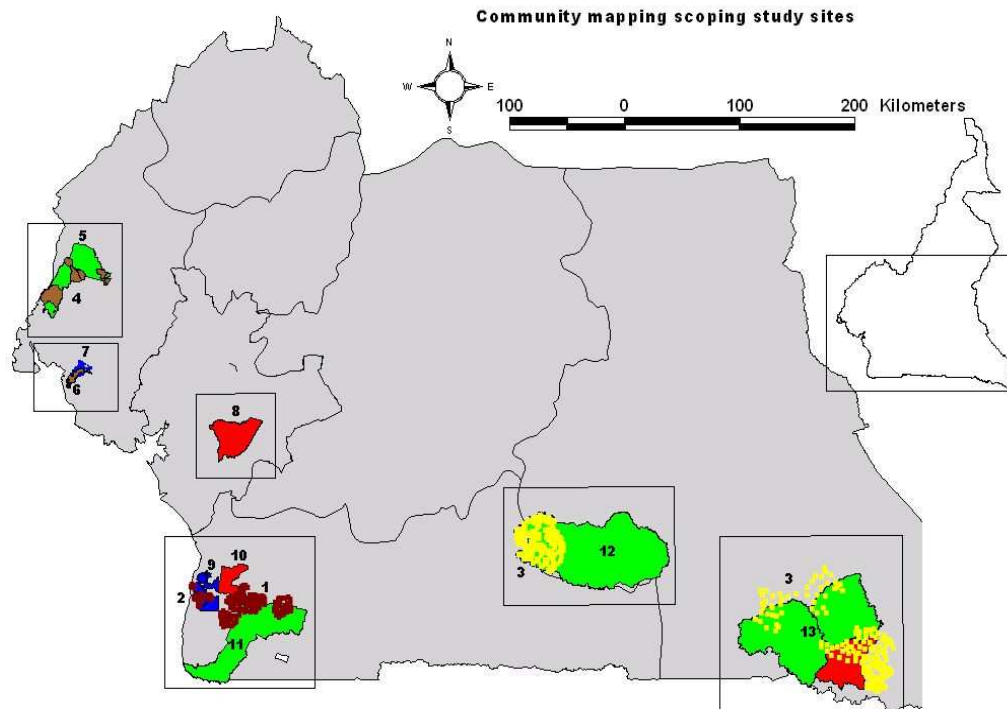


COMMUNITY MAPPING IN FOREST ZONES OF CAMEROON



A scoping of cases, questions and methods used in community mapping and its relationship with tenure recognition

Peter Mbile

World Agroforestry Center (ICRAF), Rights and Resources Initiative

April 2008

EXECUTIVE SUMMARY

There is lack of easily available information in many countries including Cameroon undergoing reform on the status of recognition of tenure rights, ownership, access and use of forest resources under different regimes; customary versus statutory, including land environment and forest laws. Information is very incomplete and incoherent in terms of sample cases and extent of contestations, either in the form of overlapping or conflicting claims or lack of respect for customary ownership and control of forest resources, especially in areas recorded as official domains of the State.

One approach to start improving understanding of these in Cameroon has been through a systematic review of community territorial mapping. Such community mapping in Cameroon has used a range of methodological approaches, organizational philosophies, tools and techniques. Such mapping activities have been carried-out by non governmental organizations mainly, less by government but all involving communities within different contexts of land and forest use conflicts.

In this Cameroon scoping study we review a selected number of contestations most of which possessed a mapping component, involving local communities and traversing questions from conflicts with agro industries, conservation zones, forest reserves and timber concessions occurring across the entire forest zones.

To situate the reader and also address ethical concerns in this widely used development technique, we present some brief analyses focusing on how the concepts of participation as used in participatory problems analyses. In view of the sometimes disparate uses of mapping terminologies we standardize our terminologies describing the three main types of mapping approaches used in Cameroon and applied these to the four thematic areas covered in the report.

The four types of contestations and claims are similar in that in all local communities perceive their legitimate resource use and extraction zones to either be in direct conflict with State or private sector prerogatives. Depending on the objectives of the community mapping exercises; such as for local planning, staking claims, contesting rights, demanding space or simply indicating use, different approaches are used to represent customary access, use and or dominion. Depending on the perception of the power relationship between the communities and their neighbours, adversary, competitor or authority, a claim to space or a contestation is represented. Bantus with more developed adversarial instincts tend to be

more territorial in their representation of space where as Pygmies, perhaps depicting a more passive or egalitarian perception to spatial occupation tends to be less territorial. The cases also demonstrate a strong influence on the mapping process arising from either the intent or the philosophy of the facilitating organization.

The role of government where it was recorded seemed ambiguous and raises questions on what is effective as a rights recognition procedure. The study tended to have raised more questions than it provided answers. It would appear that much of the land use conflicts can largely been blamed on the conception of the State forest regimes by the same government, which is seen during mapping exercises to be symbolically endorsing contestations and claims mapping. Much of the perception of conflicts, delays in their resolutions appear to have been inadvertently underwritten by State actions, influence or lack of action.

Thus key questions regarding rights recognition is evaluating what the thresholds of Government's compliance with its own instructions and engagements are. Why for instance has government not implemented decrees she had been seen to pass? To what extent does the government respect the letter of its own constitution and laws? What is the extent of the bundle of rights to be associated with retro cessions in cases where these are either being planned or promised? What is the latitude that communities have of reverting to the status quo prior to the zoning plan as a basis for new negotiations? For it seems curiously hopeless for communities to be optimistic about negotiating rights recognition whereas there is a perception that much is already lost.

Based on the difficulties analysed it appears that what may be more effective are constitutional guarantees, recognition and protection of customary property rights on a case-by-case basis and at operational level, governance mechanisms for regulating benefits sharing.

ACRONYMS

BLCC	Bakweri lands Claims Commission
MCP	Mount Cameroon Project
CED	Center for Environment and Development
RRI	Rights and Resources Initiative
ICRAF	World Agroforestry Center
CIFOR	Center for International Forestry Research
CAM-ECO	Cameroon Ecology (NGO)
FPP	Forest People Programme
UNEP	United Nations Environment Programme
PRM	Participatory Resource Mapping
PM	Participatory Methods
ISK	Indigenous Spatial Knowledge
PGIS	Participatory Geographic Information Systems
GIS	Geographic Information Systems
GPS	Global Positioning System
DED	German Development Agency
NGO	Non Governmental Organization
FCFA	Franc Communautés Financière Africaine
CDC	Cameroon Development Corporation
HEVECAM	Cameroon Rubber Plantations
SOCAPALM	Cameroon Oil Palm Company
ONADEF	Forest Development Authority (defunct)
ANAFOR	Forest Regeneration and Management Authority
CARPE	Central African Regional Programme for the Environment
UFA	Forest Management Unit
NCI	National Cartographic Institute
WWF	World Wide Fund for Nature
ECA	Economic Commission for Africa

ACKNOWLEDGEMENTS

In preparing this scoping report, we express our gratitude to Mr. Njoh Litumbe of the Bakweri Lands Claims Commission. He provided us with information used in this report regarding the prolonged struggle between the commission that they represent and the State of Cameroon on the rights of Bakweri people to the lands currently occupied by the Cameroon Development Corporation. We acknowledge the assistance of Mr. Okenye Mambo of the Mount Cameroon Project for providing us with information and for putting us in contact with the communities of the Boa plains who carried-out the mapping exercise in that locality in 1998. We extend our sincere gratitude to RRI Cameroon colleagues: Samuel Nguiffo, Belmondt Tchomba, Samuel Nnadobe and Hanja Thierry-Georges who on their own account as staff of CED, and on behalf of the FPP shared useful participatory mapping information that we have been able to reproduce for explanatory purposes. We thank John Nelson of FPP for providing us with completed reports of their work with CED that helped us verify what we were doing for authenticity. We thank Mrs. Cecille Ndjebet, Sahmo Calvin of Cameroon Ecology and Martin Biyong ex-staff of CIFOR and all RRI Cameroon colleagues for the providing us with information on community mapping in the 07002 and 09026 forest concessions and the Kienke forest reserve. We thank Mr. Patrice Pa'ah, RRI colleagues in Washington DC, ICRAF colleagues in Cameroon and other collaborators in Cameroon who helped us put together the data used for the report. We thank especially the forest zones communities whose issues have justified this work. We excuse ourselves before hand for using the terms Bantu and Pygmy to describe all indigenous communities should these terminologies be misconstrued as pejorative.

The opinions and errors in this representations are those of the author and do not reflect the official positions of the World Agroforestry Center, the Rights and Resources Initiative and the organizations that provided the information.

1. INTRODUCTION TO COMMUNITY MAPPING IN CAMEROON

○ Concepts, contexts and definition

We have deliberately resisted the urge to place this conceptual section in the annex of this report. We maintain it here in order that we can be clear about the main thrust of this scoping study report, i.e., community mapping in Cameroon. And since community mapping should preferably not occur in a vacuum we present some brief conceptual points to help our reader ask the relevant questions as she/he progresses through the report. Secondly, we include in this conceptualization a bit on the term conflict used repeatedly in this report. We will present briefly how this report conceptualizes land use conflicts which in Cameroon; have been at the root of all the mapping activities reviewed here. We reproduce below a definition and a brief review of community mapping, participation and conflict

○ Mapping definition and dilemmas

The United Nations Environment Programme (UNEP), defines Participatory resource mapping (PRM), as *‘an emerging tool to empower local communities and indigenous peoples to become more involved in natural resource management and environmental protection’*. Participatory mapping is conceptually only a part, debatably, an entry-point to the use of participatory methodologies (PMs). Local people’s abilities to make maps only became widely known in the early 1990s. Since then participatory mapping has spread widely with many variants and applications, encompassing natural resources management in its broad sense to include; land use, resource planning and conservation; rights-based approaches to development, identifying tenure rights, negotiating boundaries, resolving conflicts, and participatory monitoring and evaluation. In view of this rapid spread and use, many ethical issues present troubling dilemmas, and lead to overarching questions about empowerment and ownership. Questions arise about who is empowered and who disempowered? Who gains, who losses and whose map, anyway? (Robert Chambers, 2006). This leads us to the question of the ‘P’ in community mapping.

○ “P” in mapping techniques and typologies

Few single representations capture the dilemma of the ‘P’ or participation as that reproduced by R Chambers (2006) in table 1 below.

Table1: A Participation Ladder with Intent, Roles and Relationships

Relationship types	Outsiders' seek	Roles/Relationships		Actions		Ownership
		Outsider	Local people	Outside	Local People	
TOTALITARIAN	State political control	Dictator	Chattels	Command	Comply	Outsiders'
NOMINAL	Cosmetic legitimisation	Manipulator	Victims			
EXTRACTIVE	local knowledge	Researcher/ planner	Informants			
INDUCED	Gains material incentives	Employer	Workers			
CONSULTATIVE/ INSTRUMENTAL	Improved efficiency	Rational economiser	Collaborator			
PARTNERSHIP	Share responsibility/and power	Co-equal partner	partner	Support	Initiate	Local people's
TRANSFORMATIVE	Facilitate sustainable development	Facilitator/catalyst	Actor			
SELF-MOBILIZING	Support spontaneous action	Supporter	Co-owner			

R Chambers (2006)

Irrespective of *type* of mapping activity these dilemmas have all been implicit to varying degrees in the mapping *techniques* used in Cameroon and reported in this scoping.

Mapping *type* is defined in this report by the objectives sought, the actors participating and the manner in which the actors occupy physical space in the forests. Thus types will differ in scale, the post-mapping agenda, use of maps and relative skills of the facilitators. As a result questions of ethics will apply differently as it is often the type of mapping activity which imposes the techniques irrespective of the objectives. Mapping *techniques* in this report have mainly to do with tools used in representing local knowledge and especially in recording and transposing that information and in many cases transforming it so it can be stored, integrated, used and re-used. Invariably community mapping has come to be closely associated with ‘conflict’ resolution over forest resources use in Cameroon.

○ **Conflict, as used in this report**

Our brief on ‘conflict’ and how it is used and should be understood in this report has been expounded by many; especially by Douglas W. Laube (2004) of the University of Wisconsin, USA. According to Prof. Laube a situation of conflict will exist when the concerns of two or more parties appear to be incompatible. ‘Conflict’ is not used here necessarily as a negative word. Thus its resolution will center on solutions, rather than on magnifying problems.

Laube argues for a move from perceiving conflict as a disruption of order, a negative experience, an error or mistake in a relationship, to viewing conflict as an outgrowth of diversity that might hold possibilities for mutual growth and for improving the relationship. He further argues for a move from perceiving conflict as a battle between incompatible self-interests or desires, to viewing the phenomenon as part of a relationship, a part that involves needs, values, perceptions, power, goals, feelings, and so on, *not just* interests or desires. He goes on to argue against viewing conflicts as isolated events we allow to define our entire relationships, to occurrences that punctuate a long-term relationship and that can help clarify them.

In a forest and land tenure conflict context such as in Cameroon the lesson is that, we need to move away from dealing with such conflicts using ways that focus on demands and then on trading portions of those demands to gain advantage, *to* a process based on needs assessments, both individual and shared, on clarified perceptions, on improving the relationship, and on mutual benefits, not domination.

Whether in identifying conflicts, analyzing them or representing community indigenous spatial knowledge with which to situate forest resource conflicts, mapping employs specific tools and techniques. Thus, the challenge depicted in table 1 applies to the use of all

techniques in virtually all types of mapping activities though not necessarily to the same degrees.

For ease of understanding the community mapping cases that will be presented, we start with an overview of standardized definitions of mapping techniques used in Cameroon. Four main techniques have and are still being used in Cameroon and few authorities have described them like in Giacomo et al. (2006) I hereby reproduce their consensual and essential characteristics below in order of increasing sophistication.

- **Techniques of community mapping used in Cameroon**

(i) **Ephemeral mapping:** This most basic mapmaking method consists in *drawing maps on the ground*. Informants use raw materials like soil, pebbles, sticks and leaves, to reproduce the physical and cultural landscapes in the manner they perceive them to be. Such ephemeral maps disappear in a matter of a wind blow. Acquired knowledge is memorised by participants and mentally recomposed when needed.

(ii) **Sketch mapping** is a slightly more elaborate method which makes use of large sheets of Kraft paper. Features are depicted by the use of natural materials or more frequently by coloured marker pens or chalk. Participants usually have a range of choices regarding what materials to use for the drawing and how to visualize desired items. Features are exaggerated in size to match the importance participants attach to them. If properly facilitated, the process is documented and records are kept in terms of the keys necessary for interpreting depicted symbols. The lack of a consistent scale and geo-referencing of the data leaves room for subjective interpretation of the final map.

(iii) **Scale mapping** is a more sophisticated method aimed at generating geo-referenced data to facilitate discussions and allow community members to develop maps which can stand the scrutiny of adversarial parties. The method is based on effective selection of symbols and colours for depicting Indigenous Spatial Knowledge (ISK) on transparencies superimposed on a geo-coded and scaled map.

(iv) **PGIS spatial analysis** uses the functionality and data associated with GIS technology to explore community driven questions. In the process, local spatially referenced as well as non-spatial data are integrated and analyzed to support discussion and help decision making processes. The spatial analytic functionalities allow much easier and rapid analysis by the users, of e.g. time and cost functions, of separation and contiguity, and of the effects of barriers and buffers.

○ **Types of mapping activities in Cameroon**

Three broad types of mapping activities have been carried-out in Cameroon and are presented here in order of increasing geographic scale. The first and of smallest scale is referred-to here as the ***type-1*** maps or village development maps. Much less will be said and developed about this type of mapping not because it is less important but because it is the most widespread. In fact the expansion of mapping since the early 1990s and its use as an entry-point to participatory methods of spatial research, village development plans, land use characterization, conservation planning, institutional analyses, etc have used this approach. Village development maps are a combination of ephemeral and sketch maps. The most recent case of village development maps are those at the basis of village development plans being developed jointly between various Governments' departments in the South west region and the German Development Agency (DED), in Cameroon. These maps are not often widely usable for rights-based natural resources management research or analyses, but more for local level spatial planning.

The second is referred-to here as the ***type-2*** mapping activity comprising mapping customary tenure and use zones mainly involving Bantu communities and to a lesser extent Pygmy populations (Baka and Bagyeli mainly in Cameroon). This type of mapping has often been multidisciplinary and involved the application of all four techniques discussed by Giacomo et al. (2006) above. The use of all four techniques do not occur in all the mapping activities, however, the tools, materials and equipment used (e.g., topographic maps, Global Positioning Systems (GPS), land marks) makes graduation to a higher level of sophistication feasible even after ephemeral maps have been graduated to sketch maps and completed. The focus on Bantus in this type of mapping is largely due to perceived limits of customary tenure reinforced by extended sedenterization. 'Informants' or resource persons as these are called use land marks; rivers, rocks, roads, salt licks, or other physical features to indicate fuzzy boundaries between communities' spheres of influence. In a few cases where no such features are identifiable a GPS is used to locate the perceived fuzzy customary territorial boundary between communities. Although later-on the ethical facilitator does not represent the boundary as distinctly as expected, to avoid even further conflict.

In this report all reported mapping activities; in and near the Korup national park and Boa plains (south west province), Ngonga and Konpongo (littoral), in and near the Campo Ma'an national park (south Cameroon), near and in the Dja faunal reserve (east province) and in and near the Boumba bek and Nki national Parks (east Cameroon) have used this type-2

mapping and it is easily the most stable and developed of the three types widely used in Cameroon. .

The third is the **type-3** mapping of cultural use zones and spheres of influence. There is a focus here on Pygmy populations although this type of mapping also remains relevant to Bantu populations which they use mainly for indicative characterizations (using various shapes and objects to add detail and differentiation). The key difference with the type 2 is that ‘polygons’ or measurable areas are not created. The majority of pygmy settlements reviewed are transient in migration behaviour and although spatial information capture and storage techniques have been done later-on in geographic information systems while working with Pygmies, the main tool in this type of mapping has been the Global Position System (GPS). What has been mapped here are mainly hunting sites, forest products collection sites, burial sites, temporary settlement sites, etc. However, some Pygmy populations have been mapped as sedentary groups; but for a few cases most of such are physically associated with Bantu villages.

There are few stories of self-initiated community maps handed over to non governmental organizations (NGOs), or other projects, thus raising the question of what level (see table 1) we can honestly place more than 90% of the types of community maps produced to-date in Cameroon. Thus we can safely say here that the community maps reviewed here have been mainly stimulated from the ‘outside’, by non governmental organizations, with symbolic State support, by projects or individual activists, researchers, etc often for the reasons noted in table 1. All these processes possess unequal power relationships, intentionally or unintentionally hide inexplicit objectives and unequal, delayed sharing and use of information acquired.

While conflicts are a natural part of human relationships, claims and contestations have become the hallmark of people reaction to policies. These have been largely at the roots of the dynamics which have driven almost all the cases of community mapping reviewed in this report.

- **Historical, political economy and ethnographic drivers of community mapping**

Much has been written about the historical and political contexts of claims, contestations, rights recognition or the lack of it in Cameroon. Much less analyses have been done in this domains regarding how they have correlated as the driving forces of community mapping.

Existing literature points to the transposition of colonial ownership and its use by the emergent State to legitimize dominion on forests. However, the period 1988 – to date;

characterized by structural adjustment and economic hardships, devaluation of the FCFA, laws on political pluralism and on freedoms of association, leading up the Forests and Wildlife laws of 1994, the National Environmental Management Plans of 1996 and the National Zoning in 2003, are of particular importance to rights mapping.

Over this period there has been a steady rise in the creation of wildlife protection areas. These included in the forest zones, Campo Ma'an (south), Lobeke, Boumba Bek, Nki (east) Mengame (south) Takamanda, Banyan Mbo (south west) and now expected Ndongore, Mount Cameroon, Bakossi (southwest) to name these. Bigombe and Atamana (2004) report a steady increase in the contribution of timber to State revenue within this same period: from 1998 (21%), 1991/1992 (23%), 1992/1993 (27%) and 1993/1994 (34%).

More recently, there have been expansions in industrial plantations (CDC moving to the Boa Plains, Southwest), Hevecam and Socapalm expanding within the south, petroleum exploration and solid mineral mining concessions being awarded (Southwest and East) and the Tchad-Cameroon pipeline. Much fewer cases of community mapping are however, associated with production forest reserves formerly managed by the National Forest Development Authority (ONADEF), from which communities were previously excluded. These categories are becoming increasingly important as these communities have now expanded, with rotational farming land becoming scarce and the reserve assuming an uncertain future as the newly created and semi-autonomous ANAFOR, becomes more concerned with forest regeneration.

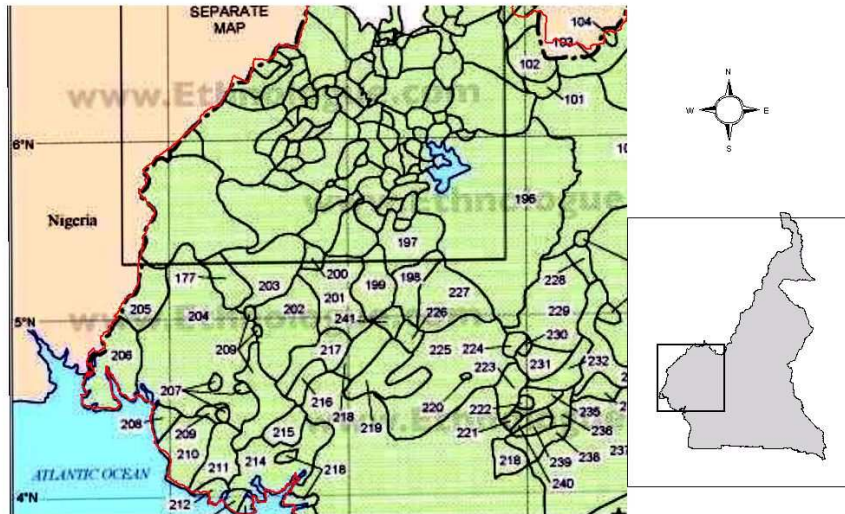
These trends have created their own frontiers of interactions with communities, as well as motivated compensatory creation of other conservation zones (Campo Ma'an, Mban et Ndjérem), thereby compounding the potential for conflict.

There is temporal correlation too between expansion of civil society groups and associations, with increases in forest area under concessions for timber revenue. So too have these correlated with the creation of conservation zones. It has meant that at the conflict frontiers of community-State; community-private sector interaction over forest resources, these newly created associations and NGOs have had plenty of work. Much of the entry-points to these civil society works have been community mapping.

Whether these differences in perception of rights and tenure were entirely unexpected, vis-à-vis the tightening grip of the State over forest resources remains uncertain. Still Map 1 below is an ethnic map covering the forest zones of Cameroon. It depicts that in view of the ethnographic realities in forest zones of Cameroon conflicts of perception over forest tenure were inevitable. For reasons of scale only the south western part will be shown although this phenomenon occurs all over Cameroon and that data too is available online.

Map 1: Seal ethnic map of Cameroon shown the complete mosaic of customary territories

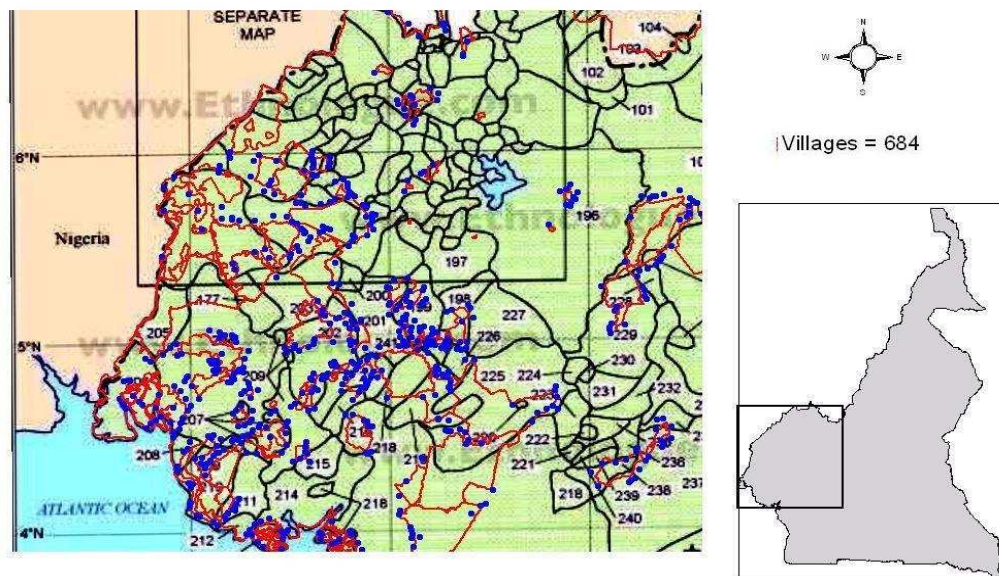
Customary (ethnic) land extents in south western Cameroon



Source: SEAL ethnic map of Cameroon

Map 2: Same map with permanent forest estates (pfe) superimpose (red-lines), and village communities inside or within 4 km of the pfe borders (blue circles)

Village communities in customary-statutory conflict over access and control over AFTs (Note: not trade!)



GWF/WRI/MINFOF electronic atlas of Cameroon, 2007

In consequence to rapid economic change, new forest policies and a drive towards compliant conservation much of the community mapping in Cameroon have been around agro industrial plantations in and around state managed conservation zones, timber concessions, more recently in mining areas, all in complete disregard to ethnic or customary perceptions of influence. Thus frontiers of conflicts and their mapping have spread.

The time lapse and operational methods of the land/forest claims and contestations however differ. Though spatial quantities are involved in all land/forest claims/contestations recorded here not all are developed cartographically or indeed legally. Some remain sensitive socially and politically as they possess characteristics, subtleties, undertones and multiplier effects that may be potentially disruptive. In view of the confidentiality and honesty with which information gathered for this work was provided, the best we can do is to present the information as respectfully, ethically and the arguments in the best possible language to avoid compounding misunderstandings.

- **Note of caution:** Limits and fuzziness of community map boundaries

As already mentioned the *type-1* are small village development plans, are highly numerous, ephemeral and very rarely geo-referenced. Our focus has been on *type -2* and *type – 3* data.

For the purpose of this report fuzziness of boundaries should be viewed from more than one perspective. Firstly, fuzziness is used for practical reasons because borders (often contentious) of most participatory maps are based on on-sided customary perceptions (that of the community doing the map), local acknowledgement, are un-negotiated and unofficial. A few participatory maps have received the official stamp of the local government official. This however should not be confused with ‘official maps’ produced by the National Cartographic Institute. The second reason fuzziness is used is for ethical and disclaimer grounds. All spatial data representing customary claims in this report have been provided with a **scale bar** to enable the readers make their own calculations in terms of contested areas without attributing liability to the authors or publishers of the report.

- **Selected claims/contestations**

The cases of land forest claims presented below are selected for their geographic spread, the fact that these can be verified and to demonstrate where lessons of value to practice can be learned. Their presentation here does not constitute endorsement of the claims, but serve as means to discuss their methods and demonstrate how solutions to common problems are being approached in different contexts where forest tenure conflicts exist.

What is however common across these cases is that none has been resolved to the satisfaction of the communities who prepared the maps.

Table 2 below is a summary of the selected land/forest claims and contestations involving agro industries, conservations zones, timber concessions; some mapped and others not. Mixtures of *type 2* and *type 3* mapping have been used. Where *types 2* have been used we will endeavour to reproduce the spatial products (with scale) and where type 3 GPS points (especially with Baka and Bagyeli), we will reproduce the ‘spheres’ of influence using points of different shapes.

Table2: Claims/contestations covered in this report

	<i>Land use category</i>	<i>Case studies</i>	<i>Data available at</i>	<i>Main lessons for practice</i>	<i>Type of mapping</i>
1	Agro industry	CDC, SW	BLCC	Legally challenging	None
2	Agro industry	CDC, SW	MCP/CAR PE/ICRAF	Multi-stakeholder approach	Type 2
3	National park	N. Parks	ICRAF/CED	Community conservation	Type 2 & Type 3
4	Timber concession	PUFA 07002.	Cam Eco	Community-based action	Type 2 & Type 3
5	Agro industry	Socapalm	CED/FPP	Multi-stakeholder approach	Type 2 & Type 3
6	Agro industry	Hevecam	CED/FPP	Multi-stakeholder approach	Type 2 & Type 3
7	National park	Campo Ma'an	CED/FPP	Multi-stakeholder approach	Type 2 & Type 3
8	National park	DJA	CED/FPP	Multi-stakeholder approach	Type 2 & Type 3
9	Faunal reserve	Boumba bek	CED/FPP	Multi-stakeholder approach	Type 2 & Type 3
10	National park	Nki	CED/FPP	Multi-stakeholder approach	Type 2 & Type 3

○ Community representations of conflicts with agro industries

a. Case of the Bakweri lands claims commission (BLCC) in south west Cameroon

In this case no community mapping was carried-out as the CDC lands are pretty well mapped. The complainants state that the Bakweri were pushed by the Germans onto their current sites in order to facilitate occupation and plantation development. Representatives of the BLCC provided the information themselves and same can be freely accessed online at <http://www.bakwerilands.org>. This case is politically sensitive and Cameroon remains one country within the region where in view of civil society liberalism there is responsible

freedom of expression and democratic discussion of such contestations and claims. The lesson scholars and researchers may draw lies in the legal extent the commissioners have gone in order to seek clarifications on a question that has historical roots. How the commission alleges, the State has responded when these clarifications have been sought and what needs to be changed in similar encounters where conflicts of perceptions like these arise. At a time when there is rapid expansion of mining zones and industrial plantations it is perhaps the only case which provides lessons for other parts of Cameroon likely to face similar challenges in the future. By its scope and importance, the case presents challenges for the Bakweri people, for the state of Cameroon and for other indigenous groups confronting rapid transformation.

The complaint states that the Bakweri title to lands currently occupied by the Cameroon Development Corporation (CDC), a State corporation employing just under 20,000 people (second only the State are confirmed by Cameroon's 1974 Land Tenure Act 74-1. The Act states that land entered into the *Grundbuch* is subject to the right of private property, and that lands held in trust were leased in 1947 for a period of 60 years to the CDC, until that time that the Bakweri people were competent to manage them without assistance. It continues that during that time rents paid for the land were to be shared with local councils in Fako division. The BLCC objects to the Decree N. 94/125 of Cameroon privatizing the CDC arguing that without addressing the issues of traditional rights, the transfer to private hands of CDC lands will in the long term be prejudicial to the native rights of the Bakweri. They have filed a motion at the African Commission on Human and Peoples Rights who in their communication 260/2002 called for an amicable settlement of the matter between the Cameroon State and the Bakweri people. The total land holding (expanding in other areas) of the CDC under this claim is 104,000 hectares.

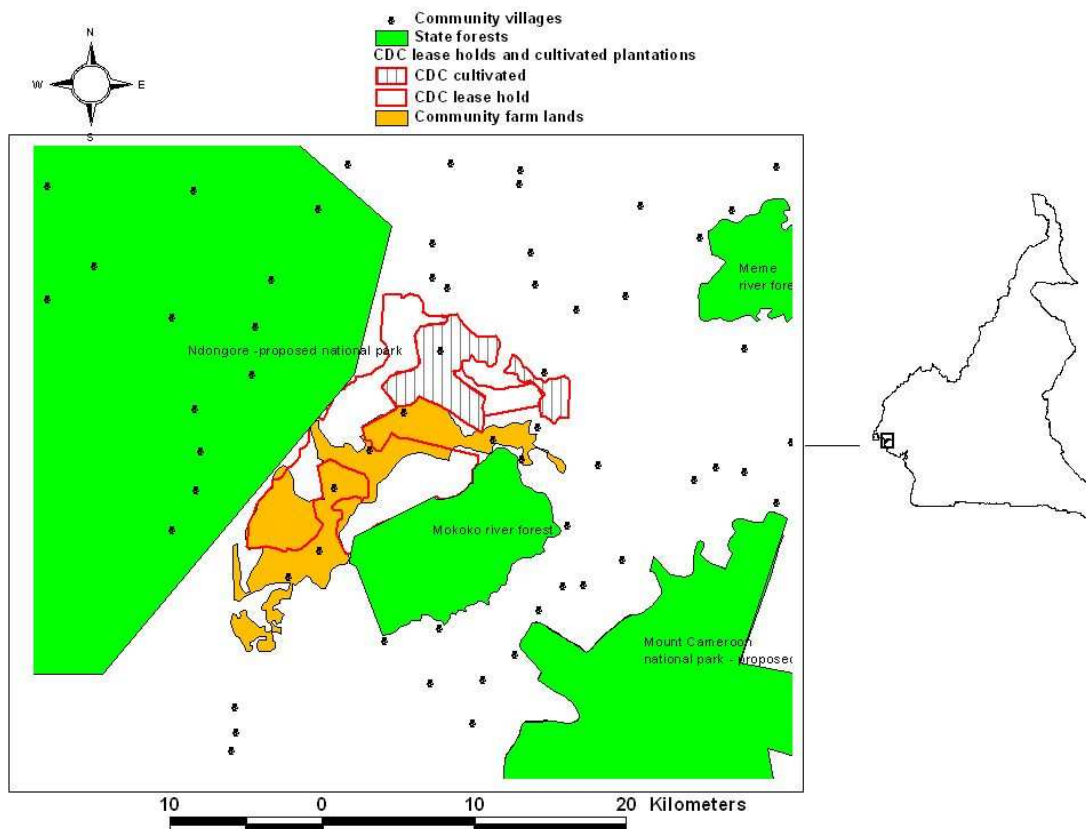
b. Case of the communities of the Boa plains in south west Cameroon

Participatory mapping was carried between the period 1998 – 1999 by six village communities (Ekombe Mofako, Illoani, Mbongo, Bonjare, Boa and Diongo) supported by the mount Cameroon project (MCP), the Central Africa Regional Programme for the Environment (CARPE), the national cartographic institute (NCI), and the Canada based Centre for Native lands. Though members of the village were contact via MCP, Buea, it was not possible within the time frame, to acquire written permission to re-produce the participatory maps. Instead the participatory spatial information was reproduced using Arcview GIS.

The mapping methods used by the communities were largely *type-2 and type 3*. The objective of including the CDC and Forest reserve boundaries in this participatory map as stated by

the individuals who carried out the mapping was that they hoped to illustrate the presence of land use conflict and in their own words, *“hope that the map can be used some day in the appropriate forum as basis for negotiations towards improved land use planning in the area”* and similar areas sharing similar conflicts and contestations. Map 3 below is a reconstruction of a hard copy of the participatory map and its associated management units using Arcview GIS 3.2. By the time this participatory map was developed the Ndongore national park now under development was not yet proposed. This can be found on the left of the community farmlands and is sure to create new frontiers of land use conflict.

Map 3: Types 1 & 2 mapping representations of community conflicts with CDC leaseholds in south west Cameroon



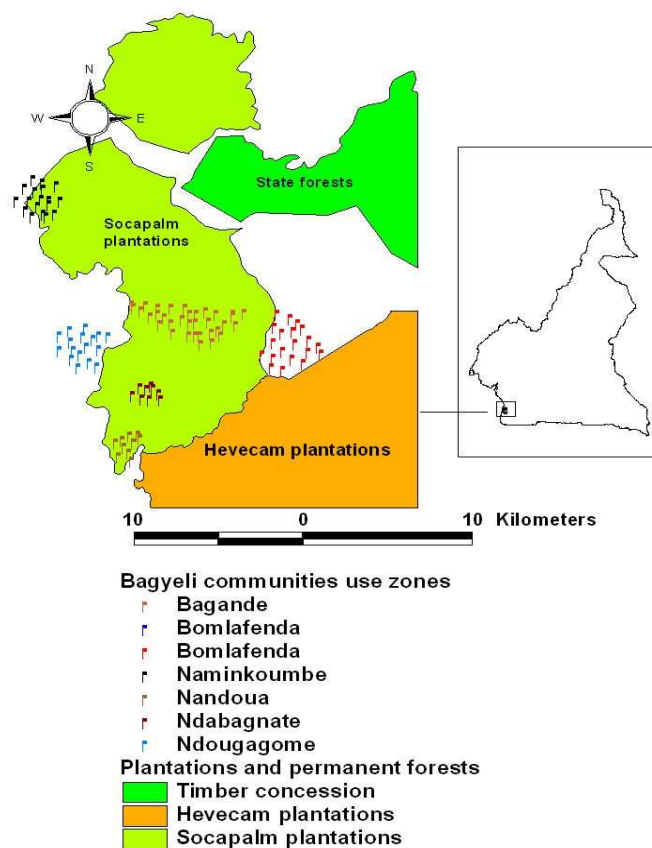
c. Case of pygmy communities living in the Socapalm and Hevecam areas in south Cameroon

This work carried out by the Center for Environment and Development (CED) with support from the Forest Peoples Programme (FPP) is a classic case of *type 3* cultural and use zone mapping by communities. Generally Pygmy communities like their Bantu neighbours master the extents of their use zone. But while Bantu communities used the more ‘exclusive’

type 2 mapping which represents a perception of use zones vis-à-vis that of their neighbours Pygmy mapping, perhaps representing a more continuous and egalitarian disposition is based on their representation of spatially explicit use zones the help of GPS points showing fishing areas, burial grounds, collection of forest products and hunting. This has traditionally posed a challenge to arbiters seeking to allocate land to Pygmy populations. Though that challenge is still there, this perception of use zones in terms of access, use and needs, perhaps holds one answer to the policy question of how to attribute or associate forest benefits to communities without creating artificial boundaries. This notion of common ownership so strong with Pygmy populations also helps de-construct the notion of property rights being tied to ‘demarcated’ space.

The information in the map below has been reproduced from data provided by CED generated with support from FPP. It is obvious that the representation of the information may have been influenced by the ‘border’ construct of Bantus, and a different type of conflict not based on ‘exclusiveness’ of property rights.

Map 4: *Type – 3* representations of Bagyeli community conflicts with Socapalm and Hevecam plantation land uses in south Cameroon



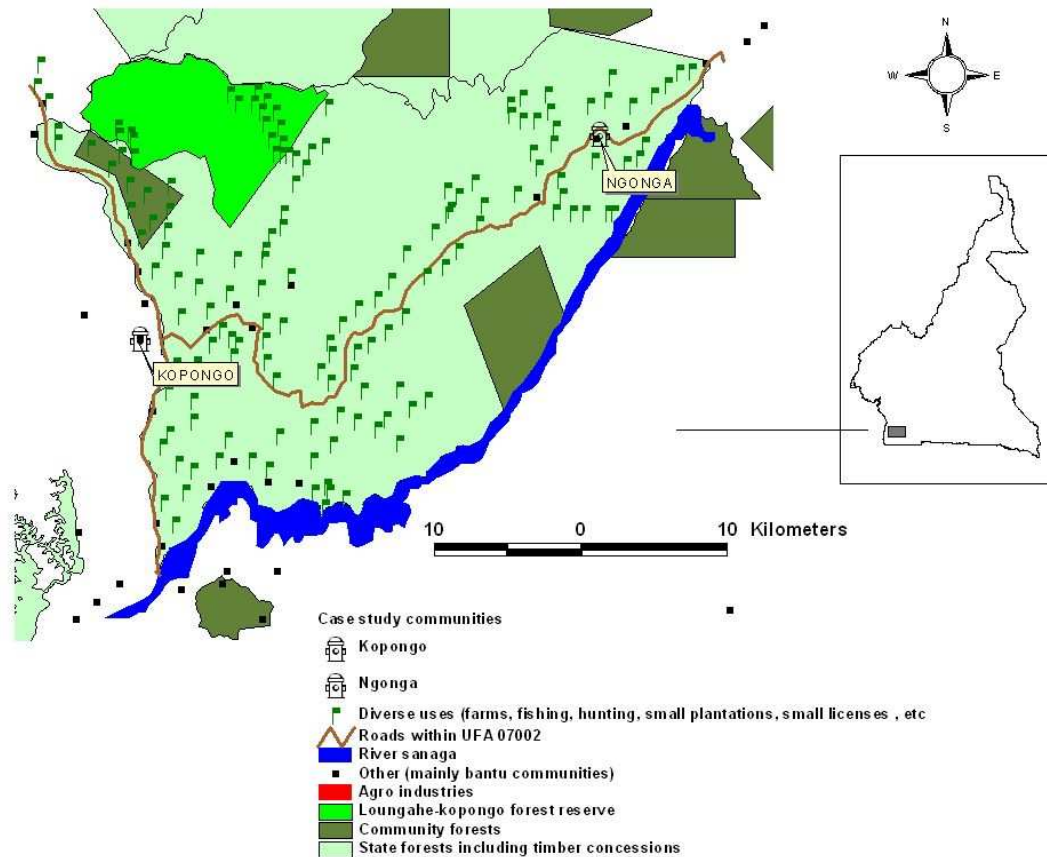
- **Community representations of conflicts with forests management units**

- d. Case of the Ngonga and Kopongo community representation of conflicts with the forest management unit 07002, littoral, Cameroon**

The need to highlight these conflicts stems from an application for community forests (maximum of 5000 hectares) submitted separately by the village communities of Kopongo and Ngonga in the Sananga Maritime divisions of the Littoral region, Cameroon. Both submissions have been refused on the grounds that the said forest resource had been attributed to the Timber concession 07002. From the community point of view the process of allocating the resource to the concessionaire was not participatory and although legal enclaves had been promised to the communities concerned, this too had not been respected. The conflicts had been further compounded as the forest resource was later allocated to the paper pulp company that closed down in 1983. Currently another private company 'Edea technopole' is involved in advanced negotiations to legally control the forest resource. The communities hold firmly that prior to these transfers and counter transfers, this forest resource had been under community customary ownership which they had been using for farming, fishing, hunting, as burial grounds etc. That insufficient harmonization between customary and statutory tenure rights and regime lies at the bottom of the conflict. The community mapping work was carried-out by Cameroon Ecology with support from the Rights and Resources Initiative. The data is freely available through Cameroon Ecology.

To raise the issue and bring it to light sufficiently to organize a public event with State officials, participatory mapping was carried-out in 2008. The approaches used were a combination of types 2 & 3. There is focus on 'evidence' of use and of occupation as different from say the Boa plains case, where effort was made to develop a quantifiable area. Map 5 below is a reproduction of the community mapping output within the 07002 forest concession.

Map 5: Simplistic re-representation of the information in Figures 1a and 1b showing uses within the UFA 07002, littoral, Cameroon



There are similarities between this Ngonga-Kopongo case and the Kienke case which follows so they will be discussed together.

e. Case of the forest reserve of Kienke, south Cameroon

Forest reserves in Cameroon are a special case especially after the demise of ONADEF that used to manage them and its replacement with the re-structured ANAFOR. The reality of forest reserves in Cameroon are that, they are sites of unfettered encroachment by agriculturists; indigenous and migrant, tempered only occasionally by the over-exuberant forest law enforcement officer. From southern Bakundu in Meme division of the Southwest, through the contested Bimbia bonadikombo in Fako division (south west) through the Loungahe-kopongo of Littoral to the abandoned forest reserves of Mbalmayo, and beyond these category of State forests, are viewed longingly by conservationists and with increasing

hostility by local communities. We site the case of Kienke which has been the subject of some recent RRI work and public event. According to Biyong (2009) there have been open cases of group and individual violence over rights to this forest reserve. The choking shortage of land on which to farm, coupled with increasing local population pressure is compelling communities to highlight the injustice of ‘illegality’ with which their livelihoods have become associated with the forest reserve.

Longstanding and very reduced scale conflicts over access to farmland tends to necessitate the use of *type 1* mapping not reviewed here so far. In some of the Kienke analyses no ‘reference-able’ maps in the orthodox sense were produced. The use of *type 1* mapping was also an indication of the reduced local scale and intensity of the problem. It demonstrates that community mapping does not always produce physical or virtual ‘maps’, but helps in analyzing and representing land use conflict to provide ingredients for discussions. GPS points typical of *type 3* were used however to determine points along a ‘transect’ or land use profiles along which land/forest use and occupation was characterized and represented visually.





Figures 1a and 1b below are just such ‘mapping’ representations which are \neq to a traditional map, but serves very vividly as representation of acquired knowledge of how space is occupied, especially how it is ‘limited’. This information can also be ‘situated’ within a geo-referenced map using GPS points collected during the ‘transect walk’, although the ‘transect’ profile itself cannot. The process may appear less sophisticated than the Boa case (*types 2*), but in practice can be more participatory, local knowledge-dependent and less externally driven and skills dependent.

Secondly, such information cannot not easily be manipulated; the positive side is the information stays with the local actors (owners of the knowledge), and the down side being that new information cannot be easily added. For instance the extent may not be easily visualized unless the information is re-represented using secondary sources of data in an appropriate referencing and graphics system.

For this report, the information from hard copies have been re-represented aligning as closely as possible with the original and setting it within the permanent forest estate contexts in the region. This highlights the dilemma of how community indigenous spatial knowledge (ISK) during representation, re-representation and reproduction can be widely communicated, integrated, and through the process losing detail ISK quality, yet gaining in dissemination.

Figure 1a: *Type -1* mapping land use in Kienke

Transect de Nkoblong

					
	RF	RF	RF	UFA + RF	UFA + RF
ZONES	HABITATIONS	CHAMPS	JACHERES	FORETS LAÏE	FORETS LAÏE
Occupation de l'espace	Maisons Eglise + chapelle Ecole	Jeune jachère Champs vivriers	Jeune jachère Culture de bas fond rivière	Jachère moy Vieille jachère	Poilik Forêt dense fleuve (Kienke)
Arbres et Végétation	Jardin de case Manguiers, Citron Okoumé Nimba, sapotillier	Cacaoyers palmeraiés Okoumé Nimba, Bibolo Niangon	raphia, rotin Okoumé, Nimba Frambre, Niangon feuilles diversés Bibolo	lophira, okoumé Nimba, Bibolo Niangon, Bambou de dune	Nimba, Okoumé Bibolo, lophira Saccoglottis Eurythoppleum
Animaux	chèvres poules canards chiens chats	Porc-épic, rat lièvre, Hérisson Tortue, serpent	Antilope, singes Herisson, rats lièvre, poissons reptiles	Antilope Sanguier Buffle Gorille Boa	Antilope Sanguier Buffle Gorille Pangolin
				Zone contestée	Zone Reclamée

Source: Phil-rene oyono, 2009.

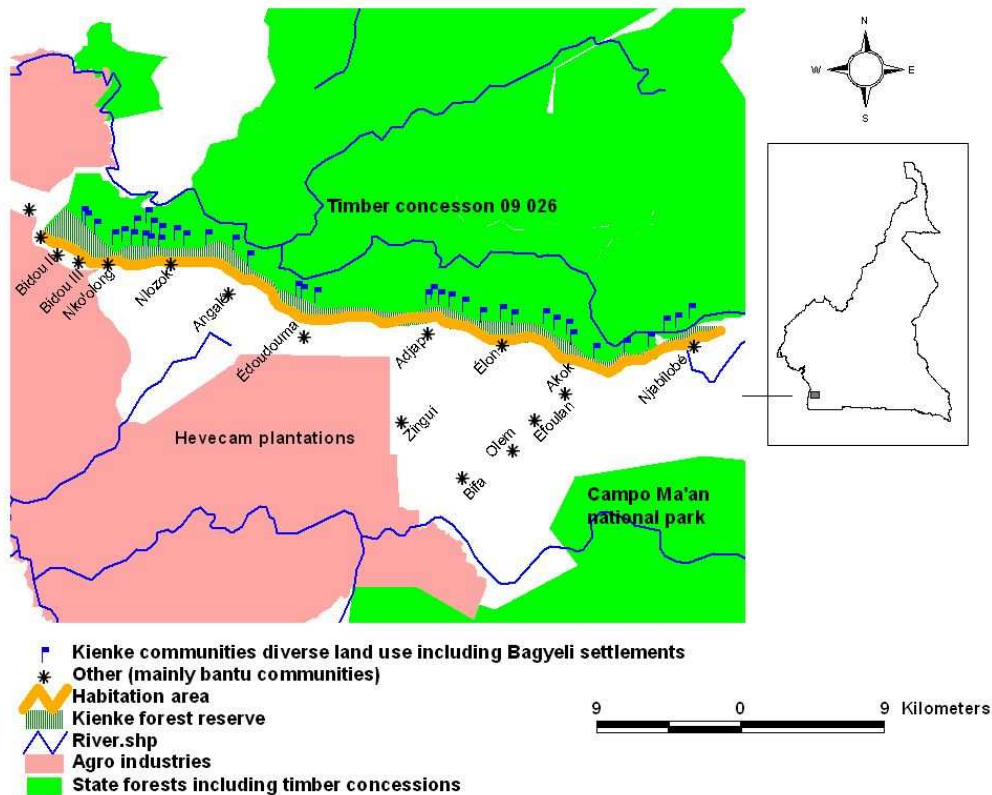
Figure 1b: Quasi spatial representation of 'mapped' area (still *type -1*), Kienke



Source: Phil-rene oyono, 2009.

The 'reference-able' community map below of the Kienke area, perhaps best demonstrates how this particular problems can perhaps be best visualized when we move from type-1, to a combination of types 2 & 3. The main advantages being the 'context' and 'big picture' view can be acquired when the information is geo-referenced.

Map 6: community mapping in Kienke, south Cameroon.



The uniqueness in the lesson we can draw from comparing types 1, 2 & 3 as we have done with the Ngonga, Koponga and Kienke may not be obvious. Invariably, ‘points’ of various shapes were used to represent space in both cases. Although type – 3 attributed to dispersed representations of spatial activity more closely associated with mapping involving Pygmies and their mode of occupying space we see that in both Koponga/Ngonga and Kienke. The Kienke communities and their neighbours are Bantus, more prone to mapping with customary limits; rivers etc. Why have they in this case used spatial characterization and indicative representations instead of sure polygons like in the Boa plains case? After all they have settled in these parts long enough. The answer is not so obvious, though it would seem that when territory is actively being contested mapping representations tend towards *type 3*; representation of use as if to communicate a justification of a claim. The first instinct of mapping by Bantu communities indicating ‘exclusive’ customary boundaries seems not to be of relevance here. A partial alternative hypothesis we can develop here could be that, the ‘boundary’ orientation in community mapping tends to be common when there is apperception of ‘equality’ in power relations between neighbouring communities. Whereas where one party is the State communities can only ‘grumble’ or ‘complain’. Thus it seems

that when power relationships are unequal, mapping seems more inclined to 'prove' *usage* rather than represent '*dominion*'.

- **Community representations of conflicts with conservation zones.**

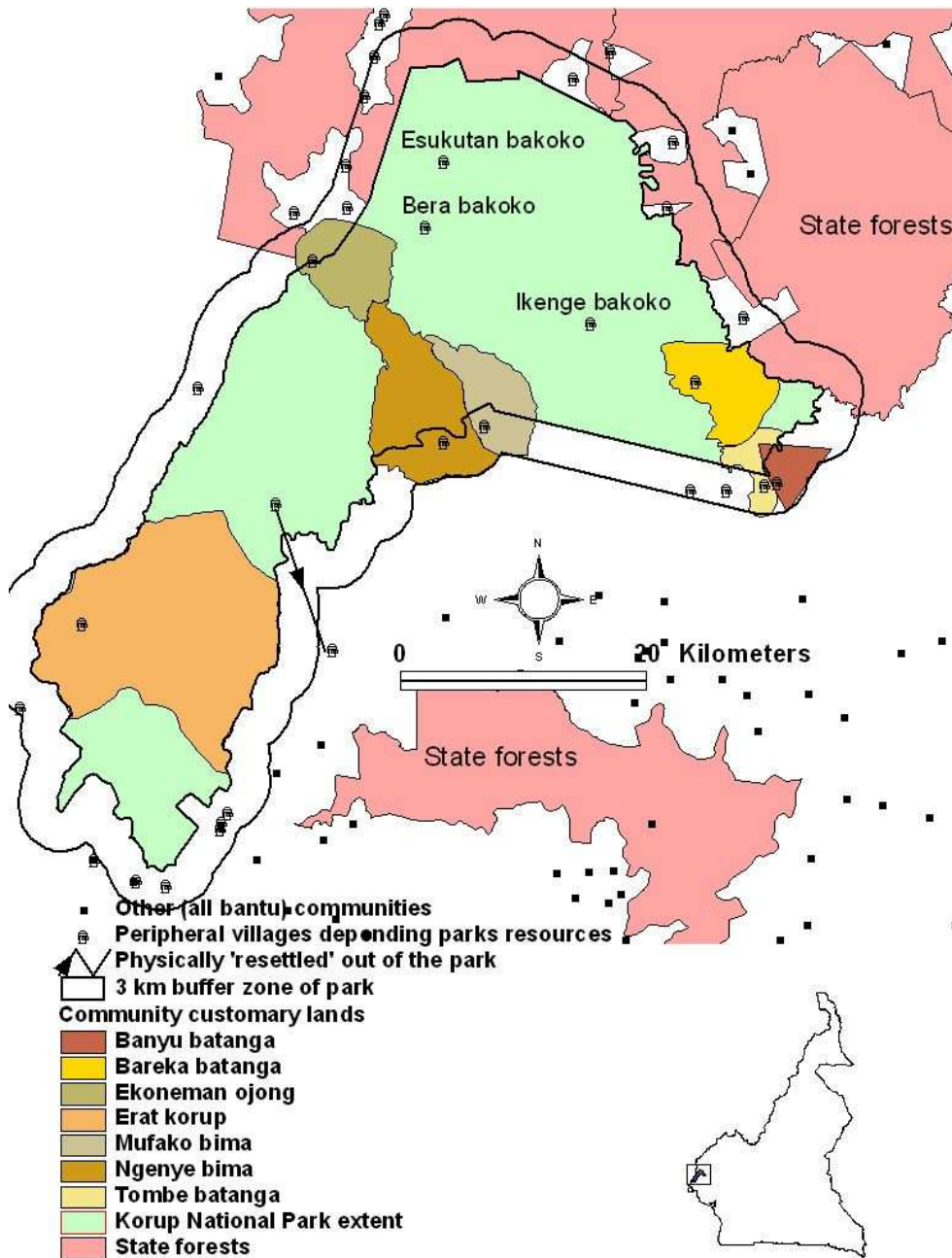
- f. Case of the Korup national park communities, south west Cameroon**

Since the creation of the Korup national park there have been five villages within inside and twenty three within 3 km of its borders. In 1986 when the Park was created knowledge about the value and effectiveness of community conservations was poor. The exclusive model of park management was more widespread and promoted by conservation organizations. Such was the flagship importance of Korup as a conservation hotspot that in 1998 a project was created specifically to manage the park. In 2003 that project closed down with very mixed results. A couple of years prior to closing down, the project had attempted to settle all six villages out of the park in the belief that this would provide greater assurance to wildlife and also because Cameroon's law on national parks forbids human presence in them. The Park adviser and lead author of the 2003-2007 Korup national park management plan conceded that, by 2003, only 20% of the park was effectively protected using game guards. This ineffectiveness of policing as a means to conserve the Korup national park had been heeded as early as 1998. During the dry season that year (December) an extensive participatory mapping exercise was carried-out with selected communities inside and within three km of the park boundary. Though the use of Geographic information systems was just beginning, participatory mapping was already well developed in Cameroon. Thus the type of community mapping carried-out was mainly *types-1* and *2* although type -3 was considered implicit in the cognitive representation of customary space by the communities.

The purpose of the mapping was to evaluate the physical extent of use of park's resource, as an indication of customary and livelihoods attachment, and therefore legitimacy of communities to participate in community based conservations strategies. The process was led by WWF the then managing agency of the park. Thanks to the presence of sociologists within her staff body (Dr Michael Vabi; see also P Mbile et al., 2005) it was reasonably expected that useful results would be derived, although their use to-date leaves much to be desired. Apparently in the recently approved management plan these findings on community conservation are being considered.

In view of similarities in context, yet differences in techniques and objectives this Korup case will be discussed with the Campo Ma'an case that follows.

Map 6: Korup national park community mapping of customary territory



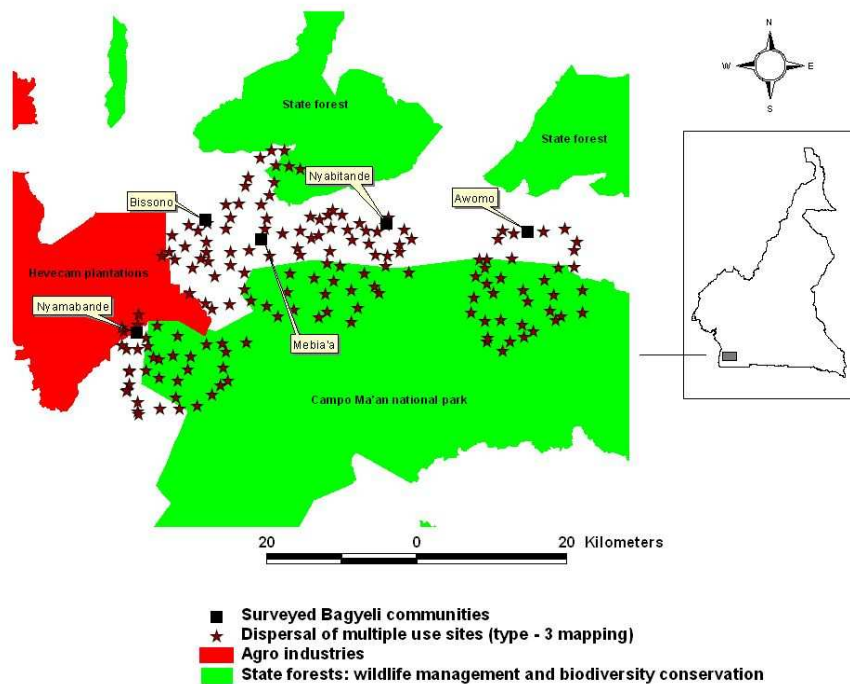
- Case of the Bagyeli (pygmies) of Akom II, south Cameroon.

The contrast between the 'polygon' or border based mapping of the Korup national park case and that of the Bagyelis north of the Campo Ma'an national park is striking. Mixed

messages can be drawn from these two experiences. The case of Korup was proposed by actors involved with the Project itself with the objective of ‘assessing’ the extent of community use as basis for developing community aspects of the park management plan. Thus, while the more development planning *type – 1* mapping was used at village level, focus was on ‘the extent’ that the communities claimed the parks territory as indication of weighting for their representation, if ever joint-management was to be an option. Therefore *type 3* was used to justify and analyze the spatial spread of land/forest use, while type 2 was used for visual spatial quantification. In the case of Campo Ma’an however, although another conservation site, it was a different organization (CED with support from FPP) that carried out the mapping. Collaboration was achieved from WWF and the local administration that endorsed the map; but true to type, it was mainly type – 3, no borders, just the use of GPS to ‘mark’ points of resource extraction. Detailed description have however been produced of the Bagyeli communities as the objectives here also included developing understanding of their land use practices. We see similarities in the ‘indicativeness’ of the mapping; and strangely like the Kopongo/Ngonga and Kienke cases seeming more inclined to ‘prove’ *usage* rather than to ‘stake’ a claim (see Korup) which used type -2 polygons.

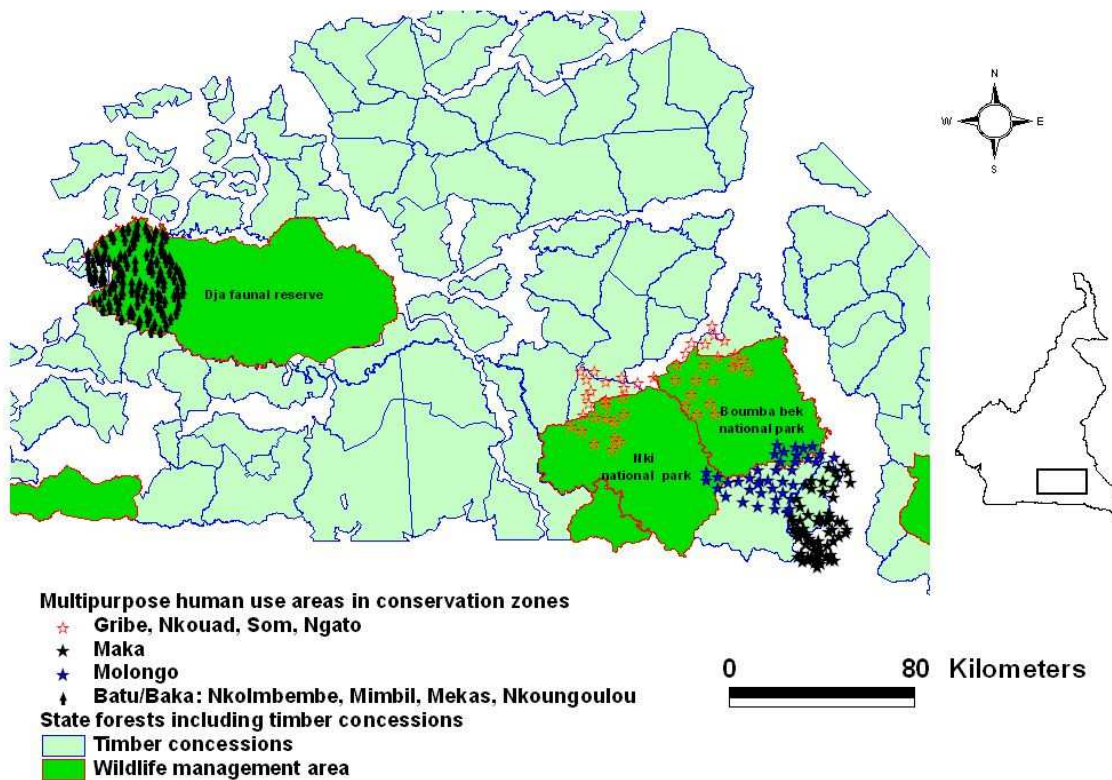
Below is a reproduced copy of the type-3 community map of the Bagyeli community use zones of Akom II sub division.

Map 7: Bagyeli use zones north of the Campo Ma’an national park, south, Cameroon



The final cases in this review (map 8, below) are community mapping activities in the DJA faunal reserve area, the Nki and Boumba bek national park zones. The community mapping exercises carried out by CED, with technical support from FPP mask more detailed work as has already been mentioned. Still they have generally used similar tools and techniques (type 2 and 3) to that of Campo Ma'an. These maps have been reproduced for this report with data provide by CED. The main communities are pygmies although in the case of the Dja faunal reserve use zones by Bantus have also been mapped.

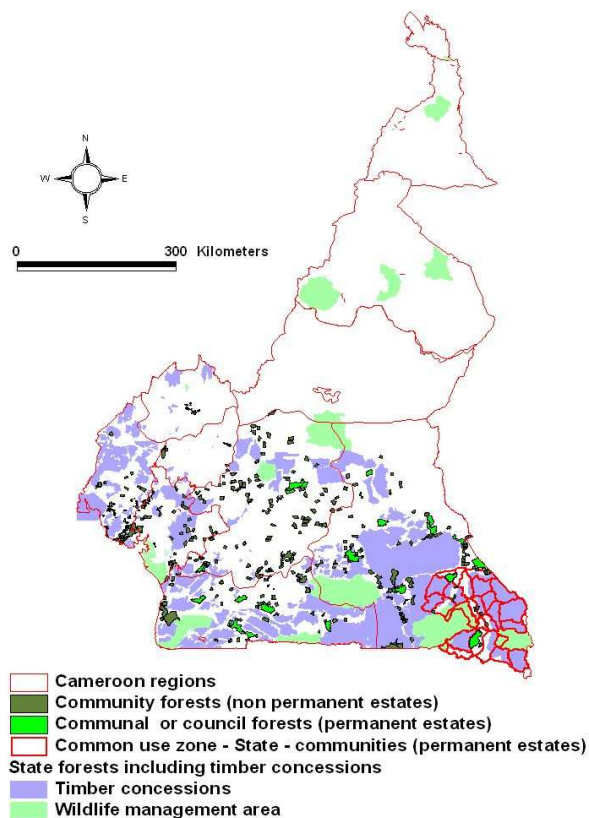
Map 8: Community mapping of human use zones in conflict with conservation in the southeast, Cameroon



CONCLUDING POINTS

As the title of this report suggests, we wrap our discourse not only around participatory community mapping activities and techniques in their different shapes and forms, but also consider the question of ‘rights recognition’. There are obviously differences in perception regarding the concept of rights recognition, so we will articulate ours to the extent that it is supported by theory and the evidence gathered in this report.

There have been cases of retro-cession of lands previously occupied by agro industrial corporations (e.g., CDC), the creation of council forests to benefit communities, community forests to share the benefits and challenges of forest management with local people, proposals for legal enclaves and community hunting and joint management zones. Map 9 below is a summary of some of the forest categories with community and communal interests. Retro-ceded lands by agro industries are not included and statistics on these have been hard to come by.



How retro-cessions have come about, who has been responsible for implementing them, their success and challenges are not dealt with in detail in this report. Furthermore, a number of policy briefs will be prepared to accompany this community mapping synthesis. These

briefs will focus on factors critical to community rights to forest resources, but which are not obvious in rights mapping. The structure will comprise (i) the philosophy of forest policies based on mapping evidence as it should frame forestry laws (ii) sources of evidence and the constituency of the consensus to support the proposals (iii) elements and impacts of the forest zoning plan as it affects access and trade rights, (iv) subtle issues of gender within the context of social practices in the different locations sited, (v) suggestions for best practices.

Having said these, it is important to recall our discourse in understanding the concept of ‘conflict’ as expounded by Laube (2004). We note that

“in a forest and land tenure conflict context, we need to move away from dealing with conflict using ways that focus on demands and then on trading portions of those demands to gain advantage; to a process based on needs assessments, both individual and shared, on clarified perceptions, on improving the relationship, and on mutual benefits, not domination”

We should therefore be careful regarding how we are to understand ‘rights’ recognition, or indeed how it should be pursued so as not be viewed as endorsing this or that approach. The best we can do is to lay down the principles based on evidence and leave the construction to the experts. The bottom line is that according to the 1994 Wildlife and Forest laws of Cameroon all wildlife and naturally growing trees belong to the State.

In this scoping study we presented a brief historical and ethnographic background prior to reviewing six broad cases of land claims and contestations, which have used various types of community mapping tools and techniques. It is critical that in mentally constructing ‘rights’ recognition through mapping we understand that the dominion of the State especially after the 2003 zoning plan, has been total and to a very large extent on paper; whereas at local levels (mainly Bantu areas in Cameroon) acknowledged customary ownership based on ethnography continues to hold sway. Customary rights are thus challenged when communities come in contact with the State. And arguments have been that, rights need to be clarified and or communities need to be familiar with laws. At a continental level the duality of the property rights systems; one customary and the other statutory is widely acknowledged (ECA, 2007) as being at the roots of numerous conflicts and undeveloped productivity. We observe from this scoping work that simple clarification, familiarity with laws and processes does not suffice. What is needed instead are constitutional guarantees, recognition and protection of property rights and at operational level, governance mechanisms for regulating benefits sharing.

Not all cases reported here involved ‘mapping’ in the orthodox sense, but all involved conflicts of perception over ownership and control of spatial elements of lands. The BLCC case demonstrated the absence of a smooth transition from pre-independence to post independence and from federalism to a unitary State. The BLCC case, and observations made by the *African Union Commission on Human and Peoples Rights* seem clear. Still according to the BLCC commissioners, this land claims highlights the problem that, due process using a nation’s judiciary system, focusing on clarification of legal entitlements, from a legal perspective are not necessarily the answer to rights recognition. Based on the BLCC case also it is clear that amicable outcomes are difficult where parties don’t have equal standing at the outset, especially if the arbitration level is less than constitutional. Still, it is critical to learn from the excuses of the stronger party (state), who like in the case of the BLCC conflict over lands occupied by the CDC, questions the BLCC case on grounds of legitimacy of representation. The need to first develop local constituency, ownership and facilitate analyses and hearings locally, prior to moving at higher levels is an important level we learn from the BLCC lands claim.

This case is reinforced by experiences in the Ngonga and Kopongo cases. Like in the BLCC case, the cases of Kopongo and Ngonga in the Littoral have help to reinforce the belief that **‘right’ is not ‘might’**; rather the other way round seems more likely. In this latter case, despite a Prime Ministerial decree n° 95/531/PM of 23rd August 1995, apparently authorizing legal enclaves (even if these would truly have not been a good solution) these did not materialize. However, unlike the BLCC case that went international much too quickly, the Ngonga and Koponga cases are seeking to build a national case by starting with local level community mapping and participatory land use analyses, building a constituency of local, regional, national and even international support. So far community mapping in NGonga and Kopongo has led to no less than two RRI-supported public events at regional level.

Next, the cases of the community mapping of the boa plains and that of the Korup national park though coming from different roots (one, conflict with agro industry and the other with conservation) teach a related lesson. The Korup mapping was driven by communities staking a place on a virtual ‘joint management board’ for the Korup national park. So although the mapping was *type -2* involving quantifiable extents of land and forests, focusing on where this dominion ends; and where the other starts; the justification was *type -3*, based on use, not ‘effective’ occupation. In the Boa community case in conflict with CDC, it was the ‘community’ on one side and the CDC on the other. Thus here, a single ‘polygon’ or quantifiable area showing the land use by six villages combined was the result. Thus though, the *type -2* was used to generate quantifiable area for ‘communities’ as opposed to the ‘lease

holds' by the CDC, the essential justification for use within the polygons was *type - 3* mapping.

Thirdly, the case of the community of Kienke depicts a longstanding conflict at a very early stage of resolution. The *type-1* mapping carried-out would characteristically be attributable to land use planning for local developmental planning and not in a claim. *Type -1* maps are either 'planning' or 'complaining', maps. From the background, this is understandable as this has been a longstanding problem. There are perhaps other reasons why it doesn't seem possible to map dominion like in the Korup case (such as with Pygmies that move regularly). Even the Kopongo and Ngonga mapping cases demonstrate this limitation placed on mapping when there is the 'looming' omnipresent power of the State to contend with. An ordinarily *type - 2* map justified by *type - 3* characterization is reduced to a *type - 1* 'grumbling' map aimed at communicating 'intensity' of use as justification for due process to begin.

The fourth and final category of mapping reviewed here are those by communities in conflict with conservation zones. All except Korup involve Bantus facilitating community mapping by Pygmies. We can only deduce as it has already been done that these largely *type - 3* characterisation maps are typical of communities without obvious exclusivist perceptions to land and competitive interests on related, expected benefits from the mapping. However, there are similarities between these Pygmy focussed *type-3* maps and the 'grumbling' maps of Kienke and Ngonga/Kopongo. They have been developed within areas 'possessed by a more domineering interest. The objectives of the mapping are also important as we see in the case of community hunting zones, carried out by Pygmies, an attempt to identify dominion and not just characterize use with GPS points, signs and symbols.

The question of ethics remains important but a look at table 1 which may help serve as indicator in terms of the level of participation would suggest weaknesses all round. Most of the community mapping cases in Cameroon are characterized by participation levels from totalitarian, nominal, extractive to induced. The *type - 3* would fall more under the consultative or instrumental to the extent that they facilitate the preparation of development plans. From the genesis of the mapping of 1998 beyond in Cameroon, they are almost always initiated from the outside. Thus the question of ethics remains in Cameroon, a very sore one. Even the case of the Boa plains where CARPE and MCP appeared as facilitating outsiders; because they could not be said to be of the same responsibility or power level, the current 'compensation' for land being carried-out with which community members seem dissatisfied may be a result. The only case initiated by the community actors themselves is the BLCC and such is the magnitude of the problem and power of the adversary that there is deadlock.

In the community mapping cases discussed the role of government has been an ambiguous one and should serve to re-enforce proposals on how to frame the philosophical dimension of forest policies as they affect community rights. Government has been involved at various stages of the different mapping efforts cited here. In most cases, government has been co-opted by the initiating agencies to legitimize the maps. The community map of the Boa plains, like the maps around the Campo Ma'an, Dja, Boumbe bek and Nki have carried the stamps of either the National Cartographic Institute, or like in the case of the wildlife reserves that of the local administration. Still the land use conflicts have largely been blamed on the conception of the State forests by the same government, which is symbolically endorsing contestations and claims. Thus the key issue as has been tested by the BLCC is where the threshold of Government compliance lies. Why for instance has government not implemented the decree in the Kopongo case? To what extent does the government respect the letter of its own constitution? (see the BLCC case of the entries into the *Grundbuch*). What is the extent of the rights to be associated with the enclaves promised communities in the new Korup National Park Management Plan or in the UFA 07002 or the 09026? What is the latitude that communities have of reverting to the status quo prior to the zoning plan as a basis for new negotiations? It seems curiously hopeless to be optimistic about negotiating something you perceive to have already lost.

Who leads the negotiations on behalf of communities; NGOs or themselves? Who is the referee? These are questions that frame the role of government in community mapping of all types and should help guide proposals for lasting and meaningful reform.

REFERENCES

Robert Chambers, 2006, Participatory Mapping and Geographic Information Systems: Whose Map? Who is Empowered and Who Disempowered? Who Gains and Who Loses?

Electronic Journal of Information Systems EJISDC, Volume 25

<http://www.ejisdc.org/ojs2/index.php/ejisdc/issue/view/85>

Giacomo Rambaldi, Peter A. Kwaku Kyem, Mike McCall, Daniel Weiner, 2006, Participatory Spatial Information Management and Communication in Developing Countries

Electronic Journal of Information Systems EJISDC, Volume 25

<http://www.ejisdc.org/ojs2/index.php/ejisdc/issue/view/85>

Biyong, M., 2009. La question de la tenure forestière dans les villages riverains de l'ex-Réserve Forestière de Kienké-Sud. Notes de terrain, CAMECO, Edéa, Cameroun.

Mbile P, Vabi M, Meboka M, Okon D, Arrey-mbo J, Ebong E. (2005) Linking Management & Livelihood in Environmental Conservation: Case of the Korup National Park, Cameroon: *Journal of Environmental Management*, 76 1-13

Land Policy in Africa, A framework to strengthen land rights, enhance productivity and secure livelihoods, African Union, Economic Commission for Africa, African Development Bank, April 2007