UNIVERSITY OF CAPE COAST

EFFECTS OF COMMUNITY-BASED FOREST MANAGEMENT PROJECT ON WOMEN'S LIVELIHOOD: A CASE STUDY OF RUDEYA FOREST MANAGEMENT PROJECT IN THE ASUNAFO DISTRICT OF BRONG AHAFO REGION, GHANA

BY

STANLEY KWAKU MANU

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JUNE, 2009

DECLARATION

Candidate's Declaration

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

Candidate's Signature: …… Date:……..

Name:……...

Supervisor's Declaration

We hereby declare that the preparation and presentation of the thesis were supervised in accordance with the guidelines on supervision of thesis laid down by the University of Cape Coast.

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

Name: ……..

ABSTRACT

Ghana's forest resources base is shrinking at such an alarming rate. It has been estimated that about a third of Ghana's forest have disappeared in 17 years between 1955 and 1972 whilst the average annual rate of deforestation since the turn of the century has been estimated at 750 sq. km. Forest resources constitute the source of livelihood for about 70% of Ghanaians and the loss of forest resources at such rate has a great effect on the livelihoods of these people most of which are women. The main aim or objective of this work is to examine the perceived impact on women's livelihood of the RUDEYA's Community-Based Forest Protection and Management Project in the Asunafo District of Brong-Ahafo region of Ghana. To achieve this, a wide range of literature was reviewed on sustainable forest management in general and collaborative forest management in particular. Moreover, a fieldwork was undertaken which involved interviews and administration of questionnaires among the beneficiaries and other stakeholders of RUDEYA's collaborative forest management project in about 25 forest communities in the Asunafo-North district. Questionnaires were used to collect all relevant data which were analyzed to support this study. The key findings of this study are that collaborative and community-based programs are needed to ensure sustainable forest management in Ghana. The research revealed that RUDEYA's community-based forest management project has improved women's livelihoods and made a major positive contribution to sustainable forest management in the Goaso forest districts. In view of the findings, it is recommended, among other things, that sustainable community-based forest management projects be intensified for forest community people.

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DEDICATION

This work is dedicated to my mum Abena Dwumfour for her love, care and support throughout my entire educational career. My lovely children Kwabena Darko-Dankwa, Nana Konadu, Nana Yaa Dwumfour and my sweetheart, Grace Manu

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CHAPTER ONE

INTRODUCTION

Background to the Study

At the global level the divergence between estimates of forest loss is less dramatic but still pronounced. NASA scientist Elaine Matthiaws attempted to estimate the world original forest cover, based on the areas that were climatically suitable comparing this with the situation around 1970. She concluded that the original cover had declined by 15 per cent (Cleaver et al, 1992). Cleaver observed that, figures for the areas of tropical forest lost each year range from 133,000 square kilometers up to 245,000 kilometers. In developing countries studies suggest that the rate of deforestation has been accelerating. For example in West Africa the average deforesting rate is 3.7 per cent a year or more (Harrison, 1992).

According to Danso and Opoku (2005), the governance of the forest sector in Ghana has gone through series of historical shifts which has gradually been disempowering and denying one of its key stakeholders, the fringe communities its benefits and rights. According to the Forest and Wildfire Policy (1994), the Forest Commission is to ensure that forests are indeed managed to provide 'a perpetual flow of benefit to all segments of society'. The Collaborative Resource Management Unit (CRMU) of the Resource Management Support Centre of the Forestry Commission took up

the mantle of ensuring that stakeholders participate in forest management in the form of sharing of roles, responsibilities and benefits. To ensure effectiveness of the collaborative concept structures such as Community Forest Committees (CFCs), NTFP cultivation and management, and establishment of District Forestry forum as well as forest dependent livelihoods (boundary cleaning, Modified Taungya Systems etc) were piloted in most forest zones of Ghana. The collaborative Resource Management Unit (CRMU) of the FSD has introduced guidelines for the establishment of Community Forest Committees (CFCs). The guidelines recognized that women's participation in the forest governance is pre-requisite to overcome the crises considering their relationship with the forest resources. It has been left to Non-governmental organizations such as Rural Development and Youth Association (RUDEYA) to champion their expansion and recognition.

The Organisational Profile

Rural Development and Youth Association (RUDEYA) is a Ghanaian non-governmental organization (NGO). It was formed in 1989 and registered with the Registrar General's Department in Ghana as an Association in 1991. It also received a certificate of recognition by the Department of Social Welfare, Ghana, in the same year.

RUDEYA has both social and environmental aims. Its mission is to improve the standard of living of men, women and the youth of its target communities through programmes designed to sustainably manage natural resources and enhance primary health care. According to Bacho and

Macqueen (2006), RUDEYA has a particular and rather rare vision. This vision could be seen from three levels:

- Action, whether economic, social or environmental, must ultimately take place at the community level if RUDEYA's mission is to be achieved.
- Members of the communities themselves must be empowered if they are to benefit from action at the community level and not be marginalized from it.
- The poorest and the most marginalized members of the community need to be included in attempts at empowerment if livelihood gains are to spread.

RUDEYA has three thematic programme areas. These include

1. Natural Resource Management (NRM)

- Community –based forest management programmes
- Institutional capacity building of forest stakeholders
- Forest governance especially at the local and district levels
- Development and marketing of forest enterprises
- Networking /lobbying and advocacy

2. Youth Development Programmes

- Community based groups (school, unemployed etc) development and business management skills training

3. Primary Health Care

- Adolescent reproductive Health, Family planning, Water and sanitation, HIV/AIDS

Geographical Areas of Operation

RUDEYA has over the past 15 years been operating in the Ashanti, Western and Brong Ahafo Regions of Ghana. Important districts worth mentioning are the Atwima and Asunafo in Ashanti and Brong Ahafo regions respectively.

Organizational Structure

The organization is governed by seven-member Board of Directors of different professional backgrounds ranging from natural resources management through developmental planning. The Board is made up of four males and three females ensuring gender equity within the decision –making structure. The key role of the Board is to formulate policy and strategies towards the development of the organization.

The Management includes team Executive Director, Programmes Coordinator, the Board secretary and the Treasurer. This team is the standing committee for the Board of Directors. The Executive Director represents the organization on all legal matters or contracts and executes management decisions on the advice of the Board of Directors and the management team.

RUDEYA has basically 3 units within the organizational settings. These include the Natural Resource Unit, the Primary Health Care Unit and the Finance and Administration Unit. The Planning, Monitoring and Evaluation, and the Gender Units support these three units.

RUDEYA has 12 professional and technical staff with varied backgrounds in primary health care, forestry, agriculture, community development, accountancy, development planning and project management

who form a multi disciplinary team. Additionally, it engages the services of experienced professionals as part time staff when the need arises.

The organization is a member of numerous NGO networks such as GAVOD, NRMP and Forest Watch Ghana (FWG). Apart from these platforms, it is also in partnership with both local and international donor organizations such as ICCO, IUCN, SNV-Ghana, TBI-Ghana and Friends of the Earth (FOE). ICCO has been a major contributor in both financial and technical aspects for the development of RUDEYA and its activities at Atwima and Asunafo Districts.

Statement of the Problem

According to the 2000 Population and Housing Census Report, the total population of the country living in rural communities is 56 per cent. High population growth within the forest zones leads to increase demand of forest resources and land for farming activities. The pressure on these two key land use systems leads to forest encroachment resulting in excessive logging of timber and non-timber forest products and bushfires among others. The Ghana's forest resources base is shrinking at such an alarming rate. It has been estimated that about a third of Ghana's forest have disappeared in 17 years between 1955 and 1972 whilst the average annual rate of deforestation since the turn of the century has been estimated at 750 sq. km. Forest resources constitute the source of livelihood for 70% of Ghanaians and crises means poverty for the citizens which majority are women (Forest Governance Livelihood Group, 2005). Rural women, the daily managers of such natural resources as water, soil, food, wood, fuel, and land, are the one who are going

to be affected so much because they access non-timber forest products as food and as a source of income from the forest.

The forest loss has been due to a number of factors including: absence of incentives for local management (women) of forest resources. Rural women who are Forest dependent have been alienated from decision-making processes on forest resources management, access to and benefits from forest resources to improve their incomes

Even though the 1994 Forest and Wildlife Policy clearly emphasizes the need to '*Promote public awareness and involvement of rural people in forestry and wildlife conservation to maintain life sustaining systems, preserve scenic areas and enhance the potential for income generation opportunities,*' there is still inadequate information flow and collaboration among the numerous forest stakeholders particularly women.

Rural women in the forest fringe communities (and the general public) do not have the information about this situation, their constitutional rights and methods of exercising these rights which would enable them to take action. According to Arthur and Brogan, the Forestry Commission, under pressure from donors, has developed a forest service charter and initiated District Forest Forums (DFF), community forest committees (CFCs) and customer service centers in some districts. However, these structures also remain uninformed on policy status, the realities of timber allocation and logging practice, which are all issues decided on the corridors of officialdom (Arthur and Brogan, 2005).

The forest plays an important role in the socio-economic development of Ghana. The forestry sector (dominated by the wood industry) is an

important source of domestic and exports earnings of Ghana. It also plays a crucial role in environmental stabilization. Forests sequestrate carbon, act as the sanctuary of biodiversity, protect vital watersheds and prevent siltation and flooding. However, in recent years the forestry sector has been subjected to various impacts and pressures, which have threatened both the sustainability of timber resources and certain species and the sector's ability to contribute to the country's socio-economic development and maintenance of the environment and the greatest adverse effect is on the rural women folk.

According to the Ghana Poverty Reduction Strategy (GPRS, 2002) document, the country's forest had been reduced from 8.2 million hectares at the beginning of 20th century to 1.7 million hectares in the 21st century. Continued reliance on forest resources must be based on proper management to achieve low volume and high value production. In collaboration with the Ministry of Energy, the Ministry of Environment, Science and Technology and the Ministry of Local Government and Rural Development, the ministry of lands and Forestry is currently implementing a comprehensive ten–year sector investment programme, the Natural Resource management programme. This programme is to protect, rehabilitate and sustainably manage the national land, forest and wildlife resource through collaborative management and aimed at increasing the incomes of the rural communities and for that matter woman who own these resources. Under this programme many women and other forest users are engaged in tree plantation establishments, domestication of forest livelihood options, watershed management, cultivation and processing of root and tuber crops, which are exclusively the preserves of women.

In spite of all these challenges that women have been facing as managers of forest resource alongside their men counterparts, there is increasing evidence that the extent of women's role in forest governance seems unknown or unrecognized. Since the 1994 Forest and Wildlife policy seeks the promotion of community participation in forest management of which women are involved, it is important to examine the extent to which women have participated in forest management programme and the effect of their participation on their livelihood.

The study will enable us answer questions such as:

- What is the level of women's participation in forest management?
- What is the nature of women's participation in forest management?
- Do women feel the need to participate in forest management?
- What factors are related to the participation of women in forest management?
- How has the participation of women in forest management affected their livelihood?

The answers to these questions will help in generating strategies to make women's participation in forest governance more effective at reducing forest degradation and improving their livelihood.

The Objective of the Study

The main objective of the study is to examine the perceived impact on women's livelihood of the RUDEYA's community-based forest protection and management project in the Asunafo District of Brong Ahafo region of Ghana.

Specific Objectives

Specifically the study is to:

1. Identify and analyse Community Forest Committees' visions or rationales for women collaboration/participation in forest management.
2. Identify the extent to which women CFCs have contributed to sustainable forest management and its effect on their livelihoods
3. Examine the major stakeholders' perception about the effect of women CFCs role in RUDEYA's forest management project on their livelihoods
4. Identify and analyze constraints to effective collaboration between women CFCs and other stakeholders.

Research Question

1. What is the rational for women CFC's collaboration/participation in forest management?
2. To what extent have women CFCs contributed to sustainable forest management affect their livelihoods?
3. What is the perception of major stakeholders about the effect of women CFCs role in RUDEYA's forest management project on their livelihoods?

4. What are the constraints to effective collaboration between women CFCs and other stakeholders

Justification of the Study

The study results would contribute to the existing literature about the women's role in the forest governance in general and mainly at the Asunafo District of Brong Ahafo region of Ghana.

The results will also be a useful to government agencies such as Forestry Commission, Forest Service Division, Ministry of Food and Agriculture, Asunafo District Assemble and other policy makers as a whole in setting priorities and formulating policies to reduce forest degradation.

The outcome of the study would also be used to direct stakeholders such as RUDEYA and like-minded NGOs' attention to good practices in the study area and improvement of the livelihood of women.

Limitation of the Study

The following limitations militated against the conduct of the study:

The first is lack of adequate financial resource to enable the researchers capture all the stakeholders in the study area. The second limitation is the bad nature of some of the roads linking the forest fringe communities to the main District capital of the Asunafo North District which make accessibility very difficult.

Definition of Terms

This section indicates the operational definition of terms used in the study.

Perception: personal indications and opinions regarding some things, and meaning put in ones' own way. Perceptions, opinions and attitudes have the same meaning in this study. It is measured by a scale of 1-5, where (1) implies low participation, (3) measure participation and (5) implies very high participation.

Perceived impact: the degree to which women CFCs or stakeholders regard RUDEYA's interventions to have improved or retarded any aspect of their livelihood. As measured by a scale 1-5, where (1) implies low impact, (3) implies high impact and (5) implies very high impact.

Community forest committee: community-based group formed and trained to assist in forest management. This is a concept of the Forestry Commission to ensure involvement of local people in sustainable forest resource management.

Non-timber forest product: It is forest livelihood options that farmers try to domesticate them for income generation and nutritional purposes, such as Snails, Grasscutter, and Mushroom etc.

Livelihood: Assets, activities and access that determine the living gained by individuals or households**.**

The Study Area

Asunafo district is located at the Southern part of the Brong Ahafo Region. It lies between latitudes 6 ^{0} 27" N and 7^{0} 00" N, and longitude 2 ^{0} 23" W and 2 ^{0} 52" West. It is bordered to the North and North Eastern parts by

Asutifi district, North West by Dormaa district in the Brong Ahafo Region, East and South by Western Region and South East by Ashanti Region. It has an estimated total land area of 2,187.57 km^2 with Goaso as its district capital.

The District has a population of 175,000 and the growth rate is 3 per cent (Ghana Statistical Services, 2000). Economically, the area is predominantly rural with agriculture as the prime contributor to the economy. About 70 per cent of the populations are peasant farmers, with majority specializing in the cultivation of food crops and few of them cultivating cash crops such as cocoa. The subsistence nature of farming has resulted in high poverty level in the district.

The Asunafo District is endowed with six forest reserves covering a total area of 815km^2 and the open forest (off-reserves) area is also about 1372km^2 comprising mainly cocoa plantations and small holder food crop farms. The Asunafo District was chosen because of the nature of the forest reserves. These six reserves are linked together by interesting closed corridors from one reserve to another. The 2000 national inventory revealed that the reserves are endowed with both unique flora and fauna. RUDEYA realized that it was a great opportunity to involve the communities and other relevant stakeholders to protect and manage the resources in order to maintain the unique corridor nature of these six forest reserves (See fig. 1 for the map of the study area). This inspiration gave 'birth' to the Asunafo District community – based forest protection and management project in 2002 till date.

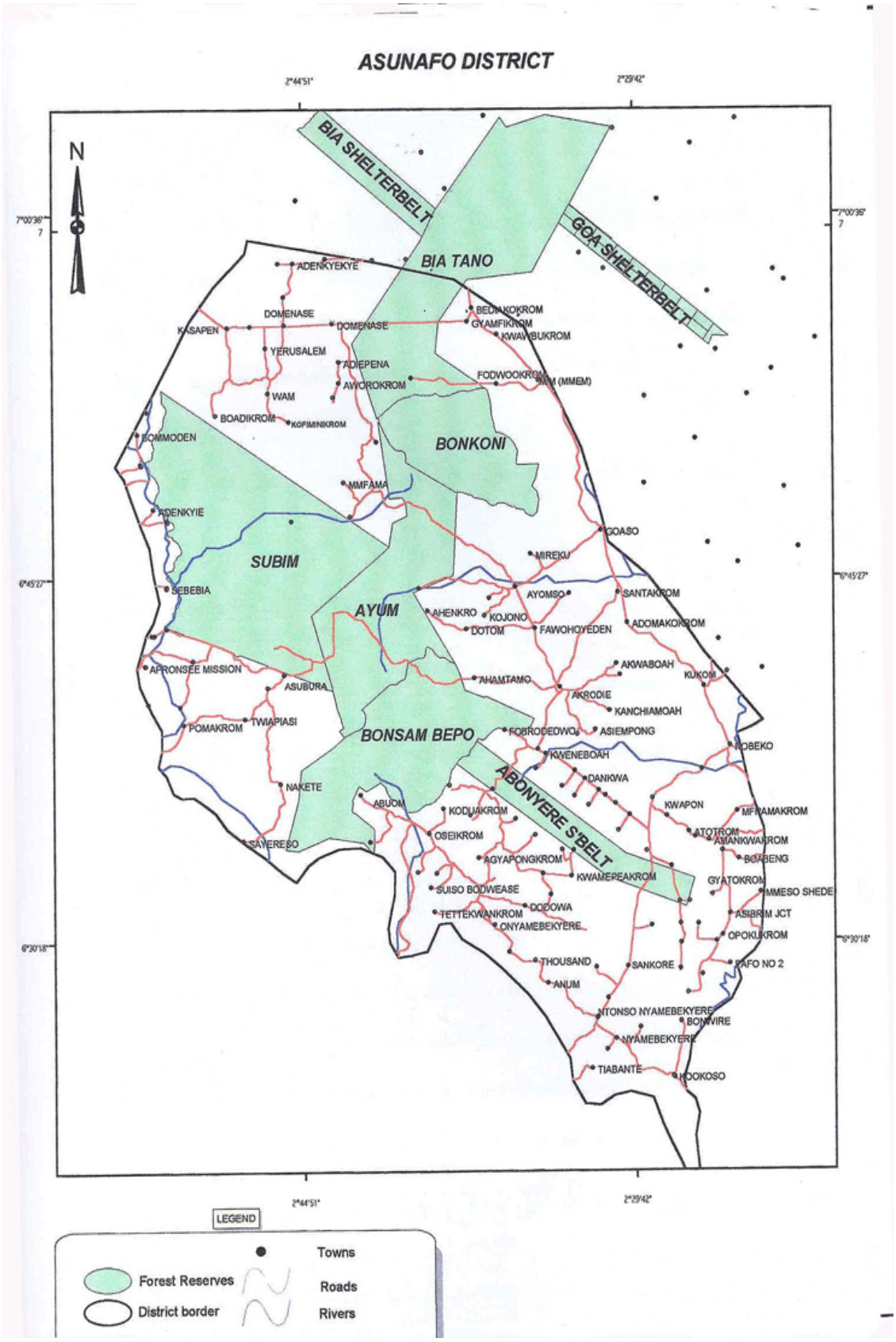

Figure 1: Map of the forest reserves and the communities.

CHAPTER TWO

LITERATURE REVIEW

General Overview

The literature review tries to pull together the existing theoretical and empirical studies that provide the background and necessary basis for the study. This chapter attempts to review relevant works done on various aspects of community-based forest management projects with emphasis on the impact of the projects on the livelihood.

Ghana and the Forestry Environment

According to Ardayfio-Schandorf (2007), forest and other natural resources form the backbone of the economy of Ghana and therefore play a critical role in the lives of its people. They fulfill national, economic, ecological and environmental goals, hence the need for policy attention to promote sound and sustainable development for the reduction of poverty. As a conservative of biodiversity strategy, the forests are protected in more than 200 reserves and managed by the Forestry Commission and the Department of Wildlife. In spite of protective measures, the country's deforestation continues to accelerate towards ecological destruction. This is largely because farming communities, the stakeholders groups with the greatest capacity for, and structural interest in sustainable forest use remain marginalized in forest

policy-making and management. Women constitute a high proportion of the farming communities and continue to sink into poverty. The continuing shrinkage of forest raises several issues on sustainable forest management involving women and men and other stakeholders.

Women and Environment

Deforestation substantially contributes to accelerated changes in global climates and robs the world of irreplaceable biodiversity and that approximately 100 million hectares of forests have been lost throughout the world since 1950, with the world losing up to 20.4 million hectares of tropical forests annually (Marchetti, 1997). Moreover, according to Marchetti, women's participation in environmental development is currently impeded by many factors such as problems of land tenure and ownership. In order to have a balance between greater productivity and environmental protection, policymakers should ensure that agricultural and forestry extension services are designed incorporating a balanced gender perspective, including women's full participation in decision-making fora, and building upon their knowledge of community concerns.

According to Dehlot (1992), women are often the poorest of the poor, shackled to social, cultural, legal and economic inequalities. While many women have indeed suffered the wrongs of social injustice, the transcendence of their deprivation enables them to develop innovative ways of maximizing meagre resources. While making something out of nothing is, in many cases, borne of necessity, it nonetheless demands labour-intensive drudgery. Because of their marginal position in society, women have drawn on indigenous

knowledge for the identification and utilization of alternative resources usually ignore by the mainstream economy.

This explains why in rural communities, women's knowledge of big-diversity is often more comprehensive than men's. Women's botanical knowledge, for example, tends to embrace a maximal number of edible plants, including poisonous plants that can only be made edible through food processing. Knowledge in medicinal herbs and rare plants useful in periods of scarcity is also largely the purview of women, who often hold the key to sophisticated indigenous plants classifications. In contrast, men's botanical knowledge tend to focus on plants that are used as staples and those marketed as cash crops.

The loss of indigenous knowledge is a permanent loss of precious resource. An entire bank of data, collected over thousand years in indigenous knowledge system, cannot be superceded entirely with 'scientific' information. As Shiva Vandana (1989) pointed out, environment and gender issues have much to gain from a new recognition and research within old knowledge system, particularly in the forest communities. In this regard, it is imperative to protect women's rights of access and control over the forest and other natural resource particularly the environment as their main source of indigenous knowledge and livelihood,

As natural resource managers, women provide food and oversee overall family welfare. More often than not, women are the backbone of smallholder agricultural production. They often hold the key to changes in fertility levels. Ultimately they are responsible for population structure, growth, size and distribution. Population growth and pressure on the limited

and increasingly degradation natural resource base, however, can undermine a woman's role as a major user and manager. The amount of women's time and energy required in their farms and home-based work is increasing. Yet women continue to cope with deeply-rooted gender biases, often reinforced through development policies and programmes that constrained their social, economic and legal rights plus their access to modern technology. if environmental degradation and over-increasing poverty are to be overcome, the social and economic conditions under which most rural women live and their access to technology must be improved. But if these improvements continue to be withhold very little can be accomplished, either for the women or for rural development in general.

Women Involvement in Community Institutions

One of the major arguments advanced by gender theorist is that involvement of women in institutionalized decision making improves the prospects for better resources conservation (Agarwal, 1998, 2001; Sarin, 1995). Women who are typically charged with collection of forest products such as firewood, fodder, snail and other non-timber products, if they are in leadership positions , they can create regulatory mechanisms that are more suited to the local context as well as their needs for forest products.

The experience of many project is that women often take the lead on Non Timber Forest Products (NTFPs) but can be less interested in the physical work of Eco-timber operation .the difference in experience and cultural focus of men and women needs to be recognized and attention taken to find mode of operation that fit with the need and performance of men and women (ICCO,

2000). Again, the presence of gender conflict is positively associated with better forest condition. Women are likely involved in decision making and positions of power only after there is some conflict related to gender issues. According to Agarwal, (1998), clear examples illustrating these gender dynamics occurred in the community forests of Shanag in Kullu, Thalli and Kuthah in Mandi (Indian Himalaya). In all these three villages, women gained decision-making positions only after local forests were viewed as deteriorating rapidly. Women were most affected by this decline, and there were substantive disagreements within the village community around how to address these issues. Women's participation in forestry-related community institutions like Community Forest Committee is not an easy or smooth process in rural context where they are typically assigned more burdensome parts of household and agricultural labour. But the positive association of gender-related conflicts and forest condition suggest that such obstacles ultimately have a positive effect on forestry outcomes (Agarwal, (1998).

Community Participation in Forest Management in Africa

Natural forests of moist, coastal and especially dry types represent a massive resource of more than 500 million ha, found in all 56 states of Africa, ranging from 135 million ha in the Democratic Republic of the Congo to 2 000 ha in St Helena (FAO, 2001b). All over Africa there is a called on community participation in natural resource management as means of checking the fast rate of environmental degradation.

Local involvement occurs in diverse forms, but is broadly encompassed by the term "participatory forest management" (PFM).The

generic term “forests” is used to encompass diverse types, from dry woodlands to moist tropical forests, coastal mangroves and plantations. “Community” in the context of PFM refers to people living within or next to forests.

forest management is itself primarily a matter of governance is crystallizing, with technically driven functions reassuming their proper place as support functions to sound forest governance regimes. Forestry administrations have begun to find, however, that local participation becomes a great deal more meaningful and effective when local populations are involved not as cooperating forest users but as forest managers and even owner-managers in their own right.

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. State readiness to empower local people in respect of classified or reserved areas is less, as is readiness to devolve to communities significant jurisdiction over resources that are of high biological diversity or commercial value, such as those in which timber or wildlife are dominant products (Willy, 2000).

Consultative and collaborative norms to those in which partnerships between state and community are being forged and, in a growing number of cases, for the purpose of enabling communities to operate as effectively autonomous forest authorities. Evolution of African PFM as a whole is thus increasingly characterized by devolution. Custodianship, not access, is becoming central to agreements and relations. Internally, to make local forest managers accountable to the wider communities on whose behalf they act. The

main “drivers” towards these changes are well known, especially the continued loss of forest on the continent of up to 1 million ha each year (FAO,2001; Mathews, 2001). Less acknowledged are the effects of the changing sociopolitical climate, as African states adopt more devolved and inclusive ways of managing society and its resources (Willy, (2001).

In Ghana, two communities were assisted to declare Dedicated Forests (215 ha and 190 ha) in 1994, a development that has not yet been replicated. A Community Forestry Management Unit (1992) promotes the creation of community forestry committees as a contact point for consultation in forest reserve planning. Boundary maintenance contracts are being issued to adjacent communities and the *Taungya* regime has been modified to allow foresters to pay farmers who tend seedlings in planted areas. A new timber management law (1997) requires concessionaires to provide 5 percent of the royalty value to local communities and to secure the permission of landowners prior to harvesting on their lands. Several companies have begun to aid communities within their concession areas (Amanor, 1996).

The definition of **“**community” and the resulting determination of powers Constraints on power sharing remain, not least in the ambivalent authority that local populations may attain in respect of local forests. This exists against a backdrop wherein formal, democratic governance institutions already exist at the community level, and into which local forest management roles may be divested (Willy and Hammond, 2001).

Community as User or Manager

In cases where local people are being involved only to regulate their own forest use, and where the forest has few non-product values of use to the wider community (such as water catchment functions), the founding of management or user groups may be workable However, this is decreasingly the purpose of participatory forest management (PFM) development, which looks more and more to wider Managerial functions on the one hand, or to the organization of significant income generation and/or revenue receipt on the other. In either case, a wider construction of community and its representation in management is required. The interests of the user group and the forest-local community as a whole do not necessarily converge. This may be seen in the process of setting quotas, determining which areas should be open for access, and so on. Management may also lose key actors who are not forest users in user-defined management regimes. User-centred management also tends to give too little attention to critical socio-environmental functions of the forest in its decision-making in favour of extraction. The focus on user interests overall has its roots in a perception that the poverty of most forest-local populations means that they are only interested in the immediate income potential of the forest. Accordingly, local custodial and socio-environmental interests in the forest are ignored, reinforcing the focus on product use and distribution on the one hand, and on institutional formation, shaped around the forest user constituency, on the other. Returning to the Cameroon example, Gardner, DeMarco and Asanga (2001) instructively observe that: “those more familiar with the forests of southern Cameroon with their potential for income through timber exploitation are often surprised at the high degree of

motivation for forest management exhibited by the population around Kilum-Ijim Forest, despite the forest's low potential for income generation. The experience of Kilum-Ijim clearly shows that communities value their forests for far more than cash to the extent that they are willing to contribute the significant time and effort needed to manage the forest in the long term as well as voluntarily give up the option of converting the forest to other land uses which produce greater cash benefits." Projects report similar findings in the United Republic of Tanzania and the Gambia, where power sharing is most complete and implemented within management regimes that define the community as a whole as the source of decision-making (Reed, 1999). Issues of internal accountability tend to arise in all types of new community-level institutions. This is true to the extent that most new PFM initiatives now make capacity and systems building a priority task of facilitation. The main need seems to be to assist communities to form management systems that allow for constructive debate and are fully accountable to community membership. In the process, a good deal of restructuring of community norms often occurs, generally towards more democratic and transparent norms. Many projects report that PFM is highly empowering to this kind of community-level capacity building (Massawe, 2000). In Tanzania, for example, the creation of active and effective forest management committees has quite often resulted in unfavourable comparison with the lethargy of founding village councillors, resulting in calls for new elections, especially of village chairpersons (Iddi, 2000). Questionable record keeping by forest management committees, particularly in respect of income from fines and fees, also leads eventually to

stronger reporting regimes and firmer measures for transparency, often more rigorous than community members ever imagined they would require.

Determination of how the forest may safely be used becomes a managerial decision and one with which users, either local or from more distant areas, need to negotiate. Issues of customary custodianship are playing a clearer role in determining support for local-level management, and PFM as a whole is positioning communities less as client users to be appeased than as populations who have not only interests but also rights over resources in their vicinity, and as a matter of course must have the major say in sustaining their future. It is also apparent that local-level participation in forest management only becomes meaningful when it is given real power to manage. Failure to do so does little to alter the existing flawed management regimes, may exacerbate tensions between those who still control the forest and those who protect it, and raises questions as to the purpose of local-level participation in the first place. More singular definition of the "manager" is also advantageous. Multi-stakeholder approaches that include a host of different actors from central and local government, such as chiefs, Timber Harvesters, user groups and NGOs, show signs of being self-defeating, engendering competition, weak decision-making and the failure to perform that are generic to diffused responsibility. It is also apparent that community forest management roles need legal entrenchment to assure actors' security in their decision-making and accountability to both partners and to their own local constituencies.

Forest Degradation: Blaming the Victim

Conventionally, indigenous peoples particularly women are blamed for degrading forest resources. There is a general attitude among the policy makers, forest department officials and general administration to deny the real causes of forest degradation and adopt a strategy of 'blaming the victim' who happened to be women. According to Sontheiner (1990) it is commonly believed that women are solely responsible for environmental destruction because they often seen carrying loads of wood or cultivating marginal lands. However, it is believed that it would be unfair to put the blame on women because globally linked causes of environmental degradation have created and continue to create a situation, which force women into ecologically destructive actions.

As one of the significant causes of deforestation, Roy (1998) points out that the infamous CHT forest transit Rules 1973 which make it extremely difficult and expensive for local farmers to obtain mandatory permits to extract and sell the trees grown in their lands. This rule has caused huge corruption and a major disincentive to homestead plantations. If these rules were simplified, they would definitely lead to afforestation reduce pressure on forestlands and significant raise income of local farmers.

According to Roy (2000), governments are partly responsible for deforestation. We cannot excuse the Governments role in pursuing shortsighted policies on resource use, population transfer, the enhancement of the area of the reserved forests, and inequitable land distributions that has deepened the resource crisis. Therefore, it would be far more equitable and practical to address the underlying causes of deforestation- namely resource

scarcity and illegal trade in forests produce-rather than to blame its symptoms and minor causes.

Natural Resource Management in Ghana: Professionalism and Political Interference as a Challenge

Ghana's forest resources have decreased from 8.2 million hectors at the beginning of the previews century to 1.6 million hectors now. Again, depletion and degradation continue annually at alarming rates. The story is indeed sad but we should not abandon hope for the tree is only tilted towards a direction but not completely fallen (Tropenbos International Report, 2004). My point is not that everything is bad, but that everything is dangerous, which is not exactly the same s bad. If everything is dangerous, then we always have something to do. So my position leads not to apathy but to hyper- and pessimistic activism (Foucault, 1997a). According to Prof. Dominic Fobih, the then minister of lands and Forestry, it is the responsibility of the professional bodies to ensure that this trend of resource depletion is significantly reversed. The main aim of resource managers is to conserve, protect and sustainably manage the forest and wildlife resources, to create wealth, provide job and reduce poverty. Currently the Forestry Commission is engaged in the training of community based organizations such as Community Forest Committees, Community Biodiversity Advisory Groups (CBAGs), Community Resource Management Areas (CREMAs), to assist in forest protection and to influence policy formulation and implementation at the community level (Tropenbos International Report, 2004). Until about two decades or so ago, forest management in Ghana was dominated by the development ideology that

'science and technology' are the engine of progress. This scientific myth gave rise to technical and 'traditional' forestry. This was a tradition of manipulating the trees, and the soil largely to produce sustained outputs of timber. Consequently, the traditional forestry training equipped the practitioner principally to manipulate the forest ecosystem to produce maximum continuing yield of certain goods and services (Kotey et al, 1998). This give rise to formally trained 'scientific' and technological oriented personnel to manage the forest resources; those who can be called professional foresters today. Notwithstanding the scientific, technocratic and professional myth surrounding forest management since the colonial days, there is more than enough evidence to show that the rate of forest management in Ghana constitute a threat to the sustainability of the resources. Environmental changes are linked to social and political pressures and that social relations of production are central to an understanding of deforestation (Nygren, (2000). Whereas we cannot underestimate the contribution of natural forces such as wildfires and socio-economic pressures such as increasing demand for fertile land for farming to degradation, we cannot turn a blind eye to the contribution of the state, its forestry agencies and professionals.

If the state is a theatre in which resources, property rights and authority are struggled over, and then state policies embody that struggle, often facilitating the interest of powerful economic elites, and including both social unrest and ecological degradation (Bryant, 1992). Tie at the pinnacle of the state can distort policies and weaken the supervision of the middle and lower level state implementers leading to a culture of corruption, cronyism and nepotism at the district level while official's forestry policy discourse seems to

deal with a range of problems it has actually failed to face sensitive political issues (McCarthy, 2000). The state in natural resource utilization has used its power and influence to shield and protect private interests through complex alliances and networks has a prominent place in resources politics today. It is common to hear both from professionals and others about political interference in forest management in Ghana. According to Awudi and Davies (2001), the timber rights have been most crucial for political interference. 'The timber industry could influence policies, stall legislation and modify some working plan prescription. The timber industry continues to be a significant lobbying group and a powerful protector of it interest' (Kotey et al, 1998).

Clearly, the issue of political interference is a complex and challenging when it comes to sustainable forest management in Ghana. The existing institutional, legal and governance environment is probably not effective enough to cushion the professionals against such political and social pressures.

Stakeholder Conflicts in Forest Management

Yasmi (2007) writes that natural resource management is almost always characterized by conflict, particularly because stakeholders have competing interests, perceptions and ideas about how natural resources should be married. Also, the implementation of decentralization policies gives rise to conflict between local and central government as well as among local stakeholders. Yasmi noted that if these conflicts are not properly managed, sustainable forest management can be impaired. Stakeholders conflict in relation to forest decentralization policies were studied in West Kalimantan, Indonesia by Yasmi, Anshari, Komarudi, and Alqardri, (2007). They

observed, inter alia, that despite the goal of the central government to benefit local stakeholders by decentralizing forest management, the central government's subsequent withdrawal of much of local government's authority to manage forestry raised new serious questions. They concluded that central and local governments and relevant stakeholders need to develop better communication and negotiation procedures to address current conflicts appropriately. With the central government implementing its developmental policies, including awarding concessions of timber and mineral resources, and local stakeholders, including women, who live by the benefits of the forests, there is bound to be conflict. These conflicts are what according to Yasmi must be managed properly by developing effective communication and negotiation procedures. However this cannot be achieved by ignoring relevant local stakeholders, especially women.

The Concept of Gender

Ostergaard (1994) in "Gender and Development" refers to gender as quantitative and interdependent attributes of men's and women's position in society. Gender relations are constituted in terms of the relation of power and dominance that structure the life chances in terms women and men. Thus gender divisions are not fixed biologically, but constitute an aspect of the wider social division of labour and this in turn is rooted in the condition of production and reproduction and reinforced by cultural, religious and ideological systems prevailing in the society.

Dickinson's study (1985) indicated that sociologist use the term 'sex' to refer to the biological differences between male and female and the term

gender to refer to social expectations related to those differences. The term gender would include ideas about the kinds of behavour expected of girls and boys in a particular society at a particular time.

A study by Obeng –Darko (1999) has shown that gender identity of women and men are socially and culturally determined and its influenced by political, economic, religious factors. Gender includes the relative value and statues accorded to men and women by the society in which they live. For example, women in fringe communities are normally sidelined when it comes to decision making and key positions at the local levels.

Gender Sensitivity and Stereotyping

Williams stated that gender referred to the social, psychological, and cultural attributes of masculine and feminity. Gender pertained to the socially learned patterns of behavour and psychological and emotional expressions of attributes that distinguished males from females. She stated that gender refers to psychological attributes, characteristics and behavour that were acquired with a social context and that were related to social meaning of sexual categories in a given society (Williams (1984). She further stated that males and females were distinguished not only by their biological sex, but also by behavour, as for, example, men do hunting in the forest whilst women mostly do the picking of Non Timber Forest Products from forest reserves and that impact differently on the environment. Such differences where they exist were socially constructions that could vary greatly from one culture to another.

Most of the early research on the context of gender stereotypes concentrated on personality traits associated with men and women. Yet it was

obvious that many other domains were also linked to gender in most people's mind, indeed, the person in the street could likely invoke spots, hobbies, occupations and range of domains in which the sexes were belief to differ. Stereotype of gender could be differentiated on the basis of role behavour, physical characteristics and occupational statues. However, the dimensions were interrelated to the extent that information about one dimension influences other dimensions, suggesting that the network of belief was interwoven. Stereotype based on gender historically placed women in a nurturing submissive role, while men were seen as dominant, more aggressive gender. Stereotype of men and women were derived, at least in part, from observing individuals in their social positions, that is, men were likely to assume the occupational role and women domestic role.

Moser (1986) identified three roles – reproductive, productive and managing roles. The reproductive role comprised the child bearing/rearing responsibilities and the domestic roles comprised the tasks undertaken by female representatives to guarantee the maintenance and reproduction of the labour force. It includes not only biological reproduction but also the care and maintenance of the work force (husbands and working children) and the further workforce (infants and school going children).The productive role comprise work done by males and females for payment in cash or kind. It included market production and an exchange value, subsistence /home production with an actual use-value, and also a potential exchange value. For females in the fringe communities engaging in agriculture production, this included work as independent farmers, peasant wives, and wage worker. The community managing role comprised activities undertaken wholly by females

at the community level as an extension of their reproductive role. This was to ensure the provision and maintenance of the scarce resources of collective consumption such as water, health care, and education, it was a voluntary and unpaid work undertaken in ‘free time’.

Greenstreet (1971) observed from the traditional Ghanaian society that it was based on subsistence economy in which division of labour existed between men and women. She noted that women were to look after home, raise children and provide regular assistance to men on farm work such as the planting and harvesting of crops.

Gender in Sustainable Forest Management

Gender is understood in this strategy as the differential concerns, rights and interests of women and men in land matters as shaped by the socio-economic and cultural circumstances of the particular societies they live in at particular times in the history of that society. Gender factor is critical in forest management in Ghana. According to Annie (2006), men and women play different role in society; their relationship to the environment therefore differs in their resource utilization and conservation. Thus the impact of degradation on gender is different and needs to be taken into account in any energy conservation effort. Annie however argues that participation in decision making over the years has been limited to the traditional elders who are mostly men and a few old women. As a result gender equality has not been ensured in forest management issues. Anderson on her part considers that discrimination remains a critical obstacle in land management in general and a sustainable forest management in particular, and this discrimination is in most cases a

result of customs, traditions and institutions, particularly with respect to inheritance and ownership of land. Women also hold the key to forest conservation (Anderson, et al 1998). In Nepal, for example, women used to be neglected in the forestry sector. In reality, though, they formed the main actors in forest management.

Annie argues further that a number of gender issues in land conservation exist. These include environmental gender issues, economic gender issues, social gender issues, and institutional issues. All these call for the consideration of gender factors in land management efforts or programmes.

Moreover, according to Ardayfio-Schandorf (2007), access to information about forestry issues is very significant to effective management of the forest. This information is mostly received through training. However she argues that women hardly participate in these training programs except when it specifically targets them or conscious efforts are made to involve them. Because the women lack education, they are always relegated to the background and because of this most women are not involved in decision-making at the local level on forest related issues.

Women and Forest Degradation in Ghana

Notwithstanding the fact that both men and women are exploiters and consumers of natural resources, degradation of forest has severer effect on women as they depend largely on forest resources. According to Anderson et al (1998), the impact of forest degradation on men and women differ. Women are usually engaged in household subsistence activites that is the collection of

water, fodder, herbs for medicinal purpose and fuelwood, basket and other materials. She states that in Ghana where about 70% of the people are engaged in agriculture or its related activites with women making up to 60%, decline in soil fertility or cash crop production affect women's livelihood directly. Access to basic forest materials as fuelwood sources and similar materials may result in a greater workload for women. It can also lead them with little choice but to engage in harmful environmental practices. According to her these problems also have the potential of affecting children's education, especially girls and its overall effect is detrimental to women economic status. She concludes in her article that the impact of conservation project on men and women differ, e.g forest conservation plans may conflict with women's need for basic forest materials unless women are directly involved in project planning and management of the land and forest. She thus recommended that women should be targeted in natural resource development and conservation programmes since they are mostly responsible for sustainable natural resource management.

Role of Forests in Poverty Alleviation Particularly for Women

Gender issues in agriculture cover a broad range of areas that are critical for the maintenance of families and communities in developing countries. Women tend to dominate in the agricultural sector in most developing countries. A decade ago, agriculture accounted for 62 per cent of all female employment in southern countries, and in India it now accounts for about 84 per cent of the total female workforce in rural areas (Williams 2003a). In Uganda, the percentage of women working in the agriculture sector

is also very high; however, here, most female workers are unpaid family workers (women comprise 80 per cent of unpaid workers) or self-employed in the informal sector. In most countries, men are responsible for production of cash crops and women mainly produce domestic staples; they also have a greater involvement in small-scale trade of domestic food items (Williams 2002).

According to Forestalls (1966), despite great potential of tree production in Chittagong Hill Tracts (CHT) region constitutes south-eastern hilly areas of Bangladesh and opportunity of utilizing the forestry sector in poverty alleviation, no systematic measure have been taken to increase timber production through participation of the local people.

Collaborative Forest Management

The Forest and Wildlife Policy indicates the urgent need for addressing unemployment and supporting the role of women in development as a guiding principle. It is therefore a law that the role of women and the unemployed be explored and incorporated appropriately in forest management initiatives (Ardayfio-Schandorf, 2007). She further noted that the forest and wildlife policy of Ghana promotes the involvement of local communities and stakeholders in the management of forest resources. For instance section 3.3 of the policy emphasizes the importance of local people in pursuing these principles, and proposes that the government place ‘particular emphasis on the concept of participatory management and protection of forest and wildlife resources and will seek to develop appropriate strategies, modalities and

programmes in consultation with relevant agencies, rural communities and individual.

According to Ardayfio-Schandorf (2007), Collaborative resource management (CRM) is very important and at the core of sustainable forest management in Ghana. CRMs should therefore focus on ensuring that because forest resources by regulation are owned by the people they should participate in management and benefit from it equitably. This is because for a long time, communities were not party to decision-making on forestry issues and were often negatively affected by such decisions. Communities should be involved from planning stage to implementation stage of all natural resources initiatives.

Key Findings

The following key observations were made from the relevant literature reviewed above:

- The involvement of women in institutionalized decision making improves the prospects for better resources conservation (Agarwal, 1998; Agarwal 2001; Sarin, 1995).
- Unfortunately, local involvement, especially women in forest management and resource conservation in Africa in general and Ghana in particular has been relatively low.
- People who have the greatest potential to alter the environment are the most important agents for its preservation and conservation. Therefore there is an urgent need to involve local stakeholders particularly women in forest management.

CHAPTER THREE

METHODOLOGY

General Overview

This chapter describes the procedures and techniques used to collect and analyze data for the study. It captures design, population, sample size, sampling procedure, research instrument, data collection and data processing and analysis that were used as well as the rational behind choosing those techniques for the study.

Research Design

A research design chosen for the work was descriptive sample survey. The study sought to assess the effect of RUDEYA's community-based forest management project on women livelihood at the Asunafo districts in the Brong Ahafo Region, Ghana which was supported by RUDEYA an NGO operating in the area. Specifically the study is to:

1. Identify and analyse Community Forest Committees' visions or rationales for women collaboration/participation in forest management.
2. Identify the extent to which women CFCs have contributed to sustainable forest management and its effect on their livelihoods

3. Examine the major stakeholders' perception about the effect of women CFCs role in RUDEYA's forest management project on their livelihoods
4. Identify and analyze constraints to effective collaboration between women CFCs and other stakeholders.

According to Neuman (2003), survey designs systematically ask many people the same questions about situation of programme or project. Researchers who employ survey design measure many variables, test multiple hypotheses and infer temporal order about past behaviour, experience, or characteristics. Surveys also generally gather data from a relatively large number of cases at a particular time (Best and Kahn, 1998). Bennett (1979, p. 3) also pointed out that surveys in programme evaluation or impact studies "generally compare at one point in time the achievements of programme objectives or may compare the effect of a programme between participants and non participants".

An important use of the survey in impact studies is to collect data on perceptions or opinions about the activities or outcomes of a programme or project (Bennett, 1979). He emphasized that the survey requires fewer resources (time, participants and money) than other designs that are used in impact studies such as the experimental, matched-set, time-trend and the before-after studies. It is also simple and flexible. It also makes it possible to evaluate a programme or project that has been implemented but data was not collected about situations or status prior to implementation, a condition which is a prerequisite for other designs.

The Study Population

The population of the study is members of community forest committees established by RUDEYA for the community-based forest management project in the Asunafo North and South Municipal/Districts. Fifty forest fringe communities were involved in the project. In each community there are 3 women and 3 men in the CFC. In all 150 women and 150 men CFCs are involved in the project. There are over 150 opinion leaders associated with the project. The study population will be 75 women plus 75 men and 50 opinion leaders all selected from 25 communities in the study area.

Sampling Procedures

The scattered nature of the forest fringe communities in Asunafo Districts and lack of any comprehensive sampling frame for rural communities or consistent and systematic numbering of these forest fringe communities make it difficult to use any strict stratified or cluster sampling techniques in choosing the sample (Nsiah-Gyabaah, 1992). In order to avert the issue of biases in choosing the women, men and opinion leaders groups that would form the sample of the study, a list of the project communities was retrieved from RUDEYA's office in Kumasi, Ashanti region.

Twenty five communities were chosen using the random sampling method and the women and men CFCs as well as the opinion leaders in the communities became automatic sample choice. To do this, all names of the 50 forest fringe communities were written on strips of papers and folded into small pieces. They were put into a bowl and mixed up. After this one piece of

the folded papers were selected at a time. The process continued till all the 25 forest fringe communities were obtained. Thus the following were the selected communities tabulated below.

Table 1: List of Selected Communities

Number of Communities	Name of Community
1	Aworokrom
2	Anwiawia,
3	Asumura,
4	Nyamebekyere
5	Mfante,
6	Nyamebekyere,
7	Mfama,
8	Fianko,
9	Asuadai,
10	Kumahu,
11	kwahu,
12	Akwadro,
13	Mentumi,
14	Adwumakase,
15	Nkwanta,
16	Mpamase,
17	Akwaduro,
18	Abuom
19	Domenase,
20	Mensakrom
21	Ahantamo
22	Driverkrom
23	Kumoso
24	Nnayinaanse,
25	Akwaboahene

Figure 1 of page 13 shows the geographical location of the study area and the forest fringe communities from which the samples were selected. The total number of women interviewed came up to 100 consisting of 50 CFCs members plus 25 women leaders as well as 25 women opinion leaders. This

was done necessarily to ensure consistency between individuals and group objectives among the respondents. In order to get a comparative view of the study, 100 men were interviewed from the selected communities using the same sample method. The total respondents who form the population of the study are 200. Table 2 shows the sample size taken from each category of groups.

Table 2: The Population and Sample Size used for the Study

Category of community groups.	Sample size from 25 communities
Women CFCs members	100
Men CFC members	50
Non-CFC members	50
Total	200

Source: Authors Field work (2008)

Data Collection

The data collection methods and techniques employed in the study were

1. Documentary (secondary data from Rudeya's office and other sources),
2. Observation,
3. Questionnaires/interview guide, and
4. Interviews with the key informants/stakeholders

Documentation Sources

Workshop reports, Books, Journals, Minutes, Attendance list were used extensively to gather information on women's participation in forest management project and their livelihoods. Whereas secondary data served as support for field findings, others helped to indicate the form and directions the field work should take. For instance it was found out from the available documents that majority of the target group were illiterates and therefore interview guide was used for the study.

Observation

A reconnaissance survey was conducted in 4 of the selected forest fringe communities to identify similarities and differences in the socio-economic activities of the women particularly forest livelihood option enterprise bestow on them from the project and the forest reserves and off-reserves that they live around. The survey therefore took the researchers to the beneficiary communities like Asuadai, Mfama, Nkwanta, and Kumahu.

During the reconnaissance visits, questions concerning the women livelihood enterprise in the district and communities were asked. We also had a look at the Grass cutter breeder house that RUDEYA has put at Asuadai. The researchers gathered from the care taker of the breeder house the purpose for which that investment has been made and for whom. His response gave us some insight about the NTFP component of the Rudeya's forest management project. This initial informal interaction served as introductory point for the researchers to build up community entry skills for the actual task of data collection.

Questionnaires/Interview Guide

Questionnaires were designed and administered to the project beneficiaries. Three main types of questionnaires/ interview schedules were used. One set of interview scheduled was prepared for the programme staff of Rudeya who implemented and coordinated the project and the other two were administered to the women/men CFC leaders, and Opinion leaders. Whilst those members who could read and write were given questions to answer, the illiterate members were taken through an interview schedule using the same set of questionnaire**.**

Administration of Research Instruments

Due to the large illiterate population from which the research sample was selected, the research instruments that were designed were used as interview guide. The person –to person method was adopted. The researcher did so with assistance of two-trained Rudeya field staffs. The questions were read and interpreted in 'Twi' (the indigenous and common language of the study area).

To each respondents and responses supplied recorded item by item from beginning to end and there were no difficult challenges with instruments retrievals since all the questions were completed with the help of the researcher or his assistants.

Data Analysis

Data collected from the field were screened manually to ensure consistency of responses under the various headings. The data was processed

and analyzed with the use of Microsoft excel, table, charts graphs and percentages to help the researcher gain an overall view of the findings, to identify trends, and to display the relationships between parts of the results. The data were analyzed according to the major themes so as to reflect the order of the research questions. Qualitative and qualitative data analysis was employed throughout the process to reflect the research design**.**

Field Problems

One of the hectic problems encountered was accessibility to the fringe communities. Being a cocoa growing area, the road leading to the fringe communities were heavily damage and not motorable because of the heavy duty trucks or vehicle that ply the roads. The problem of Community accessibility became worse during the raining season. The research team sometimes rescheduled appointment with some of the communities into other agreeable dates before they were able to carry out the exercise. Although this did not affect the quality of the research, additional cost was incurred. They sometimes relied on motor bikes for the journey. Some respondents have difficult recalling facts and figures farther than three years. Due to illiteracy, the research questions were sometimes interpreted in the local dialect (Twi) to most of the respondents for responses.

Summary/Conclusion

The research design adopted for this study was the descriptive sample survey which was participatory in nature as the women, men CFCs and the opinion leaders themselves took part in assessing the effect of the project on

the livelihood of the women. An accessible and manageable sample size of 200 beneficiaries was used due to resource and time constraints. Apart from data generated directly from RUDEYA and the women/men CFCs and the opinion leaders, other secondary sources and observation were also used.

CHAPTER FOUR

ANALYSIS AND DISCUSSION OF RESULTS

This chapter deals with analysis of the result or data obtained from the fieldwork as well as discussion of the findings. The chapter is divided into two sections. The first section deals with analysis of the data, and the second section deals with discussion of the main findings.

Analysis of Data

Sex: The population for this study was made up of 100 women who were CFC members, 50 men who were CFC members, and 50 other stakeholders who were not members of the CFCs, and they were all men. In all, we had the sum of the men and women respondents to be 200 who formed the population. Although the focus of the study was on the women respondents yet the men's view spiced the study and provided alternative view for confirmation or otherwise.

Occupation

The occupation of the respondents is predominantly farming (88%). Only 12% of the respondents are engaged in trading and other economic activities.

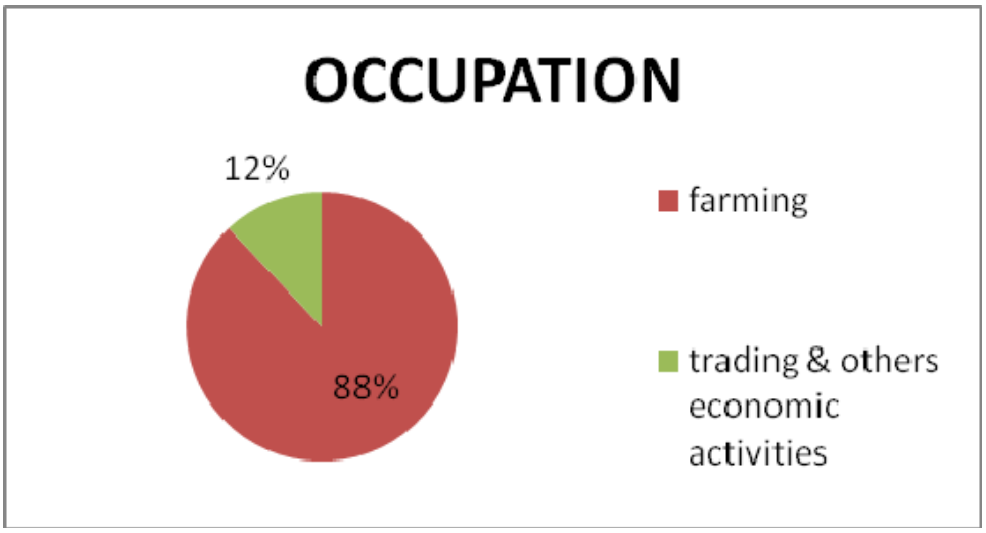

Figure 2: The occupation of the 200 respondents.

Source: Author's fieldwork (2008)

Educational Background: unsurprisingly, majority of the respondents were uneducated. Even the few educated ones were mostly High School graduates.

Marital Status: About 80% of the respondents were married, 10% single, 5% divorced, and 5% were widows.

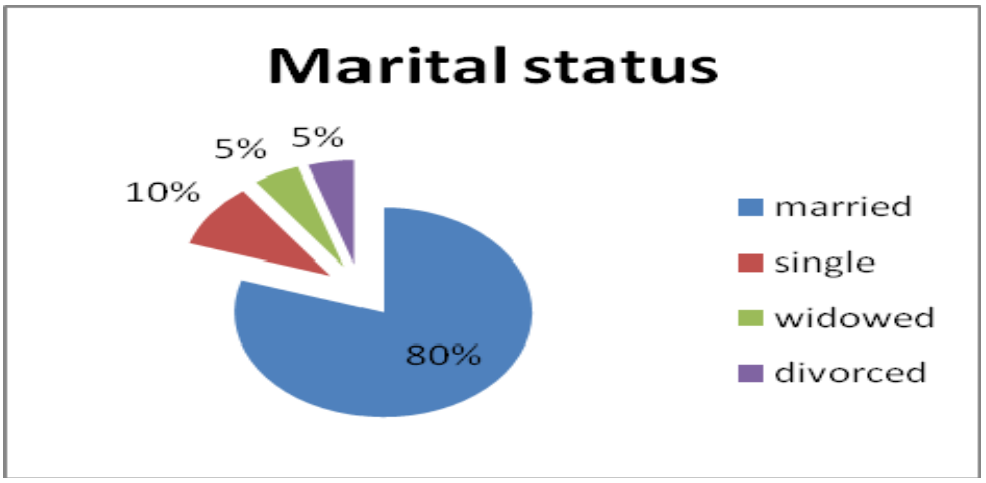

Figure 3: The Marital Status of Respondents

Source: Author's fieldwork (2008)

Table 3: Composition of the CFC/Stakeholders Representation for each Community

Stakeholders Group	Number of representatives
Traditional Authority	2
Land owners	0
Farmers group	1
Women	1
Youth group	1
NTFPs collectors	0
Assembly (assemblymen/unit committee members)	1
Migrants	0
Others	0
Total	**6**

Source: Author's fieldwork (2008)

Table 3 above gives the composition of the CFC/Stakeholders representation for each community. This was in accordance with RUDEYA's guideline for the composition and selection of the CFC members. The CFCs comprise of representatives from the chiefs, unit committees, queen mothers, youth groups, women group, farmers groups and opinion leaders in the community and this was overwhelming affirmed by all the respondents contacted.

Understanding of Collaborative Forest Management

There seemed to be a consensus among the respondents on their perception or understanding of collaborative forest management as all the respondents stated that collaborative forest management is all about

stakeholders' involvement in forest management in terms of decision making, policy and law making and protection of the forest.

Interests in the Forest as Stakeholders

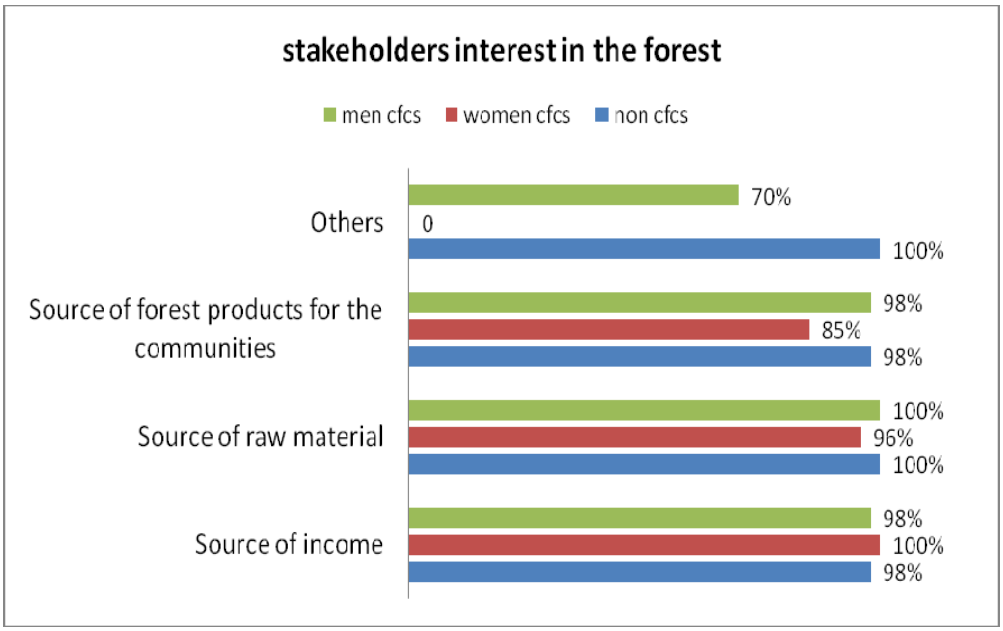

Figure 4: Respondents interest in the forest.

Source: Author's fieldwork (2008)

From the graph above, the various respondents were asked to state the kind of interest they have in the forest as stakeholders. Some key interests were provided as options for respondents to choose from. These include source of income, source of raw material, forest products for the communities, and any other interests.

All the 100 respondents in the women category stated source of income as their interest in the forest. The women cited products as mushrooms, Grasscutter and Snails rearing as examples of the products that give them income. About 96% of the women contacted stated source of raw

material as their interest in the forest. They cited products like canes used for weaving baskets and mats as example of raw materials they derive from the forest. About 85% stated source of forest products for the whole community as one of their interests in the forest. These products include food products, commercial products, medicinal products etc. It can be observed from the responses that the women stakeholders have huge interest in the forest without which living would be unbearable. Hence their pressing expectations for effective management of the forest.

About 98% of them stated source of income as one of their main interests in the forest. In addition to products like snails and mushroom, some of the men cited hunting as some of the activities that gives them income. All the 50 men also stated source of raw material as one of their key interests in the forest and 98% stated source of forests products for the whole community as their interests in the forest. Here, the products that were mentioned are similar to what the women stated. Among the men that were contacted, 35% mentioned other interests apart from the options provided. Among the interests that were stated is ownership of part of the forest. These men noted traditionally, all lands including the forest in and around their communities belong to them. Therefore the forests are owned by them and must be considered as such.

The non-CFC stakeholders include traditional and opinion leaders such as chiefs, queen mothers, Assembly members, and government officials such as forestry officials and the district assembly representatives. About 98% of them stated that the forest serve as source of income. 100% cited source of raw material, and 98% mentioned source of forest products for the community

as major interests. Also all of them noted other interest apart from the options provided. They cited the preservation and protection of the environment as their main concern. It is to be observed that even though the various respondents stated specific interests in diverse ways their overwhelming interest in the forest is not in doubt hence their desire to for collaborative effort in sustainable forest management. It must also be noted that the interests of the women in the forest are not too different from that of the men and other stakeholders.

Vision and Aims of the Respondents for Their Collaboration in the Forest Management Projects

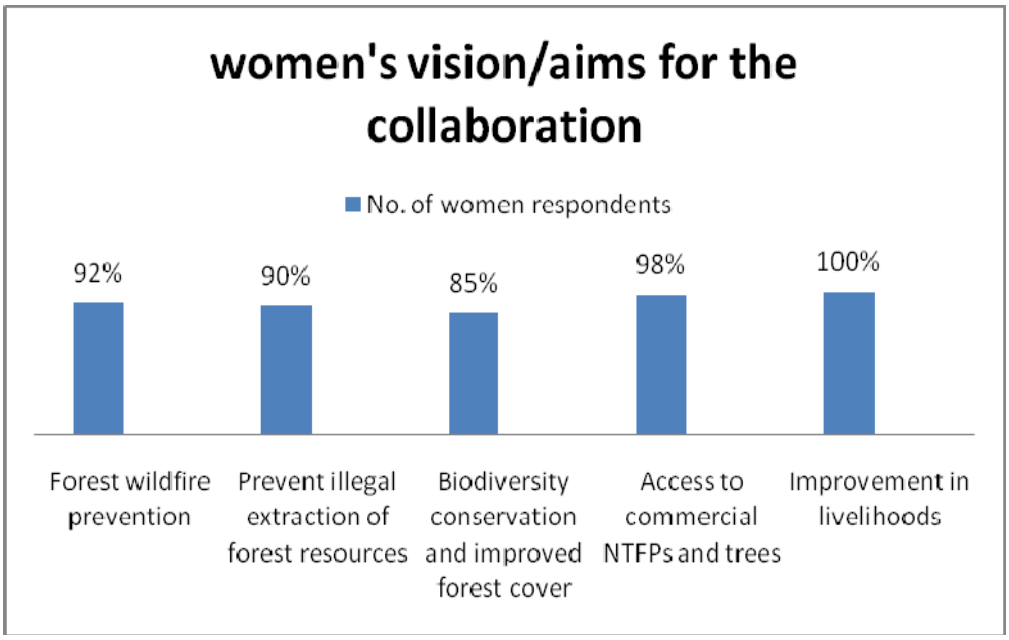

Figure 5: Visions and Aims Expressed by Women CFCs

Source: Author's fieldwork (2008)

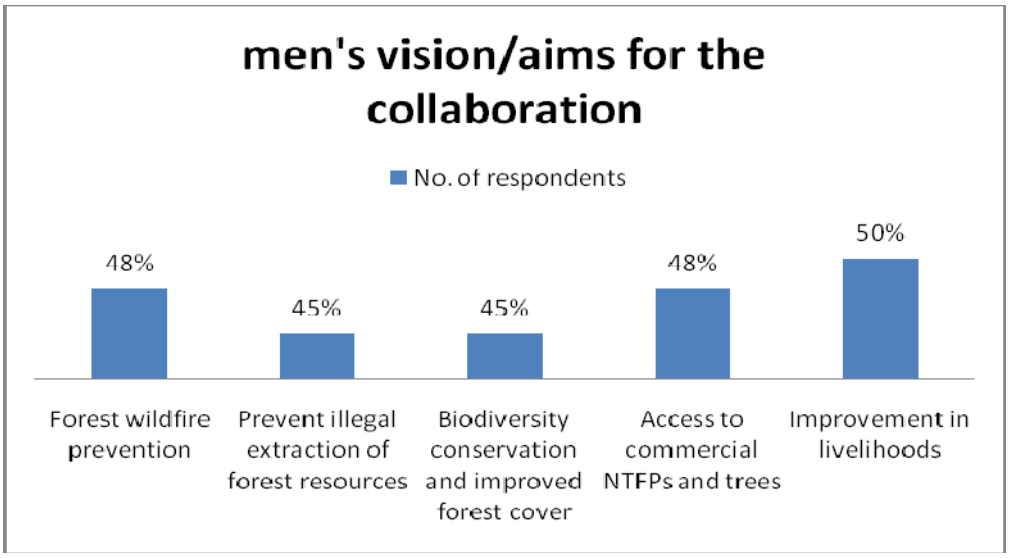

Figure 6: Visions and Aims Expressed by Men CFCs

Source: Author's fieldwork (2008)

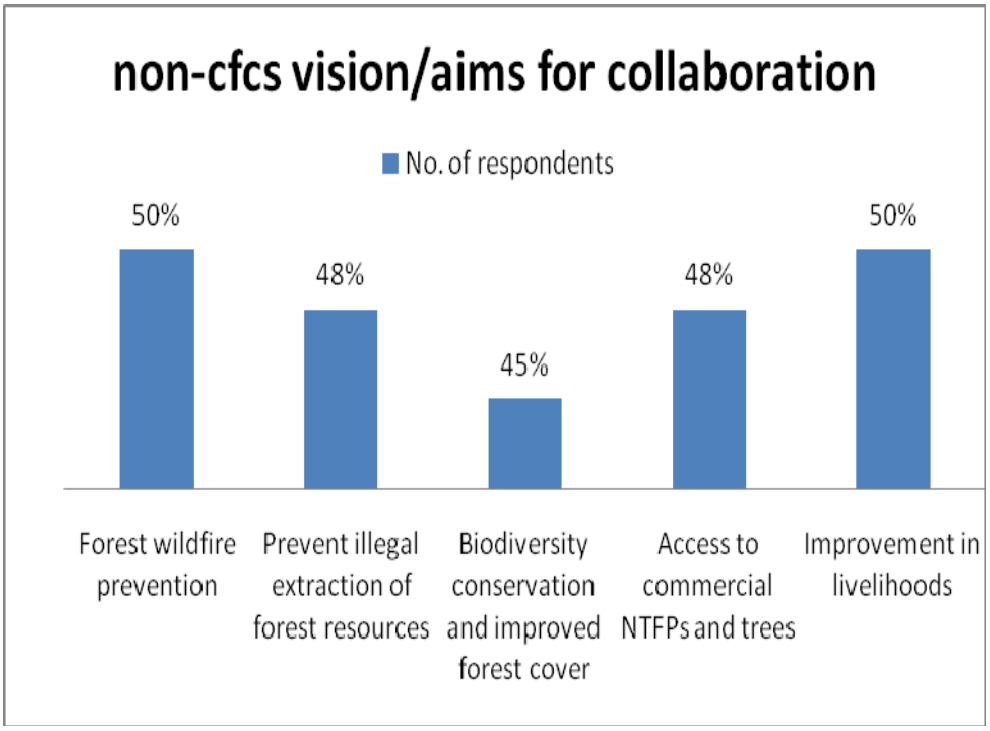

Figure 7: Visions and Aims Expressed by Non - CFCs

Source: Author's fieldwork (2008)

Having stated the kind of interests they have in the forest as stakeholders, the respondents were asked to state their visions and aim for their collaboration and participation n the collaborative forest management project. Here too some key aims were provided as options for the respondents to choose from. These include Protection of forest against fire, Protection of forest against illegal extraction, Biodiversity conservation and improved forest cover, Access to commercial trees and NTFPs, and Improvement in livelihoods.

Figure 4 represents the responses of the women CFC members. From the graph improvement in livelihood recorded the highest number of respondents (100%). This undoubtedly proves that the most pressing aim of women for their collaboration in forest management is to improve their livelihoods. They believe their livelihoods can be improved by effective management of the forest from which they derive most of their domestic and commercial needs. Of course this is not to underrate the other aims/visions as the number of women who expressed other visions was very high. For instance Protection of forest against fire recorded 92%, Protection of forest against illegal extraction recorded 90%, Biodiversity conservation and improved forest cover recorded 85%, and Access to commercial trees and NTFPs recorded 98%.

Figure 5 represents the responses of the men CFC members. Here too improvement in livelihoods recorded the highest response (100%). The men were willing to subsume all the other aims under improvement in livelihoods. They stated that since the communities are predominantly farming communities and live hugely of agricultural produce, noting contributes more

to their livelihoods than the forest. Aside this Protection of forest against fire recorded 96% among the men, Protection of forest against illegal extraction recorded 90%, Biodiversity conservation and improved forest cover recorded 90%, and Access to commercial trees and NTFPs recorded 98%.

Moreover, from figure 6, which represents the responses of the non-CFC stakeholders, Protection of forest against fire recorded 100%. Respondents in this category reiterated the extreme importance in keeping the forest from bush fires which pose the greatest danger to the forest. The forestry officials contacted noted that bushfires have the potential of denying the nation of rich resources in the forest hence their preparedness to collaborate at all levels if only that will help keep the forest in good shape. Again improvement in livelihoods records 100% among this category of respondents. Protection of forest against illegal extraction recorded 96%, Biodiversity conservation and improved forest cover recorded 90%, and Access to commercial trees and NTFPs recorded 96%.

It is to be noted from the above data that improvement in livelihood of the people in the communities is the vision for most of the respondents which they intend to achieve through collaborating and participating in RUDEYA's forest management project.

It was found out from the respondents who are CFC members whether their understandings of collaborative forest management as well as their visions or aims for collaborating are in line with the RUDEYA's Community-based Forest Management Project and its objectives. The figures below represent their responses.

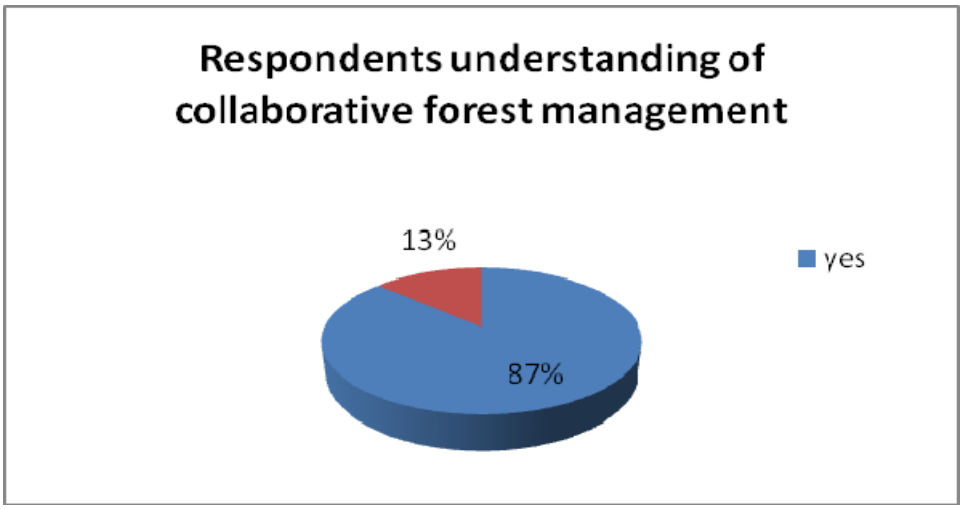

Figure 8: Respondents Understanding of Collaborative Forest Management.

Source: Author's fieldwork (2008)

From the figure above, majority of the respondents, both men and women (87%) responded that their understandings of collaborative forest management as well as their expectations are in line with what is being done so far by RUDEYA. Only 13% said that their perceptions and visions were not fully in line with what is being done. Some of them stated that since traditionally, all lands including the forests in and around their communities belong to them, they were expecting RUDEYA's project to confirm their ownership over the forest and accordingly claim the rights over all the resources in the forest. Some CFC members also cited payment of remunerations by RUDEYA for their collaborative efforts. Nevertheless, it can be rightly observed that the project took into account the concerns of the beneficiaries and conferred ownership of the project on the beneficiaries and thereby ensuring its effectiveness.

Level of Participation

It was found from the respondents what aspect(s) of RUDEYA's forest management project they were involved in, and the extent to which they participated in the project.

Table 4: Level of Women CFC Members Participation

Major Activity	No. of respondents	Percentage
Project development	80	80%
Forest operations/implementation of action plans	85	85%
Decision on benefit sharing	60	60%
Others	60	60%

Source: Author's fieldwork (2008)

Table 5: Level Men CFC Members Participation

Major Activity	No. of respondents	Percentage
Project development	48	96%
Forest operations/implementation of action plans	50	100%
Decision on benefit sharing	50	100%
Others	45	90%

Source: Author's fieldwork (2008)

Table 6: Level Non - CFC Stakeholders Participation

Major Activity	No. of respondents	Percentage
Project development	48	96%
Forest operations/implementation of action plans	20	40%
Decision on benefit sharing	15	30%
Others	45	90%

Source: Author's fieldwork (2008)

In this part, some of the major activities in the project were listed for respondents to state which level(s) or aspect(s) that they participated and options were also provided for those who undertake any other activity apart from what has been stated. Table 2 represents the level of participation among the women. At the level of Project development, 80% of the women take part. 85% take part in Forest operations/implementation of action plans, 60% take part in Decision on benefit sharing, and 60% undertake other activities. Some of these activities include boundary clearing, watershed management etc.

On the part of the men, represented on table 3, 96% take part in the project development, 100% take part in Forest operations/implementation of action plans, 100% take part in Decision on benefit sharing, and 90% undertake other activities. These activities according to them include leading the communities to negotiate for social responsibility, boundary clearance, daily inspection of the forest to check encroachment and poaching.

Table 4 which represent the response of the non-CFC stakeholders indicate that 96% of the non-CFC stakeholders participate in the project development, 40% participates in Forest operations/implementation of action

plans, only 30% take part in Decision on benefit sharing, and 90% undertake other activities aside what have been listed. According to them, some of the activities they undertake are legislation and policy formulation, especially the forestry officials and district assembly representatives.

From the data above, at the level of project development, the women have relatively less level of participation. However according to the respondents, this was not meant to be the case. It is rather due to what they states earlier as sometimes unfavourable time schedules. Apart from this the women have very high participation at all levels and aspects of the project.

The Rate of General Impact of Respondents on the Project

Here, respondents were asked to rate their general participation in the RUDEYA's forest management project. Below are their responses.

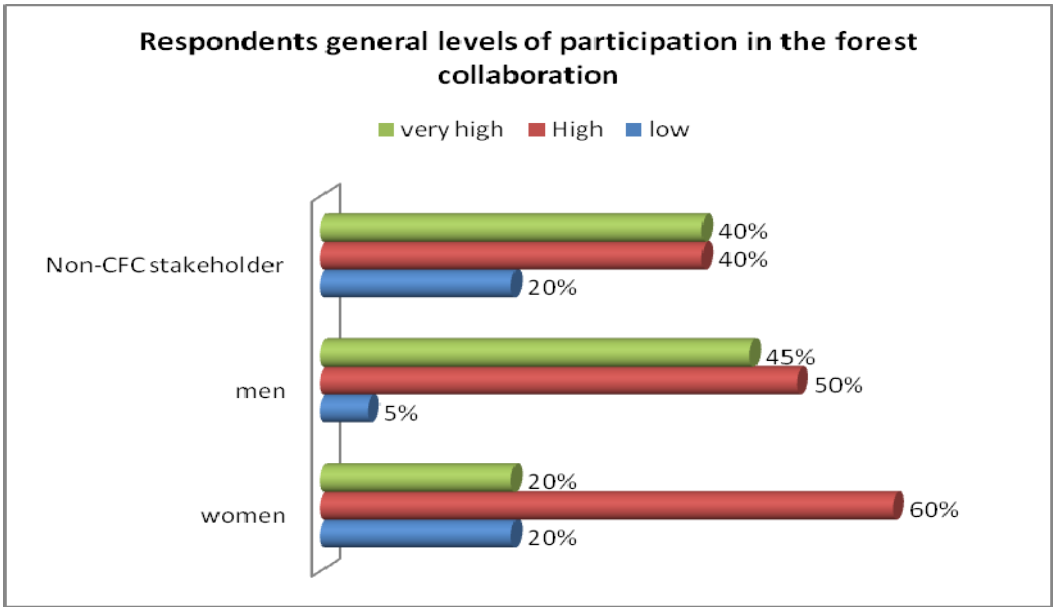

Figure 9: Respondents Levels of Participation in the Collaboration Forest Management

Source: Author's fieldwork (2008)

Figure 9 indicates the rate of general participation of the various category of respondent in the whole project. 20% of the women have low participation, 60% have high participation, and 20% have very high participation. On the part of the men, only 5% have low participation, 50% participate highly, and 45% participate very highly. For the non-CFC stakeholders, 20% have low participation, 40% have high participation, and 40% participate very highly. The graph below compares the participation rate of the various categories of respondents.

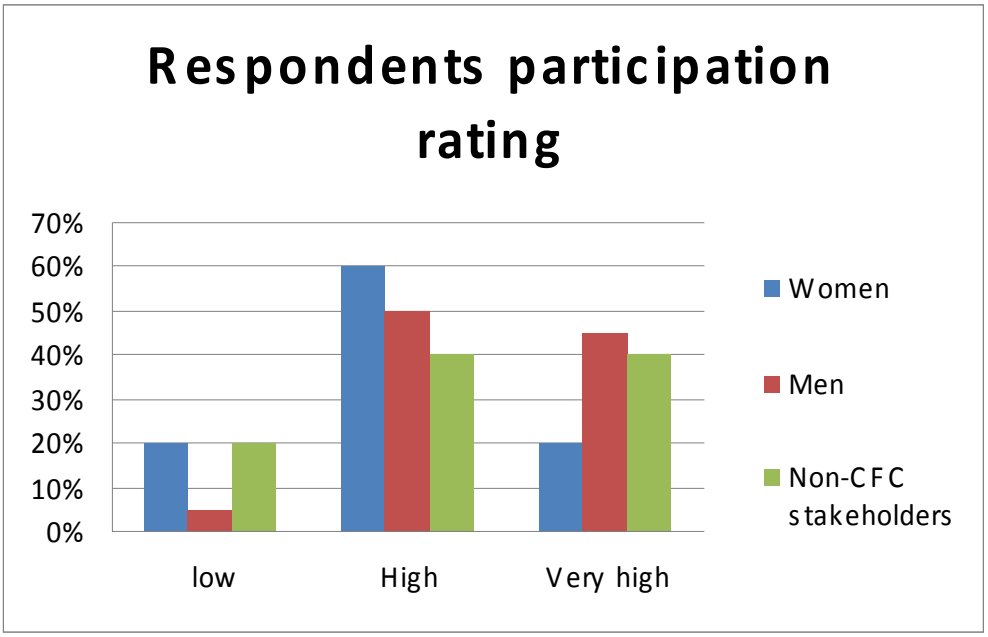

Figure 10: Rate of Participation

Source: Author's fieldwork (2008)

From the graph above, there is no doubt that each category of respondent has impressive rate of participation. Men have the least number whose participation is low. Thus 5%, and this imply that majority of them participate highly. Women have the highest number (60%) whose participation in the project is high. This is encouraging, and it also indicate the

overwhelmingly acceptance of the project among women in the community. It is also important to that the non-CFC stakeholders also have impressive rate of participation. As has been pointed out earlier these stakeholders participate and contribute to the project in diverse ways ranging from assisting in projects formulation and development to giving technical assistance such as workshops. Notwithstanding the fact that the men have the highest number (45%) whose participation rate is very high, it can rightly be said that there is no big disparity in the participation rate of the various category of respondents, and this signifies the overwhelming acceptance of the project by all the stakeholders in the communities.

It was important to find out whether the role each respondent play is the same as what was agreed upon at the beginning of the project. The entire respondent answered positive notwithstanding the fact that some of them played other ancillary roles.

Table 7: Participation in Benefit Sharing by CFC Members Only

Benefits	**No. of respondents**	
	Women	**Men**
Recognition as a stakeholder	80%	96%
Access to forest resources	75%	80%
Royalties	0	0
Social Responsibility Agreement Benefits	65%	76%
Alternative livelihoods	100%	50%
Employment, i.e. paid job/services	0	0
Incentives, e.g. money, farm tools etc	100%	100%
Others	95%	96%

Source: Author's fieldwork, (2008).

A number of benefits were listed for the respondents to choose which of them they derive from the collaborative forest management project. These benefits include Recognition as a stakeholder, Access to forest resources, royalties, social responsibility agreement benefits, alternative livelihoods, employment, i.e. paid job/services, Incentives, e.g. money, farm tools etc, and other benefits aside what have been listed. 80% of the women and 96% of the men stated recognition as one of the benefits. According to the respondents, prior to the project their status as stakeholders was obscured by the general notion that all forests in the country are vested in the Government and is accordingly controlled by the government via its agencies. Per projects like this, they have come to believe that they also have a big stake in the forest and their collaboration is needed to keep it in good shape.

Moreover, 75% of the women and 80% of the men cited access to forest resources as one of the benefits they receive from the project. This benefit has relatively lower percentage of respondents simply because the communities are not allowed to access some of the resources especially the commercial ones. The resources they are permitted to access are mainly NTFPs. None of the respondents cited royalties as one of the benefits they derive. This is not surprising because royalties from the forest are not paid to the communities directly. They are paid to the either the central government of the district assemblies which according to the respondents, they are not familiar with.

Alternative livelihood is one of the benefits which received 100% response as a benefits derived by both men and women. The respondents reiterated the importance of the project in their lives as farming communities. Most of the respondents noted that they derive other benefits apart from the ones listed and this include improved knowledge on alternative livelihoods and forest protection among community members.

Comparisons of Benefits Received by Respondents and Their Expectations/Interest in the Forest as Stakeholder

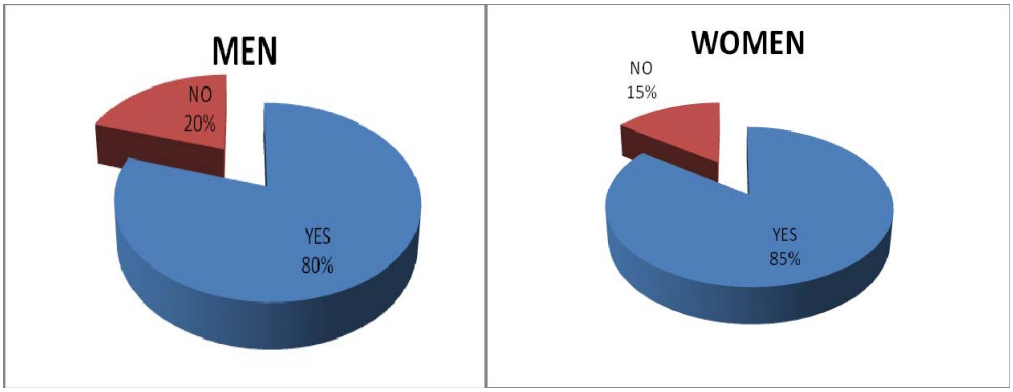

Figure 11: Comparison of Men and Women respondents benefits received

Source: Author's fieldwork, (2008)

Here, it was inquired from the respondents whether the benefits they receive from the collaboration were commensurate with their expectations/ interests in the forest as stakeholders. The chart below represents their responses: 85% and 80% of the women CFCs and men respectively indicated that the benefit they received met their expectations and interest as stakeholders whilst 15% and 20% of women CFCs and men respectively indicated otherwise. The percentage differences between women CFCs and

men respondents may be due to the fact that some of the male respondents who constituted the men population were not CFCs – officials of government agencies like FSD, DA and chiefs, etc. they expressed other interest like royalties and forest conservation.

Achievements of the Community Forest Management or the Collaboration

According to the respondents contacted the community forest management project has had a number of achievements so far. The major achievements of the project according to the respondents include the following:

- Women are now given the opportunity to take part in decision making at the community level on how the forest is to be managed. By this their concerns are considered at all levels of the forest management process.
- Illegal logging has reduced drastically
- Forest encroachments and other illegal activities have reduced
- There is a yearlong flow of water for domestic consumption or use
- There are no more bushfires in the forest areas.
- Greater income and nutrition for the communities.
- Improved knowledge on alternative livelihoods and forest protection among community members
- Improved environment.

Condition of the Forest before the Collaborative Forest Management Project

Views were solicited from the respondents on the conditions of the forest prior to the initiation of the project by RUDEYA. The response of all the respondents indicated that the forest and the environment as a whole were under threat. Forestry officials reiterated the difficulties they face in protecting the forest due to illegal exploitation of the forest. Timber contractors also pointed out the problems and challenges they sometimes face in their activities.

The Condition of the Forest Now

From the interactions, it was gathered from the respondents that some considerable improvements in the condition of the forest have been experienced as result of the project. Illegal logging has reduced drastically, forest encroachments and other illegal activities have reduced, there is a yearlong flow of water for domestic consumption or use, and there are no more bushfires in the forest areas.

Impact of the Collaborative Forest Management Project on the Livelihoods of Women

All the respondents confirmed that the project has improved the livelihoods of the community members especially women in a number of ways:

- Moreover, women access to forest products and NTFPs has been enhanced. This has improved nutritional values for households.

- The women CFCs helped to promote collaborative forest management involving the communities, the Forest Services Division, Timber Firms (Loggers), Traditional authorities and the local government to check forest encroachment, illegal logging and bush fires.
- The women CFCs have helped to promote agro forestry and small-scale plantations development in the Forest Fringe Communities.
- The women CFCs have also succeeded in leading their communities to negotiate for Social Responsibility Agreements (SRAs).
- The relationship of women as partners and managers of the forest has been enhanced.
- Greater social recognition – especially for women where they now felt included in decision making and forest management
- Women received physical infrastructure and equipment for NTFP production.
- Greater income and or nutrition as a result (especially important for women who have not traditionally been involved to such extent in income generating activities)
- Improved environment (less fire, cleaner water, less crop damage etc).
- Strengthening of access to traditional cultural foods.
- Moreover, NTFP enterprises which is part of the project serve multiple functions:
- Improving local nutrition
- Securing local cultural food customs
- Reducing agricultural risk

- Increasing personal creativity of women CFCs and social standing
- Developing social networks around producer groups
- Increasing income for women
- Developing entrepreneurial skills
- Leading them to new market openings

There has also been increased nutrition, especially for vegetarian groups in the case of mushrooms, for pregnant women where snails are reputed to be an excellent dietary supplement, and for the poorest farmers

- Increasing availability of important cultural items – for example, honey is widely used local medicine, snails, mushrooms and grasscutters are local delicacies
- Reducing dependency on a few commodity crops – especially cocoa where markets are subject to global forces.
- Increased social standing – for example by the gift of food items to friends or for important feast occasions and medicinal purposes.
- Increasing income – especially important for women otherwise dependent on men's cash crop incomes. This additional income is sometime reinvested in production, but may also be used for important issues such as child education or health care.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

Summary

Ghana's forest resources base is shrinking at such an alarming rate. It has been estimated that about a third of Ghana's forest have disappeared in 17 years between 1955 and 1972 (Hall, 1987) whilst the average annual rate of deforestation since the turn of the century has been estimated at 750 sq. km (World Bank, 1988). Forest resources constitute the source of livelihood for about 70% of Ghanaians and the loss of forest resources at such rate has a great effect on the livelihoods of these people most of which are women.

The main aim or objective of this work was to examine the perceived impact on women's livelihood of the RUDEYA's community-based forest protection and management project in the Asunafo District of Brong-Ahafo region of Ghana. To achieve this, a wide range of literature was reviewed on Ghana and the Forestry Environment, Women and Environment, Women involvement in community institutions, Community Participation in forest management in Africa, Natural Resource Management in Ghana: professionalism and political interference as a challenge, Stakeholder conflicts in forest management, the concept of Gender in sustainable forest management, Women and Forest Degradation in Ghana, Role of Forests in

Poverty Alleviation particularly for women, and Collaborative Forest Management and women.

Moreover, a fieldwork was undertaken which involved interviews and administration of questionnaires among the beneficiaries of RUDEYA's collaborative forest management project in about 25 forest communities in the Asunafo-North district. The main purpose of the fieldwork was to identify and analyse Community Forest Committees' visions or rationales for women collaboration/participation in forest management, Identify the extent to which women CFCs have contributed to sustainable forest management and its effect on their livelihoods, examine the major stakeholders' perception about the effect of women CFCs role in RUDEYA's forest management project on their livelihoods, and Identify constraints to effective collaboration between women CFCs and other stakeholders.

Key Research Findings

High Level of Common Stakeholders' Interest

One of the key findings of the study is that there are high commonalities of interest among the stakeholders or the respondents in the Rudeya's community based forest management project.

These include source of income, source of raw material, forest products for the communities, and any other interests. Over 98% of the interviewees' interests were same. They cited the preservation and protection of the environment as their main concern. It was observed that even though the various respondents stated specific interests in diverse ways, their overwhelming interest in the forest is not in doubt hence their desire for

collaborative effort in sustainable forest management. It must also be noted that the interests of the women in the forest are not too different from that of the men and other stakeholders.

High Level of Women CFCs Participation in the Project

Generally, the local people, especially women have been excluded in decision-making on forest management in Ghana. It appears that most of the decisions on the management of the forest are not effective because the concerns of the local people are not taken into account. However the research has revealed the 80% of the women CFCs agreed that their general participation in the project was high. Again, above 90% of the men CFCs and non-CFC members conceded that their level of participation in the project is high. This may account for the success of the project.

High Level of Women CFCs Participation in the Benefit Sharing

Generally, the participation in the benefit sharing was very high among the women CFCs as well as the men. The benefits include recognition as a stakeholder, royalties, access to forest resources, Social Responsibility Agreement benefits, alternative livelihoods, and employment, i.e. paid job/services, incentives, e.g. money, farm tools etc, and other benefits aside what have been listed. Most of the respondents noted that they derive other benefits apart from the ones listed and this include improved knowledge on alternative livelihoods and forest protection among community members. All the women and men CFCs indicated that they participated in all the benefits

except royalties which the some of non- CFC members conceded that they are earmarked for FSD, Paramount Chiefs and the District Assemblies.

- A great number of literature reviewed strongly recommend and call for collaborative efforts in forest management. Thus the involvement of community members in decision-making on forest management. Many authors argue that policies and programs on forest management can be effectively implemented if the very people who are affected by these policies are involved and their concerns taken into account.
- RUDEYA's Collaborative Forest Management Project was a positive step in effective forest management and was overwhelmingly accepted by the communities
- An interaction with the community members indicates that the visions of communities in any forest management effort were in line with the objectives and goals of RUDEYA Collaborative forest management project. According to the respondents of the questionnaires, their visions include: Protection of forest against fire; Protection of forest against illegal extraction; Biodiversity conservation and improved forest cover; Access to commercial trees and NTFPs; Improvement in livelihoods etc.
- The collaborative forest management project had huge impact in the lives of members of the communities particularly women. Women's livelihoods have been improved substantially in a number of ways: women are allowed to take part in decision-making on forest management in those communities. There is a yearlong flow of water in those communities. This has reduced the difficulties women and

children used to go through during dry seasons in order to get water for domestic consumption. Nutritional value of the households and food security has improved through the exploitation of NTFPs. NTFPs serve as employment opportunities for women CFCs during the lean season. Women also receive income from the NTFPs.

- According to the respondents the collaborative forest management project has improved the conditions of the forest in those communities. Vegetation cover around rivers has improved. There is less bush fires in the area. Illegal logging and encroachments have also reduced drastically.

Main Achievements of the Collaborative Forest Management Project

According to the respondents the main achievements of the Rudeya's collaborative forest management project are;

- The women as well as the men CFCs have helped to promote collaborative forest management among forest stakeholders.
- It has provided alternative livelihood and employment opportunity for farmers particularly women. The NTFP production has been a source of income generation to the women CFCs particularly during the lean season.
- The interviewees indicated that the CFCs have promoted the compliance with forest and community bye-laws in the forest fringe communities.

- There is a reduction in forest encroachment and minimal level of cases of bushfires.
- Their activities brought an improvement in cooperation among forest stakeholders.
- The damming of streams and the use of poisonous chemicals for fishing has also declined as a result of regular education being carried out by women and men CFCs.
- CFCs have led able to negotiate for Social Responsibility Agreement (SRA) for community development.
- CFCs have aided in the promotion of agro forestry and small scale plantation development on farm lands.
- There has been an increase in the awareness of gender mainstreaming, managerial and leadership skills.

Some Constraints to Women in the Collaborative Forest Management project

- Marital dispute is one of the major constraints to the women CFCs projects. Particularly on products like snails that have particularly sensitive cultural acceptance by husbands.
- Lack of financial resources to expand or restock NTFP production units.
- Unavailable gender strategies, policy and disaggregated data.

Conclusion

There was general assertion from the respondents that RUDEYA's community-based forest management project has improved women's livelihoods and made a major positive contribution to sustainable forest management in the Goaso forest districts. However, the concerns of the Interviewees were how to sustain the gains of the project and scaled it up to other areas. Almost all women CFCs and other respondents interviewed placed a great deal of emphasis on the equal training opportunities they had received such as project cycle management, gender, business management, training in NTFP production, group dynamics etc.

The project is well known and spoken highly of in all the communities visited. There is evidence of regular visits, sound technical inputs and training from Rudeya staff to the beneficiaries including the women CFCs. The project achievement can be sum up as follows; (a) there was successful implementation of alternative livelihood options leading to income generation, employment opportunities and unprompted replication across the Asunafo district, (b) increased women CFCs and broader community capacity and understanding of rights and responsibilities with respect to the forest – leading to bye-laws to protect water courses, reduce fire and stop illegal logging activities; and (c) the increased inclusion of women in decision-making – leading to greater emphasis on water course management and more appropriate timing of meetings. Introducing alternative NTFP-based livelihood options was particularly designed to provide some incentive for women and men CFC members. The empowerment of the women and men CFC, and broader community for understanding of rights and responsibilities is a two

edged sword. The CFCs as local institution could develop into highly effective and motivated local management institutions for effective collaboration in sustainable forest management if they receive the blessing and support from FSD. If let down by FSD complicity in forest crimes, the CFCs could quickly become or form alliances with illegal operations and contributed negatively to the already forest degraded situation. There is evidence of widespread understanding at community level of what an SRA is and what benefits should flow to them. The women and men CFCs have led the communities in negotiating and signing for SRA on behalf of the communities.

Future forest management projects should draw heavily and consolidate these gains made through this Rudeya initiative. The gains made in the project are partly the direct result of women effective participation and gender mainstreaming strategies and activities of RUDEYA.

Recommendations

In view of the major findings from the study, the following recommendations could be made:

- There is the need to strengthen local institutions. The concept of CFC should be promoted and women inclusiveness must be carefully considered when policies are being formulated and implemented. The women must be part of the consultation and participation processes in order to bring harmony among all the key stakeholders.
- The timber industry particularly those who hold TUC, the FSD and the communities should collaborate to promote sustainable forest management and check illegal logging.

- There is the need to form Community Forest Committees (CFCs) in all fringe communities. The concept of collaborative forest management involving the Forest Fringe Communities (FFC) the FSD and the timber firms need to be taken seriously in Ghana.
- There is the need for proper negotiations and documentation of SRAs. Effective monitoring of the utilization of SRA fund would promote fair benefit sharing among the key forest stakeholder.
- The study also recommends provision of skills training and community-based facilities for the promotion of forest-based alternative livelihoods (NTFPs) development and utilization, which will enhance collaborative forest management and provide alternative livelihoods for household consumption and income generation.
- Intensive community level education/sensitization on sustainable forest management issues such as: wild life hunting rules, CFC concept, watershed management SRA, illegal logging/excessive harvesting of NTFPs and forest protection, forest conservation and management practices, just to mention a few should be replicated in other fringe communities.
- Proper negotiation and documentation of SRAs as well as effective monitoring of implementation of SRAs need to be pursued and women needs should be considered when using SRA proceeds.

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APPENDIX

QUESTIONNAIRE

INFORMATION PROVIDED IN THIS QUESTIONNAIRE IS FOR USE IN AN ACADEMIC RESEARCH ON THEME:

EFFECTS OF COMMUNITY-BASED FOREST MANAGEMENT PROJECT ON WOMEN'S LIVELIHOOD: A CASE STUDY OF RUDEYA FOREST MANAGEMENT PROJECT IN THE ASUNAFO DISTRICT OF BRONG AHAFO REGION, GHANA.

OBJECTIVES

- Identify and analyse Community Forest Committees' visions or rationales for women collaboration/participation in forest management.
- Identify the extent to which women CFCs have contributed to sustainable forest management and its effect on their livelihoods.
- Examine the major stakeholders' perception about the effect of women CFCs role in RUDEYA's forest management project on their livelihoods
- Identify and analyze constraints to effective collaboration between women CFCs and other stakeholders

QUESTIONNAIRES

Forms and vision/rationale for collaboration

1. What is the composition of the CFC/Stakeholder representation and how were they selected?

Stakeholder Group Number of representatives

- Traditional Authority (Chief /Odikro) ……
- Land owners ……..
- Farmer Group ……..
- Women group …….....
- Youth group ……..
- NTFPs collectors ……..
- Assembly (assemblyman/unit committee members)……
- Migrants ……
- Others (list)……..……

…….…….

2. What is your perception/understanding of Collaborative Forest Management?

……

……

…….....

3. What interest do you have in the forest as woman CFC/Stakeholder?

a) source of income/royalties for landowners and District Assemblies

b) source of raw material for exploiters

c) source of forest products for communities

d) Other.....

……

4. What is your vision/rationale for the collaboration? (Tick as appropriate)

a) Ensure the protection of forest against fires

b) Ensure the protection of forest against illegal extraction

c) Ensure biodiversity conservation and improved forest cover

d) Ensure access to commercial trees and NTFPs

e) Ensure improved livelihoods

f) Others …….

……

5. Is your vision/perception/understanding of Collaborative Forest Management in line with what is being done?

a) Yes [ ] b) No [ ]

6. If no, why?

……

……

Level of collaboration/ Participation

7. As a women CFCs/stakeholder, what activity(s) or aspect(s) of the Collaborative Forest Management project or programme are you involved in?

a) Project development [ ]

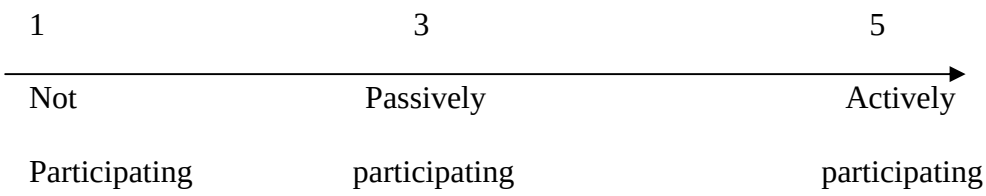
b) Forest operations/implementation of actions/plans [ ]

c) Decisions on Benefit sharing [ ]

d) Others ……

……

8. How would you rate your participation in forest management planning/policy formulation? (Circle as appropriate)



Participation in Forest Operations/implementation of actions

9. Are you involved in the implementation of Rudeya's Forest Management project plan/actions?

   a) Yes [ ] b) No [ ]

10. If yes, what role(s) do you play? (Tick as appropriate)

   a) Forest information acquisition/inventory

   b) Protection against fires

   c) Protection against illegal activities

   d) Development of forest resources/forest regeneration, e.g. nursery establishment, planting, nurturing, maintenance, etc.

   e) Forest resource exploitation; i.e. harvesting, processing and marketing

   f) Others……

   ……

   ……

   ……

11. Are the roles you play in the implementation process the same as those agreed during the planning stage?

   a) Yes [ ] b) No [[

   [IF YES, PLEASE CONTINUE TO QUESTION 31]

12. If No, what accounts for this?

……

……

13. Do these differences affect your level of collaboration?

a) Yes [ ] b) No [ ]

14. What other factors affect your level of collaboration?

……

……

……

……

15. What are the difficulties you face as women CFCs/stakeholder in your attempt to collaborate in implementation of actions/forest operations?

……

……

……

Participation in Benefit sharing

16. Have/do you derive any benefits from the collaboration?

a) Yes [ ] b) No [ ]

17. What benefits do you derive?

a) Recognition as a stakeholder [ ]

b) Access to forest resources [ ]

c) Royalties [ ]

d) Social Responsibility Agreement benefits [ ]

e) Alternative livelihoods [ ]

f) Employment; i.e. paid jobs/services [ ]

g) Incentives, e.g. money, farm tools, etc [ ]

h) Others ……

……

18. Are you involved in anyway/do you contribute to decisions concerning how these benefits are shared/distributed?

a) Yes [ ] b) No [ ]

19. If yes, how do you participate?

……

……

……

20. Are you involved in decision making concerning forest resource extraction/exploitation (e.g. award of Timber Utilization contracts or the issuing of permits for exploitation of forest resources)?

a) Yes [ ] b) No [ ]

21. If yes, how are you involved?

……

……

22. Do the benefits you receive commensurate with your interest/stake in the forest or contributions to forest management.

a) Yes [ ] b) No [ ]

23. If yes/no, why?

……

……

24. Are there any changes you expect in the way benefits are shared?

a) Yes [ ] b) No [ ]

25. If yes, what changes do you expect?

……

……

……

26. What are the constraints to your participation in benefit sharing?

……

……

27. How would you rate your participation in forest benefit sharing?

1 3 5

Not participating | Passively participating | Actively participating

28. To what extent or how would you rate your participation in forest management generally?

1 3 5

Not participating | Passively participating | Actively participating

(Limited participation) (Without the influence of external institutions)

Achievement of CFM or the collaboration

29. What are the achievements of the women CFCs in this collaboration so far?……

……

……

……

……

30. What was the condition of the forest before the collaborative forest management begun?

a) Totally degraded [ ] b) Partially degraded [ ] c) Not degraded d) Under threat [ ]

31. What is the condition of the forest now?

a) Totally improved [ ] b) Improved [ ] c) Partially improved [ ] d) No changes [ ]

32. What other forest conditions do you think have improved, if any?

……

……

……

……

33. In your view, do you think the Rudeya's Forest Management project has led to improved governance in forestry? (i.e. improved community/stakeholder participation in forestry utilization and management). a) Yes [ ] b) No [ ]

34. If yes/no, explain how?

……

……

35. In your view, do you think the Rudeya's Forest Management project has improved your community's access to forest resources and benefits?

Yes [ ] No[ ]

36. If yes/no, explain

……

……

……

37 PERSONAL DATA

Please tick where appropriate

Sex: Male ( ) Female ( )

Age: 18 – 30 ( ) 31 – 45 ( ) 45 above ( )

Occupation.....

Educational background: High School ( ) Tertiary School ( )

Others.....