

Scale-Specific but Inter-Linked Strategies for Managing Forest Resource Conflicts in Ghana: Forest Professionals' Views¹

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Abstract

Constructive conflict management strategies according to forest professionals have the potential to minimise the prevalence of forest resource conflicts at different levels of scale in Ghana's high forest zone. The paper therefore employed mixed methods in gathering data on conflict causes, prevailing and alternative conflict management strategies from forest professionals' perspectives. Results revealed multifaceted forest resource conflict causes such as: i) weak implementation of policy strategies and actions; ii) absence of guidelines on crop damage compensation payment; iii) boundary disputes; iv) farmland scarcity; and v) local elite capture of social responsibility agreement negotiation process and benefits. It was also ascertained that prevailing conflict management strategies are diverse but strategies used are based on case-by-case approaches which lack clearly defined conflict management mechanism to redress the numerous grievances in the sector. It is in view of that the forest professionals recommended scale-specific but inter-linked strategies to be institutionalised in the forestry sector.

Keywords

Forest resources — Conflict — Conflict management — Forest professionals — High forest zone

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Introduction

Forest resources contribute immensely to the livelihoods of people - particularly the world's poor [1;2; 3; 4). Despite their contribution as livelihood sources, forest resources are often confronted with challenges that undermine their importance to most forest dwellers' wellbeing. Population increase especially in Africa has also contributed its fair share to the fast decline

of forest resources since many people exercise different and similar competing claims based either on need or on greed. Such competing claims often let people engage in conflict situations thus affecting the livelihood sources.

As a social phenomenon, conflict is characterised by power disparity, incompatible interests and inadequate institutional structures [5]. In this paper, forest resource conflicts is taken to mean "perceived or actual opposing or competing needs, values and interests between two or more parties related to the allocation, access, ownership or utilisation of a resource" [6]. Conflicts differ according to context [7; 8) and causes. For the context, conflicts in Ghana's high forest zone are classified by forest professionals as a) on-reserve forests, b) off-reserve forests and c) both on and off-reserve forests [9].¹ Each of these contexts presents peculiar conflict types. For instance, some conflicts in on-reserve revolve around illegality issues (e.g. chainsaw milling, forest encroachment for farming) and competing land uses whiles that of off-reserve include compensation payment dispute and administrative lapses in obtaining planted timber trees harvesting permits. Similarly, conflicts occurring in both on and off-reserves revolve around social responsibility agreement (SRA) [9]. For the latter, due to the complexity of natural resource conflicts there are usually many causes and many interconnected issues, and that makes

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it difficult to pinpoint the key causes in conflict scenarios. Different scholars have symbolised these conflicts in different ways. Two underlying causes of conflict are 'perceived goal incompatibility' with respect to the resources and activities that the conflicting parties share and the 'perceived opportunity for interfering with the attainment of one another's goals' [10]. Other causes are power plays [11], competing and diverging interests and the needs of stakeholders [12], the scarcity of environmental resources [12], the resource curse [14], inequity in benefit sharing and the absence or inadequate consideration of conflict management in national policies, policy or institutional lapses and failures and governance failures [15; 16; 9]. Conflicts also differ in terms of level of occurrence; these occur at household level, local level within or between communities, at national level and at international level [5; 17].

There are various approaches to deal with conflicts and these not only differ according to their underlying objectives and assumptions [18] but also with respect to their coping strategies. These strategies are in a continuum, which goes from negotiation, mediation, arbitration, adjudication, coercion to avoidance [7] as indicated by the Forest professionals in Figure 2.

Ghana's forest sector in terms of administrative decentralised structure is located at the national, regional, districts and reserve levels. The district and reserve levels are close to the forest resources where District Managers have oversight responsibility of the day-to-day management of the forest. The multiple actors in this sector is not exempted from forest resource conflicts [19; 11; 20; 6]. Insight into these conflicts within the context of the high forest zone of Ghana is therefore imperative in order to provide strategies to manage them constructively. The objective of this paper is to explore forest professionals² 'perception on forest resource conflict causes, prevailing and alternative conflict management options in Ghana's high forest zone? From the objective, three questions were derived:

- What are forest professionals' views of the causes of forest resource conflicts?
- How do forest professionals' view the instruments available to manage these conflicts?
- What strategies do forest professionals propose to improve conflict management in Ghana's high forest zone?

This paper adds to the literature on the causes of natural resource conflicts by making them explicit for forest resources in Ghana. It also contributes to conflict management debates

[see 7; 21] by clarifying how conflict management strategies in Ghana fit into existing classifications, and what alternatives are desirable from the forest professionals' point of view. The analysis of this paper is guided by introduction which entails literature on forest resources, conflict and conflict management debates followed methodology-addressing the research design, study area, data collection and analysis. Next, the results regarding forest professionals' perceptions of forest resource conflict causes, the instruments for managing the conflicts and the strategies needed to improve conflict management at different levels of scale are presented. The discussion relates the findings against the context of scholarly literature on the subject matter and ends with a conclusion.

1. Materials and Methods

1.1 Research Design

This paper draws from a Ph.D study on forest governors and experts' perceptions of forest and tree related conflicts and management strategies –from images to actions [6]. The study combined a case study approach with mixed methods of workshop, interviews, document analyses and semi-structured questionnaire to understand forest professionals' views of conflict causes and management strategies in the high forest zone of Ghana.

1.2 The study area

The study was conducted among forest professionals who work in Ghana's forest sector. Just like any natural system, the high forest zone of Ghana is structurally characterised by diversity, complexity and dynamics. Located in the southwest of Ghana (Fig. 1), the high forest zone covers an area of approximately 8 million hectares. It covers five regions namely the Ashanti, Western, Eastern, Brong Ahafo regions and a portion of the Central region made up of 204 gazetted forest reserves (see Figure 1). Ghana's high forest zone provides both direct and indirect livelihood services and products to numerous actors in Ghana. Among the forest livelihood services in the on-reserves and off-reserve forest areas include the modified taungya system (MTS), commercial plantations, Highly Indebted Poor Countries (HIPC)-funded plantations, admitted and illegal farming, NTFP extraction for both domestic and commercial purposes, crop damage compensation payment received from crop destruction on farmland during logging and social responsibility agreement (SRA) payments by legal timber operators [cf.9: 6].

²In this article, 'forest professionals' refer to knowledgeable people with experience in the forest sector, for example, researchers, consultants, retired government officials or staff of non-governmental and international organisations [16]. Other forest actors views including local communities were also sought and presented in different publications (see Derkyi et al. 2013, 2014)

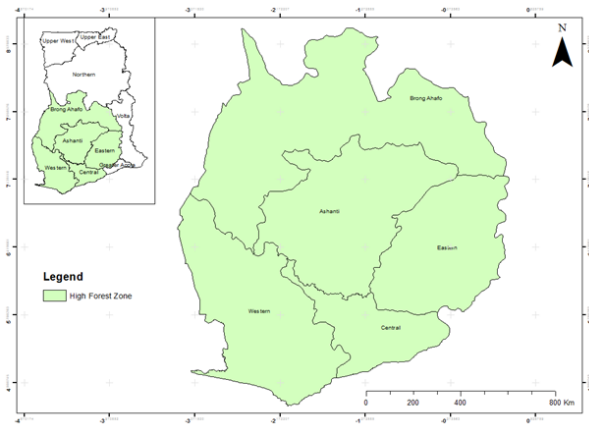


Figure 1. Map of Ghana showing the five regions (shaded) of the high forest zone

1.3 Data collection

The data collection was done in stages. First, a desk study was carried out and informal interviews were held with key persons in the Ghanaian forest sector to identify relevant conflict issues in Ghana's high forest zone. The second stage encompasses the self-completed semi-structured questionnaires administered to 30 forest professionals who were purposively selected of which 11 returned the questionnaires from March to June 2009. To increase the number and representatives of actors especially from the policy arena, the third step involved additional face-to-face interviews conducted in August 2010, using the same questionnaire that was previously used as a self-completion form. This increased the number of respondents to a total of $n = 15$. In order to compensate for the low response and also to validate the findings, a dissemination and consensus workshop was held on February 2010 in Kumasi, Ashanti Region of Ghana with 25 forest professionals purposively selected. With a view to identifying options for minimising the challenges with regard to the existing case to case approaches of managing forest resource conflicts, the forest professionals involved in the self-administered questionnaire and interviews were asked to mention scale-specific but inter-linked recommendations. These recommendations were presented to the workshop participants ($n=25$) for validation.

1.4 Data analysis

The data on the causes of conflict and management strategies from the semi-structured questionnaire and interview guide were coded and analysed using statistical package for social sciences to ascertain their frequency of occurrence. Using the Affinity Diagram, the conflict causes as mentioned by the forest professionals were positioned in the typology of drivers of conflicts [see 16; 10; 9]. An Affinity Diagram is a management technique used to gather large amounts of data (ideas, opinions, issues) and organizes them into groupings based on their natural relationships. This quality management tool helps to understand and sort opportunities by placing them under

common themes. The rationale is to simplify complex information and help improve whole categories of opportunities rather than single cases[22]. The conflict management strategies as mentioned by the forest professionals were also analysed by adapting Moore's conflict management continuum [7].

2. Results

2.1 Conflict causes across the contexts

Results of the semi-structured questionnaire and interview with forest professionals revealed that, in their opinion, several underlying and manifest factors trigger conflicts in the high forest zone. The conflict causes were multifaceted such as: i) poor implementation of policy strategies and actions; ii) absence of guidelines of payment modalities on crop damage compensation; iii) boundary disputes; iv) farmland scarcity; and v) hijack of social responsibility agreement negotiation process and benefits by few community elite. These causes were categorised using identified conflict causes typology [see 16; 12; 10] to position the causes mentioned by the respondents using the Affinity diagram process as shown in Table 1.

2.2 Prevailing conflict management strategies

The respondents mentioned several case-by-case approaches of conflict management, which have been categorised on the basis of the continuum of conflict management approaches [7] and some content adapted from "Fighting over forest : Towards a shared analysis of livelihood conflicts and conflict management in Ghana" [9]. From Figure 2, among the informal decision-making approaches, conflict avoidance appeared to prevail mostly in chainsaw milling. The presence of the FSD/Military patrol team³ in the logging sites result in escape of the chainsaw operators, leaving behind the lumber and their work tools. Negotiation and mediation mechanisms according to the respondents are employed by timber contractors involved in conflicts about SRA and crop damage compensation. The SRA negotiation process occurs between beneficiary communities and the timber operators in the presence or absence of the District FSD or the local government representative. These officials often mediate when negotiations are unsuccessful. In the event of crop damage, contractors first try to negotiate with the farmer directly. Only if the process fails does either the contractor or the farmer call upon the district FSD officials to mediate or take action. Similarly, arbitration falls under informal third-party decision-making. It takes the form of committees of inquiry which assess conflict cases such as illegal farming and logging in forest reserves, and present recommendations for action. From the perspectives of the respondents, legal authoritative third-party decisions in the form

³In Ghana, both the military and police collaborate with the FSD to form a task force that monitors illegal forest activities, particularly chainsaw milling and illegal timber logging. The presence of either the military or the police is location-specific and depends on the availability of the enforcement agency in that location. In the Ashanti region, where the study was conducted, the FSD has established a standing task force in collaboration with the military instead of the police. However, in some parts of the country the police also team up with the FSD to form a task force.

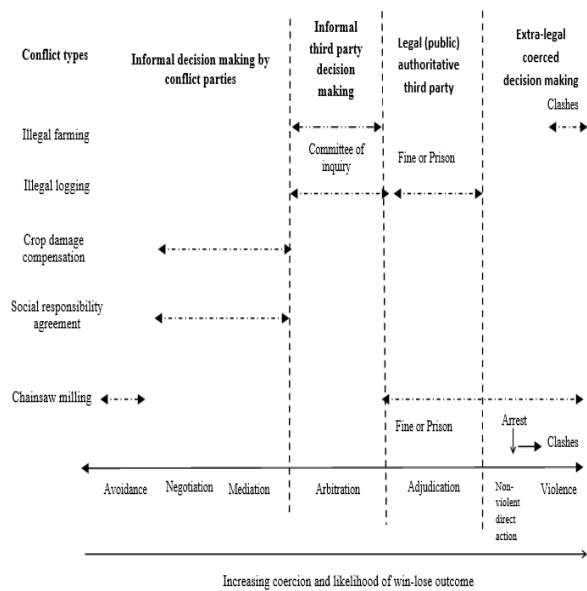


Figure 2. Perceived Spectrum of conflict management strategies employed in different conflict types in the forest contexts

Source: Authors, in scheme adapted from Moore, 2003 by Engel & Korf (2005).

of adjudication are taken by signing affidavits by offenders in which they pledge to desist from committing such offences again and pay for the forest products stolen (fines). This is a common practice in relation to illegal logging by legal timber contractors, although prosecution leading to a prison sentence of a number of years is also an option. Such legal action can be based on the legislative framework that stipulates how disputes should be settled between the FC and timber operators [This Regulation has been amended by Timber Resources Management (Amendment) Regulations, 2003(L.1. 1721)] and other forest offenders [Forest Protection (Amendment) Act, 2002, (Act 624)].

The last approach, coerced decision making, is said to be applied when the FSD military / police team arrests illegal chainsaw operators (non-violent direct action) or destroys illegal farms in the reserves (violence). Violent clashes occur mostly in relation to illegal chainsaw milling, because of the use of force in clashes between chainsaw millers and a team of FSD officials and the military, or among chainsaw millers themselves in the case of conflicts over money or log theft.

Despite these strategies, forest conflict is still ubiquitous and it is in that respect that Forest professionals proposed scale-specific but inter-linked strategies specifying roles for the forestry officials and its diverse actors especially the local people whose livelihoods are often dependent on the forest resources. The rationale is that forest resource conflicts occur at different levels of forest management scale (i.e. national, regional, district and reserve), thus effective conflict management at one level should contribute to a reduction in conflicts at

another level, if proper mechanisms are functioning efficiently.

2.3 Scale-specific but inter-linked strategies to minimise forest resource conflicts

[!h] The synthesized strategies resulting from the semi-structured questionnaire and interview and adopted during the workshop are as follows:

National Level

1. The Forestry Commission and Ministry of Lands and Natural Resources, with support from actors within the forest governance system⁴, must integrate conflict management strategies that blend statutory and customary systems to meet the conditions of contemporary forest governance processes.
2. The Forestry Commission should seek internal and external funding sources to strengthen forums and platforms at all levels of scale. This will help discussions and the finding of solutions to forest-related problems and will facilitate information flows and education. Furthermore, additional funds would help ensure that frontline staff at the Forest Districts and Reserve levels has adequate resources via the regional level, thereby allowing the effective implementation of the policy strategies.

Regional Level

The Regional FSD managers should make an effort to:

1. Adopt effective coordination measures to address and monitor problems promptly at forest district level.
2. Promote interactions between actors at regional and forest district levels through the strengthening of the existing regional and district forestry forums that have the potential to remove false suspicions and perceptions. For instance, local communities usually perceive the FSD as an ally to timber contractors, while the FSD perceives farmers and local communities as conniving with chainsaw millers.
3. Facilitate training in conflict management techniques and the enforcement of forest laws for all district frontline staff (District Managers, Range Supervisors and Forest Guards) with a view to providing them with the necessary skills to manage potential and ongoing forest conflicts

District Level

The District FSD managers should make an effort to:

1. Use the resources (financial, human, logistics etc.) provided by law and/or access funds from external sources (e.g. national and international donors) in order to ensure effective implementation of policies and strategies.

⁴Derkyiet al. (2012) presented six actor governing structures operational in Ghana forest sector to be made up of i) formal/statutory; ii) Traditional/customary; iii) Civil society; iv) Market (Industry), v) Hybrid and vi) Transnational.

2. Intensify forestry education not only for local communities but also for the timber contractors to make them aware of their roles and responsibilities, especially regarding the management of non-violent forest conflicts.
3. Delegate some responsibilities to subordinates such as Customer Service Officers (where applicable) or Assistant District Managers, thereby allowing them to mediate or arbitrate in forest conflicts.

Reserve/ Community Level

The District Forest Services Division should, in collaboration with representatives of communities and other stakeholders:

1. Institutionalise a local conflict management structure. A committee composed of representatives of the different groups in the community (including the resident forest guards) should be established to settle non-violent forest conflicts after having received adequate training in conflict management skills.
2. Institutionalise annual stakeholder dialogues between District Forest Services officials, local people and timber operators to bridge gaps between these actors.
3. Enter into a Memorandum of Understanding with forest fringe communities through institutions like Community Forestry Committees (CFCs) and Community Biodiversity Advisory Groups (CBAGs) which can support the Forest District Office in creating awareness of forestry issues after capacity building of the leaders in these directions.
4. The Forestry Commission and its key stakeholders (e.g. the timber industry and commercial plantations investors) should create economic opportunities that are compatible with forest conservation objectives to improve well being in forest fringe communities, especially those located at the borders or within protected forest areas where access to forest resources has been denied or restricted.

Table 1. Forest Professionals' views of causes of conflicts related to forest resources in Ghana's high forest zone

<p>POLICY AND LEGISLATION LAPSES^a</p> <ul style="list-style-type: none"> • The absence of a sectoral policy on timber benefits sharing with farmers who nurture timber trees on farmlands. • Poor enforcement of forest laws. • Weak implementation of policy strategies and actions. • Lack of political will among technocrats to implement stringent measures to foster sustainable forest management.
<p>INSTITUTIONAL FAILURES^a</p> <ul style="list-style-type: none"> • Inadequate forestry education (laws, policies, strategies, etc.) for both farmers and timber operators. • The absence of guidelines on crop damage compensation payments. • Procedural difficulties in obtaining permits to harvest planted trees on farmlands. • The absence or defaced internal forest boundary markers or pillars. • Poor participation of communities in forest resource management in terms of monitoring and benefit sharing. • The absence of FC officials in mediation in SRA negotiations between timber operators and communities. • Systems for managing conflict weakly developed. • Minimal supervision of timber harvesting by the FSD. • Inadequate FC frontline staff and logistics to monitor activities at the resource base.
<p>PERCEIVED GOAL INCOMPATIBILITY (MOTIVATIONAL FORCES)^b</p> <ul style="list-style-type: none"> • Boundary disputes. • Diverging interests in forest resources by local communities, general public and forest managers. • Grieve farmers because of not been involved in timber harvesting benefits especially in off-reserve areas.
<p>PERCEIVED OPPORTUNITIES FOR DELIBERATE INTERFERENCE WITH THE OTHER'S GOALS^b</p> <ul style="list-style-type: none"> • Difficulty of controlling off-reserve resources because of the varied nature of the land-use system and the many actors involved with their different interests and needs. • Community elites capture SRA negotiation processes and benefits. • Denial of crop destruction payment to farmers by pastoralists receives because of support from Traditional leaders.
<p>ENVIRONMENTAL SCARCITY (INCLUDING STRUCTURAL SCARCITY BASED ON UNEQUAL DISTRIBUTION)^c</p> <ul style="list-style-type: none"> • Population increase. • Farming land scarcity. • Poor fertility of farmlands. • Limited pasture land for animal grazing. • Financial greed resulting in illegal exploitation of forest resources especially timber. • Rent seeking by officials from timber operators.

Key: FC = Forestry Commission; FSD = Forest Services Division of the FC; SRA = Social responsibility agreement

^aCategory based on Tyler (1999); ^bCategory based on Schmidt and Kochan (1972); ^cCategory based on Homer-Dixon (1994)

3. Discussion

The respondents' views of the causes of conflicts that occur in the different context of Ghana's high forest zone are diverse. In trying to bring order to the variety of conflict causes, the causes were categorised using the main categories identified in conflict literature: policy and legislative lapses and institutional failures [16], perceived goal incompatibility and perceived opportunities for deliberate interference with the other's goals resulting in blocking behaviour [10], and environmental scarcity, including structural scarcity related to the unequal distribution of natural resources [12]. These categories cover most of the conflict causes mentioned by the respondents, but are not mutually exclusive. As can be seen in Table 1, most of the perceived opportunities for deliberate interference with the other's goals are created by policy and institutional failures. Many of the conflict types identified by the respondents arise because of violations of key forest laws and regulations in Ghana. These are the Forest Protection (Amendment) Act 2002, (Act 624), which deals with offences in forest reserves, and the Trees and Timber (Amendment) Act, 1994, (Act 493) together with the Timber Resources Management Regulations, 1998, (L.I. 1649). This confirms the need for improved forest governance and law enforcement under the Voluntary Partnership Agreement (VPA) between Ghana and the EU [23]. Another basic trigger is the conflict of interest between people [24], particularly between livelihood needs and other interests in declining resources, be they economic or in biodiversity conservation [25]. This divergence of interests, goals and needs often leads to either latent or violent conflicts, further limiting people's livelihood base and causing institutional disintegration among the people. These conflicts can only be managed if underlying causes of these conflicts are addressed.

There is a recognition that conflicts need to be managed in order to prevent them from escalating [26; 27] and that conflict management should be an intrinsic part of natural resource management [28; 6;29]. As indicated by [18], conflict incidences require different resolution approaches. Currently, the six conflict management mechanisms indicated by [7] are being applied in Ghana's high forest zone. These range from avoidance to violence with some chainsaw milling conflicts not managed at all (i.e. avoidance) and illegal farming and chainsaw milling conflicts being managed through violence under extra-legal coerced decision making. Figure 2 clearly confirms the assertion that not all natural resources are managed through violence since there is no perfect strategy and approach for managing conflict in natural resource[21]. In that respect, this study has revealed that conflict types such as crop damage compensation and social responsibility are often managed through negotiation and mediation. In contrast to the views of local communities, some incidences of crop damage compensation and social responsibility agreements conflict types in production management regime result in extra-legal coerced decision making (i.e. Non-violent direct action and violence)[6]. The deductions made from this study and that of [6]

confirm the empirical relevance of Moore's conflict management continuum as a dynamics process. It can also be deduced that in a particular conflict type, different perceived conflict management strategies may be employed depending on the stakeholder groups involved in a study and how they perceived the conflict incidences as well as the management strategies employed. According to the forest professionals involved in this study, what is needed to manage forest resource conflicts is not only legislation and administrative conflict management strategies but integrated and practical conflict management system(s) with active involvement of forest actors in the formulation and implementation processes at the different forest operational levels. The rationale behind scale-specific strategies is that forest resource conflicts occur at different levels of forest management scale (i.e. national, regional, district and reserve). Hence, effective conflict management at one level contributes to a reduction in conflicts at another level, if proper mechanisms are in place and functional.

3.1 Conclusions

This paper presents the views of forest professionals on causes of forest resource conflicts and conflict management strategies in a specific region using combined approaches of semi-structured questionnaire, interviews and workshop. Ghana's high forest zone is endowed with a broad array of forest and tree products and services that support the livelihoods of different categories of forest actors. Due to diverging sources of conflicts ranging from interests to institutional failures, it is also a contested 'battlefield'. The solutions to these problems call for proactive initiatives and practical conflict management systems with active involvement of forest actors in the formulation and implementation processes. There is, therefore, an unequivocal call for forest policy makers some of whom were the respondents in this study, to review and institutionalise the proposed scale specific but inter-linked strategies for the national, regional, district and community/reserve levels in Ghana as well as other forest resource-based countries where conflicts are ubiquitous.

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