been made by local people, and for that reason they were full of errors. Existing maps don't show how the Communities use land and forest, and really did not carry much information relevant to the Communities. Maps were seen to be more powerful than guns in claiming and defending land.

### 3.3.3 Data Collection:

#### i) MATERIALS:

The following materials were used for data collection and drawing of sketch maps:

Questionnaire, Flip Chart Paper, Exercise Books, pens, coloured pencils, pencils, eraser, ruler, GPS, Tubes (made of plastic pipes, with rubber stoppers, as protection against humidity and general wear and tear).

#### ii) METHODOLOGY:

The Local Cartographers' work in the Community was working with people who know where everything (in terms of land use and physical features) was located. These informants were mostly user groups – hunters, trappers, farmers, timber exploiters, fuelwood collectors, fishermen, gatherers (NTFPs, medicine) and Village Elders with years of experience in historical changes in land and forest use. 4 – 5 persons from each of these groups were brought together to help the Village Researchers. They sat down with the Village Researchers and with the use of Semi-structured Interviews (SSI) provided information, first filling the questionnaire with names of subsistence areas.

In some villages, the subsistence areas listed in the Questionnaire were first of all represented on the ground after locating major roads, rivers, stream and other important physical features and later transferred on flip chart paper. In other Communities the information was put directly on flip chart paper. In the course of putting data on sketch maps there was contradiction on the limits of subsistence areas but these were resolved through discussion.

The Village Researchers used coloured pencils to differentiate the categories of land use and physical features – rivers, lakes, roads, forest Reserve, Communal Forest, Farming areas, CDC leasehold boundaries, CDC Cultivated/uncultivated areas, etc. They indicated areas of conflict with CDC. A sensitive issue here was in the demarcation of village boundaries. As MCP staff in the Mokoko area were already aware of the existing inter-village forest boundary conflicts, it was stressed that the purpose of the mapping project was not to delimit boundaries, but to show land use.

At the initial stage of the Mapping Exercise, symbols for representing land use were developed by individual Village Researchers. This seemed to pose a lot of problems for most of them. So a standard key was prepared for all of them based on their own symbols. The Technical Team made daily visits to all the villages to solve some problems on the spot. Visits to Diongo and Boa were less frequent because the roads were inaccessible during this period. However, Local Cartographers from these two villages had an excellent understanding of the Mapping Exercise to the extent that some of them were deployed to assist their colleagues in other villages.

Village researchers made forest walks to CDC leasehold areas to check the validity of some doubtful information that informants had put on the questionnaire and sketch maps. Historical information about villages – changes in land tenure, land use pattern, changes in river courses and distances to areas of activities (in km or time) was meant to assist cartographers in locating physical features and subsistence areas during transcription of field data to scaled maps.

#### 3.3.4 First Assessment (Evaluation) Workshop:

This was meant for the village researchers and the technical team to assess the problems encountered in the process of data collection and jointly explore ways of addressing them. Also, the forum was used to assess the level of community participation, which in turn served as a barometer for measuring of the community's interest in the mapping project. Maps were displayed on the wall and participants pointed out irrelevant and missing information.

**i) PROBLEMS ENCOUNTERED:**

<b>S/N</b>	<b>VILLAGE</b>	<b>LOCAL CARTOGRAPHER</b>	<b>WHAT PROBLEM DID YOU ENCOUNTER</b>	<b>HOW DID YOU SOLVE THEM?</b>	<b>HOW CAN THEY BE SOLVED</b>
1.	<b>Ekombe Mofako</b>	<ul style="list-style-type: none"> <li>▪ Lucas Diah</li> <li>▪ Joseph Itoh</li> </ul>	<ul style="list-style-type: none"> <li>▪ Elders not available because of many ceremonies</li> <li>▪ Some hunters refused to give information because they are not paid as Local Cartographers</li> </ul>	<ul style="list-style-type: none"> <li>▪ Further explained importance of Mapping Exercise to the Community</li> </ul>	<ul style="list-style-type: none"> <li>▪ Try to contact Elders in the evening before they take alcohol.</li> </ul>
2.	<b>Barombi Mokoko</b>	<ul style="list-style-type: none"> <li>▪ Pius Ntonga</li> <li>▪ Onori Felix</li> </ul>	<ul style="list-style-type: none"> <li>▪ Villagers want their share of Local Cartographer's Perdiem</li> <li>▪ Local Cartographer (Ntonga) was considered a stranger and incompetent to represent the village for the Mapping Exercise</li> <li>▪ 3 Villagers who wanted to represent the village acted as saboteurs. Refused to give information.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Bought Palm wine for informants</li> <li>▪ Consulted Chief and Traditional Council who called a meeting</li> <li>▪ Invited MCP/CARPE Team to further explain purpose of exercise and Perdiem.</li> </ul>	MCP/CARPE organize an explanatory meeting in the village.
3.	<b>Illoani</b>	<ul style="list-style-type: none"> <li>▪ Felix Nekana</li> <li>▪ John Mbotaka</li> </ul>	<ul style="list-style-type: none"> <li>▪ Informants asked for drinks. Believed Local Cartographers are paid</li> <li>▪ Informants occupied with farm work</li> <li>▪ Elders involved in traditional ceremonies "juju"</li> <li>▪ Difficult to estimate distances to certain points</li> </ul>	<ul style="list-style-type: none"> <li>▪ Bought drinks with perdiem</li> <li>▪ Held meetings in the evening</li> </ul>	<ul style="list-style-type: none"> <li>▪ Contact Head of "Juju" group and explain importance of exercise. Asked for 30 minutes/day.</li> </ul>
4.	<b>Dikome</b>	<ul style="list-style-type: none"> <li>▪ William Ngoh</li> </ul>	<ul style="list-style-type: none"> <li>▪ Estimating distances from village to certain points was difficult.</li> <li>▪ Spent all his Perdiem to buy beer for informants because there is no palm wine in the village</li> </ul>	<ul style="list-style-type: none"> <li>▪ Sent people in the field to check these points</li> </ul>	<ul style="list-style-type: none"> <li>▪ Local Cartographer should also check the points</li> <li>▪ Buy palm wine from neighbouring village.</li> </ul>
5.	<b>Mbongo</b>	<ul style="list-style-type: none"> <li>▪ Emmanuel Ngoh</li> </ul>	<ul style="list-style-type: none"> <li>▪ Estimating distances from village to certain points</li> </ul>	<ul style="list-style-type: none"> <li>▪ Together with some villagers, walk to these points</li> </ul>	

6.	<b>Bonjare</b>	<ul style="list-style-type: none"> <li>▪ Asoh Fidelis</li> </ul>	<ul style="list-style-type: none"> <li>▪ So many deaths in the village, so difficult to get informants</li> <li>▪ Hunters expected him to know everything since he is a hunter himself - not willing to give information</li> <li>▪ Difficult to group people to give information</li> <li>▪ People were drinking while giving information (Christmas period)</li> <li>▪ Not enough time to complete work</li> </ul>	<ul style="list-style-type: none"> <li>▪ Explained that contribution from all was equally important (put heads together)</li> <li>▪ Bought Palm wine</li> <li>▪ Met informants in their homes</li> </ul>	<ul style="list-style-type: none"> <li>▪ Avoid working around drinking places</li> <li>▪ Palm wine should be bought in the evening after work</li> <li>▪ Researcher should use time efficiently</li> </ul>
7.	<b>Boa</b>	<ul style="list-style-type: none"> <li>▪ Okah Roy</li> <li>▪ James Itoh</li> </ul>	<ul style="list-style-type: none"> <li>▪ Death Celebrations during this period</li> <li>▪ Informants were busy preparing for Christmas</li> <li>▪ Difficult to get informants at their convenience (farm work)</li> <li>▪ Some people felt the exercise was for the benefit of the Local Cartographers</li> </ul>	<ul style="list-style-type: none"> <li>▪ Concentrated on putting already acquired information on map</li> <li>▪ Organised meetings in the evening and in the night</li> <li>▪ Bought palm wine to attract informants</li> </ul>	<ul style="list-style-type: none"> <li>▪ Prepare a programme for meeting and give people enough notice</li> <li>▪ Ask them convenient time to hold meetings</li> <li>▪ Continue to explain the purpose and importance of Mapping Exercise (Sensitization)</li> </ul>
8.	<b>Diongo</b>	<ul style="list-style-type: none"> <li>▪ Mambo Richard</li> </ul>	-	-	-

ii) **COMMUNITY PARTICIPATION:**

S/N	VILLAGE	P A R T I C I P A T I O N						
		Excellent	Very Good	Good	Poor	Very Poor	Reasons for Participating	Reasons for not participating
1.	<b>Ekombe Mofako</b>		✓				<ul style="list-style-type: none"> <li>◆ Village Land problem is acute because of CDC expansion and nearness of village to Reserve. Maps will help village to acquire more land</li> </ul>	
2.	<b>Barombi Mokoko</b>			✓			<ul style="list-style-type: none"> <li>◆ Map could help present conflict areas with Illoani to authorities concerned.</li> </ul>	<ul style="list-style-type: none"> <li>◆ MCP does not only talk about Reserve, but Communal forest as well; will one day seize Communal forest</li> <li>◆ Non-native hunters were reluctant to provide information. Thought natives are in the right place to provide information about their forest</li> <li>◆ Village Cartographer was not some peoples' favourite. Consider him a stranger.</li> </ul>
3.	<b>Illoani</b>			✓			<ul style="list-style-type: none"> <li>◆ Map will help in future planning of land and forest use.</li> <li>◆ Map will help village to present their case on CDC encroachment</li> <li>◆ Map will help present land conflict with Illoani to Government</li> <li>◆ Map will enable people gain knowledge of forest and their area as a whole</li> </ul>	<ul style="list-style-type: none"> <li>◆ Some people thought MCP had a hidden agenda</li> <li>◆ Local Cartographer hadn't enough time to contact everybody because village is big.</li> </ul>
4.	<b>Bonjare</b>			✓			<ul style="list-style-type: none"> <li>◆ Map enable people to know boundary between CDC and village</li> <li>◆ Map will enable peple to know how far they have</li> </ul>	<ul style="list-style-type: none"> <li>◆ People were already feasting ( a lot of drinking). Christmas period.</li> </ul>

							gone into the Communal Forest. Help in future planning	
5.	<b>Boa</b>		✓				<ul style="list-style-type: none"> <li>◆ Since maps show Reserve boundary and extent of farms into Communal Forest, they will help planning on how to use remaining forest</li> <li>◆ Maps will enable village to defend land in case of encroachment by CDC</li> <li>◆ Map will help authorities to solve conflict areas with Barombi Ngatome</li> </ul>	<ul style="list-style-type: none"> <li>◆ Some people were involved in death celebrations for two consecutive days.</li> </ul>
6.	<b>Diongo</b>	✓					<ul style="list-style-type: none"> <li>◆ People wanted some of the villages in the area to appear on Map for the first time</li> <li>◆ Maps will help in planning/management of forest and will check any encroachment on village land by CDC and vice versa</li> </ul>	-
7.	<b>Dikome</b>		✓				<ul style="list-style-type: none"> <li>◆ Map will help educate villagers about the area, especially areas timber Companies have logged in the forest</li> <li>◆ Maps will enable villagers to present their case on CDC encroachment to authorities concerned</li> <li>◆ Maps will help show remaining forest and subsequent planning on use</li> </ul>	-
8.	<b>Mbongo</b>	✓					<ul style="list-style-type: none"> <li>◆ Maps will help villagers defend their land, e.g. stop timber Companies from exploiting in areas not</li> </ul>	-

							<p>acceptable to villagers</p> <ul style="list-style-type: none"> <li>◆ Maps will show how farms and other activities have gone into the forest hence planning for future use</li> <li>◆ Maps enabled villagers to know how much land CDC is occupying</li> <li>◆ Maps will enable young people to acquire knowledge about their area</li> <li>◆ Maps will enable forest users to know where resources are found, e.g NTFPs.</li> </ul>	
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### iii) EVALUATION OF MAPS:

Maps were displayed on wall and participants made their comments about them.

S/N	VILLAGE	GENERAL PRESENTATION OF MAP	PHYSICAL FEATURES	LAND USE	KEY	OTHER COMMENTS
1.	<b>Ekombe Mofako</b>	<ul style="list-style-type: none"> <li>◆ Scanty map (economy of symbols)</li> <li>◆ Artistic frame not necessary</li> </ul>	<ul style="list-style-type: none"> <li>◆ Rivers not clearly shown</li> </ul>	<ul style="list-style-type: none"> <li>◆ Chop farms not well indicated, savanna area too large, extent of CDC and Forest Reserve not indicated</li> </ul>	Key absent	Redraw map
2.	<b>Barombi Mokoko</b>	<ul style="list-style-type: none"> <li>◆ Poor orientation of flip chart paper, no frame, no title</li> </ul>	-	-	No key	Redraw map and change orientation
3.	<b>Dikome</b>	<ul style="list-style-type: none"> <li>◆ Symbols not proportionately distributed</li> </ul>	<ul style="list-style-type: none"> <li>◆ Unimportant features included</li> </ul>			<ul style="list-style-type: none"> <li>◆ Map complete, make a few amendments</li> </ul>
4.	<b>Illoani</b>	<ul style="list-style-type: none"> <li>◆ No frame, Map not neat</li> </ul>			No key	<ul style="list-style-type: none"> <li>◆ Redraw map</li> </ul>
5.	<b>Mbongo</b>	<ul style="list-style-type: none"> <li>◆ No frame, Map over-crowded. Symbols too large, many colours for the same feature</li> </ul>	<ul style="list-style-type: none"> <li>◆ Present rivers and streams in blue. Too many houses</li> </ul>	<ul style="list-style-type: none"> <li>◆ Indicate names of subsistence areas</li> </ul>	<ul style="list-style-type: none"> <li>◆ Congested key with complicated symbols</li> </ul>	<ul style="list-style-type: none"> <li>◆ Redraw map</li> </ul>
6.	<b>Bonjare</b>	<ul style="list-style-type: none"> <li>◆ Map congested, very large symbols</li> </ul>	<ul style="list-style-type: none"> <li>◆ Distance from Bonjare to Mbongo exaggerated on Map</li> </ul>		<ul style="list-style-type: none"> <li>◆ Key inappropriate to Map</li> </ul>	<ul style="list-style-type: none"> <li>◆ Redraw Maps and present information better</li> </ul>
7.	<b>Boa</b>	<ul style="list-style-type: none"> <li>◆ No title, no date</li> <li>◆ Poor presentation with overlaps of boundaries</li> </ul>	<ul style="list-style-type: none"> <li>◆ Hills too large</li> </ul>			<ul style="list-style-type: none"> <li>◆ Redraw Maps and respect boundaries with neighbouring villages</li> </ul>
8.	<b>Diongo</b>	<ul style="list-style-type: none"> <li>◆ Map too large</li> </ul>		<ul style="list-style-type: none"> <li>◆ Boundaries with forest Reserve, CDC not shown</li> </ul>		<ul style="list-style-type: none"> <li>◆ Map incomplete, redraw.</li> </ul>



### 3.3.5 SECOND ASSESSMENT (EVALUATION) WORKSHOP:

The second assessment Workshop was limited to the evaluation of maps after villager researchers had done the relevant amendments identified during the first evaluation workshop.

S/N	VILLAGE	GENERAL PRESENTATION OF MAP	PHYSICAL FEATURES	LAND USE	KEY	OTHER COMMENTS
1.	<b>Dikome</b>	-	<ul style="list-style-type: none"> <li>Seasonal rivers not indicated</li> </ul>	<ul style="list-style-type: none"> <li>Symbols for Chop farms, CDC uncultivated area scanty</li> <li>Timber exploitation in Reserve not indicated.</li> </ul>	-	<ul style="list-style-type: none"> <li>Make amendments on same Map.</li> </ul>
2.	<b>Ekome Mofako</b>	<ul style="list-style-type: none"> <li>Researcher's name not written on Map</li> </ul>	<ul style="list-style-type: none"> <li>Seasonal rivers not indicated</li> </ul>	<ul style="list-style-type: none"> <li>Village/CDC conflict area not shown</li> </ul>	-	<ul style="list-style-type: none"> <li>Redraw Map</li> </ul>
3.	<b>Mbongo</b>	-	-	<ul style="list-style-type: none"> <li>Area of activities not named</li> </ul>	-	<ul style="list-style-type: none"> <li>Map complete</li> </ul>
4.	<b>Bonjare</b>	-	-	<ul style="list-style-type: none"> <li>Areas of activities not named</li> </ul>	-	<ul style="list-style-type: none"> <li>Map complete</li> </ul>
5.	<b>Diongo</b>	<ul style="list-style-type: none"> <li>All features outside frame</li> </ul>	-	<ul style="list-style-type: none"> <li>Areas of activities not named</li> </ul>	-	<ul style="list-style-type: none"> <li>Redraw Map</li> </ul>
6.	<b>Illoani</b>	-	<ul style="list-style-type: none"> <li>Seasonal rivers not indicated</li> </ul>	<ul style="list-style-type: none"> <li>Fishing areas not indicated</li> </ul>	-	<ul style="list-style-type: none"> <li>Map to be amended</li> </ul>
7.	<b>Barombi Mokoko</b>	-	-	-	-	<ul style="list-style-type: none"> <li>Map Complete</li> </ul>
8.	<b>Boa</b>			<ul style="list-style-type: none"> <li>Timber exploitation by community and Timber Companies not differentiated on Map</li> </ul>	<ul style="list-style-type: none"> <li>Symbols on key not well represented on Map</li> </ul>	<ul style="list-style-type: none"> <li>Map complete, but make amendments on key</li> </ul>

### **3.4 SECOND WORKSHOP (16 Days):**

#### **3.4.1 Transcription of Data to Scaled Maps:**

The transcription exercise took sixteen (16) days with the production of a draft Land Use Maps of the Boa Plain at the scale of 1:25,000. (four sheets in total).

It involved the active participation of two Government Cartographers from the National Institute of Cartography in Yaounde, two Mount Cameroon Project staff and twelve Village Researchers from the Boa Plain.

Transcription was facilitated by the fact that most of the base maps and aerial photographs used had the same scale of 1:25,000.

Despite some difficulties encountered during the first few days of the transcription process, they were easily overcome and the end result was success.

#### **3.4.2 Preparation of Transcription Materials:**

While waiting for the arrival of the village researchers, the following materials and equipment had been assembled in a Hall in preparation for transcription:

- Drafting tables
- Light tables
- Topographical base map of the region at a scale of 1:25,000
- CDC leasehold map at a scale of 1:25,000
- ELF aerial photographs at a scale of 1:25,000
- Four pairs of stereoscopes
- Sheets of tracing paper (vellum)
- Colour pencils, pencils, rulers, erasers, cellotapes, and typing sheet papers

Arrival of Village Researchers:

With the arrival of village researchers with their hand-drawn maps, note books and questionnaires, it became apparent that the transcription exercise had to begin immediately. The first two days of the transcription process did not involve the village researchers much.

The Cartographers used tracing paper (vellum) to trace major river systems, roads spot heights, forest Reserve boundaries and Cameroon Development Corporation (CDC) boundaries. This was produced in four sheets covering the Boa Plain. These were traced from the 1:25,000 Maps which had some irregularities as it was possibly derived from a smaller scale map. Therefore, a lot of basic information (topographic) was absent. Secondly, existing topographic information was unclear as Village Researchers soon discovered that some physical features were not really visual in their actual field positions, e.g. small rivers, field and toponymy etc.

To solve this problem, aerial photographs were of great assistance as they were of the same scale as the base map. Although the photographs did not cover the entire region, they helped to close some necessary information gaps related to topography.

Owing to the fact that the area in question falls within the dense equatorial region, much of the topographic information was hidden under vegetation cover. Smaller streams fell much in this category and were left for the field verification exercise.

#### 3.4.3 Transcription of Topographic Features:

A major problem at the transcription stage was to convince Village Researchers on how scales work, how information reduces on the map with scale reductions and changing symbols to match with scales.

However, all topographic information recognizable to the villagers were kept to give the map some credibility in the eyes and understanding of the villagers.

Working with individual Village Researchers and the use of aerial photographs and sketch maps, it was possible to locate streams, hills, valleys, settlements and attach respective names to the identified features.

#### 3.4.4 Transcription of Land Use:

Like the topographic information, the scale of the map posed some problems to satisfy the expectations of Village Researchers.

The hand-drawn maps contained many symbols. Village Researchers were educated on how to regroup data in order to reduce the number of symbols which were accompanied on the legend by explanatory notes. Pictorial symbols were used to ease interpretation of map by villagers. Farming areas could be clearly demarcated by the use of some prominent land marks like hills and rivers as seen from aerial photographs and Community hand-drawn maps. Areas of intact forest were clearly demarcated and local names attached to farming areas and forest.

Information on fishing, hunting and gathering was equally transcribed taking into consideration the location of streams, forest and farming areas.

Cameroon Development Corporation (CDC) parcel land was also included at this stage (forest, cleared land, fallow land and planted areas).

### **3.5 Conclusion:**

Throughout the transcription exercise, it was realized that some information gaps were lacking as a result of poor obscurity on some aerial photographs or features not well located on hand-drawn maps of Village Researchers.

In a sense, the transcription exercise was quite encouraging as a considerable amount of data was already visualized at this stage. Nevertheless, information gaps included the following:

- Streams under vegetation cover
- Farm/forest boundaries
- Location of new settlements
- Encroachment on Village land by CDC and vice versa
- Encroachment on Forest Reserve by Villagers.

The absence of this data necessitated the second field verification with the use of a Global Positioning System (GPS) and ground truthing.

### **3.6 Second Field Work – Third Workshop (12 Days):**

#### **3.6.1 Verification of Data/Finalization of Maps in Field:**

The second field and third Workshop exercise for data verification and finalization of map took 12 days. Six (6) days for field data collection and presentation to the Community; and six (6) days for finalization of maps.

At this stage, the Technical Team was present in the field to ensure accurate data collection in relation to the use of a Global Positioning System (GPS).

Each Village Researcher was given a copy of a draft map produced during the transcription exercise for field verification covering this area. On the maps and in their notebooks were indicated unanswered questions.

The amount of field verification differed from one village to another. In some villages, there was very little to be done while in others the exercise was absolutely necessary.

In the field, it was clearly noticed that the base map had been derived from a small scale topographic map. However, available photographs did not cover the whole map; e.g. the photograph showing Bamusso as an Island was absent, thus this area appears as a continual stretch of land. The area under survey however had necessary photographs.

Geographically, the whole region is an out wash plain and most rivers are seasonal drainage channels. As a result of time constraint only rivers and streams of interest were visited and transcribed. Some water bodies that could not be identified on aerial photographs were visited. In most cases, they appeared as pools of water in deep valleys without outlets.

Global Positioning System points were recorded in areas where this was possible for accurate positioning.

The field visit in the creeks revealed the existence of new settlements not indicated on hand-drawn maps by Village Researchers.

Substantial land use information was collected during this phase of the fieldwork. Many communication lines had altered their use. It was discovered that some motorable roads had degraded into foot paths and vice versa.

CDC cultivated lands had increased and clearing was going on for the opening of new Estates for cash crops.

Limits of farm/forest boundaries were properly verified especially in areas not clear on aerial photographs and hand drawn maps by village researchers. Also included was encroachment on village land by CDC and vice versa and encroachment in the Mokoko River Forest Reserve by villagers. In every area where possible, GPS points were collected for a detailed and accurate transcription.

### 3.6.2 Presentation of Maps to the Community:

The draft maps were later presented to the entire community (village by village) to ensure that everyone is happy with the information collected. Prior to this exercise, Village Researchers had been busy discussing the draft maps with their communities and interested parties. Omissions and additional information were immediately transcribed. In the end, villagers were able to appreciate the map with very little assistance from the village researchers. Also, the final product was seen as the effort of the entire community and not just the researchers.

### 3.6.3 Production of Final Maps (6 days):

This exercise took 6 days and involved three (3) Cartographers. The village researchers did not participate during this phase.

In the absence of a draftsman, the cartographers carefully drew the final maps on transparent paper (vellum) avoiding any major change as agreed by the village researchers and their communities. However, some symbols and colour patterns were changed to comply with International Convention.

In the end, the final maps produced took into consideration all Cartographic norms.

#### 4. LESSONS LEARNT:

- The choice of Village Researchers is very crucial in Participatory Mapping exercise. The researcher has to command respect in the Community as people are likely to undermine him and therefore take the exercise less seriously as was the case in Barombi Mokoko;
- A lot of time needs to be spent on sensitization of the Community about the exercise. In some large villages like Illoani, information about the exercise did not reach everyone and some only knew about it during Community presentations.
- In most villages informants were aware that village researchers were compensated for their time spent in collecting data. As a result, they constantly demanded drinks from Researchers. Compensation for informants would require some consideration for subsequent Mapping Projects.
- It would be necessary to point out that during the transcription exercise most village researchers were idle, because the technical team could only work with three out of twelve at the same time. In these circumstances, the technical team could not work for long hours.
- Aerial photographs provided had no index. Therefore, the technical team could not work with them until an index was provided. This dampened the working spirit of the technical team to an extent.

## APPENDICES

**APPENDIX 1****DIARY OF EVENTS**

<b>DATE</b>	<b>ACTIVITY</b>
26-11-98	<ul style="list-style-type: none"> <li>• Departure of Mokoko Village Researchers from Limbe</li> </ul>
27-11-98	<ul style="list-style-type: none"> <li>• Mokoko Village Researchers give feedback of Workshop to Community</li> <li>• Departure of Technical Team and Djoum/Tikar Researchers to Mokoko</li> </ul>
28-11-98	<ul style="list-style-type: none"> <li>• Introduction of Technical Team to Traditional Authorities of Ekombe Mofako and Barombi Mokoko</li> <li>• Village meetings at Ekombe Mofako and Barombi Mokoko</li> </ul>
29-11-98	<ul style="list-style-type: none"> <li>• Introduction of Technical Team to Traditional Authorities of Illoani and Dikome</li> <li>• Village meetings at Illoani and Dikome</li> </ul>
30-11-98	<ul style="list-style-type: none"> <li>• Introduction of Technical Team to Traditional Authorities of Mbongo, Bonjare, Boa and Diongo.</li> <li>• Village meetings at Mbongo and Bonjare</li> </ul>
01-12-98	<ul style="list-style-type: none"> <li>• Village meetings at Diongo and Boa</li> </ul>
02 to 07-12-98	<ul style="list-style-type: none"> <li>• Supervision of local Cartographer/Problem solving</li> </ul>
08-12-98	<ul style="list-style-type: none"> <li>• 1<sup>st</sup> Assessment (Evaluation) Workshop</li> </ul>
09 to 10-12-98	<ul style="list-style-type: none"> <li>• Supervision of local Cartographer/Problem solving</li> </ul>
11-12-98	<ul style="list-style-type: none"> <li>• 2<sup>nd</sup> Assessment (Evaluation) Workshop</li> </ul>
12 to 13-12-98	<ul style="list-style-type: none"> <li>• Supervision of Local Cartographers – cross checking notebooks and final drafts of maps</li> </ul>
14-12-98	<ul style="list-style-type: none"> <li>• Submission of final drafts of maps and notebooks</li> </ul>
15-12-98	<ul style="list-style-type: none"> <li>• Departure for Limbe</li> </ul>
16-12-98	Field Work Evaluation meeting.
7 to 22-01-99	<ul style="list-style-type: none"> <li>• Transcription of data to scaled maps</li> </ul>
25 to 31-01-99	<ul style="list-style-type: none"> <li>• Field verification of data (filling information gaps)</li> </ul>
1 to 3-02-99	<ul style="list-style-type: none"> <li>• Presentation of maps to Communities</li> </ul>
2 to 10-02-99	Finalization of Maps



**APPENDIX 2:           AGENDA OF ENLARGED COMMUNITY SENSITIZATION MEETINGS**

1.     Prayer
2.     Introduction of Technical Team (Ekwoke Henry)
3.     Introduction of Traditional Authorities (Village Researchers)
4.     Explanation of purpose of Meetings (Ekwoke Henry)
5.     Presentation of objective of Mapping, Workshop Proceedings and Field work Programme (Village Researcher)
6.     Speech by Mac Chapin
7.     Fieldwork proceedings and distribution of materials (Ebong Harrison)
8.     Closing Remarks (Village Chief).

**APPENDIX 3: QUESTION / ANSWER SESSION AT ENLARGE COMMUNITY MEETINGS**

**Question:** (Illoani, Dikome) Will Maps show inter-village boundaries?

**Answer:** The purpose of the exercise is not to solve boundary disputes between villages, but to map land use. Boundary dispute resolution is the responsibility of the Divisional Officer (Administration) and not MCP or CARPE

**Question:** (Bonjare) Why are small villages not found on most advanced maps?

**Answer:** That is why it is necessary for Communities to produce their own maps, locating villages and land use.

**Question:** (Bonjare) What if villages insist on showing inter-village boundary on maps?

**Answer:** Conflict areas could be shown on the Map as this could help administration in resolving boundary problems.

**Question:** (Dikome, Illoani, Mbongo) CDC has occupied most of our land and there are no documents to show that they bought land from our grand parents. How can the map help?

**Answer:** By producing a Land Use Map showing subsistence areas, CDC cultivated land/uncultivated areas, villages can present their problem to Government. Maps are more powerful than guns.

**APPENDIX 4:** Attendance at community meetings (sensitization and presentation of maps)

**Ekombe Mofako:**

<b>S/N</b>	<b>NAME</b>	<b>POSITION IN COMMUNITY</b>
1.	Thompson Mosua*	Regent Chief
2.	Thomas Nomba*	Traditional Chief
3.	F. M. Betu*	Traditional Councilor
4.	Joseph Misodi*	Secretary, Traditional Council
5.	Peter Mosua*	Hunter/Farmer
6.	Lucas Dih*	Village Researcher / Councilor
7.	Martin Mbebe*	Councilor
8.	Joseph Ekoko Itoh*	Village Researcher/ Council Messenger
9.	Godfred Minity*	Chainsaw Operator
10.	George Memba*	Farmer
11.	Dominic Naseli*	Farmer
12.	Emmanuel Mbaka*	Farmer
13.	Stephen Nanga*	Farmer
14.	Martin Besong*	Traditional Councilor
15.	Erick Kemenyoh*	Farmer
16.	Thongi Genesis*	Chainsaw Operator
17.	Elias Elengwe*	Traditional Councilor
18.	Richard Besumbu*	Produce Buyer
19.	Peter Namote*	Farmer
20.	Stephen Male*	Councilor
21.	Akama Joseph*	Driver
22.	Julian Okele	Farmer
23.	Donald Angwu	
24.	Abel Same	Hunter
25.	Elisabeth Mbaka	Farmer
26.	Hannah Mokube	Farmer
27.	Christina Itoe*	Farmer
28.	Same John	Farmer

\*Those present at sensitization meetings and presentation of maps.

**Barombi Mokoko:**

<b>S/N</b>	<b>NAME</b>	<b>POSITION IN COMMUNITY</b>
1.	Elvis Kema Asoh*	Village Chief/Village Researcher
2.	Peter Dibondo*	Traditional Chief
3.	Ajeke Adolf*	Councilor/Timber Exploiter
4.	Tabi George*	Council Secretary
5.	Kudi Daniel*	Council Messenger
6.	Goddy Edet*	Farmer
7.	Augustin Ndecham*	Farmer
8.	Mrs. Sophie*	Farmer
9.	Tamua Ferdinand*	Farmer
10.	Ngolla Denis*	Farmer
11.	Asani Pius*	Councilor
12.	Ngong Rudolf*	Farmer
13.	Sunny Jackson	Council Messenger
14.	Kalu Atare	Farmer
15.	Ndong Gilbert	Farmer
16.	Ngende Emmanuel	Chief Councilor
17.	Jean Paul	Councilor
18.	Mathias Lonje	Farmer
19.	Ntonga Pius*	Village Researcher
20.	Anyenti Albert	
21.	Mbah Oka	
22.	Julius Young	

**Illoani:**

<b>S/N</b>	<b>NAME</b>	<b>POSITION IN COMMUNITY</b>
1.	Dominic Etoni*	Village Chief
2.	Ambolo Maroka Samuel*	Councilor
3.	John Mbotoka*	Village Researcher
4.	Kenneth Itoh*	Farming
5.	Nekena Felix*	Village Researcher
6.	Nefenda John	Student
7.	Nekende Augustin	Farmer
8.	Thomas Oasi	Farmer
9.	Ambolo Patricia*	Teacher
10.	Modika Solomon	Farmer
11.	George Itoh*	Farmer
12.	Leo Bau*	Council Chairman
13.	Maadam M. Mbile*	Women's Chief
14.	Embola Ndongo*	Councilor
15.	Okon Etim	Farmer
16.	Martin Molongo	Councilor
17.	Andrew S. Mbotaka	Farmer
18.	William Nekena	Farmer
19.	Alice Nekena*	Farmer
20.	John M. Nanji	Farmer
21.	John Iyassa	Farmer
22.	Patrick Okori	CDC Worker
23.	Etah N.	Farmer

**Dikome:**

<b>S/N</b>	<b>NAME</b>	<b>POSITION IN COMMUNITY</b>
1.	James Nhoh*	Village Chief
2.	Sako*	Traditional Chief
3.	William Ateh*	Assistant Chief
4.	Mrs. Ngoh	Farmer
5.	Mara George	Councilor
6.	Nalemu*	Farmer
7.	Mrs Etongo*	Housewife
8.	Egbe Meagot*	Farmer
9.	William Ngoh*	Village Reseacher
10.	Ngassa Peter	PTA Teacher
11.	Manfred Mongot	Farmer
12.	Joseph Owasi*	

**Mbongo:**

<b>S/N</b>	<b>NAME</b>	<b>POSITION IN COMMUNITY</b>
1.	Ngoh Emmanuel*	Village Researcher/Councilor
2.	Michael Anje*	Village Chief
3.	Ngoh Thomas*	Council President
4.	Disuku Isaac	Village Adviser
5.	Moto Vincent*	President, Mokoko Wildlife Management Association
6.	Alabi Moses*	Councilor
7.	Molua Francis*	Farmer
8.	Disuku Michael	Farmer
9.	Pius Nakinya	Farmer
10.	Lucy Nowango*	Farmer
11.	Mary Itekeh	Farmer
12.	Grace Etani	Farmer
13.	John Iyassa*	Elder
14.	Nofanjo Stephen	Farmer
15.	Andumu Stephen*	Farmer
16.	Richard Ngoh*	Farmer
17.	Raymond Abilabi	Farmer
18.	Nikoh Orinji	Farmer
19.	Pauline Efio	Farmer
20.	Elisabeth Naende*	Farmer
21.	Alabi Alfred*	Farmer
22.	Alphonsus Etongo	Farmer
23.	Julie Alabi*	Women's Leader
24.	Edward Nofanjo*	Farmer
25.	Stephen Efi*	Councilor
26.	Okori	Chief of Nigeria Union
27.	Simon Netomba	Farmer
28.	Etoi Jospheh	Farmer
29.	Tom Andumu	Farmer

30.	Olomo M.	Farmer
31.	Ude Enjinna	Farmer
32.	Okoko Lanky	Farmer
33.	Obasi Oko*	Farmer
34.	Igwoh Edet	Farmer
35.	Mbula Blessing	Farmer



**Bonjare:**

<b>S/N</b>	<b>NAME</b>	<b>POSITION IN COMMUNITY</b>
1.	Chief Lucas Sako*	Village Chief
2.	Joseph Anda	Chief Councilor
3.	William Etongo*	Hunter
4.	Emmanuel Enoh*	Farmer
5.	Nelson Arrey*	Farmer
6.	Asoh Fidelis*	Village Researcher
7.	Ekomo Innocent	Trapper
8.	Lucy Mbango	Farming
9.	Mary Saka	Farming
10.	Sunday Alego*	Farmer
11.	Udo	Nigerian Chief
12.	Aanastasia	Women's Chief
13.	Joseph Anda Itogo*	Chief Councilor
14.	Mathias	Council Messenger

**Boa:**

<b>S/N</b>	<b>NAME</b>	<b>POSITION IN COMMUNITY</b>
1.	Martin Fete*	Village Chief
2.	Malle Esaw*	Traditional Council Chairman
3.	Okha Roy*	Village Researcher
4.	Enongene Victor	Headmaster, Government School, Boa
5.	Esther Kongo*	Farmer
6.	Andrew Otto	Farmer
7.	Stephen Bau*	Farmer
8.	Hans Bau*	Traditional Chief
9.	Ikome Ikome	Farmer
10.	Nangia Francis*	Farmer
11.	Bekondo David	Farmer
12.	Etongo Martin	Farmer
13.	Naliembe Pauline	Publicity Secretary, MWMA
14.	Alex Niasa	Farmer
15.	Peter Bau	Farmer
16.	James Itoh*	Village Researcher/Hunter
17.	Peter Itoh	Farmer
18.	Jacob Nangia*	Farmer
19.	Divine Okho*	CPDM Sub-Section President
20.	Agrikola Ajebu	Farmer
21.	George Mukete*	Farmer

**Diongo:**

<b>S/N</b>	<b>NAME</b>	<b>POSITION IN COMMUNITY</b>
1.	Emmanuel Ilambo	Village Chief
2.	Paul Eyoh Kossah*	Regent Chief
3.	Henry Baua*	Council Chairman
4.	Effiong Okon*	Farmer
5.	Daniel Bau*	Treasurer, MWMA
6.	Muku Bau*	Farmer
7.	Effiong Udo*	Farmer
8.	Mambo Richard*	Village Researcher
9.	Agnes Kossah*	Women's Chief
10.	Emilia Wassa	Farmer
11.	Comfort Mambo*	Farmer
12.	Grace Chiche*	Farmer
13.	Magdalene Bau*	Farmer
14.	Anna Moliki*	Farmer

\*Those present at sensitization meeting and presentation of maps.