Participatory Forest Management in Ghana: An Empirical Perspective

Gordon Kofi Sarfo-Adu
Corporate Planning Manager
Department of Corporate Planning, Monitoring and Evaluation
Forestry Commission, Ghana
gsarfoadu.hq@fcghana.org/gsarfoadu@gmail.com
+233244286127/+233208420472

Abstract—This study examines the effectiveness of community participation in Participatory Forest Management (PFM) in the Dunkwa-on-Offin Forestry District. It was to find the extent to which communities in the Dunkwa-on-Offin Forestry District take part in the management and the decision-making processes of the forest. The study examined whether the structures of management and decision-making engender community's participation. Also, the perception of the communities with regards to participation in forest management was investigated and examined the challenges to Participatory Forest Management (PFM). The sample for the study comprised 57 respondents made up of 45 community members and 12 Forestry Commission officials. The findings are: forestry officials meet communities to discuss issues that affect them and the forest resource, communities were consulted before the final decision was taken on issues that affect them and the forest resources, and communities have channels of communication. The study recommendations that: communities should be given training in forest management; allowances should be given to community members, who are actively involved in PFM and Job descriptions be well-defined forestry staff and community members.

Index Terms— Concept of participatory forest management, decentralized policy and the forestry organization, forest reserve collaborative management, government policies and regulations, local institutional structures for off-reserve collaborative management of timber trees,models of PFM, nature of participatory forest management, policy regulations and legislations.

———————————— ◆ ————————————

1 INTRODUCTION

The concept and constituents of participatory forest management in Ghana may not be complete without the contributions of a scholar like Amanor (Marfo, 2008). He started investigating the phenomenon in 1996 with managing trees in farming systems: the perspectives of farmers. This study provides evidence of the current research trends and the missing links for future research engagements in Ghana. Participatory forest management is a recognized norm in most donor-supported forestry programs in West Africa (Amanor, 2004). Participatory forest management became institutionalized during the 1980s as part of a movement towards decentralization and devolution of state enterprises management under structural adjustment programs. Most nation-states have implemented forest sector administrative reforms that give more significant roles to communities in forest management and recognize the importance of building partnerships between communities and forest departments (Brown 1999).

The idea that community participation is central to effective natural resource management has been recognized in of several international environmental conventions. It was given a prominent place in the 1992 Rio Earth Summit and the 1994 UN Convention to Combat Desertification. It was embraced in 1997 by the United Nations Intergovernmental Panel on Forests Proposals for Action, which called for the establishment of participatory mechanisms to involve all interested parties, including local communities and indigenous people, in policy development and implementation. In Ghana, the timber industry had virtually collapsed during the 1970s and early 1980s under the burden of economic recession. Before this, timber had been the country's third-largest export behind cocoa and gold. In 1983,

Ghana signed a structural adjustment programme (SAP) with the International Monetary Fund.

The timber sector was identified for special attention in the World Bank's Export Rehabilitation Project, and major donor programs were arranged to rebuild capacity through credit for re-equipping the industry and for transport. In the period 1983-86 the World Bank and the UK government provided more than $42 million to private-sector companies in Ghana (Amanor, 2004). The selection process for disbursing loans was coordinated by the Ministry of Land and Natural Resources, subject to the approval of donor agencies.

These were primarily disbursed as 'soft loans' with a 1.5 per cent interest rates repayment over 40 years. Although these resulted in increased export earnings, they also increased national debts and disproportionately benefited a small class of timber concessionaires. As an article in the Financial Times commented: 'A seven-fold rise in export earnings to $80 million a year may seem impressive, but not when you have $30 million annual debt repayments on transport alone' (Amanor, 2004).Participatory forestry management commences in Ghana when the structural adjustment programs (SAPs) was adopted by the government to secure loans and grants (Amanor, 2004). The PFM was a conditionality attached to the aid through decentralization of administration of the state (Amanor, 2004). Forestry management played a notable role in the decentralization. More so, International agencies (World Bank) ensured forest departments' devolved management of forest resources to local administrative bodies, communities, and private-sector enterprises (Ribot, 2009).

Consequently, Ghana introduces a new forest code, enact new forest policies, and develop national principles of joint forest management with communities, bringing new decentralized natural resource and land administrative systems (Wardell &Lund, 2006). The rationale for this study is to explore the: administrative efficiency, reduce administrative costs, address equity issues, and improve environmental monitoring (Zhang 2001; Kellert et al. 2000). Implicit in the structural adjustment programme was the objective of rolling back the state, reducing the government budget deficit, placing the burdens of natural resource management on decentralized local authorities and communities, retrenching workers from the forestry service, and increasing corporate control over natural resource management (Larbi, 1999). This study examines the effectiveness of community participation in participatory Forest Management (PFM) in the Dunkwa-on-Offin Forestry District.IJSER staff will edit and complete the final formatting of your paper.

2 THE CONCEPT OF PARTICIPATION

Participation describes a range of activities that are entirely outside control, with involvement of members freely to form collective action that members set and implement on their agenda in the absence of outside initiators and facilitators (Silver, Scott & Kazepov, 2010). The concept of participation has gained acceptance across the range of development actors as a way of improving developmental practice (Cornwall, 2002).

2.1 The concept of participatory approach in forest management

Community members are endeavoring to create rights to manage and enjoy the proceeds from lands considered traditionally as belonging to them but may not be legally defined as such under-state laws (Ribot, Agrawal & Larson, 2006). Similarly, due to speeded decrease in the area of tropical forest from agriculture, logging and infrastructural development, many native groups drive for their rights to control and manage forest land (Robinson, Holland, Naughton-Treves, 2014). On the other hand, ascertaining such rights can be intricate and sometimes violent, with opposition from different powerful interests and resource users including new settlers, logging or development companies, and even governments. Although forest resources in developing countries have been owned and controlled by the state, because of the belief that many forest goods and services would not be properly produced and allocated under system of private ownership and market exchanges, this has been proved otherwise (Tietenberg & Lewis, 2016). Forest agency contributed to the degradation of forest resources.

Participatory forest management (PFM) is rooted in the history of people's movements against the state for social and economic justice and represents an accommodation between the interest of the state and people's control over forests (Ballabh, Balooni & Daves, 2002). Common assertion of people's rights, institutional expression of these rights and a challenge to the current development paradigm where demand for rights is not an exclusive pursuit of power but is linked to responsible resource utilization (Cousins& Claassens, 2004). PFM range from the recognition and strengthening of forestry activities already being implemented by local people to new initiatives requiring outside technical as well as institutional support (Bhattacharya, Pradhan, & Yadav, 2010). PFM strategy needs to reflect local priorities and its driving force should be the motivation of the local people (Yilmaz, Beris & Serrano-Berthet, 2010). Oakley (1995), points out that many arguments have emerged since the early 1980s, in the reappraisal of forestry development that concerns the causes and consequences of deforestation which although are well understood but the political and institutional support is a significant barrier to remedy the situation. Local communities play a central role in developing and managing forests as forestry forms an integral part of rural development because of its role as provider of food and income and sustaining natural resource base. It is essential to involve local communities in the definition and implementation of forest management plans and decision-making (Drijver, 1992). PFM envisages a shift towards a more comprehensive role for communities in taking on the functions previously undertaken by the state and as such "working with communities, has thus become a cultural policy paradigm and is linked to social dimension of forest sustainability" (Biesbrouck, 2002, p.55). Therefore, PFM concept tends to view local people as managers of forest resources.

2.2 The nature of PFM

To understand the nature of PFM, it is useful to start with a basic definition and a simple statement of purpose. In other words, what is a participatory approach to forest management, and what purpose does it serve? At its simplest, a participatory approach is a commitment to equity in forest management. Participation helps ensure that local people can share in the benefits of forestry and can take decisions about forestry matters that affect their lives. Its purpose is to ensure that forest management makes a real contribution to secure local livelihoods and that by doing so it also secures the future of the forest resource. With time, most forest departments will generate their own complete definition of PFM. After nine years of experimentation with Joint Forest Management (JFM), the government of Madhya Pradesh determined that: "People's participation in forest management can be interpreted as the sharing of products, responsibilities, control and decision-making authority over forest lands, between forest departments and local user groups, based on a formal agreement. The primary purpose of people's involvement is to create conditions at the local level, which enable improvements in local forest conditions and productivity. A second goal is to support an equitable distribution of forest products" (Singh, 2002, p.640). There are many ways in which local people can make decisions about forest resources. They can enter into resource management agreements, they can question professional foresters at public enquiries, they can contribute to national policy formulation, they can negotiate logging agreements with concessionaires, and they can join working groups to combat illegal logging. There are also many ways in which benefits

can be shared (Ribot et al., 2006). Communities can receive regular payments from logging revenues or tourism receipts, they can market the -Non-Timber Forest Products (NTFPs) from their resource, and they can compete for contracts for forest operations or acquire long-term permits for grazing or hunting.

Communities, families and individuals regularly conduct their cost-benefit appraisals of forestry schemes to decide whether or not they wish to invest in them (Ribot et al., 2006). Some communities will be eager to assume full managerial responsibility for the maintenance of a forest resource; others will prefer to leave the job to the professionals and to be involved only in setting objectives and monitoring the forest department's performance. In many countries, the potential for forestry to transform people's lives is enormous, if only people can gain secure access to the fruits of the productive and protective forests that have long been the preserve of colonialists, concessionaires and conservationists. Gaining secure access to new forest-based assets such as revenue, marketable forest products and new skills and contacts, is an excellent way to help local people build a solid livelihood base for their families. The participatory approach can be time-consuming and tedious, particularly when, inevitably, local politics rears its head. It is an approach that requires time and energy to create a consensus on new institutional arrangements for forest resource management. The foresters who first worked on PFM believed that a forest management committee was the critical institution for local management. Experience soon demonstrated that this was not the case. Instead, the best arrangements were those that centered on a comprehensive set of agreed-upon objectives and rules, often formulated as a management plan. The lengthy process of building consensus among different interest groups to formulate a viable agreement then began to take center stage in community forestry development programmes. The forest manager is a crucial figure in the consensus-building process. Participation is not an abrogation of the forester's responsibility.

Management plans or agreements encompass all the critical decisions about the management of a resource. Such agreements ensure that everyone in a community has confidence in the way the resource will be managed in the future; there is little scope for arbitrary decision-making by one or two individuals at a later date. The management plan confirms the boundaries of the resource and clarifies who owns it, who uses it and what it serves for. The plan assigns roles and responsibilities and arranges for an equitable sharing of benefits. Harvesting rules ensure that utilization is kept at sustainable levels and that sensitive areas are protected and degraded areas rehabilitated. Mechanisms are put in place to resolve disputes between stakeholders and to provide for action to be taken against transgressors and idlers.

2.3 The rationale for Participatory Forest Management

Peoples' involvement in PFM promotes democracy and equity, where participants can share more often in decisions about resource utilization and benefits and will enable people at local level to have considerable capacity to influence forest management (Hadley, 1994). The proximity of local communities to forest resources according to Mayers and Bass (1999), provides a significant advantage in their involvement in PMF process as their livelihoods, and culture is linked to the entire forest ecological system. The PFM approach, assumes a shared responsibility of forest management between the state and the community, incorporating a combination of the traditional know-how of the people and the technology and resources available to the state and it is envisaged to promote a more considerable more significant measure of stability and commitment than a centralized approach (Ballabh et al., 2002). Oakley (1995), points out that active local people's participation can have a positive impact on the local management of natural resources.

For instance, in India, joint forest management programmes between Forest Departments and community Forest Protection Committees (FPC) have successfully regenerated over five million hectares of productive forest (Edmunds & Wollenberg, 2013). Thus, technical expertise of state forest agency and community wisdom and indigenous knowledge will combine for mutual benefit in PFM. Besides, since the declaration of forest management principles at the Rio conference in 1992, there has been a growing concern to involve local people in forest management and according to Prabhu et al. (1998), the criteria and indicators for the sustainability of the forest have therefore been linked to the provision of the necessary institutional environment that ensures local peoples' involvement, ownership and integration of their culture and knowledge in forest management. Box.1 provides a summary of the institutional framework principles, criteria and indicators for sustainable forest management. Forest management is thus considered sustainable according to Prabhu et al. (1998) when these criteria and indicators are reflected in the general institutional framework through which the forest is managed.

2.4 Local institutional structures for PFM

Experience and empirical evidence point to the effectiveness of indigenous organizations as the basic unit from which to build improved forest management organizations (Hobley, 1996). However, there are equity and representation questions concerning the internal processes of these groups. The user group concepts formed by local leaders, for example, is associated with many problems such as equity and representation, which adversely affect vulnerable groups such as women. The heterogeneous and complex nature of community coupled with inequities within these structures is reflected in highly differentiated resource endowments and power structures. As a result of these negative views on community. Local institutions are not always able to resolve resource management conflicts and they can produce practices that may favor certain groups in communities like village champions and community leaders that produce factionalism and can give rise to overexploitation of resources that adversely affects marginalized and

vulnerable groups like women. Indigenously derived organizations have many positive characteristics, they rarely fulfil criteria such as empowering women or allowing more impoverished people a voice in decision-making and for this reason, external facilitation can be appropriate (Hobley, 1996).Institutional structures and authority amongst community groups are therefore perceived as weak and thus precluding collective action, as there are usually many subgroups with widely different claims and aspirations for forests resources. Thus, simplistic descriptions of community cohesion and natural disposition to environmental care should be treated with caution. The most important function of local institution in PFM arrangement according to Biersbrouck (2002), is therefore to provide an institutional structure, which can articulate and represent the interests of all user subgroups in the forest-fringe community in a partnership agreement with state forest agencies.

2.5 Local tenurial arrangements and regulation in PFM

The issues of institutional sustainability and the impact of decentralization within the framework of PFM, it is therefore essential to comprehend who are the users of forest resources. The implications of changing forest management structures for those who are excluded from access to the forests need to be understood since most forest lands in PFM arrangements are own or vested in the state (Hobley, 1996). Thus, efforts to increase forest users' rights and access to forest products are essential to the effectiveness of any PFM process. This arrangement involves the development of statutory frameworks and formal registration which can help legitimize access to resources (Oakley, 1991).

Secure access to forest land and resources by local people enhances their incomes and accessibility to collect NTFPs for household use without restraining from state forest agencies. Similarly, legal rights of access to public forest resources promote local peoples' autonomy and decision-making power relative to the state and provide an officially sanctioned voice in forest resource management (Ford Foundation, 1998).Rights of access coupled with community-crafted rules are especially important for indigenous communities that perceive them as the initial step in legitimizing claim of ownership. For example, Drijver (1992), in a case study in Sukhomajri in India, concluded that 'social control' by local communities might be a mechanism to encourage local people to avoid overexploitation of natural resources. Drijver, however, points out that 'social fencing' only works if the distribution of rights and advantages such as equal responsibility in management and benefit-sharing arrangements are accepted by all the participants. Defining who has a right to forest resources is a primary significant concern for effective PFM (Ford Foundation, 1998). Thus, Institutional arrangements should thus seek to include those who bear the cost of as well as those who benefit from resource management schemes but "it also difficult to analyze whether the people who participate in PFM include all those who use and need forest products to sustain their livelihoods" (Uphoff, 1992). Questions also arise as to whether

proximity to a forest alone is sufficient reason for community to claim access to the forest's benefits. Customary tenancies for example, do not provide enough security to encourage non-indigenes to engage in long-term investment programmes such as tree planting (Gustafsson & Koku, 2003).

The share and access arrangements among local resource users are significant factors that compel resource users to overexploit forest resources. Lack of access arrangements and regulations for instance, promote chances for others to maximize and intensify their harvests and that inadvertently results in overexploitation (Gustafsson & Koku, 2003). Unequal distribution of access to resources formed a significant obstacle to effective PFM (Drijver, 1992). Ntiamoah-Baidu (1995), indicated that local resource utilization and management rules such as norms and traditions that control and shape the behavior of communities are often ignored in resource management interventions and argues that to rationalize resource use behavior among local people, a mutually satisfying resource use and extraction rules be put in place and spelt out. Thus the absence or undermining of local rules at the local-level render the control of resource use difficult and " tends to support the view held by others that many common-pool resources are degenerating into de facto open-access regimes due to lack of effective institutional arrangements and non-conformance to rules at the local level" (Gustafsson & Koku, 2003, p. 19).

3 GOVERNMENT POLICIES AND REGULATIONS

The question arises whether the state regulatory functions can devise rules and structures to provide community organizations sufficient incentives to effectively participate in PFM. The tenet of PFM requires governments to discard their preferential policies on forest resources management as "efforts by governments to deny people access to forests have proved ineffective and largely unsuccessful" (Ford Foundation, 1998, p.2). People living in or near protected areas continue to use the forest as source of cultivable land, timber, fodder, fibre, medicine and wildlife and as such absolute separation of communities from the management of the forest is unworkable. Mayers and Bass (1999) point out that a radical shift in the 1998 forest policy of India from commercial timber exploitation to meeting the subsistence requirements of forest-dependent villagers promoted joint forest management.

On the other hand, Bhattacharya (2001), argues that although the Indian policy clearly defines the provisions for participation of communities in decision-making, sharing of benefits and incentives, there is the need for the necessary changes in other associated policies related to property and traditional rights to empower the communities to strengthen their confidence and channelize their inherent traditional knowledge.

3.1 Decentralized policy and the forestry organization

The concept of PFM generally operates on the democratic principle of decentralization with flexible, participatory involvement of local people in decisions and management and as such state forestry agencies "need to do away with bureau-

cracy and be responsive and adapt to this new institutional approach that provides organizational flexibility" (Deka, 2002). Although decentralization policy frameworks of most governments provide platforms to rid of their independent forest policies and ensure more exceptional local people's responsibility for natural resource management, forestry agencies continue to be more "rigid and thus constrain participatory process" (Hobley, 1996). There is thus the generally held view that community organizations promoted by the state forest agency in PFM process will be subjected to the centralized and inflexible prescription of rules and regulations that characterized conventional forest planning and management. Ostrom (1994), thus argues that externally imposed rules that allocate resources and determine benefits, may either be ignored by resource users or may lead to social conflicts.

4 THE MODELS OF PFM

There is no definite model for PFM; however, individual countries use terminologies reflecting their own social and historical context (Ford Foundation, 1998). In the Philippines, the term 'upland development' is commonly used. In Thailand, the process is referred to as 'social forestry' and in India as 'Joint Forest Management' (JFM). The approach in the case of Ghana is referred to as 'Collaborative Forest Management' (CFM). According to Bhattacharya (2001), the mode of community participation in any PFM approach ranges from manipulative, consultation, collaboration, delegated power to full community control.

4.1 Transformation in institutional arrangements

Radical changes in forest policy resulted in the formulation of the 1994 Forest and Wildlife Policy with the prime objective of involving local people and landowning chiefs in forest management both in off-reserves and forest reserves. This was followed up with institutional transformation within the entire forestry sector to ensure practical sustainability of forest reserves and off-reserve (farmlands) resources. The new forest policy to foster collaboration between the Forestry Commission (FC) and forest-fringe communities (Gronow & Safo 1996). The policy framework of natural resources management seeks to protect, rehabilitate and sustainably increase the income of rural communities in the High Forest Zone (HFZ) of Ghana who by tradition own the forest resources and also to increase their involvement in management through effective consultation, planning and decision-making with the FC.

4.2 Local institutional structures for forest reserve collaborative management

Under a donor-assisted high forest project component of the Natural Resources Management Programme (NRMP), the Forestry Commission (FC) collaborates with forest-fringe communities to prevent illegal extraction of timber through the establishment of Forest Protection Committees (FPCs). These groups are paid by the commission to undertake boundary cleaning of the forest reserves and to serve as 'local watch-dog' to prevent illegal felling of timber (Ministry of

Lands and Forestry, 2000). However, the FC controls and directs the process of the formation and activities of the FPCs. The membership of the FPCs is made up of indigenous people or migrant farmers (non-indigenes) living in villages close to the forests.

The FPCs by their functions can affect the arrest of illegal chainsaw operators but are not empowered to sanction offenders and as such all illegal cases must be reported to the District Forest Officer for further legal action by the forest management regulations. Decisions on management plan and benefit-sharing of timber production according to the Forestry Commission act (Act 571, 1999), remains the sole prerogative of the commission. Benefits in terms of revenue from sale of timber by the Constitution of Ghana (1992) are paid to the traditional rulers or chiefs on behalf of the entire forest owning communities and not to the FPCs. As such, questions are raised as to whether the royalties received are used for the general benefit of the communities. Within the wildlife reserves, the FC facilitates the formation of Community Resource Management Associations (CREMAs) that assist the Wildlife Division of the FC to control illegal entry to prevent illegal poaching and collection of Non-Timber Forest Products (NTFPS). Unlike the FPCs, the membership of CREMA may include the chiefs or village heads and individuals who may be indigenes or non-indigenes (Ministry of Lands and Forestry, 2002). The administrative setup of CREMAs and management planning fall along the same line with that of FPCs. Like the FPCs, the FC establishes the CREMAs. However, there is no legislative provision to enable groups and hence the communities to have a share of income collected from the gate fees from the parks but the groups are being assisted in alternative livelihood programmes under the implementation of the wildlife project component of the NRMP.

4.3 Local institutional structures for off-reserve collaborative management of timber trees

The FC was mandated in 1994 to take responsibility for sustaining timber trees on farms and in 'sacred groves', but this decision taken by the government was fiercely resisted by farmers due to their distrust for the FC and also the intensive damage to their crops through logging operations (Gronow & Safo, 1996). The decision is, however, vital since the forest landscape outside the system of forest reserves in Ghana had been transformed over the years from a pattern of forest and farm areas to predominantly agricultural landscape with small forest patches and trees on farms (Mayers & Bass, 1999). The Forestry Commission (2002), also estimates that off-reserve timber resources contribute about 60 per cent of overall Ghana's timber production. Collaborative arrangement in off-reserve management involves farmers, the FC, chiefs, and loggers. To reduce damage to crops, farmers take part in pre-felling inspection before logging operations to select trees for felling. Farmers are mandated to protect timber trees on their farms within this arrangement. The Chiefs who hold the lands and forest reserves in trust for the communities negotiate and sign 'social responsibility' contracts with the loggers for the development of the communities while the FC provides the

technical assistance. In terms of benefits, the chiefs on behalf of the communities receive a ratio of royalties, which is paid on every timber tree felled from the off-reserves. Surprisingly, according to Gronow and Safo (1996), the farmers who tend and protect the trees on their farms receive nothing.

4.4 Forest access rights on land and tree tenure arrangements

Forest and Wildlife Policy mandate the FC to set up a new precedent in its outreach with forest-fringe communities. Section 3.2.13 of the policy the importance of appropriate and efficient land use and security of tenure for sustainable development of forest and wildlife resources. However, tenurial arrangements continue to be a problem in Ghana. Although forest lands in the HFZ are owned by landholding communities represented by their chiefs or stools, however, the government by an act of parliament (Trees and timber act, Act 125, 1962) assumes the right to manage the forest reserves and to control timber harvesting. Thus, government continues to 'own' trees in forest reserves and on communities' farmlands under this act.

Additionally, Gustafsson and Koku (2003), reveal that acquisition and allocation of land in the HFZ of Ghana is governed by ,typical property regimes and in principle these traditional tenancy arrangements are meant to facilitate access to land, provided there is willingness on the part of potential land acquirer to comply with rules and regulations spelt out by the chiefs and elders or other landowners. However, whereas the existence of such arrangements makes some sense, and support the claim that customary tenancies, especially in rural areas, are put in place for the benefit of all, according to Gustafsson and Koku (2003), some ramifications of the system discriminate against non-indigenes. Most farmers in the HFZ of Ghana are predominantly settler farmers and acquired their landholdings under non-permanent customary usufruct tenancies and feel somewhat insecure in this arrangement.

4.5 State institutional structure for collaborative management

To implement the 1994 Forest and Wildlife Policy more participatory and practices for sustainable forest resource management, the Forestry Commission act (Act 571, 1999) seeks to establish a new forestry agency that foster a public service culture sensitive to the needs of stakeholders of forest resources and to promote collaborative management. However, the FC's act and associated Charter[1] mandate it to operate as non-decentralized autonomous business-oriented organization to serve the needs of 'customers. The situation suggests that the FC by its establishment legislation is still entrenched in bureaucratic structure which enables the agency to dictate the collaborative process as already discussed.

5 POLICY REGULATIONS AND LEGISLATIONS

The 1994 Forest and Wildlife Policy and its associated legisla-

[1]Available online: http://wwwfcghana.com/charter/preamblehtml

tion for forest management in Ghana continue to concentrate on the regulation of timber at the detriment of NTFPs. Although NTFPs according to Gronow and Safo (1996), play a vital role in rural livelihoods in Ghana and especially that of vulnerable groups such as women, their management and harvesting from forest reserves are poorly regulated and bureaucratically controlled by payment of fees or permits issued by the FC. Although the exiting policy is supposed to ensure a holistic approach to sustaining forest resources by ensuring local people involved in management, many contradictions persist in legislation and regulations. For example, while the guiding principle in the policy recognizes the participation of communities in forest resource management, ironically, the Timber Resource Management, (Act 617, Amendment Act, 2002) highlights a contrary view on access, use and control of harvesting of trees and NTFPS. This clause thus suggests that despite changes in policy, the Timber Resource Management regulations still hold on to status quo and strengthens the FC's control and limits community access rights to forest resources.

Besides, other constitutional provisions do not allow forest revenue meant for communities' benefit to be fairly distributed and accounted for. For example, the Chieftaincy Act, in the 1992 constitution of Ghana requires that revenue from timber in the form of royalties be put in accounts of stools or chiefs. PFM initiatives tend to be mainly either product- or protection-centered in their early focus and are accordingly built mainly around either use or conservation management issues. Wildlife, and not the woodland environment within which it is found, provided the launching pad for community involvement throughout most of southern Africa, led by the catalytic CAMPFIRE programme of Zimbabwe, which was subsequently adapted for the nearly first new conservancy projects of Botswana, Namibia and Mozambique. Fuelwood extraction has equally strongly fashioned PFM initiatives in the Niger and has since expanded to Mali, Burkina Faso and Senegal. Timber harvesting drives PFM in Cameroon, with the conducting of an inventory being a crucial step towards the award of a community forest. The dry character of Sahelian and North African woodlands dictates that grazing management is often the focus of PFM in these states. Emerging rural land laws in these states and related pastoral charters (e.g. Mauritania's Code Pastoral 2000 and Mali's Charte Pastorale 2000) deal with woodland and grazing rights as a matter of course. Frequently, the central management agreement is less an agreement to manage than a license to use the forest. Local-level identification of the community in such cases is disposed towards an interest group or user group focus rather than towards membership of the community residing within or next to the resource as a whole.

In contrast, PFM that begins with protection objectives tends more strongly towards management centered decision-making and inclusive local groups, irrespective of which members use or do not use the forest. Definition of the community proceeds on a socio-spatial rather than a user basis. Wilderness areas were thought to be the old farm areas that had been denuded of their cover by slash-and-burn agricul-

ture and abandoned by farmers as their soils became exhausted, whereas, in reality, these areas were vulnerable to wildfires precisely because they were not being managed by people, and their vegetation was c checked continuously by fire. The paucity of vegetation cover was not the product of destructive farming practices, but rather a result of the absence of, effective farming practices. Colonial foresters could not conceive that farmers engaged in activities that promoted the regeneration of trees. Rather than build upon the most promising aspects of farmer agroforestry, the colonial Forest Departments sought to appropriate land for the creation of forest reserves and fuelwood plantations, resulting in increasing land pressures (Amanor 2001b).

6 RESEARCH METHODS

The study adopted a mix research design where qualitative and quantitative research approaches where used. This allowed the researcher to be utilized both interviews and questionnaire administration (Creswel, 2009). These approaches were used since it allows for some flexibilities that using one of the research approaches might not allow (Creswel, 2009). The target population were opinion leaders, women's groups, various associations within each community and technical district office staff of the Forestry Commission. Data was collected from the field through the administration of questionnaires to the staffs of Forestry Commission at the Dunkwa-on Offin forest district and conducting of interviews the chiefs and community members of the areas around forest resources. Sixty-five (65) employees of Forestry commission and community members at the Dunkwa-on-Offin was sampled. Five interviews and sixty questionnaires. The interviews were recorded and transcribed. The questionnaires were analyzed using means and standard deviations.

7 FINDINGS OF THE STUDY

Based on the questions posed to solicit responses on the nature of Participatory Forest Management practiced, it became evident that forestry officials meet communities to discuss issues that affect them and the forest resource; communities were consulted before final decision were taken on issues that affect them and the forest resources; communities have channels of communicating with forestry officials and district forest managers hold meetings with communities to discuss matters that affect them and the forest resource. The chiefs in the communities do not hold regular meetings with the community members and likewise range supervisors and forest guards do not also hold meetings with the community was also found in this study. The community and the forestry staff admitted that Chiefs, Assemblymen/women and opinion leaders take part in decision making concerning PFM. Chiefs and opinion leaders had no power and authority to deal with issues that affect them and the forest resources. The forestry staff, however, disagreed with the community concerning the fact community do not participate in major PFM decisions that affect them and the forest resources. A mean score of 2.17 was achieved on the community not taking part in major PFM decisions, and the forestry staff had a mean score of 3.0 which indicate that

communities take part in major PFM decisions.
On the whole a mean score of 2.70 with a standard deviation of .559 was scored for community perception of PFM. This score indicates that there is a negative perception of PFM.

These challenges were identified. It became evident from the study that collaborators of PFM were not paid to protect the forest and its resources. Respondents preferred to work on their farm, which to them was more rewarding than to waste their time on an unpaid job. The community was of the view that since the forest belongs to the government – referring to the timber resources- they must be paid to protect it. The second most challenging factor identified during the study was inadequate logistics. Respondents were of the view that to adequately managed and protect the forest and its resources then there must be adequate logistics. The next most challenging factor to PFM, after allowances and inadequate logistics, was training in forest management. Respondents were of the view that training in forest management and protection was essential for active forest management. According to them, the community is a stakeholder in the forest and for them to effectively protect and manage the adequate forest training should be given. Even though respondents agreed that specific incentives were given, they thought that the Forestry Commission could do more. As a result, inadequate incentives were seen as a challenge to PFM.

Some of the respondents mentioned conflict with the forest guards as one of the significant challenges to PFM. The conflicts, according to the respondents, bordered on access to NTFP and unclearly defined roles. Apart from the five most challenging factors to Participatory Forest Management – no allowances, inadequate logistics, inadequate training, inadequate incentives and conflicts between the community and forest guards, other challenges were enumerated by the respondents. They include unfulfilled promises on the part of forest officials, lack alternative livelihoods to make them independent of the forest, no clear job description on where the community's duties begin and end, the connivance of forest guards with illegal loggers, and lack of permit for NTFP. The details of the challenges to PFM are presented in Table 2. Despite the challenges to PFM identified by the respondents; they unanimously agreed that community's participation in forest management could be improved. They were therefore asked to suggest ways by which PFM could be improved. Table 3 includes training in forest management, allowances for community members; the need for alternative livelihoods; provision of incentives; job descriptions must be clearly defined; among others.

8 CONCLUSION AND FUTURE DIRECTIONS

The study found that the duties of communities in PFM are not clearly defined. There is a negative community perception about the activities of the forestry officers entrusted to team with the communities in the management of the forest, and the significant challenge for PFM is the non-payment of allowances to those who take active part in PFM. Based on the findings from the study, the following recommendations are with this made to forestry officials and communities in Participa-

tory Forest Management. The study recommends to forestry official that communities should be given training in forest management; Allowances should be given to community members who are actively involved in PFM, if possible the Forestry commission can collaborate with Non-governmental organisations to provide alternative livelihoods as this will make the community less dependent on the forest, job descriptions must be clearly defined. Where the duty of the community in protecting and managing the forest does starts and where does it end; Communities must be given incentives as these will motivate them to protect and manage the forest; Communities should be involved in the planning of PFM programmes and projects; Communities should be given power and authority to deal with issues that affect them about PFM; Communities should meet their chiefs regularly to discuss issues on PFM, and communities should take active part in major decisions that affect them concerning the forest resource.

Despite efforts on the part of the researcher to conduct a thorough study, some limitations could hardly be avoided. Due to resource constraints, the study could not cover all districts in Ghana. Like most researchers the resources available to the researcher limited the study. Since the researcher limited his study to one forest district, it is recommended that the study be replicated in other forest districts in Ghana where Participatory Forest Management is practiced. Despite its youth and difficulties, PFM shows signs of emerging as a competitive route through which Africa's forest may be secured and managed. The State of the World's Forests acknowledges as much. FAO experts jointly predict that coming years will see "increased trends towards decentralization and devolution of forest management. PFM is sufficiently widespread and effective in Africa today to be recognized as a significant route towards securing and sustaining forests. While each state is arriving at more participatory approaches, especially to natural forest management, broad commonalities among processes and paradigms are notable. Root causes of failures in twentieth-century forest management are relatively common, as are the forces now driving action. Prime among these is widening sociopolitical transformation on the continent towards more inclusive norms in the governance of society and its resources. More than any other new strategy in the forest sector, PFM embodies this new democratization. Recognition that forest management is itself primarily a matter of governance is crystallizing, with technically driven functions reassuming their proper place as support functions to sound forest governance regimes.

REFERENCES

[1] Amanor, K. S. (2004). Natural and cultural assets and participatory forest management in West Africa. PERI Working Papers, 63.

[2] Arnold, J (1991). Community forestry: Ten years in review. Community forestry note.7. Rome. FAO

[3] Atampugre, N., Ngaiza, A. and Sharma, J. (1991). Whose tree? A people view of forest aid. London, Panos Institute

[4] Ballabh, V., Balooni, K., and Daves, S. (2002): Why Local Resource Management

[5] Bhattacharya, A.K. (2001). Community participation and sustainable forest development global perspectives. New Delhi: Concept Publishing Company.

[6] Bhattacharya, P., Pradhan, L., & Yadav, G. (2010). Joint forest management in India: Experiences of two decades. Resources, Conservation and Recycling, 54(8), 469-480.

[7] Biesbrouck, K. (2002). New Perspectives on Forest Dynamics and Myth of

[8] Biesbrouck, K. (2002). New Perspectives on Forest Dynamics and the Myth of 'Communities'. IDS bulletin, 33(1), 55-64.

[9] Biesbrouck, K. (2002). Reconsidering co-management of tropical forests in Cameroon. IDS Bulletin. 33 (1) 55-64.

[10] 'Communities': Reconsidering Co-Management of Tropical Rainforests in Cameroon. IDS Bulletin 33 (1).

[11] Carter, J. (1996). Recent approaches to participatory forest resource assessment. London: Overseas Development Institute.

[12] Cleaver, F. (1994). Community management: a discussion paper prepared for UNCHS community management programme preview meeting Nairobi, 20-24 March. Bradford. DPPC.

[13] Cleaver, F. (1999). Paradoxes of participation: questioning participatory approaches to development. Journal of International Development.11 (4) 597-621.

[14] Cleaver, F. (2002). Reinventing Institutions: bricolage and the social embeddings of natural resource management. European Journal of Development Research..14 (2) 64-89.

[15] Cornwall, A. and Gaventa, J. (2001). Bridging the gap: citizenship participation and accountability. IIED Participatory Learning and Action Notes. 40 32-35.

[16] Cornwall, A. (2002). Locating citizen participation. IDS Bulletin. 33 (2) 44-59.

[17] Cousins, B., & Claassens, A. (2004). Communal land rights, democracy and traditional leaders in post-apartheid South Africa. Securing land and resource rights in Africa: Pan-African perspectives, 139-54.

[18] Deka, M. M. (2002). Joint forest management in Assam. Delhi: Daya Publishing House.

[19] Drijver, C. A. (1992). People's participation in environmental projects. In. Croll, E. and Parkin, D. ed. Bush base farm: Culture, environment and development. London: Routledge. Pp. 131-145.

[20] Edmunds, D. S., & Wollenberg, E. K. (Eds.). (2013). Local forest management: the impacts of devolution policies. Routledge.

[21] Falconer, J. (1992), Non-timber forest products in southern Ghana. A summary report ODA Forestry Series No.2. ODA, London

[22] Ford Foundation (1998). Forestry for sustainable Rural Development: a review of Ford Foundation-supported community forestry programmes in Asia. New York: Ford Foundation.

[23] Forestry Department, (1992). Background paper on policy review. Accra: Forestry Department, Ghana.

[24] Franceys, R. (1990). International development: Moving the boundaries. In Christmas, J. (1990). WATSON 2000: Proceeding of the UNICEF orientation training workshop for water and sanitation. England:WEDC.

[25] Gronow, J and Safo, E. (1996). Collaborative forest resource assessment surveys for the management of community forest reserves in Ghana. In Carter, J. ed. Recent approaches to participatory forest resource assessment. London: Overseas Development Institute.

[26] Gustafsson, J-E., and Koku, J., E. (2003). Local institutions and natural resources management in the South Tongu District of Ghana: a case study. Sustainable Development. Unpublished.

[27] Hadley, M. (1994). Diversity and management of tropical forests. Eco-decision. 9 33-38.

[28] Hardin, G. (1968). The tragedy of the commons. Science. 162 (4) 1243-1248.

[29] Hobley, M. (1996). Participatory forestry: the process of change in India and Nepal. London: Overseas Development Institute.

[30] Hobley, M. and Sha, K. (1996). What makes a local organisation robust? Evidence from India and Nepal. London: Overseas Development Institute.

[31] Human, J. and Pattanaik, M. (2000). Community forest management: a case book from India. London: Oxfam.

[32] Institutions Decline A Comparative Analysis of Van (forest) Panchayats and Forest Protection Committees in India. World Development. 30 (12) 2153-2167.

[33] Institutions in Agenda 21 for monitoring their effectivity. Sustainable Development. 10 (2), 103-115.

[34] Klooster, D. (2000). Institutional Choice, community and struggle: a case study of forest co-management in Mexico. World Development. 28 (1) 1-20.

[35] Koku, J. E., & Gustafsson, J. E. (2003). Local institutions and natural resource management in the South Tongu district of Ghana: a case study. Sustainable Development, 11(1), 17-35.

[36] Larbi, G. A. (1999). The new public management approach and crisis states (Vol. 112). Geneva: United nations research institute for social development.

[37] Marfo, E. (2008). Institutionalising citizen participation and community representation in natural resource management: Lessons from the Social Responsibility Agreement negotiation in Ghana. Community Development Journal, 43(4), 398-412.

[38] Mayers, J, Howard, C, Kotey, E. N. A, Prah, E. and Richard, M. (1996). Incentives for sustainable forest management: a study in the tropical high forest of Ghana. Forestry and Land Use series. No. 6.London: IIED.

[39] Mayers, J. and Kotey, ENA. (1996). Local Institutions and adaptive forest resource management in Ghana. Forestry and Land Use series. 7.London: IIED.

[40] Meryers, J. and Bass, S. (1999). A policy that works for people. London: International Institute for Environment and Development.

[41] Ministry of Lands and Forestry (1994). Ghana Forest and Wildlife Policy. Accra: Ministry of Lands and Forestry.

[42] Ministry of Lands and Forestry (2002). Implementation manual for northern savanna Biodiversity project. Accra: Ministry of Lands and Forestry, Ghana.

[43] Ministry of Lands and Forestry. (2000). Implementation manual for natural resources management programme phase one. Accra Ministry of Lands Forestry, Ghana.

[44] Ntiamoa-Baidu, Y. (1995). Indigenous versus introduced biodiversity conservation strategies: the case of the protected area systems in Ghana. African Biodiversity Series no.1 African Biodiversity Support Programme [online] http://www.bsponline.org/publications/show.html [accessed: 20 July 2007].

[45] Oakley, P. (1991). Projects with people: The practice of participation in rural development. Geneva. International Labour Organisation.

[46] Oakley, P. (1995). People's participation in rural development projects. Occasional paper series 7. INTRAC.

[47] ODI (1999). Institutional change in forest:. Rural development forestry networks. 24. London. ODI

[48] Okirra, P. (2000). Sustaining participation: what are the challenges? IIED Participatory Learning and Action Notes. 39 25-26.

[49] Ostrom, E. (1991). Governing the Commons: the evolution of institutions for collective actions. New York. Cambridge.

[50] Ostrom, E. (1992). Crafting institutions for self-governing irrigation systems. San Francisco. ICS

[51] Prabhu, R., Golfer, C. and Shepherd, G (1998). Criteria and indicators for sustainable forest management. New findings for CIFOR's forest management unit level research. London: Overseas Development Institute.

[52] Ribot, J. C. (2009). Forestry and democratic decentralisation in Sub-Saharan Africa: a rough review. Governing Africa's forests in a globalised world, 29-55.

[53] Ribot, J. C., Agrawal, A., & Larson, A. M. (2006). Recentralising while decentralising: how national governments reappropriate forest resources. World Development, 34(11), 1864-1886.

[54] Robinson, B. E., Holland, M. B., & Naughton-Treves, L. (2014). Does secure land tenure save forests? A meta-analysis of the relationship between land tenure and tropical deforestation. Global Environmental Change, 29, 281-293.

[55] Schmidt, R. Berry, J.K. and Gordon, J.C. (1999). Forest to fight the poor. New Haven and London: Yale University Press.

[56] Silver, H., Scott, A., & Kazepov, Y. (2010). Participation in urban contention and deliberation. International Journal of Urban and Regional Research, 34(3), 453-477.

[57] Singh, R.K. (2002). Participatory forest management in Madhya Pradesh, India. Case Study. Rome, FAO. Draft.

[58] Spangenberg, J. H. (2002). Institutional sustainability indicators: An analysis of the institutions in Agenda 21 and a draft set of indicators for monitoring their effectivity. Sustainable Development, 10(2), 103-115.

[59] Tashchereau, S. (1998) Evaluating the Impact of Training and Training Development Programs: A Collaborative Approach. EDI Learning Resources Series.

[60] Tietenberg, T. H., & Lewis, L. (2016). Environmental and natural resource economics. Routledge.

[61] Uphoff, N. (1992). Local institutions and participation for sustainable development. Gatekeeper series No.31. London: International Institute for Environment and Development.

[62] Wardell, D. A., & Lund, C. (2006). Governing access to forests in northern Ghana: micro-politics and the rents of non-enforcement. World Development, 34(11), 1887-1906.

[63] Wollenberg, L (1997): The Sense and Sensibility of Local Forest Management.

[64] World Bank, (2003). World development report 2003: sustainable development in a dynamic world, transforming institutions, growth and quality of life. Oxford: World Bank.

[65] Yilmaz, S., Beris, Y., & Serrano-Berthet, R. (2010). Linking local government discretion and accountability in decentralisation. Development Policy Review, 28(3), 259-293.

Appendix

TABLE 1
Perception of PFM

Issues	N	Mean
Chiefs, Assemblymen/women and opinion leaders take part in decision making PFM	57	3.33
Chiefs and opinion leaders have authority to deal with Issues that affect them in relation to PFM	57	2.00
Communities participate in major PFM decisions	57	2.77
Grand mean (mean of means)	57	2.70

Source: Field Survey, 2020

TABLE 2
Challenges to Participatory Forest Management

Challenges	Frequency	Percent
No allowance	32	24.1
Inadequate logistics	21	15.8
Inadequate training in forest management	12	9.0
Inadequate incentives	11	8.3
Conflict between the community and forest guards	11	8.3
Forestry officials do not honour their promises	7	5.3
Lack of alternative livelihoods	6	4.5
No clear job description	5	3.8
Forest guards connive with illegal loggers	5	3.8
Lack of motivation	4	3.0
Illegal harvest of logs	4	3.0
Inadequate funds	3	2.3
Bush fires	3	2.3
Lack of permit for NFTP	2	1.5
No meetings with forestry officials	2	1.5
Illegal farming in protected area	2	1.5
Ageing of members	1	0.8
No response	1	0.8

Source: Field Survey, 2020

TABLE 3
Measures to improve Participatory Forest Management

Measure	Frequency	Percent
Training in forest management	35	23.3
Allowances for community members	30	20.0
The need for alternative livelihoods	28	18.7
Provision of incentives	22	14.7
Job description must be clearly defined	10	6.7
		5.3

TABLE 2
Challenges to Participatory Forest Management