UNIVERSITY OF CAPE COAST

THE PERCEPTIONS OF MEMBERS OF FOREST FRINGE COMMUNTIES ON COMMUNITY PARTICIPATION IN THE MANAGEMENT OF THE KABAKABA WEST RESERVE IN HO MUNICIPALITY

BY

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DECLARATION

Candidate's Declaration

I hereby declare that this dissertation is the result of my own original research and that no part of it has been presented for another degree in this university or elsewhere.

Candidate's Signature:..................................... Date...

Name: Fred Nelson Kofi Adom

Supervisor's Declaration

I hereby declare that the preparation and presentation of this dissertation were supervised in accordance with the guidelines on supervision of dissertation laid down by the university of Cape Coast.

Supervisor's Signature:..................................... Date.......................................

Name: Dr. Kwaku Boakye

ABSTRACT

Currently, the Kabakaba West Reserve is managed by the Municipal Forestry Department with little or no involvement of the surrounding communities. The non-participation of the adjoining communities in the management of the reserve has led to encroachment on the reserve by these communities leading to the degradation of the forest. The main purpose of this study was to assess the extent to which the communities surrounding the reserve have been involved in the management of the reserve.

The survey design was adopted for the study. The study population comprised of heads of households and opinion leaders of the forest fringe communities. The simple random and purposive sampling techniques were respectively used to select 180 heads of households and 6 opinion leaders who participated in the study. Structured and semi-structured interview guides were used to collect the data.

The study established that participation of the local communities in the management of the reserve is generally low. Whereas institutional failure was identified as a major cause for the low level of participation observed in the study, the locus of the reserve on the livelihoods of the local people also came into question. It was noticed that the reserve was too small; hence did not affect the livelihoods of the people in significant ways. The limited participation of the local people in the management of the reserve is likely to affect the communities and the reserve negatively.

It will be beneficial if the bottlenecks to participation that were identified in this study are addressed based on the recommendations made.

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DEDICATION

To my children, Yayra, Dela and Emerald.

TABLE OF CONTENTS

Page

LIST OF TABLES

LIST OF FIGURES

LIST OF ACRONYMS

BI	Benefit Index
CBFM	Community-Based Forest Management
CBOs	Community Based Organisations
CFC	Community Forestry Committee
CFMP	Community Forest Management Project
CSO(s)	Civil Society Organisation(s)
CREMAs	Community Resource Management Areas
DA	District Assembly
DFID	Department for International Development
EU-FLEGT	European Union‟s Forest Law Enforcement, Governance and Trade
FC	Forestry Commission
FDCFU	Forestry Department Community Forestry Unit
FOSA	Forestry Outlook Study for Africa
FSD	Forest Services Division
FWP	Forestry and Wildlife Policy
FWG	Forest Watch Ghana
GSS	Ghana Statistical Service

IFAD	International Fund for Agricultural Development
II	Implementation Index
IIED	International Institute for Environment and Development
ITTO	International Timber Trade Organisation
IUCN	International Union for the Conservation of Nature
JFM	Joint Forest Management
MES	Ministry of Environment and Science
MI	Monitoring Index
MLF	Ministry of Lands and Forestry
MLFM	Ministry of Lands, Forestry and Mines
MLNR	Ministry of Lands and Natural Resources
NFF	National Forest Forum
NFPF	National Forest Programme Facility
NFPDP	National Forest Plantation Development Programme
NGOs	Non Governmental Organisations
NRMP	Natural Resource Management Programme
NTFP	Non-Timber Forest Product

OECD	Organisation for Economic Co-operation and Development
OPI	Overall Participation Index
PD	Plantations Department
PI	Participation Index
SESRIC	Statistical, Economic and Social Research and Training Centre for Islamic Countries
SFM	Sustainable Forest Management
SPSS	Statistical Package for Social Scientist
TFP	Timber Forest Product
UNDP	United Nations Development Programme
VFC	Village Forest Committee
VPA	Voluntary Partnership Agreement

CHAPTER ONE

INTRODUCTION

Background to the study

In the 19th century, majority of countries realised the need to devolve the decision making process that was exclusively wielded by executive and legislative authorities. This was aimed at incorporating the views of people at the grassroots in decisions, in order to identify and satisfy their development needs. This culminated in the invention of the community participation paradigm. This method of development involves the local people in the decision making processes. Community participation is the current agenda in development planning and thinking, which extends to many development activities, including the management of natural resources. The rationale for community participation is to ensure that people at the grassroots have a sense of ownership and control over their activities and natural resources, in order for them to be managed and developed sustainably (Burkey, 1993).

Forestry is an activity that is practised in most countries with the aim of conserving biodiversity, protecting and managing State reserved lands and utilising unreserved lands. The conservation of State reserved lands to capture elements of biodiversity is what is known as forest reserves (Beatty, 1984). Before the advent of the colonialism, forests in most developing countries were managed by the local

people. During colonialism and the post-independence era, the conservation of forests was placed under the management of the State. Due to the inadequacy of the State to manage forest reserves, communities surrounding the forests were later on engaged to complement efforts of the State in managing the forests (Murphree, 2000).

According to Amanor (2002) however, the reality rarely reflects this rhetoric in most developing countries. More often than not, the views of local communities on forest management are not systematically elicited, evaluated, and incorporated in the decision-making processes (Thrupp *et al*., 1997; Chase *et al*., 2004; Fisher *et al*., 2000). Long-standing poor public relations is a salient feature shared by many developing countries in forest governance and, therefore, minimal support from local communities in forest management (Brown, 2002; Brown, 2003; FAO 2002; Kideghesho *et al*., 2006). Forest policies in Africa have further kept the local population away from the forest resources (Ardayfio-Schandorf *et al*., 2007). This alienation has made local communities lose self-image as trustees of the forest resources in Africa (Amanor, 1999; FOSA, 2003) and criminalization of their practices perpetrated on grounds of safeguarding the ecological integrity of forests (Bonner, 1993).

Ghana as a developing country is generally challenged with degradation in the use of its natural resources. According to IIED (2008) "marginalization of forest communities is the central issue of forest governance in Ghana and illegal logging is a symptom of this problem". The decline in forests is alarming and may have potential devastating effects on biodiversity, humanity and the global

environmental system as a whole. MES (2002) indicates that Ghana's permanent forest estate was estimated to be 10.9 -11.8 % of the original forest cover. Currently, Ghana has an average annual deforestation rate of 22,000 ha/annum and less than 1 % of forest cover in off-forest reserves. This decline has been attributed mostly to failure of forest policies to explicitly deal with the low involvement of local stakeholders, lack of access and unequal benefit sharing of timber and non-timber forest resources in both on-reserve and off-reserve areas of Ghana (Kotey *et al.*, 1998; Amanor, 1999; Boni, 2003; Marfo, 2009).

Statement of the problem

In Ghana, efforts have been made by the State to involve local communities to sustainably manage natural resources. In terms of the conservation of forest resources, the Ministry of Lands and Natural Resources (MLNR) engages the forest communities through the establishment of community forest groups to enable the local people manage forest reserves independently.

Recent forest reform efforts in Ghana have provided opportunity to promote local people's participation and optimum benefit sharing (MLF, 1994; Smith, 1999; MES, 2002; Marfo, 2009). These efforts include the 1994 Forest and Wildlife Policy *(revised in 2008)* and the Forestry Development Master Plan (1996-2000) which all provided for community participation. However, the application of these policy instruments was not uniform across the country. For instance, the collaborative forest management as an important component of the

1994 Forest and Wildlife policy was not pursued in all forest fringe communities as was done for example in Asunafo North, Tano Ofin, Krokosua Hills, etc. districts. Anecdotal evidences in the adjoining communities (Taviefe, Matse and Ziavi) to the Kabakaba West Reserve in the Ho Municipal revealed non-existence of community involvement initiatives such as the Collaborative Forest Management, Community Forest Committees, District Forest Forums, etc.

In its Annual Report of 2007, the FC (2007) acknowledged that the involvement of Matse, Taviefe and Ziavi communities in the management of the Kabakaba West Reserve in the Ho Municipality has been extremely minimal. The FC (2007) further acknowledged that as a result of the non-participation of these communities in the management of the reserve, the reserve was persistently being encroached by the communities for different livelihoods pursuits such as farming, charcoal burning and logging. This resulted in the degradation of the reserve and its resources each passing year. FC (2009) noted only 60 percent of the original size of the reserve was in place due to the activities of the encroachers.

The above claims notwithstanding, no empirical studies have been conducted to determine the extent to which the local communities have been involved in the management of the reserve.

Research questions

Though the 1994 FWP advocates for community participation in the management of natural resources, it appears the communities around the Kabakaba

4

West reserve have not been participating in full in the management of the reserve. It is not known what accounts for the limited involvement of these communities in the management of the reserve. This calls for investigations that will yield answers to the following research questions:

1. Why the communities around the Kabakaba West Reserve are not fully involved in the management of the reserve?

2. What factors account for the limited participation of local communities in the management of the reserve?; and

3. How does the non-participation or the limited participation of the local people affect the management of the reserve?

Study objectives

Generally, the study assesses, from the perspective of the local people, the extent to which they have been involved in the management of the Kabakaba West Reserve. The specific objectives are to:

1. examine the practical steps that were taken to involve the local communities in the management of the reserve;

2. explore the factors that account for the limited participation of local communities in the management of the reserve; and

3. examine the consequences of limited/non-involvement of the local people on the overall management of the reserve.

Scope of the study

Geographically, the study is limited to the forest fringe communities of the Kabakaba West Reserve namely: Matse, Taviefe and Ziavi. Thematically, the study will focus on local participation in forest management, why local people are not involved in the management of the reserve, how do they react to the non-participation and the effects of their non-participation on the management of the reserve.

Significance of the study

This study will enable the MFD in the Ho Municipality to gain access to information on the methods and dynamics of participation, in order to ensure the planning and implementation of the process in the surrounding forest communities of the Kabakaba West Reserve. The study will serve as a reference point for the FC in its policy formulation efforts for forest reserve management. The research will create a platform for the study communities to articulate their concerns about the current management practices and their perspectives on how these practices can be improved. It is also expected to serve as an eye opener to local people, which will stimulate the quest for greater community participation in forest reserve management.

The research will help in developing effective ways of engaging local people in the management of reserves across the nation. To policy-makers, the

study will identify gaps in the current management system in the context of participatory forestry management and suggest ways of addressing them. On the academic front, the study will supplement existing knowledge on participation by reserve fringe communities in the management of forest resources.

Organisation of the study

The study is organised into five main chapters. Chapter one provides an introduction of the study. It examines the background to the study, the statement of the problem, objectives of the study, research questions, scope, significance and organisation of the study. Chapter two provides a review of related literature on the theories, empirical evidence and concepts underlying the study. Chapter three discusses the methodology of the study. It captures a description of the study area, research design, study population, sample size, sampling procedures, instruments for data collection, pre-test, field challenges and the methods for data analysis. Chapter four presents the results and discussions from the analyses of data. Chapter five presents summary of the findings, conclusions and recommendations of the study.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

Introduction

The review is divided into three parts, which are the theoretical framework, empirical literature and the conceptual framework. The theoretical framework expounds on the concepts, types and demerits of participation. The empirical literature amplifies the concept and types of participation by drawing examples particularly from Ghana and other countries of practical mechanisms at ensuring community participation in the management of forest reserves and the results thereof. Finally, a Conceptual Framework was developed to guide the study.

The Concept of Participation

Participation has been a constant theme in development dialogues and discourses for the past 50 years. In the 1960s and 1970s, it became central to development projects, as a means to seek sustainability and equity particularly for the poor. Generally, participation connotes the involvement or engagement of people in policymaking. Several writers have canvassed definitions of participation in relation to how they perceive the concept. This section elaborates on the concept of participation, as well as its merits and demerits.

With regards to rural development, Cohen and Uphoff (1977) define participation as that which includes people's involvement in the decision making

processes, implementing programs, sharing in the benefits of development programs and their involvement in efforts to evaluate such programs. Oakley (1989) opines that there are three connotations for participation, which are the voluntary contribution to public programmes, but people do not play a role in shaping the programmes; involvement in shaping, implementing and evaluating programmes and sharing the benefits; an active process where intended beneficiaries influence programme outcomes and gain personal growth.

Participation is seen as an active process by which beneficiary or client groups influence the direction and execution of a development project with the view of enhancing their well-being in terms of income, personal growth, self reliance or other values they cherish (Pokomy, 1987). Participation stands for partnership which is built upon the basis of dialogue among the various actors, during which the agenda is jointly set, local views and indigenous knowledge are deliberately sought and respected. This implies negotiation rather than the dominance of an externally set project agenda. Thus people become actors instead of being beneficiaries (Organisation for Economic Co-operation and Development-OECD, 1994).

Pearse and Stifel (1979) posit that participation is concerned with the organised efforts to increase control over resources and regulative institutions in given social situations on the part of groups and movements or those hitherto have been excluded from such control. Ghai (1992) argues that participation can be seen as a process of empowerment of the deprived and excluded. This view is based on the recognition of differences in political and economic power among different

social groups and classes. The World Bank (1994) states that participation is a process through which stakeholders influence and exercise control over development initiatives, decisions and resources that affect them.

Participation by the local people is critical because, it affords them the opportunity to have greater experience and insight into what works, what does not work and why. It is equally imperative for the local people to be involved in the planning of projects, so that their commitment to the project can increase and also develop technical and managerial skills that will increase their chances for employment. The engagement of local people in development programmes will also increase the resources available for the programme. Involving local people will culminate in social learning for the planners and the beneficiaries. Social learning connotes the development of partnerships between professionals and the local people, in which each group learns from one another (World Bank, 1994).

Participation raises awareness among people on issues affecting their environments or communities. It also helps people to develop interest in whatever activity they may undertake and enables their voices to be heard on issues that affect their daily lives. Participation ensures the maximum utilisation of the services of local people provided through development interventions. It equally aids in the mobilisation of financial, material and human resources that exist in beneficiary communities to be used for the development of services provided by development programmes and projects. This enables the local people to see themselves as part of the programmes and projects that are being executed in their

communities. Participation promotes the involvement of all; even the poor and disadvantaged in decisions that affect their daily lives (Rifkin, 1990).

The Demerits of Participation

In spite of the merits of participation, it equally has its setbacks. Pokomy (1987) postulates that participation costs time and money. The involvement of people in decisions that affect their daily lives requires a lot of consultations with them. Thus, time, material and financial resources have to be allocated and devoted for consultations. Participation entails using a lot of time to engage with people. Many explanations have to be given to people for instance, as to why an intervention is being carried out in their communities so as to them to buy into the project. All these cause delays hence making participation a very costly undertaking.

Organisations that execute programmes or projects in communities will also have to grapple with the difficulty of persuading community members to participate in their activities, especially when they become suspicious of their programmes. In addition, in the course of consulting the communities, ample time will have to be given to them to elaborate on their predicaments, which is often time consuming. Development organisations will equally have to create time to listen to the plights of the people in communities where they are supposed to undertake their interventions even if the interventions are not connected with such plights (Pokomy, 1987).

The OECD (1994) adds that participation has the danger of shifting the burden of activities to the poor. Owing to the fact that most development interventions in communities are meant for the poor, with the goal of ensuring that most of them should benefit from such interventions, the tendency is to involve them in activities in which they may not be competent enough to execute and manage. If care is not taken, such interventions may not be accomplished. Cheru (2000) points out that effective participation thrives on the capacity of the local people to contribute to either decision making or development interventions.

Community participation does not guarantee success and there is no clear methodology of community participation. That is why it lacks clear goals and objectives and why it is approached in an unsystematic manner. The result is that evaluating participatory processes becomes difficult, while cynicism and lack of accountability among practitioners are taking place (Emmett, 2000).

Community participation is time-consuming and it is difficult to judge to what extent projects are participatory (Garcia-Zamor, 1985). Taylor (1994) states that community participation can be costly in terms of time, money and skills. However, it should be remembered that obstacles to community participation are directly related to one's perspective of community participation (Oakley and Marsden, 1984).

Community participation can bring latent conflicts to the surface and it can delay project start-up, while increasing the demands on project personnel and managers (Kok and Gelderbloem, 1994). Illiteracy is an inhibiting factor in community participation. This is because illiterate people may be marginalised by

professional and technical communication during the community-participation process (Meyer, Cupido and Theron, 2002).

It is not clear what constitutes a "good" decision when it comes to community participation. It is therefore difficult to assess the attainment of a "good" decision. Although there are attempts to classify a "good" decision according to the level of satisfaction and willingness to participate, for example, the literature does not state what the criteria for "good" decisions are. In other words, research on community participation is lacking as to whether there are legitimate factors for a good decision (Meyer *et al.,* 2002).

Types of participation

People may participate in policymaking, but their levels of participation may be high or low and may vary from one society to another. Several Authors have advanced different ways of how people participate and the appropriate techniques to be adopted by development practitioners to enhance the participation of local people in policymaking.

Arnstein (1971) suggests that participation implies some degree of involvement in an activity or organisation. However, there are different levels of involvement, with some people being at the centre of an activity and decision making, while others take more of a back seat or passive role. Three broad types of participation have been developed by Arnstein (1971), which are degrees of citizen power, degrees of tokenism and non-participation.

Degrees of citizen power embody position of power, delegated power and partnership. This type of participation suggests that people are in positions of influence and have a say in decision making. Their opinions are taken into account and acted upon. Degree of tokenism which is more of consultation and informing, implies that people have some involvement in an organisation or community, but other people make important decisions and inform them about these decisions. Non-participation which is the third type of participation represents passive involvement and manipulation. This involves little or no participation because although people may be members of an organisation or a community, they have no real say or influence over how it operates. Members are expected to go along with decisions made by others and are powerless to make changes themselves (Arnstein, 1971).

Passive participation, increasing involvement, active participation and ownership/empowerment are other types of participation that have been enlisted by the UNDP (1990) with respect to the dynamics of development projects or programmes. In passive participation, beneficiaries basically welcome the project proposals and support them, but are generally cautious and even suspicious in relation to project management. As the project unfolds, beneficiaries begin to develop more trust in the project and more contact with its activities and staff. They may also begin to take on some responsibilities. This kind of participation is known as increasing involvement. Active participation suggests that beneficiaries play the role of active partners in the project's implementation and assume increasing responsibilities. Upon completion of the project, beneficiaries are both

willing and able to sustain and further develop the initiatives begun by the project. This type of participation is termed ownership/empowerment.

Mcneely (1993) and Taylor (2004) identified seven types of participation, which are passive participation, participation by giving information, participation by consultation, participation for material incentives, functional participation, interactive participation and self mobilisation. Mcneely (1993) maintains that in passive participation, people participate by being told what is going to happen or what has already happened. This tends to be a unilateral announcement and people's responses are not taken into account. Participation by giving information refers to people participating by answering questions designed by researchers and project managers. They do not have the opportunity to influence proceedings, as the findings are neither shared nor checked for accuracy. With respect to participation by consultation, consultations are held with the local people and the external agents listen to their views. External agents define the people's problems and solutions and modify these in the light of their responses. The people do not share in decision making, as their views may or may not be taken on board. Participation for material incentives provides resources (labour, in return for food or cash) to people, who are not involved in the experimentation and have no stake in maintaining activities when incentives end.

Taylor (2004) adds that functional participation engages people to participate in projects, through the formation of groups to meet predetermined objectives related to a project. Their participation tends to occur at later stages of a project, after major decisions have been made. They may become self-dependent,

15

but are initially dependent on external facilitators. Interactive participation involves people in joint analysis, which leads to action plans and the formation of new local groups or the strengthening of existing ones. Groups take control over local decisions. Thus, the local people have a stake in maintaining structures or practices. Self-mobilisation summons people to take initiatives, which are independent of external institutions to change systems. Such initiatives may or may not challenge existing inequitable distribution of wealth and power.

Biggs (1989) classifies participation as contractual, consultative, collaborative and collegiate. Contractual participation is one in which the social actor has sole decision making power over most of the decisions taken in a research process and can be considered the owner of the research. In consultative participation, most of the key decisions are made by one social actor, but emphasis is placed on consultation and gathering information from others, especially for identifying constraints and opportunities, priority setting and evaluation. Biggs (1989) notes further that different actors collaborate and are put on a more equal footing, accentuating linkage through an exchange of knowledge, different contributions and sharing decision making power during an innovative process. This kind of participation is termed collaborative participation. Collegiate participation connotes partnership between different actors. Ownership and responsibility are equally distributed among the partners and decisions are made by agreement or consensus among all actors.

Several studies including Uphoff *et al*., (1979) and Baum (1999) have classified participation into different grouping levels for easy assessment of the

level of participation of different stakeholders. Participation need to be considered in decision–making, implementation and maintenance and evaluating successes and failures for better assessment and understanding (Lane, 1995). This study therefore adopted the four level of participation identified by Uphoff *et al.* (1979) cited in Alhassan (2010) to reflect the local communities at various stages in forest resources management. According to this classification, the levels of participation are described as follows:

1. Participation in planning and decision-making: In this study, this level of participation refers to how the local communities are involved in forest decision and planning processes such as management meetings.

2. Participation in implementation: This level of participation entails how the local people voluntarily or involuntarily are involved in administration, coordination, and contribution with their resources (labour, material goods and information) in forest resources management.

3. Participation in benefits sharing: This level of participation focus on how the local people participate in distribution and sharing of economic or material benefits from the forests i.e. royalties, etc.

4. Participation in monitoring: This focuses on the extent of involvement of the local communities in policing and reporting of illegal activities to the Forestry Authorities.

Empirical studies of community participation in forest management

The empirical studies provide relevant examples from other countries particularly in Ghana, of how the local people have been involved in the management of forest resources in their communities.

Globally, devolution of management of natural resources has widely been argued to be the most viable option for ecological and economic sustainability of natural resources (Conroy *et al*., 2002 cited by Faham *et al*., 2008). This has resulted in participatory management approach attracting a great deal of attention because of systematic failure of central governments to reverse the loss of forests (Odera, 2004). Participatory forest management was further enforced through global environmentalism launched, with the Rio Declaration of 1992, where participatory approach was accepted as an integral part of the sustainable development process (Kelly, 2001; Wily, 2002). The Principle 10 of the 1992 Rio Declaration specifically states that: *environmental issues are best handled with the participation of all the concerned citizens at the relevant level*.

Sustainable management of forest reserve is linked to participation of forest-dependent communities in the management and the utilization of benefits to improve livelihoods FC, (2009). Sustainable forest reserve is an integral component of development and cannot be isolated from the surrounding areas and communities. Therefore, forest reserve management has to be positioned in the context of development of the area, where the forest reserve is situated FC, (2009).

Through participation, the development of the area as a whole will eventually enable the realization of the goal of sustainable forest reserve management.

Participatory conservation is a way of approaching conservation issues through building relationships between local peoples and conservation initiatives, which has emerged along with participatory approaches to development since the 1970's (Wells *et al*. 1992 cited by Sheffy 2005). The participatory approach to forest resources management allowed forest-dependent communities to be involved in planning, protection and management of forest resources and benefit-sharing derived.

In this frameworks of study, participatory forest management means 'attempts to secure and improve the livelihoods of local people who are dependent on forest resources by involving them in the process of forest management, understanding their needs and situations, allowing them to influence decisions and receive benefits, and increasing transparency' (DFID 1996; ITTO 2002). This approach is concerned with ensuring local people's access to, and management of forest resources. Community participation in resource management essentially means sustainable use and management of natural resources by people, living in and around a region integrated ecologically, socially and culturally (Marhajan, 2000 cited by Faham *et al*., 2008).

Following the foregoing argument that there are changing global trends in natural resource governance and growing recognition of the role of stakeholders in sustainable forest resources management, many developing countries including Ghana reviewed the forestry sector (Wily, 2001). The forest policy review in

Ghana was in recognition of high rate of deforestation and the inadequacies of the past forest policy to sustainably manage forest resources.

The review of the forestry sector in Ghana resulted in institutional transformation and the adoption of a new forest policy, which incorporated aspects of participatory forest management. The 1992 Constitution provided for the establishment, composition and functions of the present Forestry Commission. The Forestry Commission Act, (Act 571, 1999) established the Forestry Commission to deal with institutional reform within the government sector, regulate and manage forest utilization (MLF, 1994). Following the establishment of the Forestry Commission in Ghana, several policies were promulgated and central to them is a stronger emphasis on the important role of local people in forest management. These major forest policy efforts to promote community participation include the 1994 Forest and Wildlife Policy, the Forestry Development Master Plan (1996-2000), the Timber Resource Management Act (1998), the National Environmental Action Plan (1990-2000), among others.

The most pragmatic policy that marked a major turning point to involve stakeholder in forest resources management in Ghana is the 1994 Forest and Wildlife Policy (Smith, 1999). This policy was formulated to guarantee forest-dependent communities basic access rights and benefits from forest resources management. The central premise of the 1994 FWP is "the conservation and sustainable development of the nation's forest and wildlife resources for maintenance of environmental quality and perpetual flow of optimum benefits to all segments of society (MLF, 1994)".

The policy attempts to strike a balance between preservation and utilization of forest resources, and emphasizes the need for increased private sector and local community involvement in the management of forest resources in the country (MLF 1994; Smith 1999; MES, 2002). In addition, the 1994 FWP states an enshrined provision to involve local communities in the adoption of decisions through a decentralized democratic system. In relation to this, Amanor and Brown (2003) argued that, resources will be more efficiently, equitably and sustainably managed if decision-making is brought closer to the primary users through policy reforms. Forest-dependent community participation gained additional momentum when the Government of Ghana shifted the forest policy trend towards the concept of participatory management and protection of forest resources with all relevant stakeholders (MLF, 1994, Agyenim-Boateng *et al.*, 2002). This forestry policy demonstrates the shift from centralized and state-driven forest resources management towards decentralized and collaborative management in Ghana (Agyenim-Boateng *et al.*, 2002). Also, the Timber Resource Management Act (1998) attempts to regulate relations between forest-dependent communities and timber companies and thus ensure that some benefits accrue to the rural communities, with the view that the outcome will foster local interests in preserving forests (FC, 2002, Agyenim-Boateng *et al.*, 2002). Ghana is also engaged in another major international on-going forest policy reform discussion, partly facilitated by the EU-FLEGT program, where Ghana as the first producer country has signed a Voluntary Partnership Agreement (VPA) with the EU to enhance forest governance and also to reduce illegal logging (Hansen and Lund,

2009). In addition, the government of Ghana in partnership with the National Forest Programme Facility (NFPF) of the United Nation Food and Agriculture Organization (FAO) has further established national and regional fora, to promote stakeholder consultation and participation for enhancement of sustainable forest management.

Stakeholders in the forestry sector also pointed out a disconnect between the 1994 FWP and legislation, citing collaborative forest management as an important component of the 1994 Policy, which has still not been captured in legislation (Tropenbos-Ghana, 2005). The collaborative forest management philosophy failed to catch up with the local forest users because it lacked the legislative backing to make it operative. Ledger (2009) notes that the 1994 FWP may be advocating collaborative approaches to forest resources management but this is hindered by confusion of the various systems of customary and statutory law. "Even if the customary law may advocate involvement of traditional leaders, statutory law can override access and ownership rights". The 1994 FWP failed to identify explicit solutions or an actual framework for sharing benefits (Agyeman *et al.* 2003: MLF, 1994 cited by Ledger, 2009).

Following this discussion, in particular that forest fringe communities in Ghana possess several opportunities which empower them to contribute towards sustainable management and protection of forests, the fundamental question, therefore, arises as to "what extent do stakeholders participate in forest resources management, particularly, forest-dependent communities?".

Community-based forest management (CBFM) in practice

The common models of CBFM that have been tried out in different countries vary with the extent of decentralisation and devolution of power, and with defined responsibilities, rights and ownership (adopted from Wily, 2002). They include:

- *Loose confederation agreements:* between community members under a registered community-based organisations (CBOs) or a trust, with limited legitimate rights to particular resource usage; ownership and authority retained by the state (widespread);

- *Consultation:* as expressed in the forest-farmer commissions in Côte d'Ivoire or the Forest Commission in Ghana;

- *Cooperative management:* in which community roles and powers are limited (e.g. in Zimbabwe, Zambia and Benin);

- *Contractual partnerships:* in which communities' roles are more substantial but are still inequitable (e.g. in Cameroon, Ethiopia, Nigeria, Madagascar, Sudan, Niger, Mali and Guinea), involves rights based on a temporal agreement or contract in combination with a management plan, for a period of between 5 to 15 years;

- *Consigned management:* in which the community has all operational powers except an ultimate authority (e.g. as is being promoted in Gambia and Tanzania in respect of national forest reserves);

- *Special arrangements:* in which community members operate on their own land areas and manage forest- and woodland-based micro-enterprises under a CBO or trust; and,

• ***Community-based forest management:*** in which jurisdiction is fully devolved and sometimes includes ownership of the estate, e.g. as in Gambia, Malawi, Tanzania, Lesotho and, potentially, Namibia, South Africa and Uganda.

The common CBFM approaches revolve around community cooperation in forest management, through product and benefit sharing under defined terms of agreement. Under these arrangements, communities participate in forest protection in exchange for access to defined products, usually Non-Wood Forest Products, traditional socio-cultural values, and benefit sharing. The second model is based on sharing power and ownership with conservation management responsibility. In this instance, CBFM construct is power-ownership focused and carries responsibility for sustainable forest management, through a real transfer of authority. Such programmes work towards improving resource management through democratic transformation.

Forestry administrations seem to prefer the first model, centred on collaborative arrangements, product-based and benefit-sharing arrangements with communities, rather than the more devolutionary regimes that are ownership-based and power/management-centred systems, to which such CBFM often lead.
Despite much rhetoric about participatory approaches, the state is still taking most decisions and continues to restrict CBFM to community and degraded forests, denying communities access to biodiversity rich forests and forest products, licensing and enforcement (Odera, 2004).

Implementation of CBFM at the community level

Procedurally, the community places a request with an intention to initiate a CBFM project following a standard procedure and guidelines provided in working manuals. Most states have established community support units in the forest service that may assist communities. Such an application is accompanied by a detailed resource inventory, a forest management plan and map. In forest rich countries, harvesting designs are crucial. The CBFM agreement or contract signed between the community and the state defines the primary construct of the CBFM, specifies roles, areas of responsibility, jurisdiction, and the management paradigm. The communities manage the forest through a Village Forest Committees (VFC) appointed by a general assembly of members (Odera, 2004).

According to Odera (2004), the state carries a dominant stake in the development of the CBFM and assigns roles and levels of benefit distribution without prior negotiation with communities. It is only in the village forest reserves in Tanzania where the village governments inform the district council of proposed action on village forest development. But all cases involving national forest reserves are referred to the central state.

Some of the requirements constraining the growth of CBFM under this approach include demands on communities to conduct surveys, develop a management plan, implement boundary demarcation, forest zoning, all of which go beyond what the forest administration can accomplish with its core staff, government funds and expertise, let alone untrained communities. In countries such as Gambia and Senegal, the community zones the forest and determines an

appropriate management regime (Amanor, 1997; 2000; FAO, 2000; FDCFU, 1998). By contrast, in Burkina, Côte d'Ivoire and Ghana, the plan is either developed by the forest service or prepared with their in-puts (FAO, 2000). These requirements have been eased in some countries and procedures have been simplified and decentralised to avoid delays (Schindele, 1998; FDCFU, 1998).

Throughout the region, the state forest retains licensing and enforcement functions. The VFCs hold both executive and legislative powers to act on behalf of the community, including authority to make judicial byelaws on issues affecting the community and local resources. But their authority is still relatively weak.

Quite often, the legal weight of forest rules and to some extent byelaws made by VFC has failed to receive judicial scrutiny (Wily, 2000). Despite inadequacies in devolution of power, community level governance is emerging as the most appropriate institution capable of enabling communities to shoulder forest management responsibility previously held by foresters.

Buffer zone developments and joint forest management (JFM) have the longest history and are designed to reduce local dependence upon the forest by providing communities with forest access to procure specified goods and services from the forest for livelihood support. Buffer zones are particularly common with the wildlife conservation sector, particularly in wildlife rich countries in southern Africa.

Experience further shows that, approaches that treat communities merely as dependant beneficiaries, risk losing their support for protection and SFM (Wily, 2002). By contrast, provisions of access to defined forest products merely meet

part of the economic costs borne by the community. This is consistent with Marrow and Hull's (1996) observation, that having legal title to the land is a prerequisite for the villagers to define the boundaries of their forests as well as the right to defend those forests. Kerkhof (2000) concurs with the view that communities can only manage woodland and forest resources over which they have some degree of effective long-term ownership.

A common weakness facing the CBFM process in Africa is the failure to accompany shifts of responsibility to the local government with a concurrent shift in resources for implementation. It is also noted that devolution of power to the district misses the deserved target, the communities that are responsible for resources management (Wily, 2002; Shackleton and Campbell, 2001). At the same time, local government units do not have the training or capacity to assume the responsibilities effectively.

Moreover, under such devolution, the final authority still rests at the level of the central/national office and not at the local level. Consequently, local forestry agencies find themselves caught between the demands of the central government, conflicting local claims on the resources and competing demands from external stakeholders (FAO, 2002). This weakness is implicit in the failure of policy and legislation that fail to recognise village institutions.

Experiences from the field show that: (a) participation as a whole is visibly moving from consultative and collaborative norms to those in which partnerships between the state and community are being forged, for the purpose of enabling communities to operate effectively as autonomous forest authorities, (b)

empowerment of local communities as owner-managers of emergent community forests is gaining particular impetus from corollary land reform strategies that endow customary land interests with much improved status in state law (FAO, 2003).

Practical initiatives towards community involvement in forest resources management in Ghana

Community participation can be seen as a process whereby the members of a community are given a voice and a choice to participate in issues affecting their lives. In this way the members of the community might, if the process is managed well, take ownership of the projects that are implemented (Theron, 2005). In a bid to deepen the participation of the local people in the management of forest resources in Ghana, several pragmatic steps were taken in recent times.

In 1992, the government created the Community Forestry Management Unit within the Forestry Services Division (FSD) to operationalise the Collaborative Forest Management initiative. The Unit also established the Community Forestry Committees (CFCs) in the local communities as a contact point for consultation in forest reserve planning in Ghana. Boundary maintenance contracts were issued to the local communities, while foresters paid farmers who tended seedlings in planted areas. In addition, a new timber management law established in 1997 required concessionaires to provide 5% of royalty value to local communities and to secure the permission of landowners prior to harvesting on their lands (Appiah & Pederson, 1998).

28

In 1999, the MLNR developed a Natural Resource Management Programme (NRMP) to ensure the sustainable management of forest, savanna and wildlife resources, biodiversity conservation, environmental management and co-ordination. To execute and achieve this programme, the MLNR established a NFF at the national, regional and district levels to consult with civil society about the implementation of the programme. However, the shortcoming with this programme has been that the government has tended to involve only Non Governmental Organisations (NGOs) rather than the direct stakeholders such as the private concessionaires and forest fringe communities. Limited inter-sectoral co-ordination and co-operation in the implementation of the programme at the local level particularly by the District Assemblies (DAs) has been another setback. At the national level, there has been limited effective co-ordination and collaboration between government institutions, the private sector and NGOs. Weak institutional capacity, limited effective community participation in the implementation of the programme, insufficient technical and financial resources were identified as other flaws (MLFM, 2004).

In 2001, the government instituted the National Forest Plantation Development Programme (NFPDP) in the Wenchi District of the Brong-Ahafo region. The programme was executed by the Plantations Department (PD) of the FSD of the FC. The FSD engaged the local farmers in the programme to provide all the labour inputs in the form of site clearing, pegging, planting, maintenance and fire protection. The farmers were also permitted to cultivate their food crops, which were inter-planted with the tree crops on the same piece of land (FC, 2007).

In 2003, the MLNR officially launched the Community Forest Management Project (CFMP) to grant the country's forest reserves to the local communities to be managed by them for their own benefit and at their own cost. Although strategies for the CFMP were developed, they were largely unimplemented. There has also been limited co-ordination between stakeholders and the absence of a legal framework to ensure transparency and to motivate community participation through the equitable distribution of costs and benefits (MLFM, 2004).

In 2004, Forest Watch Ghana (FWG) - a coalition of NGOs in the forest sector collaborated with DAs and forest fringe communities to fill the institutional gaps at the community levels. In addition, they sensitised and provided communities with the necessary information they needed to be able to assert their rights, and fulfil their responsibilities in the management of forest resources. Being a Civil Society Organisation (CSO), they also held other stakeholders and duty bearers accountable to their responsibilities with regards to forest resource management. This intervention enabled many local communities in the Western region to be aware of their rights to protect the forest, which empowered them to stop timber companies from illegal logging in their forests. Communities in this region also began to integrate timber and non-timber forest products into their cocoa farms, which helped in improving biodiversity in the off-reserve areas (Katako & Vigoda, 2007).

Similarly, Care International, which is another key stakeholder in forest resource management in Ghana, developed Community Resource Management

Areas (CREMAs) in the off-reserve areas around the protected and globally significant biodiversity areas in the Western region in 2007. The Community Forest Biodiversity Project was a four-year project funded by the French Global Environment Fund. It aimed at enhancing biodiversity conservation through the establishment and management of 450 hectares of CREMAs in the off-reserve areas around Ankasa and Bia Conservation Areas, Krokosua Globally Significant Biodiversity Area and forest reserves around Cape Three Point and other protected areas in the Western Region. This was in a bid to encourage communities to integrate wildlife management into their land use practices. These systems guaranteed forest dependent communities and families control over forest management decisions, access to, benefits and taking responsibility for the sustainable management of forest resources (Katako & Vigoda, 2007).

Though the local communities are engaged to some extent in the management of their forest reserves in Ghana through these initiatives, the International Union for the Conservation of Nature –IUCN (2009) contested this fact by arguing that some forest communities in the country participate sparingly in the management of their forest resources. The IUCN for example, noted that in the Tano Ofin Conservation Forest in the Ashanti Region, the adjoining communities have little knowledge and access to information about forest policies, rules and regulations. In the same way, they were ignorant about their roles, rights and responsibilities in the management of their forest resources and conservation of biodiversity. These factors culminated in low participation and interest by

community members, who have become apathetic to forest protection issues (IUCN, 2009).

Conceptual framework for the management of the Kabakaba West Reserve

Miles and Huberman (1994) canvassed that a Conceptual Framework explains either graphically or in a narrative form, the main things to be studied; namely, the key factors, constructs or variables and the relationship among them. The Conceptual Framework for this study envisaged participation of local communities as a major vehicle for sustainable forest resource management. In this context, local participation was operationally defined at four levels and connotes involvement in the following: 1) planning and decision-making, 2) implementation, 3) monitoring and 4) benefit sharing.

It was further envisaged that the involvement of the local communities in these four levels of participation would engender the following: 1) efficiency in the management of the forest resources; 2) equity among all the stakeholders with respect to management and utilisation of the forest resources; and 3) empowerment of the local communities to better manage the resources at their disposal.

With this level of expected results occasioned by grassroots involvement in the management of the reserve, the logical conclusion of the Framework was that the local communities would develop a high sense of ownership for the reserve and its resources, their livelihood situations would be enhanced and this would trigger greater commitments on their part to protect the sanctity of the reserve. Examples abound that demonstrate that local communities are becoming more responsible

with respect to forest management, as their rights become clearer and the benefits significant (*Murphree, 2000*). The overall effect would be that the reserve would be sustainably managed. The overall operability of this concept nonetheless hinges on sound legal and institutional frameworks which recognise the independence of the local communities in taking control over the management of the forest resource with the state and its apparatus providing facilitating role.

Summary of Literature Review

The review of literature was done to provide the researcher with guidance to arrive at a theoretical and empirical framework for the study. Theoretical review of literature looked at the concept and importance of forest reserves, the concept, types and theories of participation, and the practical operationalisation of community participation. These topics provided meaningful insights into the various theoretical issues on which the study was anchored.

Specifically, it was evident from the review that forest reserves are portions of lands where commercial activities such as harvesting of wood products are excluded in order to capture elements of diversity that can be missing from sustainably harvested sites; it notes that reserves provides reference sites for the objective assessment of the sustainability of forest management practices and are also essential for practicing adaptive resource management. This review has also considered the issue of participation and its related components and noted that this is a very complex issue. It highlights the fact that participation connotes the

involvement or engagement of people in policies and decisions that affect their wellbeing.

The empirical review, on the other hand, focused on global studies as a whole and Ghana in particular to establish current trends in the community participation in the management of forest resources particularly the reserves. The literature revealed that the local communities are engaged to some extent in the management of their forest reserves in Ghana. With respect to forest resource management, the literature revealed that State institutions are key players in Ghana and other countries. The literature finally looked at a Conceptual framework for the management of forest reserves. The Framework explains in a narrative form, the dynamics of participation as it relates to sustainable management of forest resources.

CHAPTER THREE

METHODOLOGY

Introduction

Chapter three discusses the techniques and procedures used to structure the research, collect and analyse data. It comprises descriptions of the study areas, research design, study population, sample size, sampling procedures, instruments for data collection, pre-test of instruments and data collection, and the methods for data analysis and interpretation.

Study area

The forest communities surrounding the Kabakaba reserve namely: Matse, Taviefe and Ziavi are situated towards the North of Ho; the Volta Regional capital (Figure 1). Geographically; Matse is located on Latitude 6.7° and Longitude 0.48°, Taviefe on Latitude 6.67° and Longitude 0.47°, whilst Ziavi is located on Latitude 6.63° and Longitude 0.43°. By the 2000 Population and Housing Census, the total population of Matse, Taviefe and Ziavi communities was respectively 2,323, 2,950 and 2,227 with female population in all communities slightly higher compared to their male counterparts Ghana Statistical Service (GSS), (2000). Ewe is the language spoken by the indigenes. Mixed forms of vegetation are found in these communities – pieces of savannah grassland, forest and transitional vegetation particularly in parts of the reserve that have been degraded. The Matse, Taviefe

and Ziavi communities collectively have 13.5 square kilometres of forest reserve. The majority (90%) of the inhabitants in these communities are engaged in subsistent agricultural production. The technology employed in agricultural production is largely the traditional cutlass and hoe with slash and burn as main farming system. Produce from the farm are mainly food crops including maize, plantain, bananas, cassava, etc. A few particularly around Matse and its environs produce cocoa on limited scale. Some are also engaged in reforestation by undertaking plantation agriculture particularly in the degraded parts of the reserve. Mechanised farming is very limited and the rate of adoption of other farming related technologies is equally low. Farming is entirely rain-fed as there are no irrigation facilities and this culminates in low productivity.

The formal sector of these communities is mainly made up of teachers, and a few other public sector employees. Given the geographical proximity of these communities to Ho, these communities also serve as dormitory towns for public sector workers who commute daily to and fro to work in Ho.

The mean monthly temperature range is between 22^0 C and 32^0 C, while the annual mean temperature range is between 16.5^0 C and 37.80^0 C. In effect, temperatures are generally high throughout the year, which is favourable for plants and food crop farming. However, during the dry season, daily temperatures can be very high *http://ho.ghanadistricts.gov.gh*.
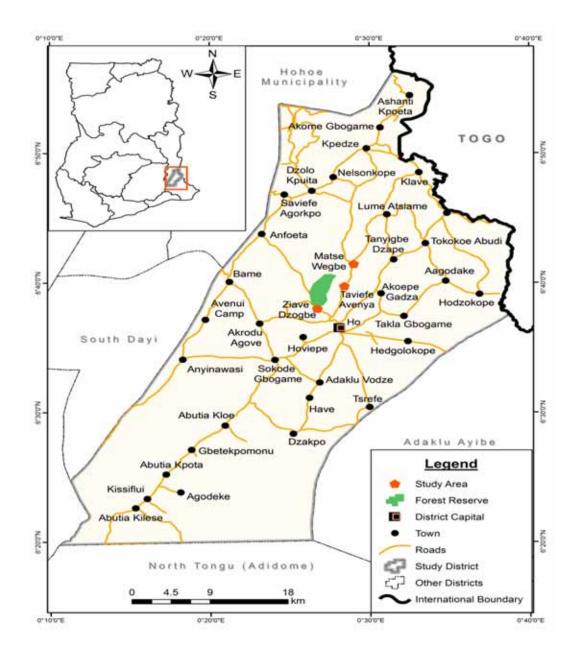
Figure 2: Map of Ho Municipality

Source: University of Cape Coast - Centre for Remote Sensing and Geographic Information Services – 2013.

Research design

The survey design was adopted for the research because it affords unbiased representation of population of interest and standardised data across the study population. Axinn, Link and Groves (2009) postulates that a survey involves acquiring information about one or more groups of people perhaps about their characteristics, opinions, attitudes or previous experiences by asking them questions and tabulating their answers. The ultimate goal of the design is to learn about a large population by surveying a sample of that population. However, the weaknesses of the design are that the findings of a sample drawn from a population at a particular time or period are held constant even in the future, when conditions or circumstances may have changed or evolved.

Thus, in employing a survey in research, peoples' descriptions of their attitudes and opinions are often constructed on the spot. Often times, people may not have really thought about certain issues until a researcher poses a question about them and so their responses may be coloured by recent events or the current context. Therefore, peoples' responses may not be a true reflection of their attitudes, opinions or perceptions about a phenomenon. An additional problem of the design is that some people may intentionally misrepresent facts as they know them, in order to give a researcher a favourable impression (Axinn et al, 2009). The above hitches notwithstanding, the survey design was appropriate because it succeeded in eliciting the required data from the respondents for the study.

Study population

The population of the study was made up of heads of households and opinion leaders of the forest fringe communities (Table 1). According to Haviland (2003), the household is "the basic residential unit in which economic production, consumption, inheritance, child rearing and shelter are organized and carried out"; the household "may or may not be synonymous with family. The heads of households were considered as the appropriate respondents for the study because, they represented each household in the communities and therefore their views with regards to the management of the forest reserve were considered as representing the views of the entire household. When extrapolated further, the collective views and opinions of households (represented by heads of households) becomes the general views and opinions of the communities at large.

Table 1: Details of the study population

Communities	Actual number of households heads	Chiefs	District Assembly Members
Matse Begbe	59	1	1
Taviefe Aviefe	133	1	1
Ziavi Lume	150	1	1
Total	**342**	**3**	**3**

Source: Field data, 2011

The opinion leaders were the Chiefs and District Assembly Members from the three study communities. The Municipal Forest Manager who heads the Forestry Department was also included as one of the respondents for the study as he is the representative of the State with the responsibility of managing the reserve.

Sampling procedures and sample sizes

The sample size was determined using the Creative Survey System's Survey Software at http://www.surveysystem.com/index.htm. At 95% Confidence Interval and with a population of 342, the total Sample Size was calculated at 181. This was then proportionately distributed among the three study communities based on their respective total number of heads of households identified in each community. In this sense, with 17%, 39% and 44% respectively for Matse, Taviefe and Ziavi, the corresponding number of proposed respondents per community were 31, 70 and 80.

The simple random and purposive sampling techniques were employed for the study. The simple random sampling technique was used to select the heads of households using the List of Heads of Households as the sampling frame (342). This technique was used because, it gave all units of the target population an equal chance of being selected and guaranteed representativeness of the research findings (Sarantakos, 1996).

The purposive sampling procedure was adopted because some members of the forest communities were considered as key informants for the study. Sarantakos (1996) postulates that purposive sampling is purposely used to choose subjects, who in the researcher's opinion, are thought to be relevant to the research topic. In this case, the judgement of the investigator is more important than obtaining a probability sample.

The respondents who were included in the study were the Chiefs, district assembly members and the District Forestry Manager. In each of the study communities, a Chief and an Assemblyman were selected for the key informant interview (Table 1). They were included in the research as opinion leaders because they represented the collective interests of the people and had deeper insight into the issues about the reserve given their status in the community.

Instruments for data collection

Structured and Semi-structured Interview Schedules were used to collect primary data. The Structured Interview Schedule was used to interview heads of households because most of them were either not educated or had a low level of education. The Semi-structured Interview Schedule was used to elicit information from the opinion leaders and the District Manager. This interview schedule was employed to get in-depth information from them.

The rationale behind using these different data collection tools was that the targeted respondents were different in nature and the kind of information needed from them required the use of separate tools to enable the right information to be

elicited from them. For instance, the semi-structured data collection tools were used for the community opinion leaders and the District Manager because the Researcher needed to get more in-depth information from them which helped to give more insight into the data collected using the Structured Interview Schedules.

A thorough and extensive literature review of relevant documents on the study area and related research was done using secondary data from journals, books, workshop reports, Annual Reports of the FC and Ghana's 1994/2008 FWP documents. The researcher consulted the forestry staff at Ho Municipal to seek clarification and foster better understanding of their operations. The secondary data was also used to increase reliability and validity of the Primary Data (Babbie, 2002; Kumar, 2002 cited by Phiri, 2009). The review provided valuable insight into the study area and issues surrounding the research core objectives, relevant literature, the methodological approach for the general survey, and discussion of the research findings.

Pre-test and data collection

A pre-test was conducted in the community of Abutia Teti near the Abutia Hills Forest Reserve in Ho municipality to test the reliability and validity of the data collection instruments. This community was chosen for the pre-test because it has the same socio-economic characteristics as the study communities. Like the Kabakaba reserve, there is also minimal local participation in the management of this reserve. The pre-test was conducted on May 26th, 2011. Heads of households of the community were reached through the Assistant District Manager of the

MFD to pre-test the Structured Interview Schedule. The Semi-structured Interview Schedule was administered to four opinion leaders of the community and the Assistant District Manager to test its reliability. After the pre-test, the instruments were modified in readiness for the actual data collection exercise.

Methods of data analysis

The Statistical Product and Service Solutions (SPSS) version 16.0 was used to screen, clean and analyse the primary data collected by the use of the Structured Interview Schedule. The categorical variables were coded and errors were checked by running and inspecting frequencies, to make sure that their maximum and minimum values corresponded with the codes at the Variable View. With respect to the Semi-structured Interviews, the recorded sessions held with the key informants were transcribed into Word Document Format. The transcripts were developed into codes to identify important substantive themes for analysis and interpretation. The data were then analyzed using dominant themes that recurred across the key informants. Also considered in the analysis were divergent views expressed by some of the informants. The qualitative data were used to clarify and provide in-depth meaning to the quantitative data generated from the survey.

A combination of frequencies and percentages was used to express community participation; the reasons for restricted local participation; the factors that account for the limited participation of local communities in the management of the reserve; and the effects of limited/non-involvement of the local people on the overall management of the reserve.

Measurement of Participation

Participation of communities in the management of the reserve was measured using Participation Index adapted from "The Statistical, Economic and Social Research and Training Centre for Islamic Countries" (SESRIC), (2010). This was used in measuring the performance of member countries in the use of Online Services to participate in public affairs – e-participation index.

To start with, participation is seen at four levels/components i.e. planning and decision making, implementation, monitoring and benefit sharing (Table 2).

Table 2: Criteria for measuring participation

Levels of Participation	Indicators Assigned
Planning	Participating in Management Meetings, being consulted
Implementation	Participating in Boundary clearance and plantation activities,
Monitoring	Participating in vigilante activities and avoid illegal activities in the reserve,
Benefit Sharing	Participating in royalties and opportunities to farm or logging in the reserve

Source: Author's construct, 2011.

Each of these components was assigned two indicators and these indicators were used to calculate the Index for each of the components – hence, Planning Index (PI), Implementation Index (IIP), Monitoring Index (MI) and Benefit Sharing

Index (BI) were generated. An average of these Indices was then calculated to generate the Overall Participation Index (OPI). Mathematically, the expressions of the various indices are as follows:

Planning/Decision making Index (PI) = MN + C/N

Where M = number of respondents reporting to attending management meetings

N = the total number of respondents

C = the number of respondents reporting being consulted

Implementation Index (II) = B/N + P/N

Where B = the number of respondents reporting to boundary clearance

N = total number of respondents

P = the number of respondents reporting to plantation activities

Monitoring Index (MI) = V/N+A/N

Where V = number of respondents reporting to participating in vigilante activities

N = total number of respondents

RA= respondents reporting to avoiding illegal activities in the reserve

Benefit Index (BI) = R/N + O/N

Where R = the number of respondents reporting to receiving royalties

N = the total number of respondents

O = respondents reporting to opportunities to farm or log in the reserve.

Overall Participation Index (OPI) =

$$\frac{\text{Planning Index} + \text{Implementation Index} + \text{Monitoring Index} + \text{Benefit Index}}{4 \text{ (the 4 levels of participation)}}$$

Thus, OPI = $\dfrac{(PI) + (II) + (MI) + (BI)}{4}$

The OPI gives the overall position of the local communities' participation in the management of the reserve. The value of all the indices i.e. PI, II, MI, BI and OPI can be interpreted on a scale of 0 - 1, where zero means the community members have not participated at all whilst 1 is the highest attainable level of participation. Increases in values from 0-1 imply increased participation of the communities in the management of the reserve.

CHAPTER FOUR

RESULTS AND DISCUSSIONS

Introduction

      Chapter Four elaborates on the results and discussions from the analyses of data. The results and discussions were presented as follows: participation of the communities in the management of the reserve, reasons for limited participation in the management of the reserve, and the effects of limited participation on the local communities and the overall management of the reserve, etc.

Results from the field work

      The study purposed to reach 181 heads of households per the calculated Sample Size. However, the data collected was less by one head of household. In effect, one hundred and eighty (N=180) respondents were present and interviewed during data collection. Another challenge that was encountered during the data collection was non-availability of some heads of households pre-selected for interview especially in the Ziavi community. As a result, the required number of respondents based on the Sample Distribution could not be obtained. In view of this, more respondents were covered in Matse and Taviefe to compensate for the loss incurred in Ziavi. Consequently, the sample distribution changed from 31, 70 and 80 (per the original sample distribution) to 32, 78 and 70 respondents for the Matse, Taviefe and Ziavi communities respectively.

Participation of local communities in the management of the reserve

Local communities' involvement in the management of the reserve was measured using the Participation Index. As explained earlier, indices were calculated for each participatory criterion i.e. planning/decision making, implementation, monitoring and benefit sharing.

Participation in planning and decision making

In the management of forest resources, the important components of planning and decision making are meeting attendance and being consulted on important issues before decisions are made. In this study therefore, these two indicators were used to measure the extent of local people's participation in planning and decision making phases of the management process. The survey result showed that 14 respondents reported participating in meetings in connection with the reserve management. With respect to consultation, 25 respondents admitted being consulted by the Forestry Authorities on issues about the reserve. This type of participation observed in the study confirms Arnstein's (1971) form of participation which he calls "degree of tokenism" which implies people's involvement is limited to being consulted before or being informed after important decisions which affect them are made. This finding also confirmed Mcneely's (1994) view about participation by consultation which states that, consultations are held with the local people and the external agents listen to their views. External agents define the people's problems and solutions and modify these in the light of

their responses. The people do not share in the decision making, as their views may or may not be taken on board. The study further corroborates Biggs' (1989) view of consultative participation which states that in consultative participation, most of the key decisions are made by one social actor, but emphasis is placed on consultation and gathering information from others, especially for identifying constraints and opportunities, priority setting and evaluation.

It can be seen that in participation by consultation, the local people do not have any power to influence the decisions in any way. Thus, participation becomes a mere window dressing affair where the affected people are purported to be part of the decision making process when indeed, their influences on such decisions are either insignificant or next to zero. The index was calculated using the following formula:

Planning Index = (M/N + C/N)/N = (14/180) + (25/180) = (0.08 + 0.14) = 0.22

Thus, the resultant Participation Index for Planning/Decision making was 0.22. On a scale of 0-1(with 0 implying no participation at all and 1 being the highest level of participation), the level of participation by the local communities in planning and decision making as far as the management of the reserve is concerned was noted to be low.

Participation in implementation

The expectation of the local authority and the requirement of the collaborative system approach is that the local people should fully participate in

the implementation of forest activities. This would help local people to understand their responsibilities, benefit and obligations under co-management approach in natural resources management (Wily, 2002; Borrini-Feyerabend *et al*., 2004).

For the purposes of this study, two elements of implementation were used i.e. boundary clearing activities and involvement plantation, to determine the level of participation by the local communities. It emerged from the study that 23 and 28 respondents were respectively involved with boundary clearing and plantation. The participation in boundary clearing corroborates the view of Odera (2004) when he identifies buffer zoning as one of the major activities under CBFM. Participation in plantation has also been noted as a crucial area where the local communities can be effectively engaged in forest resource management. Participation in plantation was also recognised under the NFPDP as piloted in the Wenchi District FC (2007). Under this arrangement, the local people provided all the labour inputs in the form of site clearing, pegging, planting, maintenance and fire protection. The farmers were also permitted to cultivate their food crops, which were inter-planted with the tree crops on the same piece of land. Mathematically the Implementation Index is presented as follows:

Implementation Index = B/N + P/N = (23/180) + (28/180) = (0.13 + 0.16) = 0.29

This returned a Participation Index of 0.29. On a scale of 0-1(with 0 implying no participation at all and 1 being the highest level of participation possible), the level of participation by the local communities in implementation component of the reserve management could be seen to be low.

Table 3: The index of the various components of participation

Participatory Criteria	Indicators	Participation Index
Planning/Decision	Attendance at meetings	0.22
Making	Being consulted on matters about the reserve	
Implementation	Boundary clearance	0.29
	Plantation	
Monitoring	Vigilante activities	0.44
	Avoidance of illegal entry	
Benefit Sharing	Royalties	0.25
	Access to forest products	
Overall Participation	Average of the indices of all 4 criteria above	0.3

Source: Field data, 2011.

Participation in monitoring

Monitoring is key in reserve management as it is the only way by which the reserve is put under surveillance against possible encroachers or illegal entrants. It is therefore a very important area for the forest fringe communities to feature in the management of the reserve. Participation in Monitoring was measured using the Monitoring Index. Two indicators were used to measure participation in monitoring – engagement in vigilante activities around the reserve and avoidance of illegal entry. The vigilante activities involved policing and reporting illegal activities such as logging, unauthorised farming, etc. by residents to the Forestry

51

Authorities. Avoidance of illegal entry connotes personally avoiding entry into the reserve to draw any Timber Forest Products (TFPs) or Non-Timber Forest Products (NTFP) from the reserve or sensitising others to refrain from entry. The survey results revealed that 30 respondents reported taking part in vigilante activities. Another 50 respondents claimed to have been avoiding entry into the forest to draw any product from it. The mathematical equation is expressed as:

Monitoring Index = V/N + AN = 30/180 + 50/180 = (0.17 + 0.28) = 0.44

Thus, the corresponding Index generated for Monitoring was 0.44. Again, on a scale of 0 to1(with 0 implying no participation at all and 1 being the highest level of participation ever possible), the level of participation by the local communities in monitoring activities of the reserve was also low.

Participation in benefits

The livelihoods of most forest fringe communities are dependent on the resources of the forest. Naturally therefore, they are entitled to draw in on the benefits or returns that accrue from the forest. In this study, two indicators were used to measure access or participation of the local communities in the benefits generated by the reserve. These indicators were participation in royalties and opportunities to draw on TFP and NTFPs. Analysis of the survey data cited 25 respondents who claimed to have benefited from royalties; whilst 20 respondents also admitted having had the opportunity of drawing on TFP and NTFPs of the reserve. Participation in benefit sharing was cited by Appiah & Pederson, (1998) when they commented on a new timber management law established in 1997 that

required concessionaires to provide 5% of royalty value to local communities. The mathematical equation for the Benefit Index is expressed as:

Benefit Index = (R/N) + (O/N) = (25/180) + (20/180) = 0.14+0.11 = 0.25

The application of the Participation Index formula returned an index of 0.25. On a scale of 0-1(with 0 implying no chance of participation and 1 being the highest level of participation possible), the level of participation by the local communities in benefits of the reserve remained low.

The reason for the low BI could be explained in the fact that benefit sharing affects only community members or families whose land was appropriated for the reserve. Though there are other forms of benefits that are communal in character i.e. the electric poles harvested from the reserve for streetlights in the communities.

The Overall Participation in the management of the reserve

The overall participation of the local communities in the management of the reserve was measured by averaging the sum indices of the four participatory criteria identified earlier – Planning/Decision making, Implementation, Monitoring and Benefit Sharing. Thus, the Overall Participation Index was arrived at by averaging the sum total of the indices of these four criteria. This was mathematically expressed as:

OPI= (PI + II + MI + BI)/4 = (0.24+0.28+0.44+0.25)/4 = 1.21/4 = 0.30

The OPI of 0.30 suggests a general low level of involvement of the local communities in the affairs of the reserve. This confirms the observation by the FC in its Annual Report of 2007, where it was acknowledged that the involvement of

Matse, Taviefe and Ziavi communities in the management of the Kabakaba West Reserve has been extremely minimal. The study also confirms Edusah's (2011) views on involvement of forest fringe communities in forest reserve management in Ghana when he maintains that in spite of growing recognition that the wise and sustainable management of forest reserves requires the close involvement of all stakeholders, the FC denies the local people access to the forest reserves and that the communities are not involved in forest management regimes.

Reasons for limited community participation in the management of the Kabakaba West Reserve

The study sought to ascertain from the local people why they were not fully participating in the management of the reserve. The structures put in place to facilitate participation at the grassroots were also examined. From the

Table 4: Reasons for limited participation in the affairs of the reserve

Reasons	Freq	%
No response	3	1.7
I don't own land in the reserve	30	16.7
Authorities prevent us	92	51.1
No interest in the reserve	20	11.1
Because I am a woman	16	8.9
I am illiterate/have no knowledge	19	10.6
Total	**180**	**100.0**

Source: Field data, 2011.

perspectives of the respondents, five key issues as presented in Table 4 were critical for their participation.

Land ownership in the reserve

Land ownership was an imperative factor in determining participation, which gave an added opportunity to some community members to participate more than others. There is therefore the likelihood that the chances of some of the local people to participate in the decision making process of the forest, would have been tremendously enhanced should they own land in the reserve. Thus, members of the communities who own some parcels of land in the reserve have a greater chance of being engaged by the State in the management of the reserve. This confirms the arguments of Verba, Schlozman and Brady, (1995) that some people participate because the opportunities for them to do so are greater than for other people.

Lack of interest by community members to participate

As noted, a proportion of the study community reported not interested in the affairs of the reserve. Further investigation revealed that not all community members in the three communities were dependent on the reserve for their livelihoods. This emanates from the fact that the size of the reserve $13.5km^2$ is small relative to the land size of these communities. Hence the reserve does not have significant effects on the livelihoods of majority in the communities. Indeed, large segments of the population of these communities have nothing to do with the reserve; hence their livelihoods are not dependent on the reserve. The finding

corroborates the position of Morell (1992/4) when he noted that recognition by communities that their livelihood depends on the permanent flow of goods and services from forests and trees is fundamental in their participation in any management efforts of such resources. In this context therefore, the livelihoods of some community members are not linked to the reserve hence there was no compelling reasons for them to participate in the affairs of the reserve. In fact, they did not feel connected to the reserve in anyway.

Gender consideration

Forests are significant sources of livelihood and women are the linchpin that connects the livelihood strategies of rural households with forest wealth (Agrawal *et al.*, 2006). However, the forestry sector has been slow in providing equal opportunities for women who are critical actors in forestry and natural resources utilization and management (Ardayfio-Schandorf *et al.*, 2007). The findings from the study appear to confirm the above positions with 8.9% of the respondents reporting they were not involved in the affairs of the reserve because they were women. This position was further given credence by International Fund for Agricultural Development (IFAD) Poverty Report of 2001 which notes that women are often excluded from community organizations or committees that manage natural resources, even when the projects are intended to benefit women. Adhikari (2001) and Martin (2004) also observed that women representation has been low at all levels and most of the time; they are largely ignored in the process

of planning and decision making process of formulating forests management plan and policies.

Illiteracy/Lack of knowledge

The study revealed that on account of illiteracy, some community members felt excluded in the management of the reserve. This is contestable as there are various roles along the forest resource management value chain some of which may not necessarily require any level of literacy to play i.e. site clearance for plantation, construction of fire belts, vigilante activities around the reserve, etc. All these activities which are key to forest resource management do not require literacy or education to engage in.

The above issues notwithstanding, the need for literate population for effective participation cannot be gainsaid. As Meyer, et al, (2002) put it; illiteracy is an inhibiting factor in community participation. This is because illiterate people may be marginalised by professional and technical communication during the community-participation process. The local communities therefore need empowerment and education to better participate in the management of the forest resources.

Restriction by the Forestry Authorities

More than half (51.1%) of the respondents reported that the Forestry Authorities prevented them participating in the management of the reserve. they mentioned specifically that they did not received any invitation from the

Authorities to participate. This revelation appears to agree with the widely held view that foresters are not sincere in their commitment to CBFM. Foresters seem threatened by fears of loosing jobs, authority and influence through up-scaling of CBFM practices. Power is an all important resource and tool in life and every bureaucrat is reluctant to give it up. Anderson et al. (1991) and other critics of the Asian JFM, have observed that the local organisations under JFM in India are little more than a proxy for the forest service to perpetuate its hold on key aspects such as the distribution of benefits. This is probably true for managers of the Kabakaba West reserve. It is however insightful to know that discussions with opinion leaders in the communities presented a contrary view. It appears the forestry authorities have been dealing only with the opinion leaders to the neglect of the larger community members. This is because, the very things the community members accused the forestry authorities of not doing were the very things the opinion leaders praised them for.

From the perspective of the Forestry officials, the local communities were being involved in various facets of the reserve. Mention was made of their participation in plantation, buffer zone preparation, watchdog activities, etc. He however admitted that the communities had limited participation in planning and decision making. On that score, he contested the involvement of the local people in the management of the reserve because, in his opinion, participation was an expensive and time consuming venture. For instance, he pointed out that when meetings are organised, transport fares, feeding and allowances of the participants have to be catered for, yet the resources are not available. This finding confirms

Pokomy's (1987) arguments that participation costs time and money. The involvement of people in decisions that affect their daily lives requires a lot of consultations. Time, material and financial resources have to be deployed for consultations. Participation is tantamount to making time to consult and talk.

Challenges to community participation in the management of the Kabakaba West reserve

The challenges confronting effective participation of the local communities in the management of the reserve can broadly be categorised into two – institutional failure and inadequate influence of the reserve on the livelihoods of the local people.

Institutional Failure

In recent times a number of legal and policy steps (as captured in the Literature Review Section of this study) were taken to give operational meaning to community participation in forest resource management. The list below gives a snapshot of these measures:

- The FC Act (Act 571, 1999)

- The 1994 FWP revised in 2008

- The Forestry Development Master Plan (1996-2000)

- The Timber Resource Management Act – 1998

- National/Regional/District Fora

- The Community Forest Management Unit – 1992

- The Community Forest Committees - 1992

- The Natural Resource Management Project – 1999

- National Forest Plantation Program – 2001

- Community Forest Management Project – 2003

All these policy and legal steps were taken with the view to creating the enabling environment for the effective involvement of the local people in the management of natural resources in the country. Years and decades after these policy and legal initiatives came into being, community involvement in forest resource management remains an elusive pursuit.

From the viewpoint of the researcher, given the reasons provided from the perspective of the communities and the forest authorities with respect to limited participation of the communities in the management of the reserve, only one thing stands out – institutional failure; both at the community, the state and civil society levels. This is further elaborated on below:

At the community level, key structures for participation were noted to be non-existent. For instance, the CFC which is the village level institutional structure intended to anchor the collaborative forest resource management system was found to be non-existent in the study communities. In Tanzania and Gambia where CBFM systems have advanced, the VFC which is the mirror image of the CFC is a critical pivot around which the whole system revolves Odera (2004). In the absence of these structures, it is difficult for any community level initiatives towards a sustained participation in the management forest resources to make headway.

It was also noted that not much advantage was taken of the existing traditional chieftaincy institutions in these communities in a manner that promotes community participatory agenda. No systematic strategies existed for the traditional authorities to lead their subjects on a path of sustainable management of the reserve using community involvement as an approach. Discussions with the Chiefs in the three study communities revealed that mobilising their subjects along this path was not a priority. It was however indicative from the study that the Chiefs were the first point of call when it came to benefit sharing in the form of royalties. These transactions allegedly went on between the Chiefs and the Forestry authorities often at the blind side of the larger communities.

According to Hibbard and Lurie (2000) cited in Nampila (2005), conditions should be created under which collaborative dialogue can occur around issues that are critical to the community. All viewpoints should be heard and all citizens should have an equal chance to participate in the decision-making process. Contrary to this view, at the district level, no functional community level support structures or mechanisms exists to effectively engage with the local communities on partnerships basis. The District Forest Forum which is a platform established ostensibly to facilitate dialogue among stakeholders on forestry issues was dysfunctional.

But more importantly, the CFMP which sought to devolve management responsibilities of reserves to the local communities could not be taken advantage of as the project itself was dead at birth.

Finally, a closer look at the forestry landscape of the Ho Municipal clearly shows the non-existence of forestry-related NGOs to fill in the gap where the communities and the state fail on their responsibilities. It must be noted that NGOs were key in the Mexican experience of grassroots forestry management initiatives (Morell, 1992/4).

The need for sound institutional framework as a catalyst to the operationalisation of the community participation was well captured and emphasized in the Conceptual Framework for this study. Institutions both at the community and state levels and even CSOs levels need to deliver on their respective mandates. Capacity development efforts aimed at strengthening the community level structures should be a matter of priority.

The overall result of all mentioned above created a situation where decisions about the reserve were still being made by the Forestry Authorities in a top-down fashion with little or no involvement of the local communities. This became evident in the key informant interviews held with the Chiefs and the Assemblymen. This result was consistent with many studies including Kotey *et al*. (1998); Amanor (1999); Ganz *et al*. (2003); Borrini-Feryerabend *et al*. (2004) and Eshun (2008) which opined that forest resources management was characterized by extensive state forest agency's involvement with little recognition of the potential of forest-dependent communities for achieving positive long-term sustainable forest management.

Inadequate influence of the reserve on the livelihoods of the people

The total land size of the Kabakaba West Reserve is 13.5km^2 stretching

across the three study communities. Anecdotal evidence suggests that the ratio of the reserve to the total land sizes of the three communities is rather low. This implies the reserve only occupies a relatively small portion of the land belonging to these communities. Hence, majority of the members of the communities are not dependent on the reserve to meet their livelihood needs. Literature has already confirmed that for people to have stake in the affairs of a given resource, it is imperative that the resource affects their livelihoods needs in significant ways Morell (1992/4). This however, did not seem to be the case with the Kabakaba West reserve. As a result, the local people did not feel connected to it. Hence, the apparent apathy demonstrated to issues about the reserve by members of the community.

In view of the foregoing, community participation as practised in Nepal, Tanzania, India, Gambia, Uganda, and probably other parts of the country Ghana with massive participation where members of the communities are intrinsically connected with the forest/reserve is not feasible in the Kabakaba West Reserve enclave. This is because, the conditions precedent for such a system to operate were currently non-existent in the case of the Kabakaba West reserve.

Consequences of non-involvement of the local people in the affairs of the reserve

The Conceptual Framework for the study predicts that effective involvement of the local communities should logically lead to efficiency in the management of the reserve, equity in access and ownership to the reserve by the

local communities and empowerment of the communities in the area of resource management and utilisation. Non-participation was an issue of concern to this study as it has the likelihood of withholding the expected gains from effective local involvement in the management of resources from the reserve as espoused by the Conceptual Framework for the study. In this Section, the consequences of non-participation were examined mainly from the perspective of the local communities.

Effects of non-participation from the perspectives of the local communities

The study therefore sought to find out from the viewpoints of the local people, the likely effects of non-participation on the communities and the reserve in general. To accomplish this, respondents were asked to state what they thought their exclusion from the management of the reserve resulted in. The issues raised by the respondents were captured in Table 5

Table 5: Ramifications of non-participation in the management of the Kabakaba West Reserve

Description	Freq.	%
Lack of community support for or commitment to reserve protection	132	73.3
Encroachment on the reserve	153	85.0
Local resources remained untapped	65	36.1
Lack of empowerment	74	41.1
Potential community-state conflict over resource ownership/use	117	65.0

Source: Field data 2011.

Encroachment on the reserve by the local communities

Key among the issues raised to be consequent to non-participation in the management of the reserve was possible encroachment on the reserve by the local communities reported by 85.0% of the respondents. This result was consistent with the position of FC (2007) which acknowledged that as a result of the non-participation of the three study communities in the management of the reserve, the reserve was persistently being encroached for different livelihoods pursuits such as farming, charcoal burning and logging. This resulted in the degradation of the reserve and its resources each passing year. The result further corroborates Mukherjii and Rangachari, (2000) assertion (cited by Basu, 2009), albeit in a reverse order, that in many areas, community participation has helped to reduce area under illegal encroachments. For instance, it was noted that in Andhra Pradesh nearly 12 percent of the encroached forest land was vacated since the joint management programme was initiated. The logical deduction was that in the absence of community involvement, chances were that forests would be encroached leading to the degradation of the forest. This situation would negatively affect the sustainability of the forest and its resources.

Lack of commitment to reserve protection by the local communities

In assessing the effects of non-participation on the reserve, lack of community support or commitment to reserve protection was also mentioned by 73.3% of the

respondents. It was envisaged in the Conceptual Framework that involvement of the local people in the management of the reserve was likely to trigger a sense of ownership and commitment among the forest-dependent communities to better safeguard the sanctity of the reserve. This finding therefore is in tandem with the Conceptual Framework in the sense that, if the local people are not involved in the affairs of the reserve, the probability that they would be apathetic towards issues about the reserve could be high. The idea is that they would not identify themselves with the reserve let alone work towards safeguarding it. It must be noted that the lack of commitment on the part of the local communities to protect the reserve creates the ground for encroachment with its attendant forest degradation. The long-run result would be that the reserve cannot be sustainably managed.

Indigenous knowledge in forest management and other resources untapped

Another important point raised by the respondents was the issue of leaving the potentials and resources of the local people untapped in the event of non-involvement of local communities in the management of the reserve. This issue was articulated by more than a third (36.1%) of the study population. The views of the respondents were shared by Tongkul, Lasimbang, Lasimbang and Chin Jnr (2013) when they maintained that forest knowledge held by indigenous communities has a vital role to play in forest management. As a result, there is growing awareness among forest scientists, for example, that local communities who possess traditional forest knowledge can play important roles in co-managing

forestry sustainably (e.g. Fortmann and Ballard, 2011; Ramakrishnan, 2007; Pei, Zhang and Huai, 2009; Herrmann, 2006; cited in Tongkul et al, 2013). Parrotta and Trosper (2012) also observed that collaboration between decision-makers, forest managers and local communities is increasingly recognized as a key to sustainable forestry. The implications are that, the ideals of sustainable forest management cannot be attained if the critical roles of the indigenous people are overlooked.

Potential state-community conflicts over ownership and use

The respondents also anticipated a potential conflict between the local communities on one hand the State Officials in-charge of the reserve. At least, 65.0% of the respondents mentioned this as a possible consequence to limiting the involvement of the local people in the management of the reserve. the findings was consistent with the positions of Kotey *et al.* (1998) and Marfo (2007) who observed that the relationship between the FSD and local people in Ghana has historically been one of mistrust and plagued with conflicts, and this has affected local people's involvement in forest resources management. This situation becomes even more accentuated when the local people, are restricted from meeting their livelihood needs from the forest.

Lack of empowerment for the local communities in reserve management

According to Yasmi (2003), co-management can foster a sense of community empowerment as local stakeholders participate in decision making and benefit sharing. The respondents seemed to agree with the Yasmi as 41.1%

acknowledged that non-involvement of forest-fringe communities in the management of the forest would deny the communities the opportunity to get empowered. Experiences from various countries have shown that when communities are empowered with responsibility and legally secured rights for the management of forest resources, the rate of degradation is substantially reduced, and in many cases the forest cover improves visibly (*Kajembe et al., 2003; Reeb, 1999* and *Wily, 2002; cited in Odera 2004*). It was also noted that devolving forest resource management responsibilities as practised in Tanzania (the Ujamaa Village concept), for example, helps the village level institutions to further develop their structures to better manage the forest. For instance, in the Duru-Haitemba Village Forest in Tanzania, a manual was prepared to assist local forest officials and the community to draw up maps, develop work plans and initiate forest operations; and these helped them to better manage the forests under their jurisdiction (Odera, 2004). The need for empowerment as a prerequisite for participation was further supported by Kok and Gelderbloem, (1994) cited in Nampila (2005) when they observed that communities should be empowered to take control over how things are done. People should feel that they can influence the outcome of the project in order for them to participate. They should be mobilised to take collective action aimed at sustainable development. Ignorance can be overcome by disseminating the appropriate information, and change agents should make sure that they are trusted by the community

How do the communities want to be involved in the management of the reserve?

Given the gaps created by the non-involvement of the local communities in the management of the reserve and its ramifications on the general wellbeing of the reserve and the communities, respondents were asked to indicate how they felt the communities should be involved in the management of the reserve. The various prescriptions given from the viewpoints of the survey respondents and key informants were captured below:

- Formation of joint committees

- Formation of taskforce to police the reserve

- engaging the local people to educate and create awareness about the reserve to other people,

- communicating decisions that have been arrived at by the forest authorities to the communities, and

- setting up a committee of land owners that would advice forestry authorities on effective measures to conserve the reserve

The type of participation being suggested by the study population bordered on partnership and collaboration between the local people and the Forestry Authorities. The UNDP (1990) brands this kind of participation as active. Under such circumstances, beneficiaries play the role of active partners to implement and develop a project. Thereafter, they also assume increasing responsibilities. Upon completion of a project, beneficiaries are both willing and able to sustain the project.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Introduction

This chapter presents the summary, conclusions and recommendations of the study. The study assesses, from the perspective of the local people, the extent to which they were involved in the management of the Kabakaba West Reserve in the Ho Municipality. The survey design was used to structure the study. The research covered 180 respondents in three communities namely: Matse, Taviefe and Ziavi. Six opinion leaders from the three communities comprising Chiefs and the Assemblymen; and the District Forestry Manager were also covered as key informants in the study.

Summary

The major findings of the research were as follows:

Participation of local people in the management of the Kabakaba West reserve

Participation of the local communities in the management of the reserve has been found to be generally low. The overall participation index stood at 0.3. This was consistent with Alhassan (2010) which also arrived at an average participation index of 0.3 for the communities around the Kokoasu Hills reserve. This notwithstanding, planning and decision making recorded the lowest participation index (0.22) contrary to benefit sharing as observed in Alhassan

2010. The overall participation index of 0.3 was also a confirmation of the view held by the FC (2007) that the participation of the local communities in the management of the Kabakaba West reserve was minimal.

It evident from the study that no pragmatic and systematic efforts were made by the forestry authorities to involve the local communities in a meaningful collaboration as far as the management of the reserve is concerned.   This underscored the low participation index recorded for all the indicators used to measure participation in this study.

Reasons for limited participation of the local communities in the management of the Kabakaba West reserve

Whereas institutional failure was identified as a major cause for the low level of participation observed in the study, the extent of influence of the reserve over the livelihoods of the local people also came into question. It was noticed that the size of the reserve ($13.5km^2$) relative to the total land size (anecdotal evidence) was too small; hence unable to command that level of dependency of the communities on its resources in satisfying their livelihood needs.   Thus, the communities have other livelihood options than solely depending on the reserve. Other factors that accounted for the limited involvement of the local communities in the management of the reserve were:

-   lack of knowledge or illiteracy

- restrictions from the forestry authorities

- gender stereotypes

- land ownership in the reserve

It can be concluded that the combination of the above-mentioned factors made it practically difficult for the local communities to participate fully in the management of the reserve with its attendant impacts on the sustainable management of the reserve.

Consequences of limited or non-participation of the local communities in the management of the Kabakaba West reserve

From the perspectives of the local people, a number of ramifications stemming from non-involvement of the local communities in the management of the reserve were identified.

Lack of community support and commitment to the protection of the reserve was one of the major concerns raised. The fear was that the communities might not cooperate with the forestry authorities in protecting the sanctity of the reserve. There was the possibility also for them to engage in activities that might be injurious to the wellbeing of the reserve.

Corollary to the above, the non-involvement of the local people was feared could lead to encroachment on the reserve in pursuit of various livelihood pursuits. This was evident in FC's (2009) observation when it acknowledged that only 60

percent of the original size of the reserve was in place due to the activities of the encroachers. Perhaps, the full impact of encroachment on the reserve would have been felt if the local communities were to be totally dependent on the reserve to meet their livelihood needs. Fortunately, this was not the case with the Kabakaba West reserve as the communities were not totally dependent on the reserve to meet their needs. The logical question that needs to be asked is "if at the current situation, 40 percent of the reserve was run down, what would have happened if there was total dependence on the reserve?"

Under-utilisation or non-use of local resources in the form of skills, indigenous knowledge and energies are possibly left untapped when the local people are not allowed to participate in the management of the local resources. In this case, the complementary roles that the communities would play in the overall resource management chain are missed out together with the accruable benefits. This is being placed in the context that sustainable resource management requires that all available resources especially the local ones be harnessed.

Lack of involvement of the local people also resulted in the lack of empowerment of the local people and the institutional structures at that level. By participating in such partnerships, capacities of individuals and institutions are built overtime. The non-involvement of the people robs off the potential capacity development opportunities. It was evident on the ground that no structures existed to facilitate the involvement of the communities in matters of the reserve. It was

also observed that the community members were not abreast with the nuances of contemporary reserve management.

It has been noted also that the non-involvement of the local people resulted in occasional conflicts between the local people and the forestry authorities; particularly the Forest Guards and the recalcitrant encroachers of the reserve. This according to some opinion leaders brought tension between them and the forestry authorities which further strained their relationships.

In summary, the consequences of non-involvement of the local communities in the management of the reserve as observed in this study are dire for the wellbeing of the reserve. It does not favour the interest of the local communities neither does it favour the interest of the forestry authorities. It is about time national level policies regarding community participation in forest resources management were translated into practical realities on the ground.

How do the local communities want to be involved in the management of the reserve?

The dominant approach to local participation in the management of the reserve proposed by the communities is the formation of a joint committee with representatives from the local communities and the forestry institution playing oversight role on the reserve; and perhaps with other stakeholders i.e. civil society organizations. With this joint committee in place in each community, a task force

could be formed with the full backing of the communities to "police" the reserve – making sure illegal activities in the reserve by unscrupulous members of the communities are kept at bay.

Conclusions

Participation in the management of the reserve was immensely restricted in the communities, because the reserve belonged to the State, hence no systematic efforts were made to encourage the participation of the local communities in the management of the reserve. The non-involvement of the communities has been blamed mainly on institutional failures and partly on the locus of the reserve in affecting the livelihoods of the communities. There was institutional failure because national policies purportedly designed for increased community involvement in the management of forest resources had not been given practical meaning at the grassroots.

The non-involvement of the local communities has been observed as the major threat to the wellbeing of the reserve as it ran counter to the outcomes of the Conceptual Framework of this study. The Conceptual Framework predicted active involvement of the local communities in all the facets of participation i.e. planning/decision making, implementation, monitoring and benefit shading. This involvement would then engender equity, efficiency and empowerment in the management and use of the reserve; with the final outcome being the sustainable management of the reserve. The level of involvement of the local communities, as

observed in the study however was not encouraging. For the ideals of the Conceptual Framework to be attained, some radical measures need to be taken as captured in the Recommendation Section of this study.

Recommendations

Based on the findings of the study and the conclusions, the following recommendations were made:

The institutional bottlenecks identified in this study ought to be addressed. In view of this, steps should be taken to translate all the policy initiatives targeted at greater community involvement in the management of forest resources into pragmatic actions on the ground. The notion of the District Forest Forum is still relevant within the context of community participation in forest resource management. In the same vein, the Community Forest Committees need to be formed in the study communities as the first step towards the active involvement of the local communities. This committee would provide the needed channel for the communities' engagement with other stakeholders in the management of the reserve. Structures have to be put in place to link the community level committees to the district level forestry authorities and their structures. Under the CBFM mechanism, Units were to be created at the district level to be responsible for the operationalisation of the system. This Unit need to be created for the FC to begin to engage the local communities and the appropriate forest management structures at the grassroots.

Having formed the community level committees and other institutional

structures, there would be the need for capacity building for these committees particularly in the rudiments of planning and management of forest resources within the context of collaborative forest resource management.

There would also be the need to engage in massive public education and sensitisation of the entire population within the catchment area of the reserve. This would help whip up their interest of the community members on the need to preserve the sanctity of the reserve as a public good. This would then elicit their support and commitment to protect the reserve. They also need to be told of the paradigm shift in the management of the reserve i.e. a paradigm from purely State-controlled regime to a more decentralized and participatory approach where the local people are ceded with greater autonomy and opportunity to manage the forest resources through their own local initiatives with advisorial and technical support from the forestry authorities.

The forestry officials should also begin to view the reserve as a joint entity made up of communal and government interest. This way, their management perceptions would change to accommodate the needs of the local communities. The quest for greater transparency in their operations can only be achieved if the joint committee discussed earlier together with the community task force were put in place.

There must be something unique about these communities which could be of benefit to the forestry authorities and their quest to sustainably manage the reserve. Local content should be explored and possibly made use of in the management of the reserve. The forestry authorities might not know it all or have

all the logistics it takes to deal with the challenges currently confronting the reserve. It might be helpful to use some local knowledge, expertise, wisdom or resources to move the process forward.

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STRUCTURED INTERVIEW SCHEDULE FOR HOUSEHOLD MEMBERS

Dear respondent,

I am a Masters student at the Institute for Development Studies in the University of Cape Coast. The purpose of my study is to assesses, the extent to which the local communities have been involved in the management of the Kabakaba West Reserve. This research is purely academic. Your responses shall be treated confidentially. Please be candid in answering the questions.

THANK YOU.

SECTION ONE

Demographic characteristics and participation in reserve management

a) Sex: (i) Male ☐ (ii) Female ☐

b) Age (as at last birthday): _____

c) Do you participate in any way to manage the reserve? (i) Yes ☐ (ii) No ☐

A. Participation in planning process

1.1. Do you participate in forest planning process concerning the Kabakaba West Reserve? ☐Yes ☐No,

1.1a. If "No" why? ....

1.2. What are your roles in planning/decision making process?

1. ……………………………………………………………………………

2. …………………………………………………………………………………

3. …………………………………………………………………………………

1.3. What challenges do you encounter during planning/decision-making?

1. ……………………………………………………………………………......

2. ………………………………………………………………………………..

1.4. What strategies do you suggest to be put in place in addressing the challenges

mentioned?

1. ………………………………………………………………………………..

2. ………………………………………………………......................................

B. Participation in implementation process

2.1. Do you take part in the implementation of forest management activities?

☐Yes   ☐No,

2.2. What are your duties in the implementation process?

1. ……………………………………………………………………...........

2. ………………………………………………………………………………..

3. ………………………………………………………………………………...

2.3. What are the constraints regarding participative strategies in the

implementation process?

1.…………………………………………………………………………………

2.…………………………………………………………………………………

3.…………………………………………………………………………………

2.4. What strategies do you suggest should be put in place to address the

challenges mentioned?

95

1. ………………………………………………………………………………..

2. ………………………………………………………………………………..

3. ………………………………………………………………………………..

C. Participation in monitoring process

3.1. Do you participate in forest monitoring activities of the Kabakaba West

Reserve?   ☐Yes   ☐No,

3.2. What roles do you play in monitoring?

1……………………………..…………………………………………………

2…………………………………………………………………………………

3………………………………………………………………………………….

3.3. What challenges do you encounter during monitoring activities?

1. …………………………………………………………………………....

2. …………………………………………………………………………....

3.4. What strategies do you suggest for putting in place in addressing the

challenges mentioned?

1. …………………………………………………………………………....

2. …………………………………………………………………………....

D. Participation in benefit sharing process

4.1. Do you derive some benefits from forest resources management of the

Kabakaba West Reserve? ☐ Yes ☐ No

4.2. What type of benefits do you get?

1…………………………………………………………………………..

2…………………………………………………………………………..

3…………………………………………………………………………..

4.3. What challenges do you encounter during monitoring activities?

1. …………………………………………………………………………...

2. …………………………………………………………………………...

4.4. What strategies do you suggest for putting in place in addressing the

challenges mentioned?

1. …………………………………………………………………………...

2. …………………………………………………………………………...

SECTION TWO

5.0 Reasons for limited local participation

5.1 If no, why are you not involved in the management of the reserve? _____

5.2 Have any attempts been made by the state to involve you in the management

process of the reserve? a) Yes ☐   b) No ☐

If yes or no, give reasons? _____

5.4 What do you consider to be the effects of non-involvement of the local people

in matters of the reserve?

1..

2..

3..

5.5 In your opinion, what are the main challenges to the participation of the local people in the management of the reserve?

1...

2...

3...

5.6 What do you suggest as a way of addressing these challenges?

1...

2...

3...

SECTION THREE

6.0 Methods of local participation in forest reserve management

6.1 Will you like to partake in the management of the reserve?

    a) Yes   ☐   b) No   ☐

6.2 If yes, how do you wish to take part? _____

6.3 If no, why? _____

6.4 How will you like the State Authorities to reach you when they require your input in the management process of the reserve? _____

6.5 Do the State Authorities consult you when they need information on the forest

reserve?

    a) Yes ☐   b) No ☐

6.6 How will you want to be more involved in the management of the reserve?

1...

2...

3...

Appendix B

SEMI-STRUCTURED INTERVIEW FOR OPINION LEADERS

Dear respondent,

I am a Masters student at the Institute for Development Studies in the University of Cape Coast. The purpose of my study is to examine the perceptions of members of forest fringe communities on community participation in the management of the Kabakaba West reserve. This research is purely academic. Your responses shall be treated confidentially and used for the stated purpose. Please be candid in answering the questions.

THANK YOU.

SECTION ONE

Reasons for restricted local participation

1) Why are you not involved in the management of the reserve?

2) Have any attempts been made by the state to involve you in the management process of the reserve? a) Yes ☐ b) No ☐

3) If yes, how has this been done? _____

4) If no attempts have been made by state to involve you in the management process of the reserve, what are you doing about it an opinion leader of your community? _____

5) Are you allowed by the State Authorities to come up with your own initiatives in order to manage the forest with other members of your community? a)Yes ☐ b) No ☐

6) If yes, how do you develop your initiatives? _____

7) If no, why? _____

SECTION TWO

Reasons for community participation in forest reserve management

8) Do you think it is important for you to be involved in the day to day management of the reserve? a) Yes ☐ b) No ☐

9) If yes, or no why? _____

10) How will your participation in the management of the forest contribute to your personal development? _____

SECTION THREE

Methods of local participation in forest reserve management

11) Will you like to partake in the decision making process of the reserve?
a) Yes ☐ b) No ☐

12) How will you like the State Authorities to reach you when they require your input in the management process of the reserve? _____

13) Do the State Authorities consult you when they need information on the forest reserve? a) Yes ☐   b) No ☐

14) If yes, are you satisfied with the manner in which you are consulted?

a) Yes ☐   b) No ☐

15) If yes or no, why? _____

16) If you are not satisfied, how will you like to be consulted? _____

17) How will you want to be more involved in the management of the reserve?

_____

SECTION FOUR

Local people' perceptions of the management of the forest reserve by the state institutions

18) What are your impressions about the measures that have been taken?

_____

19) What strategies have been put in place by the State Authorities to enhance the management of the reserve? _____

20) Do you perceive these strategies to be effective?

a) Yes ☐   b) No ☐

21) Does the state consult you in the designing and implementation of forest policies and regulations? a) Yes ☐   b) No ☐

22) If yes, how? _____

23) In your opinion, is the method that is used in consulting your community members sufficient? a) Yes ☐   b) No ☐

24) In your opinion, is the management of the reserve solely by the state the
best strategy to be used? a) Yes ☐ b) No ☐

25) Have attempts been made by the state to rehabilitate the forest?

a) Yes ☐ b) No ☐

26) If yes, what are your opinions of the efforts that have been made by the
State Authorities to rehabilitate the reserve? _____

27) Do you think the state is purposely conserving the reserve for your

interest?

a) Yes ☐ b) No ☐

28) In your opinion, are the state institutions working enough to reduce the

challenges confronting the management of the reserve?

a) Yes ☐ b) No ☐

SECTION FIVE

Rapport between the State Authorities and the opinion leaders in the

management of the reserve

29) How does the state assist members of your community to derive a source of

living apart from relying on the forest? _____

30) Does the state co-operate with you to manage the forest?

a) Yes ☐ b) No ☐

31) If yes, how? _____

32) If no, why? _____

Appendix C

SEMI-STRUCTURED INTERVIEW FOR THE DISTRICT MANAGER

Dear respondent,

I am a student at the Institute for Development Studies in the University of Cape Coast, pursuing a Masters Degree in Governance and Sustainable Development. This study is aimed at examining the perceptions of members of forest fringe communities on community participation in the management of the Kabakaba West reserve. The request for information shall be used solely for the stated purpose. Confidentiality is assured. Please be very candid in answering the questions.

THANK YOU.

SECTION ONE

Reasons for limited local participation in forest management

1. Why do you not involve the forest communities in the policy making process of the reserve? _____

2. What efforts is your office making to address the challenges of community participation in the management of the reserve?

   _____

3. Has any intervention been ever introduced in the forest reserve?

a) Yes ☐   b) No ☐

4. If yes, how have the local people been involved? _____

5. Has any attempt been made to relinquish some responsibilities of forest management to the local communities?

a) Yes ☐   b) No ☐

Rapport between the state and the local people in the management of the forest reserve

6. How do you help community members to create other sources of income for themselves to reduce their reliance on forest products?

_____

7. Do you involve members of the forest communities in the formulation of forest policies? a) Yes ☐   b) No ☐

8. If yes how? _____

9. If no, why? _____

10. If no, what are the reactions of the local people when you do not engage them in policy formulation? _____