The Implications of Participatory Mapping: The CARPE Experience in Cameroon

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Background

The Central Africa Regional Program for the Environment (CARPE/IR1) through its Local Forest Resource Management Systems (LFRMS) component[1] utilized participatory mapping (PM) as a tool to accomplish several objectives:

- To ascertain and map community level perceptions of how timber and non-timber forest resources are currently being used and/or systematically managed across landscapes in three relatively large areas in Cameroon – Mt. Cameroon, Djoum, the Tikar Plain
- To more systematically enhance communities' understandings of resource management practices in these areas, and thereby create opportunities for improved resource management planning at the community level
- To enable adjacent communities to interact collectively on a protracted basis, setting the stage for communities to potentially mobilize collectively around issues where reform in forest policy or management practices may be needed
- To create a model for forest resources management that when integrated with other activities will prove socially sustainable in landscapes outside protected areas.[2]

Results

Results from the mapping exercises undertaken in the Mokoko area of Mount Cameroon, Djoum and the Tikar Plain have been very positive. The first two of the three objectives noted above have been accomplished within the past year. We in CARPE/IR1 hypothesize that the third objective of collective mobilization will be very important over time if forest conservation is to be enhanced in the Congo Basin. We hope to be working towards achieving this objective with community level partners over the coming few years.

Short-term Prospectus

Despite the positive results, it is not clear that communities will take the lead unilaterally and mobilize themselves to take conservation action. Some form of outside facilitation will be needed over the short-term, as broadly speaking in Cameroon, organizational

[1] World Learning manages this component, in collaboration with Innovative Resources Management. The latter will assume responsibility for LFRMS activities in CARPE after December 1999.

[2] For CARPE/IR1 these activities involve understanding resource management systems, identifying potentially feasible natural product development opportunities, technical assistance in identifying development options and in negotiating and implementing various resource use agreements. (See Graphic 1 at the end of this paper).

capacity deficits and governance issues constrain communities' desire and ability to act proactively in forest management issues. This is due to the fact that the state owns most of the vast estate of forest resources in Cameroon. Recent changes in legislation offer communities the theoretical opportunity to apply for management/use rights over a category of forests known as "community forests", though this has not been capitalized upon as the procedures are little understood and perceived as cumbersome at the community level.

General Implications for Forest Management in Cameroon and the Congo Basin

The implications for forest management in Cameroon and the Congo Basin through broader use of participatory mapping are, technically speaking, very promising. During a September meeting in Yaoundé organized by CARPE/IR1, participating community representatives from Mt. Cameroon, Djoum and Tikar attending the meeting resoundingly supported results of the mapping and the implications of the mapping for sustainable development in their communities. This led Cameroonian government, Non-governmental Organization, and donor participants to clarify their interest in seeing that PM be extended to other areas. Whether it turns out that governments elsewhere strongly support PM is less clear, as many are recognizing that the tool is extremely empowering, indicated by community awareness of issues and contradictions in resource tenure and management on the one hand, and initial community institutional mobilization on the other.

Specific Implications of Participatory Mapping as a Conservation Tool

- **PM as an alternative to current methods that are insufficient to promote sustainable resources management**

There currently is no "toolkit" of methods and tools that have been proven to promote sustainable forest resources management. PM offers the opportunity to introduce an effective tool broadly. We feel that PM could help revolutionize how natural resources/forest resources management is undertaken in developing countries.

For example, the participatory mapping exercise in Cameroon demonstrated to Innovative Resources Management and its CARPE partners that the standard participatory tool used in all phases of development and conservation programming -- participatory rural appraisal -- may be pre-empted by PM for ***certain types*** of participatory exercises involving natural resources management.

Tools used for biodiversity conservation tend to be oriented more for use by protected area managers, versus local populations, thereby limiting the relevance of these tools to the latter. This is to the detriment of conservation in and around protected areas as local stakeholders tend to get left out of the planning and implementation of biodiversity conservation activities save in mainly a "consultative" way.[3]

[3] PM is revolutionary because it allows for empowerment to occur as development rhetoric in the late 20th century would have it. Communities do own the mapping process (and the maps), albeit I believe in

- **Landscape/ecoregion based planning**

Eco-region based planning on landscape levels has become, over the past several years, a major programmatic tool for conservation organizations. That said, it remains highly theoretical, as the integration of social, political, economic along with ecological and biological considerations is still at an early experimental stage. Furthermore, protected areas/ecoregion-based approaches *extend* the locus of conservation to include landscapes programming beyond protected areas, further into areas where populations utilize natural resources.

The implications of the participatory mapping exercises undertaken in Cameroon are significant for the future evolution of eco-region based planning. We believe that PM represents a primary tool, *par excellence,* for identifying the community perspective in natural resources management, for eliciting community level buy in, for setting the stage for expanded resource use planning exercises in areas adjacent to, or far beyond the confines of protected areas. Importantly from a conservation perspective, PM offers the opportunity to *operationalize* eco-region based planning at a broad enough scale where impacts on biodiversity conservation will be felt. This addresses the concern that many in the conservation community have felt about the limitations of community level interventions through community based natural resource management (CBNRM) approaches.

- **Coalition building**

CARPE/IR1 learned that PM is effective at creating a "space" for bringing different stakeholder groups together to appreciate local resource management realities. For this reason, PM can serve as the basis for inter-community level coalition building. This will be a fundamental component for any sustainable natural resource use planning and management.

- **Land use planning and zoning**

In the absence of PM, it is hard to see how any landscape level land use planning exercises can take place. Existing maps, for example, reflect little of the perspective or concerns of communities. Participatory maps, on the other hand, can serve as the basis for communities to negotiate land use, tenure reform, and any changes to existing zoning. The Mokoko communities in Mt. Cameroon are a prime example. They have publicly stated that they plan to request changes to existing zoning within the government managed Mokoko Forest Reserve, along with privately held lands of the Cameroon Development Corporation, based on their effective defacto use of these lands for many

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collaboration with multiple entities. This is in stark contrast to "consultation", which is the term that donor agencies use for discussions with communities concerning "projects" which more often that not are designed by outsiders to meet the agenda of outsiders, not necessarily in complementarity with the needs of local peoples.

years. The PM exercise clarified the disparity between community access to forest and agricultural resources and their needs to meet community subsistence demands.

Broader Implications Beyond Cameroon

PM has proven itself effective in Central and South America. The initial experience in Africa with PM is to date very positive.

There is no reason to believe that PM cannot become a tool recognized with the same degree of respect as participatory rural appraisal (PRA) on a global level, as PM has no limitations to where it can be used. The only prerequisites appear to be a willingness to engage the methodology, accompanied with the capacity to see the exercise through. If present, PM can be mastered by villagers in any situation, so long as a minimum of capable technical assistance providers are available throughout the course of the exercise. These need not be expatriates necessarily, save that it is crucial that the first training sessions in the method get off to a good start. For this, capable trainers, whatever the nationality, are a prerequisite.

I would go a step further however, and suggest that PM will, in the context of natural resources management and conservation, prove to be more relevant than PRA. This is because PM is more effective at:

- concretizing resource management issues across landscapes than PRA
- mobilizing "deep" community participation across a longer time-span as the PM exercise requires months of concentrated effort
- combining technologies that are accessible to both communities and "high tech" technical assistance providers such that PM itself becomes a kind of "appropriate technology"
- offering a product that a variety of stakeholders can immediately see adds necessary value to the development and conservation process.

In summary, based on our Cameroon experience I believe that PM will increasingly prove to be a necessary tool in both development and conservation work. That said, I do not believe that it will be sufficient in and of itself to promote sustainable development, as a range of ancillary activities will need to accompany PM to capitalize on its clear-cut potential.

Rather than list them out, the following graphic demonstrates how we at Innovative Resources Management envision using PM further not only in the Congo Basin, but eventually in our work combating desertification in drylands ecosystems as well.