

Accessible technologies and FPIC: independent monitoring with forest communities in Cameroon

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Introduction

The equatorial forests of eastern Cameroon are home to many tens of thousands of indigenous Baka pygmies and other forest-dependent farming communities, mainly the Bantu. They are highly dependent on forest resources for their cultural identity and livelihoods: foods such as animal protein, vegetables and fruit, craft materials for tools and house building, medicinal and sacred plants. Due to their extreme poverty they are very vulnerable to changes that affect their access to forest resources (Abega and Bigombe, 2005). The State has maintained colonial laws attributing the nation's forests to their control despite local peoples' claims to the land. With the government's introduction of a National Zoning Plan in the early 1990s, indigenous and local communities (ILCs) found themselves with sometimes drastically reduced territories and large areas of their former land rented to outsiders such as timber companies, miners, safari hunters and conservation organisations, with exclusive rights over resources in these areas. With

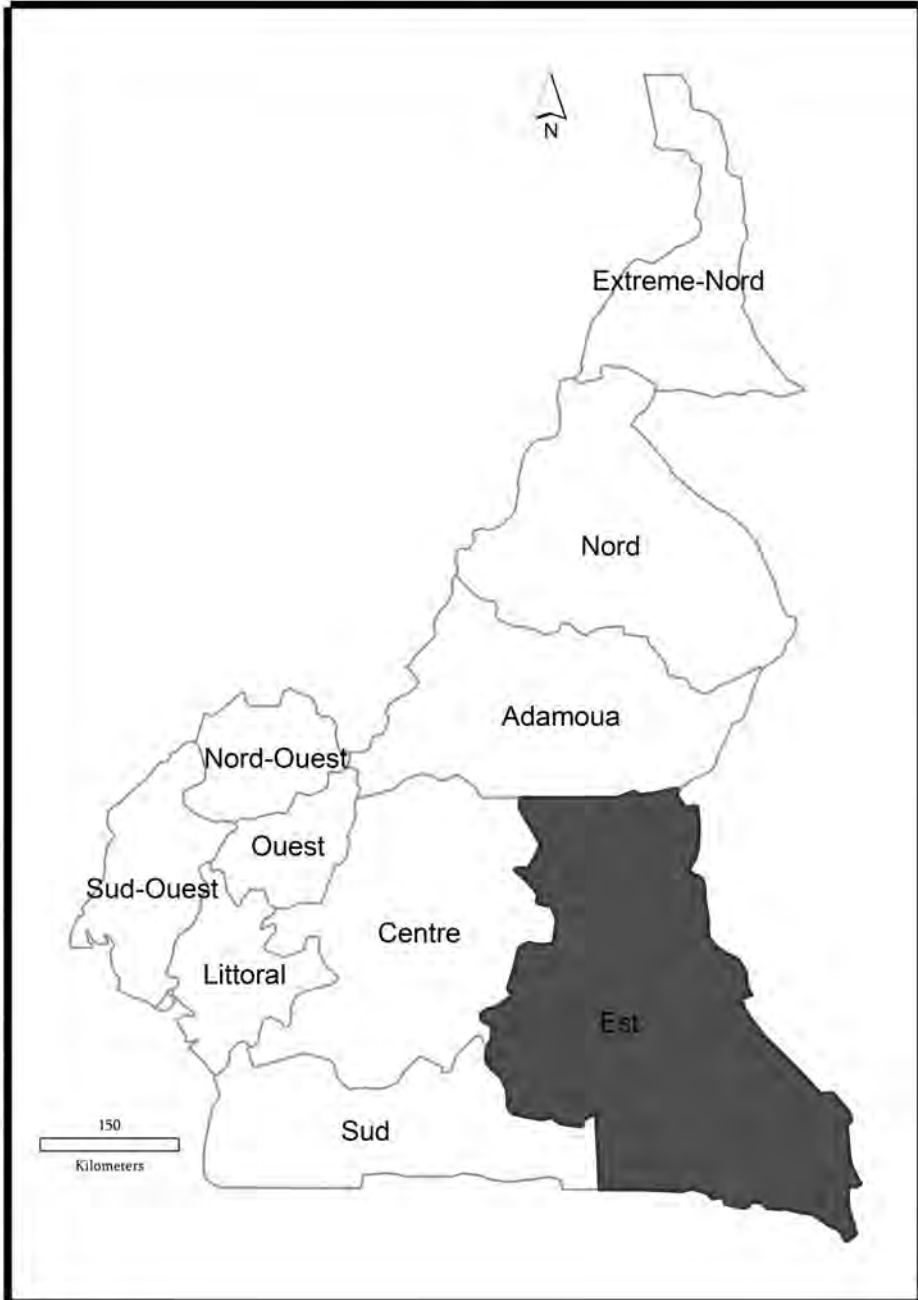
Box 1: Key problems facing forest dependent communities in Cameroon

- Substantial reduction of customary territory in the National Zoning Plan
- Expulsion from their customary territory in 'managed forests' (national parks, wildlife reserves, timber concessions, etc.)
- Restrictions on access to forest resources
- Weak communication between forest communities and other forest stakeholders concerning forest management
- Rapid and illegal logging
- Destruction of key resources during logging

often greatly reduced territories, and denied access to certain key resources, ILCs are increasingly vulnerable to hardship.

Cameroon's forests are subject to extensive legal and illegal logging by both artisan timber pirates and industrialised timber companies (REM, 2009). ILCs depend on many key tree species such as sapelli, moabi or ebony for fruit, caterpillars, medicines and oil. Until now, they have been unable to address this serious threat to their future. Noticing the link between weak governance and illegal logging, the European Union

East Region in Cameroon



Map 1: Eastern region, Cameroon.

(EU) initiated the Forest Law Enforcement, Governance and Trade (FLEGT) process in 2003 to address illegal logging in countries that export timber to EU territory (Brown *et al.*, 2009). EU-supplier countries must sign a voluntary partnership agreement (VPA) describing how they will improve FLEGT regulations. Cameroon began negotiating their VPA with the EU in 2006, signing the agreement in 2010.¹

Although detrimental to the country's economy and environment, illegal logging provides a few men with employment. But logging undermines forest-dependant people's long-term livelihoods, especially women and the elderly, who lose vital food and medicinal trees. Weak governance, poverty and ineffective local-level political structures allows most illegal loggers to work with impunity so long as local elites are assured an income.

Project aims, participants and approach

Participatory mapping is a key way for communities to assert their rights. Many projects run by NGOs and community-based organisations (CBOs) support ILCs in mapping their territories.²

The overall project objective was to support and strengthen the capacity of ILCs to independently monitor resource use, document their territory and present their findings to relevant stakeholders. ILCs welcomed the opportunity to participate. The project aimed to:

- improve forest governance through resource monitoring;
- effectively engage forest communities in key processes related to forest management;
- create an advocacy platform for dialogue between communities, CBOs and government institutions; and

Box 2: The role of civil society in the FLEGT process in Cameroon

Civil society's participation in the FLEGT process grew from an observer role to direct involvement in negotiations. They are now on the National Monitoring Committee established by the VPA, with six places out of 30. An important civil society contribution was to highlight the plight of forest dependent communities. As a result, the VPA stipulates that:

'In order to minimise any potential adverse effects of the FLEGT licensing scheme on the indigenous and local communities concerned, the parties hereby agree to assess the impact of this Agreement on their way of life' (VPA Cameroon-EU, Art 17-1).

- ensure government accountability to the FLEGT process.

This project was developed by a group of organisations already working on participatory mapping to establish a 'best practice' model for future environmental monitoring by ILCs. These included CBOs, NGOs, international organisations, and was led by a private company, Helveta Ltd, a UK-based software company with responsibility for timber traceability in Cameroon.³ Helveta wanted to develop a model for community verification to use in conjunction with their timber traceability system.

The project team included five groups of partners:

- Sixteen forest-dependent ILCs in south-east Cameroon. Project staff worked with Bantu and Baka groups separately to avoid discrimination. Communities collected data and led in presenting it to other stakeholders.
- Five CBOs implemented the methodology and trained community members in data collection, map reading and assisted with data management.⁴ They organised a network of project partners to support

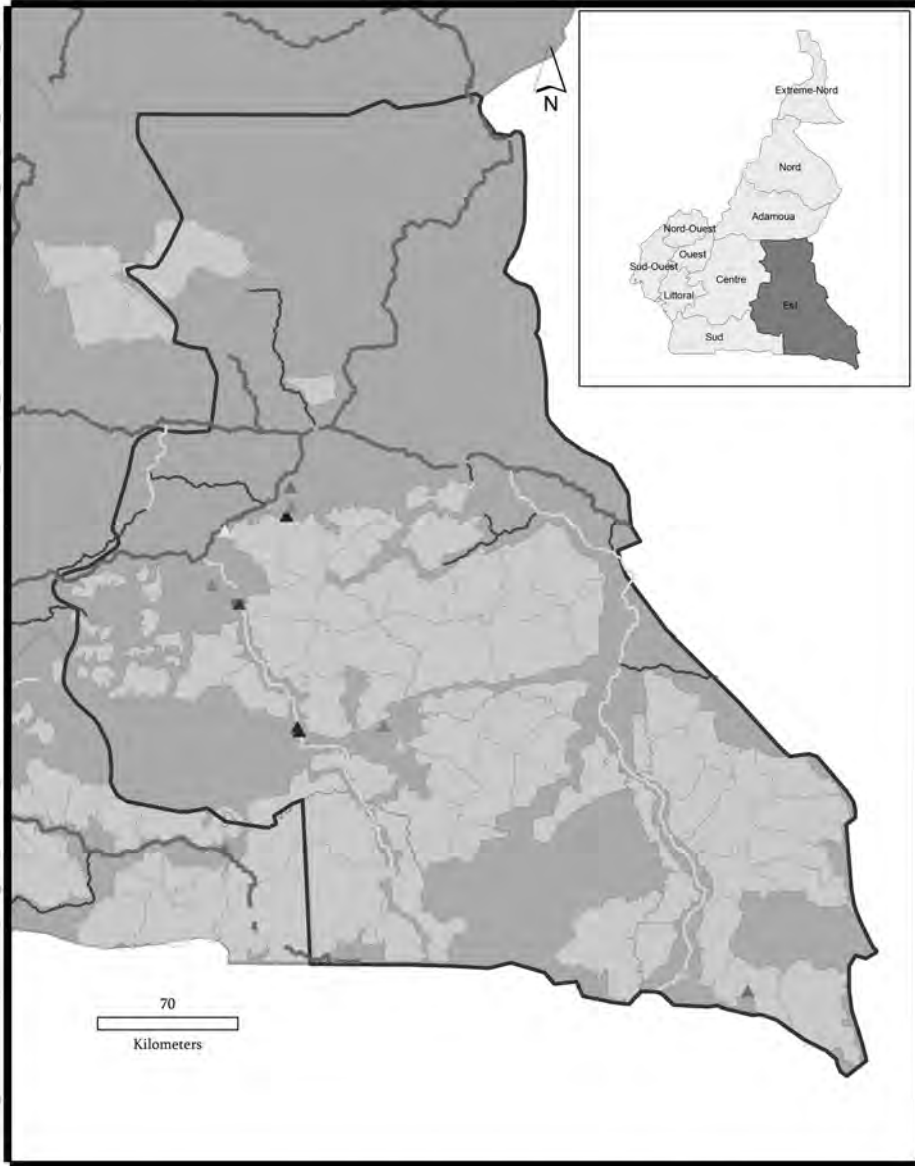
¹ See: <http://ec.europa.eu/environment/forests/flegt.htm>

² Lewis (2012) reviews a number of these.

³ Helveta and the Foreign and Commonwealth Office co-funded the project as part of the UK's contribution to improving forest governance in line with VPA/FLEGT. See <http://corporate.helveta.com/products.html?pgid=97> for more details.

⁴ Association des Baka de l'Est (ASBAK); Centre pour l'environnement et le développement (CED); Centre pour l'éducation et la formation pour l'appui aux initiatives de développement (CEFAID); Okani; Organisation pour la Protection de l'Environnement, la Recherche et l'Appui au Développement en Afrique (PERAD).

Projet de Renforcement des capacités des populations locales et autochtones pour le suivi indépendant des ressources forestières
 Aire du projet et communautés participantes
 Données collectées de Février 2011 à Avril 2011



Legend		
Est-region	National road	Participant communities
Forest Management Unit	Regional road	Djouyaya
	Department road	Abaakoum
		Bonando
		Cyrie
		Mandong Carrefour
		Mang Kako
		Mayos
		Mintom
		Missoumé
		Ngola Baka
		Nguillili 2
		Nkolbikon
		Nongwala
		Simeyong
		Zéga



Map 2: Participating communities.

communities to advocate for their rights. Each CBO accompanied between two to five communities.

- The British High Commission funded the first phase of the project.
- Helveta Ltd funded the second phase, provided project equipment, supervised the CBO's activities and securely stored the data collected. They also recruited staff to facilitate the overall project. Téodyl Nkuintchua, co-author of this article, managed the project over two years as a Helveta Ltd employee.
- John Nelson (Forest Peoples' Programme) and Jerome Lewis, co-author, (University College London) provided their expertise throughout.⁵

Project members considered the monitoring of logging activities by local forest people to be a key part of achieving better forest governance in Cameroon.

Challenges

The project ran from 2008 to 2011. In the second year, an independent evaluation showed that the technology worked well. But there was weak appropriation of the project by participating communities. Additionally there was an ethical dilemma: data was collected and maps produced, but since the communities had not formally given their consent for sensitive data about potentially criminal activity being shown to third parties, they could not be used effectively for advocacy. A second phase from June 2010 to September 2011 addressed these issues by instituting a free, prior informed consent (FPIC) process (Lewis *et al.*, 2008) and adapting community protocols (Bavikatte and Jonas, 2009) to strengthen the political organisation and participation of communities.

Despite its promotion in human rights law, FPIC is rarely applied in practice.⁶ To our knowledge, it had never been imple-

mented in industrial extraction, development or conservation activities in the Congo Basin. Given the tradition of top-down development and government interventions in this region, and the weak participation and appropriation of projects by ILCs (Abega and Bigombe, 2005), the project sought to develop a FPIC approach to enable ILCs to control the terms of their participation, strengthen their capacity to negotiate with third parties and engage in advocacy. The FPIC process aimed to ensure that project activities and their potential consequences were fully understood by the majority of the community before monitoring activities began.

Process and methodology

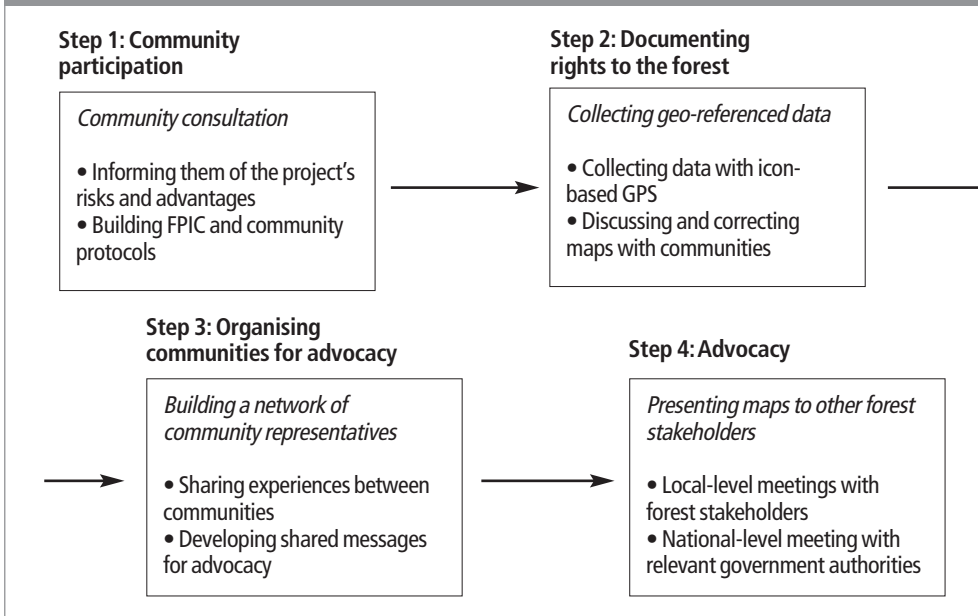
The first step was to build effective partnerships within the project team. After some early problems, this became a priority requiring ongoing attention. Learning from and incorporating each other's perspectives in co-developing the methodology proved to be the most effective way of addressing this challenge.

CBOs began by visiting a forest community they thought might be interested in participating. After extended community consultations, the CBO checks that the information provided about the potential positive and negative outcomes of participating has been understood. Consent is then asked for, and either refused or given. If given, the community works with the CBO to develop a community protocol – a statement of what resources the community would commit, when and on what terms, and a timetable of activities to begin collecting accurate geo-referenced data on their resources and logging. The data is then used to make maps, which can be presented to whoever the community allows to view them. The overall process is shown in Figure 1.

⁵ Lewis (2007) describes the participatory methodology used to develop the software.

⁶ For information on how to implement FPIC, see Lewis, this issue.

Figure 1: Project process



Step one: Community participation

This crucial step establishes FPIC agreements and community protocols that are the basis for organising project activities. The standard approach was to inform the community a few days before the meeting, to gather in a place chosen by community, and to encourage women's participation. Where the Baka and Bantu shared the same territory, CBOs held meetings with each community separately.

To ensure **informed** consent, discussions began by exploring the project's objectives, advantages, risks and prospects in ways that community members could understand. These discussions went differently according to the ILC. The indigenous Baka communities have a non-hierarchical egalitarian social organisation where women and men have equal say in community decisions. In contrast, Bantu societies are hierarchical and male-dominated. Efforts had to be made to ensure women's points of view were taken into consideration, and to avoid elite capture. Similarly, Bantu and Baka had to be worked with separately to ensure the Bantu did not

marginalise the Baka during the discussions.

A key characteristic of FPIC agreements and community protocols is their dynamism: consent can be withdrawn, partially or entirely, and the protocol can be updated to change what data is collected, who fills the various roles, incorporate newcomers etc. From the start, communities were informed that they can give, refuse or withdraw their consent for the whole project or for certain activities, at any time.

Two FPIC forms were discussed and explained before being signed. One was for the consent of the community, the second for the consent of the individuals designated by the community to do the cartography. Community-nominated leaders signed the forms on behalf of the whole community. But since cartographers would be involved in time- and energy-consuming activities collecting data designated by the community, they signed as individuals.

The CBO then supported the community to develop a community protocol (CP), inspired by the biocultural community

Figure 2: The five levels of FPIC

Community free, prior informed consent form	
Statement (should be filmed if agreed by participants)	Stamp/sign to grant consent (YES). X to withhold consent (NO).
1. Q: What do you understand to be the purpose and the main objectives of the project entitled 'Enabling local and indigenous people to do independent monitoring of forest resources'? A: Does answer demonstrate understanding? <ul style="list-style-type: none"> • If not, explain again and in a different way until the answer demonstrates proper understanding. • If yes, then can ask representative to stamp/sign against the following statement: Statement: We understand and support the purpose and objectives of the project. 	
2. Q 2.1: What do you understand will be the benefits of participating in this project? A: Does answer demonstrate understanding? <ul style="list-style-type: none"> • If yes, then can ask Q 2.2. • If not, explain again until the answer demonstrates proper understanding. Q 2.2: What do you understand will be the potential risks of participating in this project? A: Does answer demonstrate understanding? <ul style="list-style-type: none"> • If no, explain again until the answer demonstrates proper understanding. If an informed understanding of both benefits and risks is demonstrated, then ask representative to stamp/sign against the following statement: Statement: We have been informed and understand both the potential risks and the potential benefits of participating in this project.	
3. We agree to participate in this project by collecting data on customary forest use and timber exploitation.	
4. We agree to share data we have collected regarding timber exploitation with government officials and organisations participating in the project.	
5. We understand our right to withdraw fully or partially from the project at any time, and that we may insist on the deletion of all data that we have collected as part of the project.	

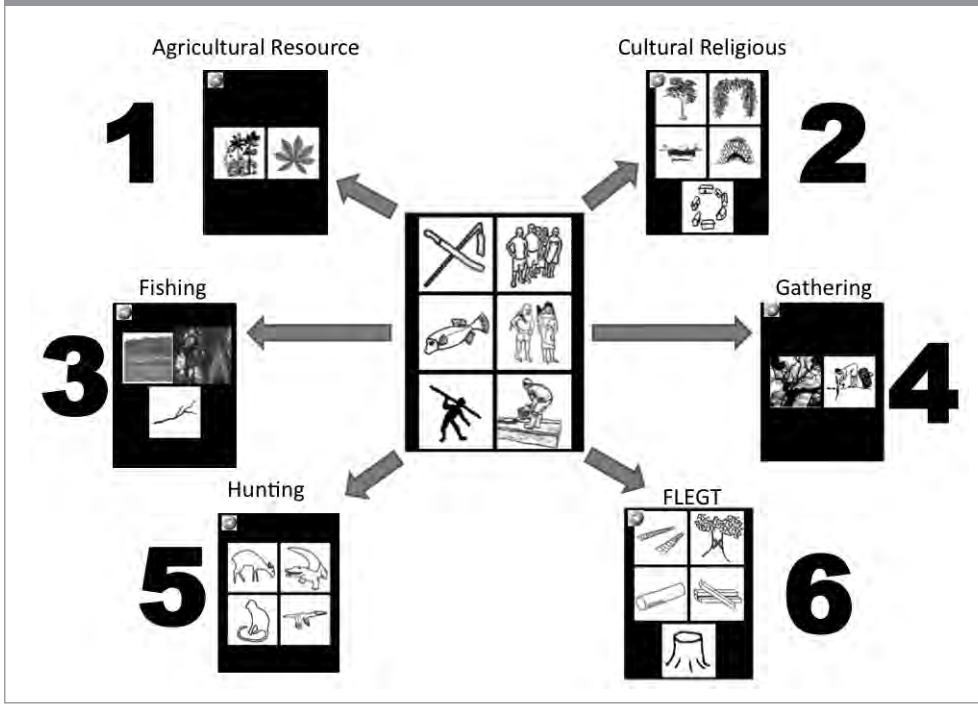
protocol approach, recently implemented in Asia and South Africa by Natural Justice and UNEP.⁷ The CP enabled communities to discuss and specify how they would participate, and to clarify roles and responsibilities. This was formalised in a simple two-page document – with images to help non-literate communities ‘read’ them – to determine the timescale for activities, what data would be collected and where, the names of cartographers, equipment keepers, and representatives for the advocacy

work after data was collected, as well as describing mitigating actions to address risks. Some ILCs appointed their ‘team’ easily. Others found it difficult due to many wishing to participate or internal rifts that required sensitive negotiation.

The process of elaborating the FPIC forms and community protocols is important. Most challenges facing project implementation by the community are discussed, and strategies to resolve them developed. Participating communities

⁷ To promote the Convention of Biological Diversity, UNEP supported research to develop biocultural community protocols. Bavikatte and Jonas (2009) offer a good example of this.

Figure 3: Overview of icon software



greatly appreciated that CBOs took time to train them in how to adapt these types of agreements to other partners. They also examined how to address possible positive and negative consequences of participation in the project. They reflected on their own institutional limitations, internal factions and overall organisational capacities, to decide the extent to which they required or desired supervision. Goodwill and self-organisation were more important than the demands and financial incentives usually given in other social mapping projects.

Step 2: Documenting rights to the forest

Next, the communities began resource monitoring by mapping their forest territory. Data was collected using an icon-based touch-screen unit connected to a global positioning system (GPS). The icons were developed participatively with communities to capture key resources and divided into six categories (Figures 3 and 4). The user-

friendly device is usable by non-literate or multi-lingual communities (Lewis, 2007) and allowed communities to appropriate the data collection process, addressing a frequent reproach made of social mapping initiatives, where communities simply assist an outsider technician in data collection.⁸

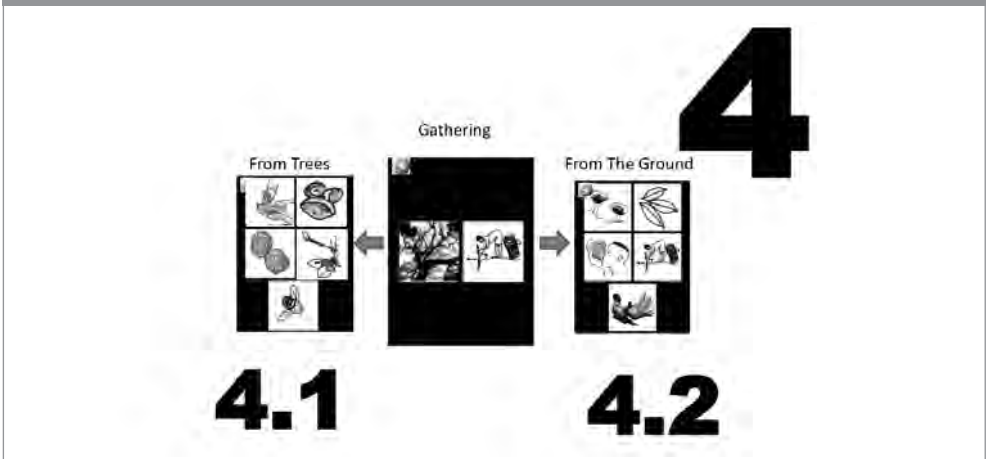
The data was then sent by Internet to a secure server held by Helveta. These records can only be viewed or copied by entities authorised by participating communities. CBOs and communities worked with a rough map for about three meetings until a final validated map was produced. To date, more than 75 maps have been produced.

Step three: Organising communities for advocacy

Project partners pooled their experiences of advocacy and capacity-building with forest communities to develop an advocacy strategy. They supported participating

⁸ A video summarises the process: www.youtube.com/watch?v=H3I8O2DRu7A

Figure 4: 'Gathering' choices



communities in presenting their maps to authorities with power to investigate illegal activities, and forest managers whose activities could be improved by better knowledge of local peoples' needs. For example, one logging company claimed that there were no indigenous people that used the forest in their concession. Community maps showed this was wrong.

The logging company changed its management plan to reflect this.

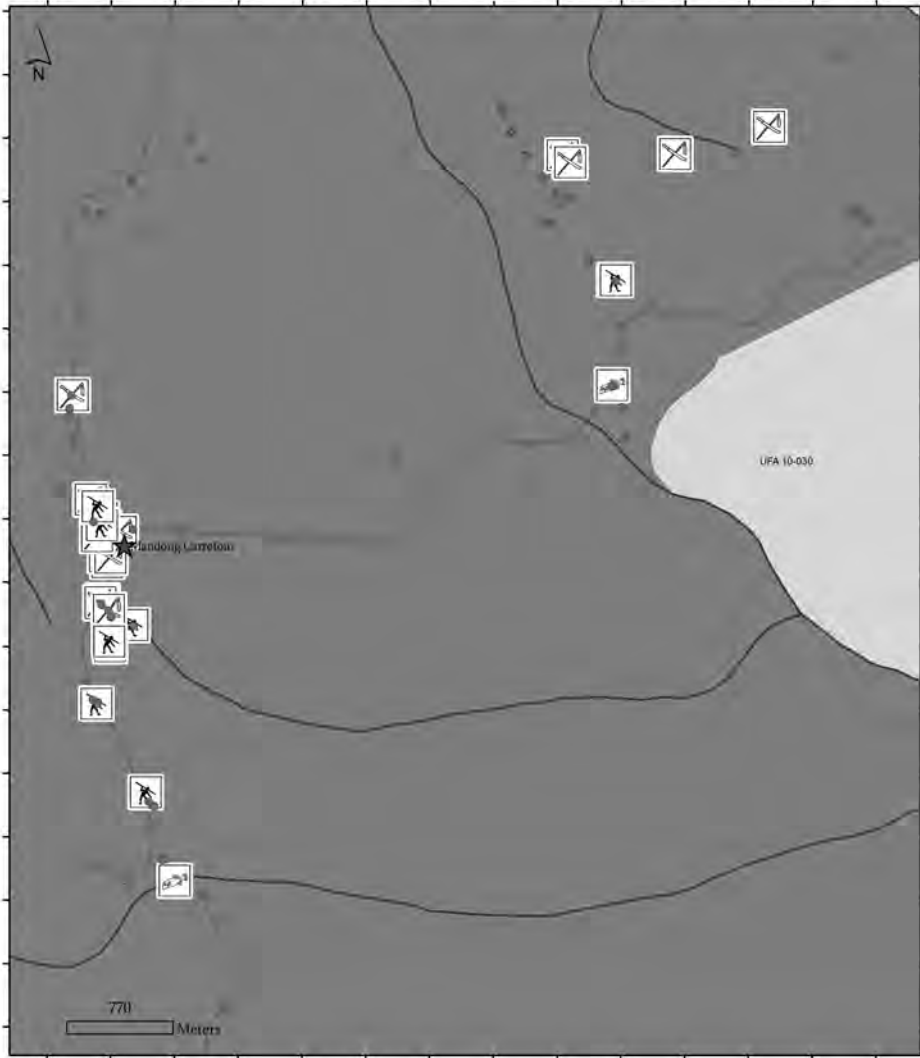
Participating in meetings with powerful outsiders is not easy for many rural people. To avoid intimidation, the advocacy work involved a series of stages, from local to regional to national level. Firstly, each community's cartographers joined a local group to attend local meetings organised

Photo: Téodyl Nkuintchua




Community cartographers during training learn how to use the icon-based GPS device.

Projet de Cartographie Communautaire au Cameroun
 Données de cartographie collectées par la communauté de Mandong Carrefour
 Février 2011 à Avril 2011



Légende

★ Mandong Carrefour	Usage coutumier du terroir	Point de pêche	UFA
▲ Communautés voisines	Plantation	Zone de chasse	Cours d'eau
● Exploitation du bois	Plantation	Routes et Pistes	Pistes d'exploitation



Données collectées par la communauté Mandong Carrefour dans la région de l'Est avec la collaboration de l'Association des Baka de l'Est-Cameroun (Asbak) et Helveta Ltd.

Map 3: An example of a community-produced map.

by the CBOs to discuss the FPIC process and how well the community protocols were working. Discussion focused on issues raised at the beginning of the project, the nature of their consent in relation to different types of data they were collecting, and to discuss next steps.

Following local meetings, a regional meeting was organised for all community representatives. Local representatives worked with the CBOs to prepare the advocacy process. Communities identified the following as key points for the advocacy process:

- FPIC and community protocols must be central to all negotiations by government agencies or outsiders seeking to work with communities or on their land.
- Conflicts of interests between customary and logging uses of the same forest are widespread. All maps produced prove that logging activities overlap with community territory, even when this territory is far from legal logging areas.
- Relevant government officials should take action to investigate illegal logging activities communities identify.

Step four: advocacy to other stakeholders

These activities were focussed on local and national levels. As part of the FPIC process, CBOs helped communities to explore their legal rights and responsibilities as expressed in the Cameroonian Forest Act. They used a range of tools including illustrated picture books, focus groups discussions and oral presentations, focusing on the sections of the Forest Act most relevant to ILCs.

Each CBO also organised a meeting to present maps to local stakeholders including government representatives, other CBOs and NGOs, forest managers and interested parties. Communities presented their work and contextualised illegal logging in their area. Unfortunately, few local authorities acted on the project's

results. According to some CBOs and communities this is because they are implicated in illegal logging, and felt accused during the meetings. However, in one case, local forestry authorities were so impressed that they asked to keep the maps and work more closely with the communities in the future.

A national meeting was held with high level forestry ministry officials, NGOs, CBOs and international actors (British High Commission). Three community cartographers attended. They shared their experiences and how the maps had better informed them of what was going on in their territories. The meeting was short, but the ministry official welcomed the project as an important way to engage other parties in the FLEGT process. Participants expressed the hope that the system would become integral to the Cameroonian timber traceability system, and that the cartographers could become important in liaising with their communities to elaborate REDD+ projects in which Cameroon is increasingly engaging.¹⁰

Advocacy is ongoing through the project partners' networks and the project hopes to contribute to developing a replicable model of community-based sustainable forest management in the Congo Basin. The British High Commission in Yaoundé is committed to maintaining a long-term engagement with the Cameroonian government to act on project outputs, as part of the VPA signed between the EU and Cameroon to mark their commitment to FLEGT.

Strengths and challenges

During local and regional meetings, community cartographers were asked about the project's strengths and limitations at the village level. This section is mainly based on their analysis with special attention to FPIC and community protocols.

⁹ Reducing Emissions from Deforestation and Forest Degradation (REDD). See: www.un-redd.org

Project strengths

The results most valued by communities were their newfound sustainable forest management skills (mapping and monitoring), FPIC negotiations and community protocols, and a better understanding of their role in, and responsibility to, defend their rights to the forest. During FPIC sessions, such issues and concepts were extensively discussed, and key for effective dialogue with other stakeholders. Communities especially appreciated the FPIC process as a new and empowering tool: being explicit about their right to refuse makes discussions or bargaining with outsiders more equal.

The advocacy capacity-building has helped ILCs to understand how to present their issues. ILC representatives appreciated that the project made advocacy with government and other actors an integral part of the project process. Though focused on illegal logging, ILCs used the meetings with government officials to discuss other issues related to government-imposed restrictions on their land or their expulsion from some forests. Community participants reported that they feel more confident about claiming and asserting their rights despite the National Zoning Plan having ignored these. Their engagement has helped them to understand the Forestry Law and learn new skills and concepts to better understand their current situation.

While not the first mapping project for some participating communities, most people now understood what maps mean and what they can be used for: in particular, to resist others trying to exploit their territory and resources. Understanding the role of the icon-based GPS was central to making FPIC more concrete. Communities gave their consent hoping to direct a project, and they did so successfully, something to which they are unaccustomed. The project was also the first time many communities had used computers. More than 100 people were trained to use computers and 38 became specialist

community cartographers. Following their request, the project also provided certificates attesting to their new skills.

The protocol was also very useful to promote community organisation. Most eastern-region communities have weak political organisation (see Bahuchet, 1991). CBOs and other development partners see this as a key barrier to development. It is often difficult to attract more than just the chief to 'participate' in a project. Community protocols helped to address this major issue by facilitating the community to better organise their participation.

Challenges

FPIC processes and community protocols are powerful tools. But there are precautions. Though recognising how important the project could be in future, communities have developed long-term 'patron-client' relationships with CBOs. The first FPIC consultations were particularly difficult. Some ILCs granted their FPIC not because they understood the proposition, but because they trusted the people involved. Impoverished communities often agree to projects and activities that may be against their long-term interests. CBO staff had to be very careful not to raise expectations that community members would earn direct incomes from the project.

This raises ethical issues concerning the balance between compensating participants and ensuring neutrality when negotiating consent. CBOs decided not to compensate so that communities were not motivated by insignificant financial benefits. This partly explains why it was difficult to involve all community leaders in elaborating the community protocols, but this was advantageous where leaders who were more concerned with personal gain chose not to participate.

Some community members were engaged in conflicting activities: that of documenting illegal logging, while also assisting the loggers. Most communities

chose strong people with good forest skills to be their cartographers. These men had given their formal FPIC to participate. Yet sometimes they also earned money transporting planks from the forest for small-scale illegal loggers. Due to a strong sharing ethic, often these were not seen as opposed activities.

This challenge for CBOs was complex. Should they forbid these individuals from participating, going against community decisions? Or, ask the nominated cartographers to renounce an important income-generating activity? Debates raged over people's need for short-term benefits against long-term forest outcomes. Some CBOs suggested that cartographers be paid what they earned for carrying timber during the project. Others pointed out that projects are always short-term, compared to people's lives, and so awareness-raising about sustainable forest management should be reinforced. Others suggested that only people who never participate in illegal logging be involved, even if this went against the community's decision. A consensus has not been possible on these issues.

Women's participation was also limited. Out of 40 community cartographers only three were women. During advocacy meetings only one woman participated. Explanations included: too much time away from children; men would not allow their wives to join a male team; long distances to walk; communities tended to nominate men; there was only one GPS device per community. CBOs tried to address this in one village by asking women what they wanted to be mapped. With hindsight, it would have been better to have fewer communities involved so that two GPS devices were available per community, enabling women to form their own mapping groups. This principle was applied to deal with discrimination against the indigenous groups by local farmers, and should have been applied to avoid gender bias.

Sustaining these activities over the long term remains to be established. This project was designed to prove the concept and develop a model for community engagement in forest monitoring that could be integrated into national FLEGT monitoring and for timber traceability. However, much has changed institutionally and at the national level. While Forestry Ministry staff responded positively to the project process, they have expressed no plans to support its continuation. Similarly, it remains to be seen if the new leadership at Helveta still considers monitoring by ILCs as an integral part of their traceability system.

Communities have led the project but cannot currently directly manage their data without Internet access and electricity. Communities have a final map in their village, but communicating new possible uses for the data to them is only possible through CBOs. In future, we hope that data copies are also left with each community so that they can reconfigure it to support their claims in new contexts.

A last key challenge is the place of FPIC in Cameroon's legislation. The State still claims the forest as its own. If it approves timber companies, conservation organisations or mining companies with the right to extract resources from ILC's land, outsiders have no obligation to seek approval from ILCs, and in practice never do. Although ILCs intend to assert their right to give or refuse their FPIC to activities on their land, national legislation does not acknowledge this right explicitly despite its international obligations to do so. However, in certain domains such as the Forest Stewardship Council's forest certification scheme, FPIC is the standard timber companies must now achieve in their relations with ILCs.

Prospects for other projects

This project illustrates the advantages of applying a FPIC process in conjunction with community protocols to ensure that

communities understand the purpose and potential of project activities, and engage with them in a manner they consider appropriate and fair. The project shows that new technologies can be usable and relevant to local and indigenous peoples, and the advantage of participative software development, intuitive interfaces and testing prototypes *in situ* with the intended users. The collaborative approach and user-friendly technology allowed communities to appropriate the data collection process and understand the maps they had produced.

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