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ABOUT THE MOUNT CAMEROON PROJECT

The Mount Cameroon Project is a multilateral project under the Cameroon Ministry of Environment and Forests (MINEF), with funding from the British Department for International Development (DFID) for the Limbe component, the German Technical Cooperation Service (GTZ) for the Buea component, and the Global Environment Facility (GEF). The Limbe component is implemented under contract by LTS International, Scotland. Significant financial and technical support for participatory mapping reported in this paper was provided by USAID's Central African Regional Programme for the Environment (CARPE), administered through Innovative Resource Management (IRM), a US based NGO.

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James Acworth, Henry Ekwoge, Jean-Marie Mbani and Grace Ntube

SUMMARY

Over a period of five years, the presence of the Mount Cameroon Project (MCP) has helped local people understand and articulate their concerns and interest in gaining a say in the management of forest lands in the Onge-Mokoko area. For a long time suspicious of the project, the adjacent Boa Plain community planned their own independent 'deal' with a private logging company. With project advice and support, an Environmental Impact Assessment (EIA) became a participatory decision-making tool, resulting in better knowledge and discussion of the options for land use, and the planned large-scale logging was abandoned. The participatory activities have since led to a dynamic and organised community-based mapping and land use planning process, and a broad range of individual resource management initiatives that promises to contribute directly to improved livelihoods, good governance, increased local capacity for forest and land management, and biodiversity conservation the project goal.

INTRODUCTION

The goal of the MCP is to maintain biodiversity on and around Mt. Cameroon. This active volcano (4,095m), which supports an extremely high diversity of plant and animal life and is rich in endemic species, probably

represents one of the highest priorities for biodiversity conservation within Africa (Oates, 1986; Watts & Akogo, 1994). However, it is under great pressure due particularly to the fact that its fertile soils and range of climates are highly attractive to industrial and subsistence agriculture.

MCP-Limbe has developed, tested and put out for widespread consultation and adoption, a Participatory Biodiversity Conservation Strategy (PBCS), which attempts to bring together a range of components: multiple partnerships, institutional development, livelihoods and multi-use approach, supported by integrated biodiversity and socio-economic information (see Box 1 (overleaf); Brown, 1998).

This case study reviews project activities over the past five years in one of its four geographic working areas, referred to as 'Onge-Mokoko'.

This area contains the last remaining significant expanse of lowland forest (27,000 ha) contiguous with the natural vegetation of Mt. Cameroon and has proven high biodiversity (Thomas, 1994a & b; Tchouto *et al.* 1998; Gadsby & Jenkins, 1992). To the north, the adjacent Boa Plain (30,000 ha) is a floodplain originally covered with seasonally flooded forest, the remainder of which has a lower biodiversity

Box 1 Summary of MCP's Participatory Biodiversity Conservation Strategy (PBCS)

- MCP applies the term "biodiversity conservation" to the development and implementation
 of land-use planning and forest management systems that successfully conserve the various
 components of biodiversity (habitat, species and gene level) considered a priority by a range
 of interested parties.
- The PBCS sets biodiversity conservation and livelihood improvements as equally important project objectives.
- It engenders a level of compromise between (international) scientific conservation objectives
 and local needs, and results in management systems which combine an optimal mix of
 "protection" with "sustainable forest resource use" and which contribute to local livelihoods.
- It aims to develop equitable partnerships between all stakeholders that share responsibilities, as well as benefits, and that find a balance between the rights of "the State", and "civil society".
- These partnerships are evolving through the development of institutional pluralistic structures which support biodiversity conservation and sustainable forest and land management.
- Government approval is sought for such local coalitions.
- Access to information, skills, finance and the decision-making process empowers forest users and managers.
- The resulting systems of management evolving from the project "field laboratory" are then
 communicated to all interested parties, in the hope that they will influence government and
 other interested parties in their policy on sustainable forest management and livelihoods.

Source: MCP, 2000

conservation value than the Onge-Mokoko Forests (Tchouto *et al.*, 1998), and is home to an increasing population.

The major threats to the biodiversity of the Onge-Mokoko forests are large-scale logging and uncontrolled exploitation of non-wood forest products, particularly bushmeat. On the Boa Plain, forest is being converted both to industrial plantations by the large state-owned 'Cameroon Development Corporation', and to small-scale commercial agriculture by an increasing population and little is likely to be maintained. These threats are being tackled by a range of different approaches

encapsulated in the project's PBCS. This paper provides a broad overview of the situation, and an evolving range of solutions. The wildlife component is covered separately (Olsen *et al.*, Paper 25e of this mailing).

PEOPLE AND LIVELIHOODS

The population of the Boa Plains, adjacent to the Onge-Mokoko forested plateau, consists of nearly 50,000 people, many of whom are migrants. Over 60% live in densely populated fishing villages along the coast. The mainly agricultural communities living on the Plain itself number some 21,000 people. Average densities are 26/km² for

these communities (ERM, 1997), more than double 1982 estimates.

Three native 'clans' dominate the Plain – the Bakolle (or Bamusso), Balundu and Barombi. The chiefs and traditional councils attempt to control, and benefit from, important resource uses, such as land use and tenure, forest exploitation for a wide range of products, and also the activities of the large and highly mobile immigrant population (fisher-folk and seasonal plantation workers) in their respective clan areas. The three main clans, who themselves are relatively recent settlers (about 100 to 200 years) have long-standing disputes over traditional boundaries, especially in the forests to the south towards the Onge River (MCP, 1997).

Some 90% of households on the Plain are actively involved in farming of traditional cash crops such as cocoa and oil palm (dominated by males) and food crops for subsistence or sale. Average farm sizes of 0.75ha per household of eight persons are estimated but can be much larger (Rew *et al.*, 1997). Small-scale oil palm has become an important source of income since the 1970s. Renting land to non-natives is also a major earner and is a locally acknowledged, though not legally approved, means to secure more land.

With many differences between social groups in socio-cultural history and competition for scarce resources (consistent with observations of Sharpe, 1998a & b, 1999; Brown, 1999), the notion of "community" is poorly defined locally. It is used here to describe collectively the range of socio-cultural categories in the region.

LAND TENURE AND USE

Land use is divided between natural, largely undisturbed forest, secondary (logged) forest, old fallows, industrial-scale plantations, smaller-scale community owned plantations and shifting agriculture.

The Cameroon Development Corporation (CDC) is a large State-owned plantation company that holds nearly 17,000 ha of leasehold land on the Boa Plain. Until the mid 1990s only 2,500 hectares had been planted with oil palm and rubber, but since 1988 CDC has expanded a further 1,340 hectares of oil palm (as part of a 10,000 ha expansion proposed in 1982, see Wyrley Birch et al.), employing mostly immigrant labour. Much of the remaining leasehold is still under natural forest (9,000 ha), or has been 'illegally' cleared for food crop cultivation (4,000 ha) by indigenous community members or settlers to whom they have allocated land. CDC considers all to be 'squatters'.

The State-owned Mokoko River Forest Reserve (9,100 ha) was established in 1952 as a Production Reserve. The community accesses most of their timber and non-timber forest products (NTFPs) from the secondary forests of the Boa Plain, but the more pristine forests of the Forest Reserve and broader Onge-Mokoko Plateau also supply rattans, medicinal plants, wild fruits and vegetables, and bushmeat for local consumption and trade. Hunting pressure is high, from both local and outside hunters.

Initially, MCP was mandated simply to develop a Management Plan for the Mokoko

River Forest Reserve (MRFR), but many more prevalent and immediate threats to the longer term security of both the biodiversity of the region and livelihoods of its population have resulted in this becoming a secondary objective to tackling broader scale land-use and forest management issues.

HISTORY OF LAND AND FOREST OWNERSHIP, MANAGEMENT AND USE, AND THE ROLE OF MCP

By law, ownership, management and control of forests is vested in the State but this contrasts with the realities that govern forest exploitation, land acquisition and ownership on the ground – even today, the forest outside the Reserve is considered by residents of the area to be under 'traditional ownership'.

The competing interest between 'the State' and 'the community' for ownership of forest and control of land, described in detail by Sharpe (1998a and 1998b) and summarised by Brown (1999) and Watts & Akogo (1994), evidently continues today and is highlighted by the Onge-Mokoko situation (see Table 1 overleaf).

PROMISES VERSUS REALITY: COMMUNITY BENEFITS FROM COMMERCIAL LOGGING

The Mokoko River Forest Reserve itself (9,100 ha) and even the entire forest area of the Onge-Mokoko Plateau (c. 27,000 ha) is relatively small from the point of view of logging. Since 1974, under the Forest Ordinances and Laws, the government has been at liberty to offer portions of up to

2,500 hectares of what is now classified as 'Communal Forest' to small operators to exploit for a one to three year period, under what is known as a 'Sale by Standing Volume' (*Vente de Coupe*)¹, a popular means of accessing small chunks of non-gazetted Forest (Brown, 1999).

Exploitation in and around the Onge-Mokoko study area has been a mixture of small- to medium-scale commercial exploitation (on the approval of the central administration in Yaounde, poorly controlled by the local Ministry of the Environment and Forests (MINEF) and yielding few community benefits, and artisanal timber-cutting under local 'informal arrangements' between villages, field forestry officers and chainsaw operators.

Historically it can be seen that the communities of the Onge-Mokoko area have been the losers as regards benefits from commercial timber exploitation initiated by outside interest. Unsurprisingly, they have developed a deep cynicism towards State management of forest resources. This is typical of the community experience of forest exploitation in Cameroon (Egbe, 1998; Ekoko, 1997).

SMALL-SCALE COMMERCIAL TIMBER EXPLOITATION TODAY

Since the end of the period of large-scale logging, artisanal chain-saw operators have been most active, felling and sawing trees both on individuals' farms and in communal forest land. Beyond domestic use for construction and fuelwood there are also important commercial markets for canoe and fishing boat construction for the large coastal community, and for the large quantities of fuelwood required by the artisanal fish-smoking industry and by the nearby CDC factory for drying rubber.

In principle, such exploitation is defined as illegal under the 1994 Forestry Law, as a 'sale' takes place, even though the village members involved are in some sense exercising their legitimate customary rights. The distinction between personal and commercial use is blurred, as is the geographical definition of the term 'local population'.

The 1994 Law included a welcome ruling on customary rights – allowing communities to access forest resources, including timber, as long as it is only for personal use. However, 'informal arrangements' between timber buyers, exploiters and the more wealthy or powerful villagers are still the norm, though disguised under the loose catch-all of 'customary rights' (Egbe, 1998).

ON OUR OWN TERMS: COMMUNITY NEGOTIATES LARGE-SCALE TIMBER EXPLOITATION

In 1996 the Boa Plain community attempted to implement a new strategy to benefit from

the forest adjacent to their villages. Encouraged by a few individuals with vested interests in outside timber companies, community leaders were persuaded to attempt to organise logging operations themselves. The expectation was that if they could engage a large-scale commercial exploiter on their own terms, they might be in a better position to negotiate community (and individual) benefits than before. They actively contacted a number of timber companies with this proposition.

MINEF and MCP learnt of this when a logging company presented an application for a permit to 'recuperate' (salvage) about 1,500 ha of non-permanent 'Communal Forest'. 3,800m³ of timber were requested, equivalent to 2.5m³ per hectare, much less than the minimum of 10m³/ha reported for most licences, and far less than would result from so-called salvage logging, raising suspicions about the company's intentions.

The application was accompanied by supporting letters from nine villages inviting the timber company to log the forest. The primary reason given was the need to clear new land for cash- and food-crop farming.

This attempt to exploit forest outside the MRFR was a major threat to the biodiversity of the area. But MCP saw it as an opportunity to engage the local community in a real test case of community management and benefit-sharing from forest use. It was hoped that, if successful, this model could be extended to a wider area, including parts of the MRFR.

¹ In theory, the forest to be exploited should be subject to a stock survey and the available volume of timber offered by public auction to the highest bidder. In practice, most of these permits were and still are allocated by 'mutual agreement', without any public auction, and often with no proper inventory.

Table 1 Historical timetable: important events and their impact in the Boa-Plain area

Date	Event	Impact
1890s	Almost 14,000 ha of land expropriated and registered as private land by German Planters on Boa Plain. Only small 'Native Reserves' left around villages.	Community legally alienated from vast majority of their land; this issue has not been a major practical problem until very recently due to low pressure on land.
1918 and 1947	German plantations confiscated by Colonial Protectorates and vested in the State to be leased and developed by the Cameroon Development Corporation for the benefit of Cameroon society as a whole.	Development very limited in extent for 50 years due to lack of financing, and marginal economics of oil-palm production.
1930s to 1960s	Creation by the British colonial administration of 'Native Authorities' (NA), a borrowed concept of traditional authorities from Nigeria & NW Cameroon for the purposes of 'indirect rule'.	Vested all unoccupied land and control of forest resources in the local 'community' through such Native Authorities. Created conflict with Colonial Forestry Service, which claimed that NAs were incapable of managing forest resources alone.
"	Colonial Forestry Department challenges NAs' capacity to manage forests, instead proposing to control timber production itself.	Struggle between Forestry Department and NAs over allocation and control of timber resources.
1930- 1950s	Colonial Forestry Department establishes Forest Reserves, largely for timber production but also watershed protection. Bambuko-Balundu Native Authority Reserve (to become Mokoko River Forest Reserve (MRFR)) demarcated in 1936-7 and gazetted in 1952, sharing one boundary with the CDC Leasehold, south of Boa Plain. Ownership and responsibility for control of Bambuko-Balundu Forest finally vested in NAs.	Forest Reserve creation highly controversial, with recurrent tensions between political officers, or local communities, and forestry staff. Incapacity of the Colonial Forestry Department to implement effective forest management. Failure of NA Forest Reserve System due to combination of artificial, non-representative and ineffective nature of NAs, and political obligation on Forestry Department & Administration to support fiction of NAs as proof of success of 'indirect rule' policy.
1961	Cameroon becomes independent. Control of forest resources becomes a shared responsibility between the NAs and the State Forestry Service.	An entirely informal system of land and forest management (based largely on sales to outside interests) evolves.

1960s till 1970s	Timber boom. NAs or individual villages enter into "agreements" with timber companies in return for opening roads, building bridges and other infrastructure. Extensive logging in the "Bambuko Corridor" to the south of the Bambuko-Balundu Native Authority Reserve.	Many cases of bitter conflict between individuals, villages, and NAs over right to sell timber or receive benefits from forest exploitation.
		Mount Cameroon area opened to massive in-migration of farmers attracted by the fertile volcanic soils on lower slopes. Boa Plain Forests not significantly affected due to inaccessibility.
1974 and 1976	Land Ordinances effectively put all lands under State control by classifying them as 'national lands'.	In practice, customary land sales by indigenes to immigrants remain the norm till today and are tacitly recognised by the authorities without recourse to the Land Ordinances.
1973 1981	Forestry Ordinances of 1973 and 1981 place ownership of all non-planted trees with the State, a clause repeated in new law of 1994. Naturally regenerating forest on fallow land returns to national domain (variously termed "communal" or "national" forest), as does land.	All community rights to land and forest, under both customary law and Native Lands Ordinances repealed. Land can be registered as "private" only after much perseverance, and investment to obtain "certificate of title". Even today, only 3% of Cameroon territory registered as private.
1974 on- wards	Changes to the Laws governing Councils, rescinding all functions of the NAs, including ownership and control over natural resources and technical responsibility for forest management and exploitation.	NAs no longer own and control natural resources. Bambuko-Balundu Native Authority Reserve becomes a State-owned "production reserve" called Mokoko River Forest Reserve (MRFR).
1970s- 1980s	Failure by the State to adequately inform communities or the local administration of the detailed implications of all the changes in the Land and Forest Ordinances and Administrative Laws.	Confusion (still persisting) within communities and the public administration over the ownership, customary rights of communities, management objectives, procedures and responsibilities within most legal categories of Forest.
1987 till 1991	Four commercial timber companies are licensed under small scale commercial timber exploitation permits (<i>Vente de Coupe</i>) to log around, but not inside MRFR.	Timber also harvested far within the MRFR by all the adjacent licensees, with much wastage and abandonment of timber, and failed promises for community benefits.
1988	UK-funded Conservation Project established to renovate Limbe Botanic Garden and conduct biodiversity surveys in forest surrounding Mount Cameroon with a view to their long term management and protection of biodiversity.	No immediate impact on Boa Plain and MRFR, which were not the focus of activities until the early 1990s.



Table 1 (continued)

Date	Event	Impact
1991	CDC obtains approval for exploitation under the guise of "Salvage Logging" (recuperation) in preparation for proposed plantation expansion of up to 10,000 ha.	In practice, the plantation expansion only covers 1,340 ha of the many thousands of hectares that were salvage logged – going beyond the limits of the recuperation licence into community land.
1992	Ministry of Environment & Forests (MINEF) created in the run up to UNCED in Rio de Janeiro, bringing together for the first time the Forestry Department (formerly under Ministry of Agriculture) and the Wildlife Department (formerly under the Ministry of Tourism).	Possible for one Ministry to begin integrated management of protected areas and forest resources, but being new, it was very weak and open to the abuses of political pressures.
1993	The Conservation Project – now MCP – attempts to regulate a timber licence in Bomana, a village just to the south of Onge-Mokoko forest.	Bomana and other Bomboko villages had initiated an "indigenous development strategy" involving sale of forested land to prominent elites and political figures in return for other development favours.
	While any community benefits would have been minor (the pre- 1994 Law made no effective provision for such benefits), and would not have been equitably shared within the community, MCP at the time had little to offer as an alternative.	Factions within Bomana (led by those who were due to benefit personally from exploitation) widely criticised MCP as deliberately attempting to stop the community from benefiting from the use and/or sale of their traditional forest, and retaliated by blocking all attempts by MCP to return to the area, an embargo that still stands today.
1993- 1994	MCP initiates botanical surveys in the Mokoko and Onge Forests.	South of the MRFR access refused by Bomboko Clan, fearing that surveys would lead to protection and further alienation of their forests.
1994 – 1996	New Forestry Policy, Law and Decrees of Application. Introduction of a new "Community Forest" category, a management agreement between legally identifiable community body(s) with the Government giving the community full ownership of all forest products exploited according to a government-approved management plan.	An alternative, but administratively complex, means of securing land becomes available to the Communities.
1995	MCP activities begin in earnest in the Onge-Mokoko Region, with the objective of developing a management plan for the MRFR with agreement of the local community.	Fears from the community that MCP wants to create a National Park in the MRFR, excluding communities from the use of the reserve.

1996	Community attempt to negotiate with loggers for the exploitation of Communal (unallocated) forest in return for promised development, in the form of access roads and bridges, and personal benefits for key individuals.	Communities fear that the intervention of MCP was an attempt to stop them from benefiting from timber exploitation.
1997	Project initiates a participatory Environmental Impact Assessment to assess logging proposal by outsider.	Community rejects logging proposal in favour of community-based management and exploitation.
1997	Government announces intention to privatise CDC as part of Structural Adjustment Programme.	Triggers fears of new wave of industrial plantation expansion in the Mount Cameroon region.
1998	MCP initiates and finances Environmental Impact Assessment of CDC Expansion.	Alerts Government to environmental and social risks of privatisation and large-scale plantation expansion on Boa Plain.
1999	Village-based institutions developed for Wildlife Management, Timber Exploitation and Management, and Land Use Planning.	Entire Community begins to see forest conservation as an important issue as well as a means to legal recognition and control over forest (and land) resources.
2000	Capacity building and regionalisation of groups. Broad-based community institutions evolving towards unified organisational structure for broader forest management, rather than individual resource management.	Different groups taking self-initiated actions to extend their area and mandate of 'jurisdiction' and gaining support and endorsement from Traditional Institutions, MINEF, Local Administration, and neighbouring communities for their plans and activities.
2001	MCP announces its intention to stop "Project" activities by 2002, and develops an "exit strategy". Proposals for a Trust Fund to maintain conservation efforts.	All partners stimulated to think about the sustainability of their respective institutions, and the additional capacity building and support they need to survive in the long term.

Source: adapted from Sharpe (1998a & b); Watts and Akogo (1994); Egbe (1998); and Acworth et al. (1997)

ENVIRONMENTAL IMPACT ASSESSMENT AS A PARTICIPATORY DECISION-MAKING TOOL

Cameroon's 1996 Environmental Management Law² specifies that where a development project is likely to perturb or destroy the environment, a Prior Environmental Impact Assessment (EIA) has to be carried out by the applicant. The EIA process was seen as a valid mechanism to engage MINEF, the local community and exploiter in a participatory assessment of the implications of any licence application.

An EIA was conducted by a multidisciplinary team of local staff. It became evident that the community's immediate interest was to offer their 'forest capital' to the logging company in exchange for village development and rural infrastructure, particularly roads, rather than to clear new farmland.

The EIA findings reflected a range of socioeconomic and environmental concerns already harboured or readily understood by the community with regard to large-scale logging:

- immediate reductions in the supplies of timber and non-timber forest products, and wildlife, each of which provide important revenue for many people;
- possible watershed degradation already a recognised problem as a result of villagelevel farming activities upstream – with logging and forest clearance threatening further reduction in availability and quality of water;
- risk of loss of important biodiversity and

- habitats, soil degradation and local climate change;
- future expansion of CDC Plantations. While the community did not really want this expansion to take place on the scale envisaged, they felt powerless to stop it.

The EIA noted that the timber company had made no written commitments to fulfil its promises to the community.

While the new Forestry Law makes allowance for a number of financial benefits to communities from timber exploitation by third parties, the legal texts of application were still incomplete and unclear as to how and to whom these would be paid, and at what level. In practice few communities in Cameroon have been satisfied with the benefits offered. The Boa Plain community was evidently not aware of the limits of their legal rights, nor how to negotiate and guarantee them. The application for salvage logging was evidently unjustified on the grounds presented, as the intention was to carry out medium-scale commercial exploitation with minimal restrictions (which would require an exploitation licence), not to undertake residual salvage operations. Given this fact, it would be reasonable to assume that MINEF would have rejected the application3, had the exploiter persisted. The EIA expressed its doubts. However it was not reasonable, nor would it have been politically acceptable for the EIA to conclude that there should be no exploitation at all. A range of options was outlined.

A series of feedback meetings to present the EIA findings to the community sparked much debate as to the relative merits of offering their forest to a large scale exploiter, compared with exploiting and/or managing the forest themselves as a Community Forest, which was the recommended option. Detailed estimates (Acworth, 1997) showed the timber company could not have made a significant profit without exceeding the volume of timber requested, as well as by evading full taxes on timber exploited and/ or failing in their commitments to the community. At the end of the process the community themselves lost interest in the timber company and vice-versa, as both realised that one side or other would have to lose.

The EIA process represented a turning point in the community's thinking. The community had begun to understand the potential to manage the forest for themselves, exploiting timber as and when necessary to support their development needs, though many members still remained sceptical.

EXCHANGE VISITS TO COMMUNITY FORESTRY INITIATIVES IN NIGERIA

In 1997, MCP proposed a visit by community representatives from each of the eight villages in the Boa Plain area to some Community Forestry Projects in the neighbouring Cross River State, Nigeria, to see for themselves what they could learn from other communities' experiences.

The Nigerian communities visited had either negotiated greater benefits from large-scale logging by outside companies than had been previously achieved, or were instead striving to establish small-scale, community-based timber production. An example of the latter was the Ekuri Initiative (Dunn & Otu, 1996).

While the Boa Plain community accepted that the MCP was genuinely trying to alert them to the risks of selling forest to outside exploiters, and to offer them better alternatives, there was still a strong tendency by the end of the visit to favour external logging by an external contractor. The feeling was that the investment cost and risk should be borne by a contractor, but with improved benefits to the community. Community members were concerned at the obstacles they would face if they attempted to go it alone. These included, for example:

- difficulties for the community in obtaining 'recognition' as an officially qualified forest exploiter, and in obtaining an exploitation permit from the government;
- lack of initial start-up capital to purchase logging equipment;
- lack of sufficient and / or "willing" labour to carry out exploitation;
- lack of training and skills to carry out forest inventory, or operate and maintain equipment;
- concern about the difficulty to extract timber without heavy machinery;
- history of disputes between villages / clans over the control of shared (and forest) resources and distribution of benefits,

² Law No 96/12 of 5th August 1996. Articles 17-20

³ In practice, this has become a regularly used legal loophole that allows timber companies to operate with very few restrictions, and low taxes (Brown, 1999). Salvage logging permits have been inappropriately issued by MINEF in a wide range of cases, but were (temporarily) suspended by the Minister in 1998.

resulting in lack of confidence in any broad-based community projects.

However, there was also a strong interest shown in the initial progress made by the Ekuri Initiative towards community-based forest exploitation.

AWAY FROM TIMBER TO BROADER LAND USE AND FOREST MANAGEMENT

Once the immediate threat of major forest exploitation had been diverted and the community had gained confidence in MCP as a source of information and support, rather than a threat to their own initiatives, they became willing to discuss a wide range of issues that hitherto had been seen as 'nogo' topics. These included: sales of forested land to immigrant settler farmers; land sales to wealthy outside investors for palm plantations; the issue of hunting and hunting controls⁴; and harvesting of artisanal timber, fuelwood and NTFPs.

The prospect of community-based timber exploitation has not been at the forefront of community thinking in the period since the 1997 visit, and is only now beginning to reemerge. This is a result of many factors:

 nobody was prepared to launch into joint timber exploitation initiatives until the problems of inter-village rivalry and conflict had been solved. This has only recently started to happen, as a result of

- collaboration on less contentious and financially charged issues, such as wildlife management;
- villagers have taken their time and looked at a range of alternatives for timber exploitation, allowing appropriate community coalitions and initiatives to evolve;
- other issues were regarded as of higher priority, particularly the threat of largescale clearance of community lands resulting from the forthcoming privatisation of CDC.

PRIVATISATION OF THE CAMEROON DEVELOPMENT CORPORATION (CDC)

The EIA of the logging proposal highlighted a key issue in the development of the region: the fact that, to date, the CDC had planted less than 24% of their 17,000 ha leasehold on Boa Plain. The process to privatise CDC was launched in 1997 as a condition of the International Monetary Fund's Structural Adjustment Programme. This threatens to have a far greater impact on the local community's livelihoods than the issue of timber exploitation. Plantation expansion of up to 5,000 ha and an additional 3,900 ha smallholder scheme on Boa Plain are on the cards. The Boa Plain community had mixed feelings:

- on the one hand, the developments would offer them some benefits, particularly the rural infrastructure, and the market which would be created for community-grown palm-oil;
- on the other, they recognised the serious negative impact that would result from large-scale clearance of valuable communal forest, as well as from the loss of some of their own farmlands in areas where they have

encroached onto dormant CDC leasehold land; they were also concerned about the risk of being over-run with in-migrating plantation workers, whom they could not 'control' in the same way as people settling at their own invitation.

Plantation expansion as a likely outcome of CDC privatisation was the subject of another, less participatory, environmental impact assessment (ERM, 1997). It was clear that if the plans to limit or mitigate the environmental impacts of large scale expansion were not satisfactorily established, then the knock-on effect on the Reserve, its surrounding forest, and the livelihoods of the Boa Plain community themselves would be very substantial.

The EIA of CDC privatisation recommended that consultation be initiated to develop a long-term strategy for land use in the area, which should include surrender of up to 10,000 ha of CDC leasehold land to villages to permit natural expansion, to provide opportunities for plantation outgrowers and to allow for forest maintenance both for watershed protection and community use. Again the EIA findings were presented back to the community, who immediately recognised that even with these assurances, the privatisation was by far the greatest threat to their future, and that they needed to unite as never before.

Sandwiched between a government-owned Forest Reserve on one side, and the huge CDC Leasehold on the other, the community realised the need to engage with the Government, and make a coherent case for the surrender of much of the CDC land back to

them. They also wished to request the degazetting of some Forest Reserve land already degraded by farm encroachment.

POWER FROM PARTICIPATORY LAND USE MAPPING

A key issue for the Boa Plain communities and MCP alike was to better understand and define resource use, land and resource tenure, and in particular the geographical extent and legal validity of rights to resource use, none of which is captured on any existing official maps. The realisation of the potential impacts of CDC privatisation coincided with an offer of outside assistance⁵ to test a participatory mapping methodology.

Boa Plain was an obvious site to pilot the methodology, which aims to compile local knowledge on forest and land use in a region, and then transfer it to a geographically accurate, scaled map, that can be used to illustrate land use issues. MCP gave communities technical assistance to begin mapping their land use. The maps produced are of high technical quality (at scale, drawn with the assistance of professional cartographers from the National Cartographic Institute, and MINEF's Cartographic Unit, CETELCAF) but represent the local groups' view of important resources and the conflicts over their use.

⁴ MCP's approach to developing sustainable wildlife management systems is the subject of a separate paper, No.25e, in this mailing (Olsen *et al*).

⁵ Innovative Resource Management, with funds from CARPE, Central African Regional Programme for the Environment, funded by USAID.

Participatory maps produced to this quality can increase a community's sense of ownership and control of land and natural resources, providing formal documentation and giving political weight to a community's perception of ownership and rights. They can be powerful tools in lobbying for their own share of unoccupied or unclaimed portions of the landscape, where competing demands for forest conservation and plantation development are compromising their own development aspirations (Chapin & Threlkeld, 1999).

HARNESSING THE POWER – FROM MAPPING TO PARTICIPATORY LAND USE PLANNING

The business of land management has now become the subject of a concerted community campaign, rather than the incomprehensible and insurmountable summation of one thousand land disputes between individual farmers, villages and clans. The community is now working together to develop a land use plan, demarcating and mapping zones for the development of a community forest, timber exploitation, future community farmland expansion, mangrove forest management and even potential CDC expansion zones.

The process by which communities describe and define areas of land use visually on paper has allowed them to be more objective and holistic about issues that are important to their livelihoods. The fact that their entire range of resources is bounded by the edges of a piece of paper and fits on a table top, and can be looked at by everybody at the same time, ensures that discussions of the present and future use of individual areas cannot be

dealt with in isolation.

Change in one zone is seen to have a definable influence on the whole. For example, one cannot have more farmland without forfeiting forest; timber exploitation cannot take place without having an impact on hunting grounds; the CDC cannot expand its plantations without the community losing some of its subsistence areas. The activities of 'our neighbours' have an impact on 'us'.

The process is preparing the community to negotiate effectively with CDC and government for a change in land tenure in the CDC leasehold before its imminent privatisation. The Boa Plain Community has sent a detailed request, with a map laying out their proposed land use, to the highest levels in Government.

The land-use planning discussions led to an exploration of how each identified future land-use zone could be better managed, using the '4Rs method' (Dubois, 1998). This allows participants to review current and explore future Rights of access and use, Responsibilities for management (allowing and controlling access), the Revenues that come from both of the above and the Relationships between the various actors.

A vision of a wholly new relationship between the partners has evolved, and this forms the basis for planning action to begin negotiating the desired changes (see also Percy *et al*, Paper 25h of this mailing).

LAND USE AND FOREST
MANAGEMENT OPTIONS: HOW
MIGHT COMMUNITIES BENEFIT?

Both the Boa Plain community and the government are now faced with a series of choices:

- the community must develop a convincing argument to government to release some or all of CDC's leasehold for community use, or risk losing it forever. They know that the State will not release CDC land to a community, simply so that it can sell, or rent it to migrants, so a new strategy is called for;
- the Government must choose between maintaining forests of socio-economic and conservation importance, or offering large areas of more or less forested land to international plantation developers in return for foreign exchange and agricultural development;
- in the few areas of forest that are not under CDC Leasehold, the Community must choose between embarking on the lengthy process to obtain a 'Community Forest', or accept the more limited but immediate benefits from embarking on some form of exploitation of the 'Communal Forest';
- whether they succeed in obtaining Community Forests or not, the Community must decide between exploiting the forest themselves, offering their forest resources to a third party, or not logging at all, a possibility that may be selected in exchange for benefits from conservation initiatives that are prepared to pay for greater levels of forest protection.

COMMUNITY FOREST APPLICATIONS: AN ALTERNATIVE MEANS TO SECURING LAND?

Applying for a community forest represents

an opportunity for the people of the Boa Plain to gain a greater share of the financial benefits from sustainable forest exploitation. It may also be a much more satisfactory long-term strategy for the community to secure access and control over land than either selling or renting it to immigrants, particularly where the land is part of the community's fragile forested water catchment.

Where the land is presently under CDC ownership, Community Forest status is a good option, possibly the only one that will gain sympathy with the Government (which has frequently released CDC land requested for community development only to see it immediately sold to outsiders).

Donor assistance in this domain is the obvious opportunity for the international community to influence the economics of land use.

CAPACITY BUILDING AND EMERGING INSTITUTIONS

In the early stages, project staff spent much time in the villages in order to establish rapport, dispel the many suspicions surrounding international conservation projects and create mutually beneficial partnerships. Staff also learned the historical context of the area's development, cultural norms and traditional values of its people, and gathered perceptions vis-a-vis Mokoko River Forest Reserve and 'village traditional forest'.

Issues were identified and addressed through a series of meetings, using a range of adapted participatory methodologies.

Box 2 Some emerging local assocations

Mokoko Timber & NTFP Management Association (MOTIMA) Based on the visit to Nigeria and the desire to meet their long-awaited community development aspirations (roads, schools, etc.), ten communities in the Onge-Mokoko region agreed in 1998 to jointly manage timber and NTFPs. MOTIMA is made up of timber exploiters, NTFP collectors, and traditional authorities. They are currently preparing a Memorandum of Understanding with MINEF that fits with the provisions of the Forestry Law.

Mokoko Wildlife Management Association (MWMA) MWMA is made up of hunters, trappers, bushmeat soup sellers and traditional institutions from 11 villages. It aims to raise awareness of sustainable wildlife management, increase animal populations, manage hunting, control outside hunters and increase members' incomes. The Association has received legal recognition from MINEF and receives support from village traditional councils (sanctioning defaulters of hunting rules and regulations). It has also developed a complex and sophisticated community-based wildlife management system (Olsen et al., see Paper 25e) and is gradually taking an interest in wider forest management initiatives.

To ensure the sustainability of community management of forest resources, skills in forest management are being transferred from project staff to organised management groups⁶, community representatives and relevant government institutions. These are achieving a greater level of organisation (see Box 2). Stakeholders take self-initiated actions and are adopting full control of the decision-making process thanks to training in communication skills, group dynamics, leadership skills and conflict management. As a result, stakeholders and user groups are now more stable, and able to discuss forest-related issues openly with MINEF staff.

LESSONS LEARNED AND NEXT STEPS FOR SUSTAINABLE FOREST MANAGEMENT BY BOA PLAIN COMMUNITIES.

Looking at Forest Management within the context of a broader Land Use Strategy

In the Onge Mokoko situation, sustainable forest management initiatives that ensure the long-term management of the MRFR could not have been taken in isolation of tackling wider land use problems. Apart from hunting, and collection of a few NTFPs, community use of the forest is presently concentrated in the areas nearest the villages, and at the farm-forest interface (see also Brocklesby & Ambrose, 1997). In most cases, this is far from the Forest Reserve and therefore not subject to plans for legal

protection or management nor likely to be included in any application for Community Forests.

Major expansion of industrial plantations by CDC on the Boa Plain and unregulated commercial logging outside the Forest Reserve are by far the greatest threats to the long-term conservation of the region. The immediate impact of forest clearance, and the knock-on effect of increasing pressure on the remaining forest, far outweigh any potential conservation gains resulting from implementing sustainable resource use in the Forest Reserve alone, as was the Project's initial plan.

Communities have been most willing to participate in sustainable forest management initiatives where they have greatest immediate interest. It was therefore logical to explore first the natural resource management issues closest to home, in preparation for management of larger or more remote forest areas, once the management capacity, skills and technology have been developed and demonstrated at community level.

Resolving land tenure issues by providing greater security of tenure to the adjacent community through appropriate legal classification of *forest*, rather than through the traditional mechanism of securing tenure over the *land*, by 'putting it to use', may have sufficient advantages to encourage the local community to adopt forest conservation rather than conversion to agriculture.

The unrestricted sale of land by communities to outsiders represents the single greatest

threat to the forests in the Mount Cameroon region. This is already happening in the adjacent Bomboko Corridor, to the south of MRFR, where the powers of intervention of the already weak State have been further undermined by the complicity of prominent government officials, with local village chiefs in large-scale and largely illegal timber and land sales.

Evolving notions of 'Community' for forest co-management

Given the historical failure of colonial attempts to devolve forest management to 'native authorities', due to their artificial nature and non-representativeness, it may appear naïve to launch again towards the mirage of community 'self-rule'. This is especially so for conservation initiatives, where incentives to both communities and the state are likely to be low. However, an appropriate concept of 'community' for forest management purposes does seem to be gradually emerging on Boa Plain, in spite of the complex and fragmentary sociocultural setting.

The emerging structure has defined some new resource management 'associations' – see Box 2 – which are democratically elected, but do not have the powers to decide all that will be done in their respective arenas of competence. These groups have themselves recognised the need to involve others to enhance their own legitimacy and offer them official support; these include a range of traditional societies (in the local area these include *Ekpe*, *Mosembe* and *Mallé*); more modern community-level administrative bodies (the multi-ethnic Village Councils, the new interclan Chief's Association, etc.); and the various

⁶ Details of the process of formation of management groups for this and other MCP areas are documented elsewhere (Brocklesby & Ambrose-Oji, 1997; Etuge & Brocklesby, 1998; Percy & Tekwe, 2001).

organs of the State. Roles and responsibilities are gradually being defined, both between these different community-level institutions, and with the range of government apparatus, at various different levels.

While undoubtedly a slow process, the 'bottom up' approach to community-based natural resource management has reinforced the level of local support now offered to sustainable forest management initiatives, in all existing categories of forest land in the Boa Plain: Communal (National) Forest, State Forest Reserve, and the proposed Community Forests.

Feedback from the local community also bears witness to the fact that developments undertaken for forest conservation can also advance the wider processes of governance at the local level (Brown, 1999). Lessons learned by the community in the forest are already being applied in other spheres.

In conclusion, we envisage that the most effective solution for the sustainable management of forest areas, no matter what their legal status, is likely to involve a contractual partnership between state and community. It helps, though, to have an umpire such as the MCP that can bring the parties together, offer them new information and ideas, and remind them of their agreements and obligations.

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ACRONYMS

CDC	Cameroon Development
CDC	
	Corporation
EIA	Environmental Impact
	Assessment
MCP	Mount Cameroon Project
MINEF	Ministry of Environment and
	Forests
MRFR	Mokoko River Forest
	Reserve
NTFP	Non-timber forest
	product
PBCS	Participatory Biodiversity
	Conservation Strategy

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