Watching the Tree Grow, Participatory Forest Management Takes Root in Africa

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Abstract

This paper presents an overview of the International Participatory Forest Management (PFM) Conference held in March 2007 in Addis Ababa, Ethiopia. The conference was designed around four key themes; PFM and Sustainable Livelihoods; PFM Biodiversity and Climate Change; PFM Equity and Local Governance; PFM Policies and Institutions. Technical papers were presented from across Africa under each theme, highlighting critical issues, sharing learning and identifying challenges in the area of PFM over the last 10 to 15 years of introduction and implementation. The conference concluded with group work and recommendations for priority action and recommended ways forward.

The authors then look in further detail at what they interpret the conference outputs, results and conclusions to really mean. The interpretation is made in terms of the authors stated view that PFM is now becoming the most important sub sector within forestry in Africa. Using the comparative experience of different African countries, the focus on livelihoods, Non-Timber Forest Products (NTFPs) and natural products, is presented as evidence to PFM’s rural development role and significance. The importance of PFM to Biodiversity Conservation is cross referenced between countries and agreed. The potential for linking PFM with Clean Development Mechanisms (CDM) is discussed. The relationship between PFM and local governance is argued as a driver of much wider development. African Forestry Policies and Institutions are also compared and contrasted, with reference to the need for significant policy revision and again is relevance to wider development progress.

The paper concludes by reflecting that in contrast to Asia, the African PFM journey has been relatively short. The authors suggest that opportunities for sharing experience between Africa and Asia are something to be re-investigated. Formerly distance and cost often proved a barrier, but in this information age new lines of communications are increasingly possible.

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1. Introduction

Participatory Forest Management (PFM) is relatively young in Africa, having started in the past 10 to 15 years; its implementation level varies among countries. However, within this short period of time, it has been realised that PFM has a very important role in forest conservation and rural livelihoods. In order to understand the real meaning of this role, to discuss the achievements and challenges of the system in Africa as well as to share the experiences of the Asian pioneers, an international conference on *PFM, Biodiversity and Livelihoods in Africa* was organized by the Ethiopian Government in close collaboration with the FARM-Africa and SOS Sahel Ethiopia Participatory Forest Management Programme (PFMP) and other governmental and non-governmental organisations in March 2007.

Presentations and discussions during the conference indicated that the forests and woodlands of Africa are estimated to occupy about 635 million ha, which is 22% of the total land area and 16% of the global forest (FARM-Africa and SOS Sahel, 2007). However, most of the forests are not managed in a way that can sustainably meet the demands of the growing population and the gap between demand and supply is increasing. Given the increased deforestation rate - about 1% for the Eastern African region - it is not possible for the forest authorities to reverse the situation alone (FARM-Africa and SOS Sahel, 2007).

From 2000 to 2005, the continent saw a net loss of 4 million ha of forest, representing 55% of the global forest loss (FAO, 2007). The inability of conventional forest management systems to address deforestation and forest degradation as a result of various anthropogenic interventions (expansion of agricultural land, increased investments that require clearing of forests, population increase, and resettlement activities etc.) has triggered the need to look for a sustainable forest management system. The rate of forest degradation, coupled with the dependency but limited rights and responsibilities of local communities on the forests, required a more practical policy framework. These issues have resulted in the initiation of a system where communities can take a lead role in the management and conservation of forests (PFM) in many African countries.

In Africa, several countries are adopting PFM approaches to reduce deforestation and by 2002 over 30 countries in Africa were involved in some form of collaborative forest
management (Alden-Wiley, 2002); and today, more than 5000 communities are involved in the management of about 5 million ha of forests (FARM-Africa and SOS Sahel, 2007). In most countries the need to work with local communities is reflected in the policies and legal reforms but the degree varies from country to country, with Tanzania and The Gambia being among the better examples (FARM-Africa and SOS Sahel, 2007). What has started as a tool to reduce deforestation has turned out to also contribute to livelihoods, local governance and biodiversity conservation.

To address the progresses, impacts and challenges thus far, the conference in Ethiopia in 2007 was designed to explore four key themes: PFM and Sustainable Livelihoods; PFM, Biodiversity and Climate Change; PFM, Equity and Local Governance; PFM, Policies and Institutions. This paper analyses the outputs of the conference based on the published proceedings and demonstrates where PFM in Africa is today in relation to the key themes. Further we look at the different means to strengthen the relationships and communication among African and Asian countries to exploit the experiences of both continents and arrive at well-developed mechanisms that can be translated into location-specific strategies.

2. PFM in Africa

2.1. PFM and Sustainable Livelihoods

Forests and rural livelihoods are intrinsically connected. Forest values include various products (both wood and non wood) and environmental services and may also be seen as potential for agriculture land. Experiences in African countries have shown that if PFM is to become successful, then livelihood options based on the interest of communities and geared towards earning some economic benefits need to be taken into account (Wood, 2007).

When supporting livelihood options to complement PFM, proper care needs to be taken in identifying those livelihoods that will increase the value of the forests in the eyes of the communities. According to Zelalem et al, 2007, experience from Ethiopia shows that some projects focus on non-forest based livelihoods (animal fattening, poultry) in the belief that such livelihood options will take the pressure off forests. Further analysis, however, showed that such activities do not significantly reduce the pressure on forests and were chosen mainly because both development workers and communities are more familiar with them rather than forest-based options. This approach missed the opportunity to link forest-based
livelihood options to increased forest value, including the management of supply and demand of forest products.

Forest programmes that use forest-based livelihood options usually focus on profits from a single resource. According to Wood, 2007, this method does not appear to be able to out-compete deforestation for agricultural production as the economic gain is lower. Options based on Non-Timber Forest Products (NTFPs) are found to be not as promising as expected since potentials, of these products, vary from place to place. Therefore, the identification of multiple sources of income is needed if PFM is to be made attractive to the communities as well as to the government bodies (e.g. payment of environmental services, ecotourism, biodiversity conservation etc).

Others suggest that PFM should be implemented in intact forests as well as in semi-converted forest areas. Again, experience from Ethiopia shows that combining both situations has an impact in conserving natural forest as well as income generation; thus enabling a combined outcome of contributing to conservation and poverty alleviation (Bognetteau, et al, 2007).

Focusing on production of NTFPs alone will face bottlenecks such as market fluctuations and access rights and hence community groups should be involved in the whole process of production, processing and marketing if sustainable livelihood options are to be developed. In such cases, strong institutions, such as Community Based Organisations (CBOs) and proper policy frameworks are essential especially when innovative trading arrangements, such as forest certification and fair trade are to be incorporated (Wood, 2007).

With all the challenges faced in ensuring PFM results in better livelihood income, most results thus far are positive. However, the bigger challenge of ensuring that community groups can sustain the introduced livelihood and hence gain income from forest resources while conserving forest needs for a more concerted effort. Communities need a more business-oriented direction to develop process-to-market system alongside with management capacity development.

Conflicts are inevitable; some community groups will be favour of PFM (such as beekeepers, plant collectors) and some will be against PFM (agricultural settlers, investors,
loggers) (Wood, 2007). Therefore, an all-inclusive method should be designed by involving all in the discussion process if PFM is to be sustainable. One of the challenges faced by PFM practitioners is the involvement of community members living farther away from the forests as they tend to lose some rights they enjoyed before the introduction of PFM. Different programmes used various methods to decide how much utilization with regards to forest products is possible in forest blocks. Such methods include: estimating carrying capacity, using customary rights, having communities develop their own use rights based on distance from the forest according to whether they were primary or secondary users or stakeholders. It is not possible to make everyone happy in this process and there will be some losers and winners but compromise needs to be based on the understanding of the different stakeholders involved in the system.

Even though the role of PFM in rural development and improved livelihood is demonstrated by various projects, the benefits to villagers are usually limited and currently the contribution of forest products to household livelihoods is poorly understood. Therefore to justify PFM as a means of poverty reduction, concrete evidence should be produced through research.

2.2. PFM, biodiversity conservation and climate change

2.2.1 PFM and biodiversity conservation

There is no doubt that forest degradation has resulted in a vast decline of biodiversity all over the world. Many species have become extinct before their contributions to global ecology are fully understood and biodiversity conservation is among the important contributions of PFM. Examples from research in different countries are summarised below:

Adou Yao et al (2007) showed that forests in Cote d’Ivoire that have been co-managed with local people demonstrated more floristic diversity than those managed under the conventional method. Although more concrete evidences need to be shown, the positive impact witnessed was sufficient for programmes in the area to extend this experience to other parts.

Experiences in Western and Eastern Africa (Burundi, Kenya and Ghana) through the Birdlife Partnership in Africa showed community site support groups play a big part in conserving natural resources and ensuring vulnerable sites indicated by bird diversity. According to Arinaitwe (2007) birds are important indicators of biodiversity and this programme has
proved that programmes supported by local communities ensure long term conservation strategies.

A study in Ethiopia showed that traditional coffee management systems that have existed for millennia have contributed to biodiversity conservation and the livelihood of the local community. The study revealed that the last remaining large forest blocks of Ethiopia are found in areas where there are coffee forests and concluded that the importance of coffee as an important income generating crop and its demand for shade has contributed to forest conservation. The traditional forest coffee production systems in the area are more diverse in plant species and coffee genotypes than any other coffee production system in the world. However, recent cultivation systems, such as introducing improved cultivars and monoculture plantation, is threatening the traditional systems and the biodiversity therein. To overcome threats to loss of biodiversity and local livelihoods, the study recommended the development of the Biosphere Reserve Conservation Approach that combines the traditional management system in the area with the modern participatory management (Feyera et al, 2007).

Analysis of satellite images in Ethiopia indicated that forest cover increased by up to 15.6% between 2001 and 2006 during the time the forest blocks were under community management. On the contrary, deforestation of up to 16% was observed in the forest areas outside PFM. It was also observed that there is clear conversion of grassland into farm plots predominantly in the areas outside of PFM resulting in decrease in grazing lands (Aklilu Ameha et al, 2007).

Studies from Kenya emphasised the need to conserve biodiversity, especially key species that would break a link within the ecosystem if not conserved (Mbuvi et al, 2007), such as the need to conserve tree species such as Prunus africana, which has a semi-recalcitrant or recalcitrant seeds and needs to be conserved in nature or be lost forever.

Discussions among participants concluded that PFM is important in biodiversity conservation, however, biodiversity conservation should not be the sole cost of local communities and the cost of conservation must be shared among all stakeholders. The danger of only focusing on biodiversity conservation without giving proper attention to improving livelihoods of local communities and tackling poverty should be avoided.
2.2.2 PFM and Climate Change

Recent studies have shown the need for immediate actions to minimize the adverse impact of climate change. The Stern Review, 2006, has confirmed that global average temperature will rise in the range of 2 – 5°C if no action is taken to reduce emissions and greenhouse gas concentration could double its pre-industrial level as early as 2035. During the same period, food insecurity is expected to rise particularly for low-income communities in sub-Saharan Africa. As the impacts are expected to be felt within 20 – 40 years, the time window to introduce climate change adaptation measures is very narrow. A highly adverse effect on biodiversity conservation is also expected as a result of rise in temperature (Timm, 2007).

Considering the high negative impact on sub-Saharan Africa, actions need to be developed to implement climate change adaptation and mitigation strategies. Thus countries need to consider various technologies and create policy framework that enables them to start making use of market-driven climate change mitigation mechanism such as carbon funds. Countries need to use the recent interest in carbon funds with opportunities in Africa rising with increase in demand. Examples are seen in Uganda and Kenya where such initiatives have triggered more interest in investing in Africa (Timm, 2007). Although the examples seen thus far focus on plantations, further investigation has shown that community managed natural forests are indeed an interest to investors, and have a potential to fetch high premiums in niche carbon markets (Timm, 2007).

In this new initiative there are high potentials and many unknowns. However, African countries need to make a concerted effort to use this opportunity and ensure their management of rich natural resources returns the value they deserve.

2.3. PFM, equity and local governance

The issue of equity and local governance is still a serious issue in most PFM programmes. This has its roots in various situations including the differences in the interests of the community and the government and lack of proper representation of community members.

A paper on the experience of Kenya (Ongugo et al, 2007), where PFM started in the late 1990s, showed that issues of equity and local governance revolve around: weak management groups where members of one tribe dominates in a multi-ethnic community; groups formed
only from one village while the PFM site is wide and covering several villages; groups composed of one clan even though the area cuts across several villages with several clans; and elitism where retired and retrenched individuals from public and private employment hold key positions in the local groups.

A study result in Ethiopia by Alemayehu (2007) revealed that members of forest management groups still have doubts in the sustainability of PFM. The major reasons identified for this scepticism were: history of frequent political and government official changes and associated shift in property rights; the ineffectiveness of the legal system to protect community rights; and uncertainty with respect to duration of rights and membership criteria. Therefore, the study concluded that, the property rights arrangement must be made clear and each decision making process in the collective action be legitimate, transparent and accountable in order for members to trust that rules and regulations are upheld and their interest protected.

Participatory Action Research (PAR) has been found an essential tool in ensuring equity. CIFOR’s experience (Colfer et al, 2007), using PAR as an approach, has resulted in the empowerment of community members through:
- improved knowledge, self confidence and greater understanding of their own situation;
- increased skills in negotiations, communication and facilitation;
- economic improvement; and
- sustainable natural resource utilization.

Most programmes have witnessed the effectiveness of dialogue in conflict situations in order to calm both parties and open discussion aimed at a common goal. CIFOR and AHI’s experience in Mt. Elgon, Uganda where the Benet local community were excluded from their traditional livelihood options within the national park, The dispute lead to a court case between the Benet (who demanded access to their livelihood) and the Government (who were concerned with conservation) which was resolved through dialogue and negotiation (Colfer et al, 2007). This has enabled both parties to understand the situations and come up with a solution that did not compromise the livelihood or conservation concerns. External facilitation thus is the key to successful collective action.
Equity and local governance issues with regards to PFM in Africa have led to the following implications (Colfer et al, 2007, Marfo, E. 2007):

- need for policy formulation and research to move beyond simple problem identification to the identification of viable solutions;
- current practices biased by wealth, gender and level of political influence exacerbate existing inequalities over time and should stop if we are interested in enhancing democratic process and justice;
- need to strengthen local institutions, especially existing ones, as they contribute to development and conservation efforts if effectively catalysed. However, careful analysis is needed as in both West and East Africa many depend on traditional structures of representation such as chiefs and town councils. Despite common understandings, studies have shown that such established institutions are not necessarily representatives of or accountable to the population over whom they preside and ignore the need for community members to participate in both the representation and negotiation process of PFM. Therefore representation of all stakeholders should be carefully developed;
- facilitation and development of multi-stakeholder forums partially overcome lack of communication and understanding between different levels;
- efforts to empower women’s groups at all levels are important; and there is a need to gear activities to those that are more convenient to women in order to avoid negative impacts including an increased marginalisation and even poverty of certain groups including women and the ‘very poor’. Programmes have to be careful not to leave out the gender agenda.
- integration of legal and customary regulation is essential for equitable PFM;
- there is an urgency to minimise elite capture of benefits at lower levels
- social communication - dialogue is an important tool;
- knowing and exercising one’s rights is imperative in the PFM process which requires the need for appropriate information;
- communities should be the owners of the projects to ensure the plans are executed after the phase out of projects; and
- Adaptation is the key for successful programmes. We need to be flexible to change and evolve accordingly.
2.4. PFM, policies and institutions

Developments in PFM have resulted in a positive policy and institutional innovations that are anchored on recognizing and involving local communities in the management and use of various types of forest resources. According to Yonas (2007) as a proof of commitment to this objective, various governments around the continent enacted facilitative policies and laws. Others have reformed public forest administration institutions to nurture local communities in successfully managing their resources. In most of the new forest laws around the continent, the elements of change in central forestry administration with the view of increasing the input from the wider civil society is obvious. This change in direction is manifested in the reforms of constitutions and land laws, including local government laws. The decentralisation and devolution of power in many instances has included that of control and management of forest resources.

Local involvement in managing natural resources and the livelihood contribution of these resources to the local community is agreed upon in principle but little is done by way of integrating PFM into national poverty reduction strategies and national rural development policies. With the exception of the Gambia, Tanzania, Cameroon and Senegal, other countries have not included PFM in national programming (Yonas, 2007).

An important way to characterize differences among differing PFM regimes is the degree of involvement of communities in the management of forest resources. According to Yonas (2007) this usually is assessed in terms of the type of arrangements local communities have with the state. This degree of involvement can range from simple consultative to consign and joint venture. Ownership rights are reserved for arrangements under community-based forest management regimes where full devolution to local levels takes place. Notably, The Gambia and Tanzania have achieved this level of community involvement in the management of local forest resources.

There is a general trend among many countries that these regimes evolve from simple to higher level arrangements; i.e. communities’ rights increase with time. Observation also indicates that increased rights to communities is directly proportional to success as measured in terms of increased collective action in resource management.
The most useful distinction in approach among the various PFM arrangements, however, is the question of whether it is about access to forest resources for local users or sharing authority and control over these resources with local people (Yonas, 2007). Local institutions need capacity building in the areas of good governance. They need to be trained in issues such as transparency, participation in decision-making, integrity and ethics. At the same time they need to be trained in basic bookkeeping and fundamental accounting practices to appropriately manage community funds. Needless to say, they need to be taught essential forest management practices. Current efforts focus capacity building at the district level and neglect lower level local institutions; however, village-level capacity building is crucial if collaborative arrangements in forest management are to be successful. Hence efforts ought to trickle down to lowest level of institutions.

Forest management institutions need to be legally recognised and capable of carrying out their activities without any obstacle. Forest management groups in Ethiopia, for example, cannot be recognised as legal unless they upgrade to full cooperatives, which are the best alternatives in Ethiopia for management groups to obtain legal entity and carryout various activities including business initiatives (Veerakumaran et al, 2007)

Public Forest Services for their part have to play their role. Few countries in Africa have clear guidelines and action plans to sufficiently integrate collaborative forest management with national programmes (Yonas, 2007). Convincing decision-makers outside the forest sector of the value of collaborative arrangements could be more challenging than reforming the public forest administration itself. To integrate collaborative arrangements into broader and umbrella national development policies requires ‘selling’ the approach at the highest level. With increasing distance between foresters and decision makers at higher levels in many countries this task can prove challenging but is essential if collaborative arrangements are to be sustainable.

The situation in Tanzania, where PFM started in early 1990s, is promising and with funds from the Government of Tanzania and bilateral donors, the Forestry and Beekeeping Division of the Ministry of Natural Resources and Tourism is currently developing and implementing a national programme of participatory forest management (Blomley et al. 2007). The programme currently supports 53 districts across mainland Tanzania. With the capture of many of the early PFM lessons in the formulation of national legislation and
policy, the emphasis in Tanzania has now shifted towards scaling-up project experiences to other areas of the country, and embedding these moves within mandated national and local government institutions and the ongoing process of decentralisation. Support from development partners is increasingly being harmonised with the systems and structures of government into a single strategy and investment programme. Despite the impressive progress shown to date, information available on the degree to which PFM is delivering on its stated policy objectives remains very limited.

Countries need to follow the examples of Tanzania and ensure PFM is incorporated in the government system for PFM to become a sustainable means of forest management.

3. The Way Forward
After three days of deliberations, the following key points were identified as the way forward for PFM in Africa.

- PFM has now been practiced for over a decade in Africa. Although still in its infancy compared to Asia, there is a need to institutionalise and scale up project-based experiences to national programmes;
- technicalities and procedures need to be simplified to ensure they are easily replicable and affordable by both community and government;
- there is a need to build capacities at the local level and to mainstream and lobby to create more space for PFM at national level;
- institutionalizing payment for environmental services in government policies;
- putting in place a power-sharing mechanism within a legal framework is an essential step. To ensure the communities are represented well, it has to be ensured that a system of accountable representation is in place. We need to ensure higher forms of citizen or people’s participation in decision-making and negotiations;
- forest minorities are still marginalised and need to be taken into consideration. Example from central Africa shows that some 150,000 pygmies in central Africa live around protected areas but PFM experiences conducted so far did not take these minorities into consideration;
- decentralisation must be driven internally and should not be the result of external sources such as funding resources to make it substantive than instrumental;
- though some policies give rights to communities there is still a need to address issues such as capacity, awareness and grassroots mobilization;
- PFM is an expensive undertaking and is currently project or donor driven which has the risk of having communities’ interest getting swallowed by donor interests.
- engaging in pro-market reforms is essential;
- conflicts are bound to happen in PFM settings; we should not prevent tensions and disagreements but rather manage them in such a way that they provide social and political space for dialogue and constructive engagement without escalating to violence. Therefore, there is a need for conflict management and multi-stakeholder dialogue facilitation;
- networking is essential and needs to be done to share experience among different actors. This could include:
  o establishing an African PFM forum network to discuss and share experiences;
  o organizing regional and world wide forums and use existing networks;
  o involve research and academic institutions because research on social and policy framework at the African level will contribute to the development of PFM; and
  o network at both policy and community levels; the community network of Kenya and Tanzania are good experience for all to take into consideration.

4. Conclusions

Though PFM started only slightly more than a decade ago in Africa, it was seen that countries have gone through various experiences and are seeking directions to make PFM sustainable. An overall synthesis by a presenter showed that the participatory approaches being used must be wider by involving more groups and deeper by understanding motivation and opinion of various stakeholders better.

Discussions have revealed that at the moment there are many networks for collaborative arrangements in forest resource management. On top of this there are many local and international conferences with the aim of sharing experiences and learning from each other. Unfortunately, local institutions and communities themselves, for the most part, do not have such networks. It will be useful to establish a federation or network of communities involved in forest management in country and abroad.

Asian countries have a much richer experience in PFM and therefore make good learning grounds for most African countries, however, experience exchanges are limited between the
two continents mainly as a result of distance. The authors of this paper believe that this needs to be re-investigated as many possibilities are at our disposal at this age of information including websites, blogs and emails. For example, most programmes do have websites and e-newsletters that make important information available, but unless we know these organisations and their addresses we neither search for them nor can they send us the relevant information. Experience exchanges and networking will strengthen the impacts of PFM worldwide and are great ways for proper resource utilisation. Thus, it is important to find ways to establish a means by which all parties concerned with PFM can at least exchange information electronically.

5. References


FARM-Africa and SOS Sahel Ethiopia in collaboration with the Government of Ethiopia and other stakeholders (2007) Proceedings of the international conference on PFM,


Sir Nicholas Stern. 2006. Stern Review on the Economics of Climate Change


