

FURTHERING COOPERATION BETWEEN PEOPLE AND INSTITUTIONS FOR SUSTAINABLE MANAGEMENT OF NATURAL RESOURCES: A STUDY OF GOASO FOREST DISTRICT IN GHANA

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ABSTRACT

This paper is based on a case study of the Goaso Forest District in Ghana. The study explored the application of multi-stakeholder processes (MSPs) to a key challenge in the coming years of effectively addressing the diverse and conflicting demands now being made on Ghana's forests, while ensuring that future generations have the potential to use the same resources of comparable quality. Differences of knowledge, interests, expectations and priorities often obscured in conventional policy dialogue in natural resource utilization and management, but which do provide deeper explanation of conflict, have been revealed. This brings up the need for careful and transparent consideration of the ways different stakeholders understand conservation of natural resources in strategies to improve forest management. Such a consideration is essential to effective cooperation between people and institutions for sustainable forest management.

Keywords: *Multi-stakeholder, Participation, Sustainability, Forest Management.*

INTRODUCTION

Collective action based on social learning and negotiated agreements among relevant actors in the use of natural resources such as forests, fisheries, land and water bodies is increasingly viewed as a condition for sustainable use and regeneration of these resources. Consequently, multi-stakeholder processes (MSPs) that bring several actors and institutions together in the management of these resources are seen as important ways of rebuilding local assets and regen-

erating ecologies. In Ghana, application of MSPs has been carried out only in a very limited range of project contexts. For example, Sarfo-Mensah and Alhassan (2003) used the approach in the study of fisheries and livelihoods that sought to create conditions that were important for the co-management of freshwater ecosystems.

Other potential areas for application of MSPs are situations where conventional decision making process is increasingly unable to generate broad-based consensual policies. Consequently, governments, businesses and other publicly engaged bodies are turning to this approach for decision

making, policy setting and action. MSPs bring together, in crucial debates, people and institutions whose interests are at stake and for whom finding practical solutions as well as ways in which these may be implemented are essential. This novelty in participatory approaches aims to move beyond deadlock towards a more equitable, effective and transparent process of resolving conflicts (Hemmati, 2002, Adams *et al.*, 2003).

Platforms, as participation strategies, that bring relevant actors together have undoubtedly been important feature of the process. However, less has been said about how the kind of platform that allows several stakeholders to express their views and needs, and to negotiate a set of common goals or objectives for themselves or their institutions for local adaptive management of natural resources, could be established and operated. Such a platform is seen as key in mobilizing capacity for social learning, negotiations and collective action for natural resource management and sustaining critical ecological systems. This paper presents evidence from the Goaso Forest District to draw out the main roles that the key features of MSPs can play to deepen the understanding of policy makers of the complex issues in and around sustainable forms of forest resources management. These issues centre on how to recognize and deal with the rights of, and risks, fears or threats faced by, all the relevant actors and institutions involved.

The basis of the paper was an initial baseline study (Toku-Appiah, 2004) and a series of follow-up studies conducted in the Goaso Forest District to find out how the forest is being managed. The purpose was to address one principal problem in Ghana today, which is the high loss of the country's forest cover and resources (Gyebi, 2004). It was also to explain how the MSPs could be organized and implemented and to report on the results of the exercise and lessons learned. In that light, the primary objective of the study was to determine how a multi-stakeholder approach could provide a foundation for resolv-

ing conflicts of interests over utilization of forests and, thus, contribute to a more equitable, effective and transparent process of achieving sustainable forms of the management of the forests.

To achieve this objective, three specific tasks were pursued, namely, (i) to identify the key stakeholders in the project context, highlight their interests and expectations and group them according to importance and influence; (ii) map out the relative influence and importance of the key stakeholders to the planning and management of the forests and; (iii) ascertain the type of participation and stages of the management process in which each stakeholder group could be engaged and, on the basis of that, determine conditions which could serve as foundation to evolve broad-based collaborative strategy for the sustainable management of the forests.

The Study Area

The Goaso Forest District, shown in the Figure below, is within the jurisdiction of the Asunafo District Assembly with Goaso as the district capital. The district is in the Brong Ahafo Region where efforts at forest and wildlife conservation and management are being intensified. The vegetative cover of the district is the closed forest type with more than 75 different timber species. For many important reasons including conserving biodiversity, wildlife and nature, socio-cultural and economic, parts of the forests have been reserved. These reserves constitute the Goaso Forest District. The areas covered (in square kilometres) are: (i) Abonyere 41.18; (ii) Ayum 112.85; (iii) Bonsam Bepo 135.90; (iv) Subim 238.28; and (v) Bonkoni 68.56. The total protected area is about 596.81 sq km.

The main purpose for establishing these forest reserves as expressed in the District's medium-term development plan (2002-2004) was to provide sustainable livelihoods through sound natural resources and environmental management for the present and future generation. Three related

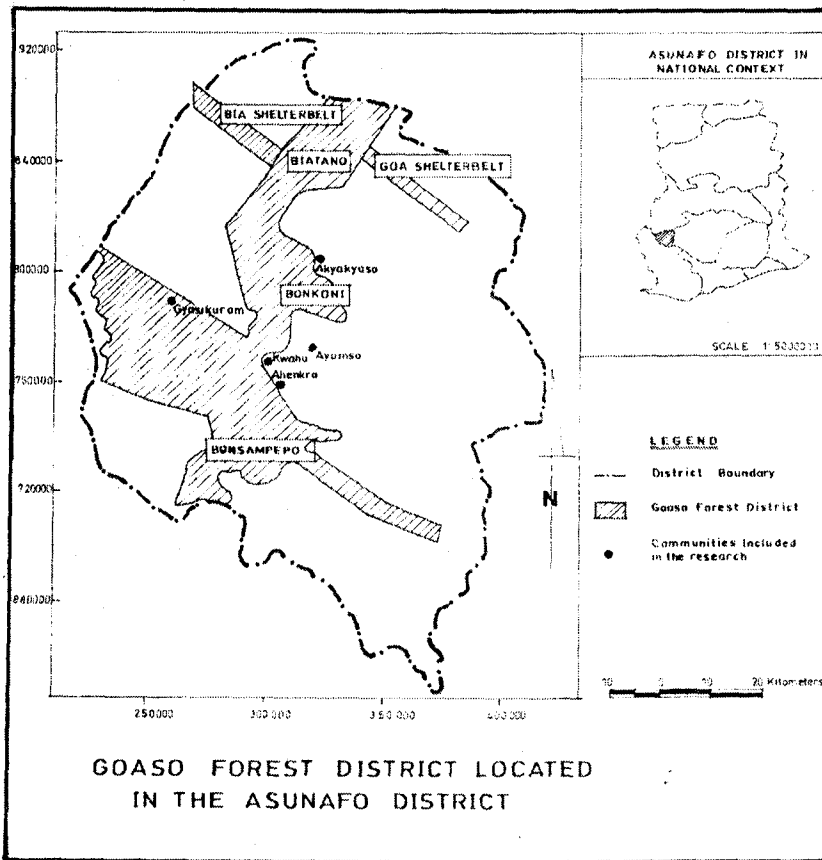
specific objectives stated in the medium-term development plan were to: (i) provide sources of income, revenue and other socio-cultural benefits for the people and government; (ii) safeguard and protect the lives of the people against environmental hazards; and (iii) conserve biodiversity areas and watersheds to avoid desertification, both now and in the future.

However, increased human livelihood activities such as farming, wild and bushfires and logging are putting these forests under pressure. Among the firms currently exploiting timber in the district are Ayum Forest Products Limited and Scanstyle Timbers. Sustainable management of

these forests must, therefore, become a central task for all the stakeholders at community, local, regional, national and international levels, if the threat to the livelihoods of the forest fringe communities in particular, and to the stability of the ecosystems in general, is to be averted in time.

Stakeholders of the Goaso Forest District

Who are stakeholders and in the context of sustainable management of forest resources in the study area? Generally, stakeholders are the individual, actor categories, and sometimes groups, defined by activity, rights or organization (Rocheleau, 1994) and in terms of a cause, an intervention or a decision. Stakeholders can af-



Source: Report on Research Survey sites of Tropenbos (2001)

fect or be affected by the cause, decision or intervention either positively or negatively (Rieberger-McCracken and Narayan, 1997). They can be found at all levels, from the household to the international (Hurni, 1998).

Stakeholders identified in this study were the direct forest users and those with related interests ranging from the individual level to international global agreements and conventions. In between were the household, group, community, locality or sub-district, district, regional and national levels. In Ghana, the three levels that are commonly understood as being part of the 'local', i.e. the sub-district, community, group and household levels (Kokor, 2003), were designated as 'primary' stakeholders. These stakeholders who are often the forests' fringe communities should be at the very core of the planning, utilization and management processes. They can not be separated from the very biological, physical, economic and cultural resource bases on which they relied (CTA-International, 2004).

On the other hand, district, regional and national levels constituted the 'secondary' stakeholders, while the international level stakeholders were classified as the 'tertiary' group. The timber firms as private sector economic operators cut across the secondary and tertiary categorization provided above, but they operate at the local level. Note, however, that stakeholder views are usually not the same and converging values are often difficult to establish.

The major concern to the primary stakeholders, for example, was the need to secure access to sustainable livelihood options by optimizing the use of their land and forest resources. The private sector, e.g. the timber firms, would want minimum control and social responsibility to ensure growing profits. On the other hand, concern over appropriate use of land and forest resources has long been dominated by the perception of forest officials, some NGOs and development partners that the forests were being degraded by the local

people, communities and timber firms. Consequently, action decided on at one level may not easily be endorsed at the other levels. Hence, there was the need for more processes of consultation, dialogue, negotiation and cooperation--use of more inclusive approach-- where all the people and institutions are able to share in both the responsibility and benefits to effectively manage the forests.

The study was restricted to selected communities fringing the Goaso Forest District as indicated on the Figure showing the research sites. These communities selected on the basis of their proximity to the forests were designated as the primary stakeholders, for the fact that they directly affect and are also affected directly by the planning and management of the forests. For example, forest resources have a spatial element, which is land, on which many of the communities farm and carry out related livelihood activities. These activities have direct impacts on the forests. Sustainable forest management, therefore, should include a system of farming and land management methods that aim to integrate ecological with socio-cultural and economic values.

The following is a listing of the range of stakeholder groups and institutions which constituted the units for the analysis: (i) the forest fringe communities who have to be at the very core of the operations; (ii) community forest committees (CFCs), kind of community-based organizations who complement efforts of the Forest Services Division's (FSD) at forest protection, management and development and serve as focal points in the negotiation of social responsibility agreements involving timber firms and the communities; (iii) traditional authorities who are custodians of the land; (iv) Forest Services Division and Wildlife Division, representing the Forestry Commission of Ministry of Lands, Forestry, and Mines in the district; (v) District Assembly; (vi) timber firms, e.g. Ayum Forest Products and Scanstyle Timbers; (vii) district directorate of Ministry of Food and Agriculture (MOFA); (ix) Forestry Commission; (x) focal conservation

agencies and NGOs, e.g. Rural Development Youth Association (RUDEYA) and Tropenbos International—Ghana Programme.

FRAMEWORK, DATA AND METHODS

The MSPs framework used and data collection and techniques of analysis employed involved the following four steps:

- i) Identification of the key stakeholders in the sustainable planning and management of the forests and their categorization into primary, secondary and tertiary groups;
- ii) Analysis of interests of the stakeholders and the potential effects that these have on the planning and management of the forests;
- iii) Analysis of the stakeholders importance, and influence over, the planning and management processes; and
- iv) Outlining of a strategy for engaging the different stakeholders in participatory planning and management of the forests.

A variety of methods such as stakeholder workshops, focus group discussions, local consultations, interviews and project report reviews were used to obtain the data required. Participants per workshop and focus group discussion numbered between eight and fifteen for the community stakeholders, while the institutional stakeholders numbered between three and five persons. Data from these various sources were pooled to form a series of matrix-based tables following the four steps described above. These steps were combined in three tables serving as framework for organizing and documenting the information generated through the stakeholder processes. Multi-stakeholder Analysis Matrices were then constructed in order to facilitate and structure the analysis and ensure that the steps were coherent, adequate and complementary.

The purpose of the analytical work was to determine how consensus could be built by the key stakeholder groups and institutions listed, with the forest fringe communities at the centre of action. The three variables used to construct the

matrices were: (i) interests, the priority concerns of the stakeholder groups, or what is at stake for each of them; (ii) influence, degree to which each of the stakeholder groups has power and control over the forest management processes which can either facilitate or hinder the implementation; and (iii) importance, extent to which achievement of the objectives for managing the forests depends on the active involvement of a given stakeholder group.

Stakeholders' Interests and Effects of the Forest Management Process on the Interests

The perceived and/or actual effects of the management of the forests on the interests of the stakeholder groups were determined by the stakeholders themselves through consensus rating as either positive (+), negative (-) or neutral (0). The method emphasized the need to find 'common ground' in the groups' decision making process. But where no definitive consensus was reached by a group regarding whether the effects were positive or negative a question mark (?) was placed at the neutral column against the particular interest. The analysis is presented in Table 1.

The importance of analyzing the stakeholders' interests was to provide the process of implementation management the bargaining chips.

Stakeholders' Influence and Importance

Each stakeholder group was asked to discuss and agree upon the level or degree of influence over, and importance to, the management of the forests. This was to be ranked. The ranking and related characteristics were as follows: for influence--U=Unknown; 1=Little/No influence; 2=Some influence; 3=Moderate influence; 4=Significant influence; and 5=Very influential. Similarly, for importance--U=Unknown; 1= Little/No importance; 2=Some importance; 3= Moderate importance; 4=Very important; and 5=Critical player.

For the local and less literate stakeholder groups, the ladder proved a useful visual mode of ex-

Table 1: Key Stakeholders, their interests, importance and influence in the management of the Goaso Forest District

Stakeholder Groups	Interest(s) at stake in relation to the project (management of the forests)	Effect of the project on interest(s)	Importance of stakeholder for success of the project	Degree of influence of stakeholder over project
		+ 0 -	U=Unknown 1=Little/No importance 2=Some importance 3=Moderate importance 4=Very important 5=Critical player	U=Unknown 1=Little/No influence 2=Some influence 3=Moderate influence 4=Significant influence 5=Very influential
Forest Fringe Communities	Continuous access to non-timber forest products (NTFPs)	+		
	Control over activities	?	5	2
	Availability of cultivable land; livelihood opportunity	?		
Traditional Authorities	Sharing of benefits	+		
	Participation in decision-making	?	4	3
Community Forest Committees (CFCs)	Accountability of timber firms	?		
	Preservation of scenic areas	+	5	2
District Assembly	Regular flow of royalties	+		
	Participation in decision-making; erosion of powers	?	4	4
Timber Firms	Sustained yield/Continuous exploitation of the forests	+	4	4
Ministry of Food and Agriculture (MOFA-District)	Soil and environmental conservation/ Sound methods of farming	+	2	1
Forest Services Divisions (FSD)	Soil and water conservation	+		
	Biodiversity conservation	+		
	Revenue generation	+	4	5
	Support from community	?		
Wildlife Division (WD)	Protecting wildlife species	+	4	3
Environmental Protection Agency (EPA)	Habitat enrichment	+		
	Protecting watersheds/water bodies	+	2	2
NGOs	Sustainable use of forests	+		
	Biodiversity conservation	+		
	Wildlife and nature conservation	+	3	4

Table 2: Mapping the key stakeholders' relative influence and importance

INFLUENCE OF STAKEHOLDER	IMPORTANCE OF ACTIVITY (OPERATION) TO STAKEHOLDER					
	Unknown (U)	Little/No importance (1)	Some Importance (2)	Moderate importance (3)	Very Important (4)	Critical Player (5)
Unknown (U)						
Little/No Influence (1)			Ministry of Food and Agriculture (MOFA)			
Some Influence (2)			Environmental Protection Agency (EPA)			Forest communities Community committees (CFCs)
Moderate Influence (3)					Traditional Authorities. Wildlife Division (WD)	
Significant Influence (4)				NGOs (RUDEYA, Tropenbos)	District Assembly Timber Firms	
Very Influential (5)					Forest Services Division (FSD)	

Table 3: Outline of participation strategy (platform) for the management of the forests

STAGE IN THE PARTICIPATORY MANAGEMENT PROCESS	TYPE OF PARTICIPATION			Empowerment (transfer of control over decisions and resources)
	Information-sharing (one-way flow)	Consultation/Dialogue (two-way flow)	Collaboration (increasing control over decision-making)	
Planning: Preparing for participation	Community mobilization/sensitization	Regular visits to protected areas to discuss issues with communities, CBOs and traditional authorities	Joint assessment of priority needs, activities and target areas.	
Organizing: Developing participation plan and negotiating agreements	Community awareness, campaign on objectives of project/restricted areas	Extensive participatory learning and actions (PLAs) with communities, CBOs, traditional authorities, NGOs, FSD seeking suggestions for community level activities	Decentralizing to District Assembly (DA), traditional authorities and communities with capacity building	Capacity building of community-based organizations (CFCs)
Implementing, Supervising and Monitoring	Joint patrol for monitoring, assessment of project progress and reporting	Beneficiary assessments for regular feed back using PLA methods	District steering committee: representatives of forest fringe communities, CFCs/CBOs, District Assembly (DA), district-level agencies, traditional authorities and FSD	Transfer of substantial decision-making power, management functions and control to CFCs/CBOs, District Assembly (DA) and traditional authorities
Evaluation	Audio visuals – sharing process and results of evaluations	Participatory evaluation methods with communities, CBOs, traditional authorities, District Assembly (DA), FSD and district-level agencies	Independent evaluations by focal NGOs and International Organizations/Conventions	Self-assessments by communities/CFCs/CBOs, DA, FSD, traditional authorities and relevant district-based agencies

pressing and rating their levels of influence and importance. The ladder contained five different steps. As one moved up the ladder it represented higher levels of influence or importance. Each stakeholder group was asked to discuss and choose a step that best represented, first their level of importance and then influence. The numbers associated with the steps and related characteristics were the same as described above. The analysis is shown in Table 1.

Mapping Stakeholders' Relative Influence and Importance

The ranked numbers associated with the levels or degrees of influence and importance of the different stakeholder groups were mapped against each other to obtain the stakeholders' relative influence and importance in respect to the forest management process and activities. The analysis is presented in Table 2. This information was used in the next step for determining the participation strategy that will enhance collective action.

Stakeholder Participation Strategy

This is an outline of how and how far the stakeholder groups and institutions can be included in the forest management process, and according to:

- i) interests, importance, and influence of each stakeholder group;
- ii) particular efforts needed to involve the important stakeholder groups who lack influence; and
- iii) appropriate forms of participation throughout the stages in the management cycle

Table 3 presents the stakeholder participation strategy.

RESULTS AND DISCUSSION

The analyses presented in Table 1 highlight the key interests of communities and their organizations (the CFCs), traditional authorities, the District Assembly and the Forest Services Division (FSD). For example, the communities and their organizations were interested in their continuous

access to non-timber forest resources, availability of cultivable land and accountability of timber firms operating in the forests. On the other hand, the traditional authorities were concerned about the sharing of benefits. They were worried about Government and timber firms capturing economic benefits of the forests and the gradual erosion and takeover of their powers. The District Assembly was interested largely in regular flow of royalties and decentralized district-based management of the forests; while the concern of the FSD was over biodiversity, water and soil conservation, revenue generation for the Government and support from the communities. In contrast, the major interest of the timber firms was the sustained yield and continuous economic exploitation of the forests with little or no social responsibility.

In Table 2 the analyses show how the stakeholder groups compare to each other and give indication of how, if at all, the management of the forests should involve the different groups. Notice that, while the forest fringe communities and the community-based forest committees (CFCs) constitute critical players in the management of the forests, they have less influence over the key management activities.

The problem appears to be the lack of capacity to perform the requisite functions. This, probably, explains some of the reasons why RUD-EYA, a rural development youth Association, often represented the communities in any negotiations of social responsibility agreements involving the timber firms and FSD, and also why the Association plays active role in the empowerment of the communities.

Compared with the communities and their organizations, the traditional authorities, the District Assembly and timber firms are both very important and influential in the management activities and operations related to the forests. However, the most influential and important institution that exercised increasing control over

management decisions regarding the forests was the Forest Services Division (FSD) of the Forestry Commission under the Ministry of Lands, Forestry and Mines. This is, probably, because it is both a central government agency and the focal institution with the responsibility for forests in the district or locality.

On the other hand, the very insignificant role played by the district directorate of Ministry of Food and Agriculture (MOFA) in the management of the forests is mind-boggling. The pace of forest degradation caused by farming activities in the district can not be ignored. Indeed, sustainable management of land and forest resources should include a system of agricultural land-use practices and management technologies that integrate ecological with socio-economic practices, and this must be a central task of MOFA in the district. But, this appeared not to be so in this case. Examples of how the stakeholder groups can be collectively and actively involved in the management process of the forests is presented in Table 3.

From this analysis it is important to ensure that stakeholders of both significant influence and importance are closely involved in the management of the forests throughout. These stakeholder groups and institutions are the FSD, District Assembly, traditional authorities and timber firms.

On the other hand, stakeholders of moderate influence and importance such as Environmental Protection Agency (EPA) and Tropenbos International-Ghana Programme may work in favour of the project as their interests are also tangential. Their engagement must be part of a wider process of network-building between local, national and international institutions on a sustained, but low-profile basis. Therefore, they need to be kept constantly informed about progress of the management process and their views acknowledged, where appropriate, to avoid conflict or disruption. This also applies to stakeholders of high influence, but low importance since they are not

the target of the project. Such stakeholder groups were, however, not found in this study.

Stakeholder groups of low influence but high importance, such as the forest's fringe communities and the committees drawn from them, need special efforts to ensure that their needs and interests are met and their participation is meaningful. Indeed, for sustainable development, the communities should become co-managers. On the other hand, stakeholders such as the district directorate of MOFA, which showed low influence and low importance according to the analysis, are unlikely to be closely involved in the management of the forests without special efforts to change the existing situation. Until then, what this means is that no special participation strategy would be designed for this district-level agency beyond information-sharing aimed at the general public.

CONCLUSION

Making explicit the basis of different stakeholders' positions is likely to reduce conflicts over the utilization and management of forests, especially, where policy often assumes that the problems are self-evident. In the research work reported on, techniques of multi-stakeholder processes (MSPs) were used to reveal differences in perceptions, interests, importance and influence of the key stakeholder groups connected with the management of the Goaso Forest District.

Beyond the value of the use of matrices and numbers paradigm in the analyses is the knowledge and information generated from the MSPs through the process of joint learning. For example, hearing the arguments, watching the interactions, sensing the power relations between individuals and, especially, seeing how the ratings were debated and changed by agreement, revealed more about the complexities and subtleties in the realities and judgements of the different stakeholders.

While, however, the MSPs could reveal compet-

ing perceptions, it can not by itself reconcile them. Dialogue and negotiations between the different groups and institutions are required. This is why a participation strategy has been recommended to provide the necessary platform for the expression of views and to build consensus for joint action. Consensus building may well be the missing link which is necessary to ensure sustainable management of the forests. In any case, there should be a deliberate objective of increasing the participation of the forest fringe communities and the grassroots organizations. This should include decentralization of control to them through the community forest committees (CFCs) and the District Assembly, with a high support for this initiative from FSD.

Notes:

Initially, the study was designed and carried out by the second author as a final year student research project in the Department of Planning, Kwame Nkrumah University of Science and Technology, Kumasi, under the supervision of the first author. The project was part-funded through a small grant provided by Tropenbos International-Ghana Programme. A project report with the title 'Partnership in natural resource management for sustainability: Case study of Goaso Forest District' was submitted by the second author to Tropenbos-Ghana in July, 2004

REFERENCES

- Adams, W.M., Dan Brockington, Jane Dyson and Bhaskar Vira. 2003. 'Managing Tragedies: Understanding conflict over common pool resources' *Science*, Volume 302, pp.1915-1916
- CTA-International, 2004. 'Protected areas: A delicate balancing act' *Spore* 112 (August), pp.1 and 2
- Gyebi, E.. 2004. 'Ghana's forest resources under threat' *The Chronicle*, Vol. 12, No. 193, Thursday, June 17, pp.1 and 3.
- Government of Ghana/Ministry of Local Government and Rural Development, 2002. Asunafo District Medium-term Development Plan, 2002-2004.
- Hemmati, M. 2002. *Multi-stakeholder Processes for Governance and Sustainability: Beyond Deadlock and Conflict*. Earthscan Publications Ltd., London
- Hurni, H. 1998. 'A multi-level stakeholder approach to sustainable land management. In H.-P. Blume and Others (Editors). *Towards sustainable land use: Furthering cooperation between people and institutions*, Vol. II, pp. 827-836
- Kokor, J. Y. 2003. 'Organisation basis of community development and planning in Ghana: An appraisal' *African Journal of International Affairs and Development*, Vol.8 (1), pp.67-87
- Rietbergen-McCracken, J. and D. Narayan. 1997. *Stakeholder participatory tools and techniques: A resource kit for participation and social assessment* (Stakeholder Analysis Module II). Social Policy and Resettlement Division, Environment Department, The World Bank, Washington.
- Rocheleau, D.E. 1994. 'Participatory research and the race to save the planet: Questions, critique and lessons from the field.' *Agriculture and human values. Journal of the Agriculture, Food and Human Values Society*, Vol II No.2-3, pp.4-25
- Sarfo-Mensah, P. and K. J. Alhassan. 2003. *Stakeholders analysis for inland fisheries co-management project Ghana*. Draft Final Report, Sustainable Fisheries Livelihoods Programme, West Africa.
- Toku-Appiah, C. H. 2004. Partnership in natural resource management for sustainability: Case study of Goaso Forest District. BSc special study, presented to the Department of Planning, Kwame Nkrumah University of Science and Technology, Kumasi, (Unpublished)