Fighting over forest: interactive governance of conflicts over forest and tree resources in Ghana’s high forest zone
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Forest governors and experts’ perceptions of forest and tree-related conflicts and management strategies - from images to actions

Introduction

Forest resources contribute immensely to people’s livelihoods and particularly those of the world’s poor (Falconer 1990, World Bank 2001, Sunderlin 2005). However, widespread conflicts over forest and tree resources and the absence of constructive conflict management mechanisms undermine people’s livelihood sources and pose challenges to forest governance and sustainable forest management (Ostrom 1999, Marfo 2006, Yasmi 2007). This also applies to Ghana, where literature on forest conflicts and failing conflict management strategies has hitherto focused mainly on legality and other issues around logging, such as compensation payments and social responsibility agreement (SRA) negotiations (Kotey et al. 1998, Amanor 2000, Marfo 2004a & 2004b). As noted in the previous chapter, even less attention has been paid to conflict management strategies. The analysis in this chapter goes beyond the timber sector and aims to cover the full range of forest-related livelihood activities around which conflicts occur in Ghana. The chapter also adds to the literature on the nature and causes of natural resource conflicts by making them explicit for forest and tree resources in Ghana. It does so based on a joint analysis with policymakers and forest resource managers (governors) and experts in Ghana.

1 Part of this chapter is under review for publication in Society and Natural Resources and another part for the Ghana Journal of Forestry as:
   a Mercy Derkyi, Mirjam A.F. Ros-Tonen, Ton Dietz & Boateng Kyereh (submitted b). Fighting over Forest: Livelihood Conflicts and Conflict Management in Ghana’s High Forest Zone
   b Mercy Derkyi (submitted c), Managing Livelihood Conflicts in Ghana’s High Forest Zone.

2 Social responsibility agreements (SRAs) refer to the legal obligation of timber operators to pay 5% of the value of stumpage fees (i.e. an amount to be paid by the timber operator on total felled trees) in cash or kind to adjacent communities.

3 Forest governors are taken to mean actors in the formal forest sector mandated to formulate policies and implementation of policy strategies in Ghana.
In addition, this chapter contributes to conflict management debates (see Glasl 1999, Moore 2003, Engel & Korf 2005, Wehrmann 2008, Chapter 2) by clarifying how conflict management strategies in Ghana fit into existing classifications, and what alternatives are desirable from the governors and experts point of view. The methodology employed facilitated a shared problem analysis among those mandated to formulate and implement forest policies. Effective policies that deal with conflicts require shared problem definition and an in-depth understanding of conflicts over common pool resources (Adams et al. 2003).

The overall question addressed in this chapter is ‘what are the perspectives of forest governors and experts in the forest sector regarding the nature of forest and tree-related livelihood conflicts and conflict management options in Ghana’s high forest zone?’ The central question has been divided into three sub-questions:

1. What are respondents’ images regarding forest and tree-based livelihood options and associated conflicts?
2. What are respondents’ perceptions regarding the instruments available to manage these conflicts?
3. What actions do forest governors and experts propose to improve conflict management?

This question will be answered against the background of the system-to-be-governed outlined in Chapter 4 and the governing system analysed in Chapter 5, based on data collected with the four-step methodology (desk study, self-completed questionnaires, dissemination and consensus workshop and additional face-to-face interviews) described in Chapter 3. The respondents’ views on the subject matter are analysed using the interactive governance approach developed by Kooiman et al. (2005, 2008), with particular attention being paid to actors’ perceptions of the system-to-be governed and their images, instruments and actions.

The next sections present the results regarding respondents’ perceptions of forest and tree-based livelihood options and associated conflicts, and the options to manage these conflicts. Then the findings are discussed against the context of scholarly literature on the subject matter and ongoing forest policy reforms in Ghana. The chapter ends with a conclusion.

Respondents’ views of the system-to-be-governed:
Forest and tree products and services in Ghana’s high forest zone

Ghana’s high forest zone provides both direct and indirect livelihood services and products to numerous actors in Ghana. This applies to both on-reserves and off-reserve forest areas. Respondents were generally aware of the different livelihood options in the two types of forest management areas and the benefits thereof. Those in the on-reserve areas encompass the modified taungya system (MTS), commercial plantations, Highly Indebted Poor Countries (HIPC)-funded plantations, admitted and illegal farming, and NTFP extraction for both domestic and commercial purposes. Livelihood options in off-

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4 Experts are representatives of governmental, non-governmental institutions and individuals who have a role or stake in forest and tree management in Ghana.
Table 6.1  Forest and tree-based livelihood components and key beneficiaries within forest context in Ghana

<table>
<thead>
<tr>
<th>Forest context</th>
<th>Livelihood components</th>
<th>Benefits involved</th>
<th>Main actors involved</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>On-reserve forest area</strong></td>
<td>• Modified taungya system in degraded forest reserves</td>
<td>• Cash and non-cash income from crops</td>
<td>• Forest fringe communities</td>
</tr>
<tr>
<td></td>
<td>• Commercial plantations in forest reserves</td>
<td>• Revenues from harvestable timber</td>
<td>• FC</td>
</tr>
<tr>
<td></td>
<td>• Highly Indebted Poor Countries (HIPC) (^5) plantations initiative</td>
<td>• Employment</td>
<td>• Stool land owners</td>
</tr>
<tr>
<td></td>
<td>• NTFP extraction (flora and fauna)</td>
<td>• Share in timber revenues</td>
<td>• Individual taungya farmers</td>
</tr>
<tr>
<td></td>
<td>• Illegal farming</td>
<td>• Cash and non-cash income from crops</td>
<td>• Forest Commission</td>
</tr>
<tr>
<td></td>
<td>• Admitted farming</td>
<td>• Revenues from timber</td>
<td>• Stool land owners</td>
</tr>
<tr>
<td><strong>Off-reserve area</strong></td>
<td>• Planted timber trees on farmlands</td>
<td>• Cash from damage compensation</td>
<td>• Adjacent communities</td>
</tr>
<tr>
<td></td>
<td>• Payment received from crop destruction on farmland during logging (crop damage compensation rate)</td>
<td>• Cash from damage compensation</td>
<td>• Stool landowners</td>
</tr>
<tr>
<td><strong>Both on-reserve and off-reserve areas</strong></td>
<td>• Cash or kind benefits from SRAs with timber operators</td>
<td>• Cash and benefits in kind (e.g. cement for school projects or a community centre hall, construction of a bridge or subsistence products)</td>
<td>• Communities adjacent to TUC/concession areas.</td>
</tr>
<tr>
<td></td>
<td>• Legal timber logging</td>
<td>• Timber revenues</td>
<td>• TUC holders and concessionaires</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Employment</td>
<td>• Forestry Commission</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Provision of SRA benefits</td>
<td>• Workers at the timber companies</td>
</tr>
</tbody>
</table>

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5 The Highly Indebted Poor Countries fund in Ghana is partly used to finance forest plantations.  
6 Employment refers to labour for a monthly or weekly salary.  
7 Daily labour to work for daily wages commonly referred to in Ghana as ‘by day’.
reserve areas include planting trees on farmlands and crop damage compensation received from crop destruction on farmland during logging. Livelihood options occurring in both and off-reserve areas include legal and illegal logging (or chainsaw milling), social responsibility agreement (SRA) payments by legal timber operators, and timber nursery establishment. Beneficiaries include the inhabitants of forest-adjacent communities, timber operators, plantation developers and the government (see Table 6.1 for a further specification). The latter three operate at multiple levels of scale (community, district, regional and national levels).

Images

Below, the perceptions of forest governors and experts are analysed with respect to the meaning of conflict and the kind of conflicts in Ghana’s high forest zone.

Views on the meaning of ‘conflict’ and ‘conflict over forest and tree resources’

Conflicts and disputes are terms which respondents used interchangeably when assessing certain types of conflicts based on different livelihood components. In the local language, Twi, a distinction is made between (i) ntawatawa, which indicates a difference of opinion or misunderstanding, and (ii) ntokwa, which is a more severe conflict, or which indicates a violent dispute.

Respondents (n=15) used slightly diverging interpretations of the word ‘conflict’ and the phrase ‘conflict over forest and tree resources’. Some of the proposed definitions included:

- ‘A situation of open discontent between two people or institutions’.
- ‘Actual or perceived opposing needs, values and interests’.
- ‘A clash of interests between stakeholders over access, allocation, utilisation and/or management of a resource’.
- ‘A process that occurs between two or more persons when they have different points of view or different goals and values and they fight over limited resources to address them’.

See Appendix 3 for the full range of definitions of ‘conflicts’ and ‘conflict over forest and tree resources’ that were generated by the survey.
‘A process in which two or more people disagree on issue(s) and take it to a level which leads to intolerance of one another’.

Respondents gave the following definitions for the phrase ‘conflict over forest and tree resources’:

- ‘Dispute over natural resources by two or more parties in terms of uses, ownership, benefits and management’.
- ‘Unresolved differences over access to resources’.
- ‘Groups of people having different or similar uses for the same resources’.
- ‘A lack of equal access to resources’.
- ‘Disputes due to a lack of flow of information and benefits to stakeholders’.

Underlying these divergent views is a common understanding of ‘conflict’ as either ‘perceived’ or ‘actually’ opposing or competing needs, values and interests between two or more people. Respondents also agreed that these competing needs and interests refer to the access, allocation or utilisation of the resource in question. Finally, they shared the view that conflicts only arise if one of the parties does not meet his/her perceived or actual expectations. Hence, the integrated definition of conflict adopted at the workshop was ‘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.’

Perceptions of conflicts associated with forest and tree resources
This section presents the results according to the six dimensions of the conflict wheel that were presented in Chapter 2 as an analytical tool (see Figure 2.2).

– Context
Generally, the survey and interview respondents classified conflicts according to the context in which they occur, i.e. on-reserve, off-reserve, or both. Each of these contexts has its own unique conflict type(s) within which multiple actors with conflicting claims aim to achieve their expectations (see Table 6.2).

– Issues and actors in different contexts
Conflicts in Ghana’s on-reserve forests usually evolve around (i) illegality issues (illegal farming, expansion of admitted farms and illegal extraction of NTFPs); (ii) the allocation and use of modified taungya system (MTS) land, and (iii) competing land uses (e.g. conservation versus productive uses, forestry vs. farming, and mining vs. forestry).

Issues that trigger conflicts in the off-reserve areas include (i) inadequate compensation for crops damaged by timber operators during felling, (ii) administrative lapses in obtaining permits to harvest trees planted on farm, (iii) felling of nurtured trees on farms, and (iv) (compensation for) crop destruction by pastoralists. The farmers are

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9 The modified taungya system (MTS) is a co-management reforestation scheme between the FC and local communities that allows farmers to grow food crops between the planted trees and share in the timber revenues (see Chapter 9).
<table>
<thead>
<tr>
<th>Context</th>
<th>Conflict type</th>
<th>Main actors involved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forest reserve management area</td>
<td>Conflicts about illegal farming.</td>
<td>Illegal farmers and the FSD; illegal farmers among themselves.</td>
</tr>
<tr>
<td></td>
<td>Conflicts arising from the extension of admitted farm boundaries.</td>
<td>Admitted farmers and the FSD.</td>
</tr>
<tr>
<td></td>
<td>Conflicts arising from the illegal extraction collection and harvesting of NTFPs for commercial purposes.</td>
<td>NTFP collectors and the FC (both the FSD and WD) officials.</td>
</tr>
<tr>
<td></td>
<td>Conflicts arising from the allocation and use of MTS farms.</td>
<td>Among taungya farmers; taungya farmers and taungya leaders; illegal farmers and taungya farmers; taungya farmers and the FSD.</td>
</tr>
<tr>
<td></td>
<td>Conflicts arising from conservation objectives versus livelihood needs in protected forest areas.</td>
<td>Forest fringe communities and the FC.</td>
</tr>
<tr>
<td>Off-reserve forest management area</td>
<td>Crop damage compensation conflict.</td>
<td>Farmers and timber operators (both legal and illegal).</td>
</tr>
<tr>
<td>Both forest reserves and off-reserve management areas</td>
<td>Conflict about harvesting of plantations.</td>
<td>The FSD and tree growers.</td>
</tr>
<tr>
<td></td>
<td>Conflict over felling of nurtured trees.</td>
<td>Farmers and timber operators (both legal and illegal); farmers and FSD.</td>
</tr>
<tr>
<td></td>
<td>Conflict arising from crop destruction by pastoralists.</td>
<td>Fulani herdsmen and farmers.</td>
</tr>
<tr>
<td></td>
<td>Conflict arising during SRA negotiation.</td>
<td>Beneficiary communities and chiefs/community elites; communities vs. timber operators.</td>
</tr>
<tr>
<td></td>
<td>Conflicts relating to illegal logging.</td>
<td>Timber operators (permit and non-permit holders vs. TIDD/FSD; farmers vs. timber operators (permit and non-permit holders).</td>
</tr>
<tr>
<td></td>
<td>Conflicts relating to illegal chainsaw millers.</td>
<td>Chainsaw millers vs. farmers.</td>
</tr>
<tr>
<td></td>
<td>About crop damage.</td>
<td>Chainsaw millers vs. FSD.</td>
</tr>
<tr>
<td></td>
<td>About illegality.</td>
<td>Chainsaw millers from different financial support groups.</td>
</tr>
<tr>
<td></td>
<td>About competing claims to timber.</td>
<td></td>
</tr>
</tbody>
</table>

Key: FC = Forestry Commission; FSD = Forest Services Division of the FC; MTS = Modified taungya system; NTFPs = Non-timber forest products; SRA = Social responsibility agreement; TIDD = Timber Industry Development Department; WD = Wildlife Department of the FC.

Source: Field survey, 2009-2010.

Interested in gaining benefits from timber trees. In relation to this, Ghanaian law distinguishes between naturally regenerated trees and planted trees on farms. Naturally generated trees fall under the custody of the State, which allocates felling rights to timber operators and not to farmers on whose land these trees grow. When farmers tend the trees, they perceive this arrangement as unjust. However, felling and selling the tended trees is illegal according to Ghanaian law and results in conflicts with the FSD. The FSD is interested in benefiting from revenues generated from the timber trees sold to timber operators with legal documents. Farmers, however, do have the right to sell trees that they planted themselves according to Act 617 (see Chapter 5) but need to go
through administrative and negotiation arrangements\textsuperscript{10} with the FSD as well as with a legal timber operator who wants to fell the trees. In this instance, conflicts can arise when farmers’ fail to adhere to the procedure. Conflicts also occur in relation to compensation for crops damaged by timber operators during tree felling and by pastoralists when they graze their animals on the farmer’s land.

Issues prevailing in both on and off-reserve contexts include conflicts over SRA negotiations, illegal logging and illegal chainsaw milling in addition to crop damage and competing claims on timber (Table 6.2).

The actors involved in conflicts in forest reserves include FC officials, farmers (taungya farmers, illegal farmers, admitted farmers) and NTFP collectors (Table 6.2). The FSD officials are the most common actors in these conflicts because they are the ones who are confronted with the aforementioned actors in their efforts to ensure that people do not access forest resources illegally in order to meet forest conservation and management objectives.

Within the off-reserve areas, farmers are considered to be the main actors in the identified conflicts. They could be in conflict among themselves or with other actors such as the FSD, timber operators (i.e. both legal and illegal) or pastoralists (Fulani herdsmen).

Actors involved in the conflict types that occur in both on and off-reserve forest management areas are members of the beneficiary communities in conflict with the local chiefs or elites, or with timber operators in the case of conflicts during SRA negotiations. In conflicts relating to illegal logging, the actors are timber operators (both permit holders and non-holders) who may become involved in a conflict with either the FC officials or the farmers. Actors involved in conflicts relating to illegal chainsaw milling are mostly chainsaw millers in conflict with each other, or with other actors such as farmers and the FSD.

Each of these actors has different interests ranging from the need to access forest resources to build a livelihood, to a greedy desire for financial benefits, or a desire to fulfil management objectives to sustain the resources for now and the future. If these interests or expectations are not met, these actors exercise their powers to get what they want and that often leads to conflicts.

\textbf{– Underlying causes}

Results of the survey and interviews with forest governors and experts revealed that, in their opinion, several underlying factors trigger conflicts in the high forest zone. The conflict sources mentioned in the survey and interviews in Box 6.1 were categorised using the categories identified in the literature (Schmidt & Kochan 1972, Homer-Dixon 1994, Tyler 1999, see Chapter 2 and the discussion section).

\textsuperscript{10} In his ongoing PhD research, Insaidoo (forthcoming \textsuperscript{2}) observed that a farmer who intends to harvest his/her planted timber trees first has to contact a registered contractor or timber dealer willing to buy the mature timber trees. When the contractor inspects the trees and shows interest in buying the timber, he negotiates the price of the trees with the farmer and eventually purchases the number of trees the farmer wants to sell at the agreed price. The contractor then collects a letter of consent from the farmer for the district FDS office. The district FSD then sends officers with the contractor to the farmer’s village, to inquire about the true owner of the timber tree farm in question. When the farmer’s ownership of the tree farm in question is confirmed, the district FSD manager allows the farmer to harvest his timber trees for the contractor. The contractor then applies to the district FSD for a conveyance certificate in order to be able to transport the harvested timber legally.
Box 6.1  Forest governors and experts’ opinions of sources of offence and conflicts related to forest and tree livelihoods in Ghana’s high forest zone

POLICY AND LEGISLATION LAPSES (based on Tyler 1999)
- The absence of a sectoral policy on timber benefits sharing with farmers who nurture timber trees on farmlands.
- Poor enforcement of forest laws.
- Poor implementation of policy strategies and actions.
- A lack of political will among technocrats and government officials to implement stringent sustainable forest management systems.

INSTITUTIONAL FAILURES (based on Tyler 1999)
- Inadequate forestry education (laws, policies, strategies, etc.) for both farmers and timber operators.
- The absence of guidelines on crop compensation payments.
- Procedural difficulties obtaining permits to harvest planted trees on farmlands.
- The absence of 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.
- Inadequate supervision by the FSD and taungya heads under the modified taungya system.

PERCEIVED GOAL INCOMPATIBILITY (MOTIVATIONAL FORCES) (based on Schmidt and Kochan 1972)
- Boundary disputes.
- Diverging interests in forest resources by local communities, general public and forest managers.
- Irritation among farmers not involved in timber harvesting benefits especially in off-reserve areas.

PERCEIVED OPPORTUNITIES FOR DELIBERATE INTERFERENCE WITH THE OTHER’S GOALS (based on Schmidt and Kochan 1972)
- Actors benefiting from the difficulty of controlling off-reserve resources because of the varied nature of the land-use system and the many actors involved in their different interests and needs.
- The hijacking of the SRA negotiation processes by community elites at local level.
- The support pastoralists receive from traditional leaders as regards grazing their animals anywhere, resulting in crop destruction.

ENVIRONMENTAL SCARCITY (INCLUDING STRUCTURAL SCARCITY BASED ON UNEQUAL DISTRIBUTION) (based on Homer-Dixon 1994)
- 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
Respondents perceived differences in intensity and scale of conflicts. For example, conflicts related to illegal chainsaw logging and milling or forestland use for farming may be latent (the potential for conflict exists, but has not yet developed), emerging (when it becomes obvious or may exhibit signs of crises) or escalating (leading to injury or violence when the conflict results in physical clashes between the parties) (c.f. Engel & Korf 2005). A conflict does not necessarily need to escalate into stalemate. For instance, a latent conflict relating to crop damage during logging can be prevented from escalating when the timber operator negotiates peacefully with the farmer, reaches an agreement on the amount to be paid, and fulfils the agreement. However, when negotiation fails, mediation becomes the next option. Failure of such an approach may result in emergence or injury, with the last resort being violent clashes between the contractor and the farmer and the involvement of their supporters. Usually such escalations include the setting up of road blockades to prevent the operator from transporting timber logs.

According to the survey and interview results, most of these incidents start at the resource base but shift from localised to national issues because of media coverage, thereby bringing in more actors who were not involved during the initial stages of the conflicts. The respondents were of the opinion that resource conflicts arise because of triggering events such as multiple claims on forest resources and forestland for farming and weak enforcement or compliance of laws. Others include rent-seeking behaviour by elite groups with regard to timber resources and legislative lapses as regards timber revenue-sharing mechanisms in off-reserve areas, which exclude farmers.

Instruments: Conflict management strategies and challenges

The respondents mentioned several case-by-case approaches of conflict management, which were categorised on the basis of the continuum of conflict management approaches adapted from Glasl (1999), Moore (2003), Engel & Korf (2005) and Wehrmann (2008) (see Chapter 2).

Among the informal decision-making approaches, conflict avoidance appeared to prevail mostly in chainsaw milling. Upon hearing of the presence of the FSD/Military patrol team¹¹ in the area, the offenders try to escape, leaving behind the lumber and their work tools.

Negotiation and mediation mechanisms 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. Arbitration, which falls under informal third-party decision-making, takes the form of

¹¹ In 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.
committees of inquiry which assess conflict cases such as illegal farming and logging in forest reserves, and present recommendations for action.

Legal authoritative third-party decisions in the form 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 (LI 1649) and other forest offenders (Act 624) (see Chapter 5).

The last approach, coerced decision making, is used 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.

According to the respondents, there are challenges inherent in some of these approaches. First, the prevalence of coercion in the administrative system has resulted in hostility between FSD officials and actors engaging in forest offences. This has resulted, in turn, in apathy among the stakeholders as regards providing support for forest management or, worse still, fighting and injuries. Second, although the SRA guidelines mandate the District Forest Manager or his/her representative to be a witness during the negotiation process and mediate when the need arises, the officials are often absent during negotiation processes. This often results in a disagreement between community members and the timber contractor or within the community, leading, in turn, to disputes that may escalate if not resolved on time. For instance, in some cases, the property of timber contractors will have been destroyed or the offended community members will have barricaded the road, thereby denying the contractor access and preventing him to transport logged timber from the forest. A third challenge involves interference by politicians and elites during conflict resolution processes. In some instances, these elites plead on behalf of the offenders, thereby preventing them from receiving the necessary punishment in the form of fines or imprisonment. Finally, respondents noted the overall problem that it is often difficult to arrive at trade-offs that are acceptable to all conflict parties involved, and that an efficient mechanism capable of minimising conflict incidences would be an important means towards achieving sustainable resource management.

Action: Propositions to minimise forest and tree resources conflicts

With a view to identifying options for minimising the challenges with regard to the existing conflict management mechanisms, the forest governors and experts involved in the survey and interviews were asked to mention scale-specific but inter-linked recommendations. The rationale behind asking them for scale-specific recommendations was that forest and tree-related conflicts occur at different levels of forest management scale (national, regional, district and reserve). However, the actors involved may operate on multiple scales. Hence, effective conflict management at one level contributes to a reduction in conflicts at another level, if proper mechanisms are in place. In order to complement the recommendations resulting from the survey and interviews, the workshop
participants selected priority issues and proposed action plans that may reduce forest conflicts for consideration by policymakers of Ghana’s forest sector.

Scale-specific but inter-linked recommendations
The recommendations resulting from the survey and interviews synthesized and adopted during the workshop are the following (see Appendix 4 for the full range of recommendations that were generated by the survey and interviews).

At national level

1. The Forestry Commission and Ministry of Lands and Natural Resources, with support from other actors within the forest governance system, must make use of the ongoing forest and wildlife policy review\textsuperscript{12} to 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.

At 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 (see Chapter 5) 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.

At forest district level

The District FSD managers should make an effort to:

\textsuperscript{12} With sector support via the Natural Resources and Environmental Governance (NREG) programme, the Ministry of Land and Natural Resources and the Ghana Forestry Commission, in collaboration with other stakeholders, are reviewing the 1994 Forest and Wildlife Policy and accompanying legislations in order to accommodate contemporary global issues such as climate change, forest law enforcement and governance processes (see Chapter 5).
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.

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.

At 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 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 wellbeing 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.

Action Plans proposed by the workshop participants

Based on the recommendations outlined above, the workshop participants formulated two action plans as shown in Boxes 6.2 and 6.3 respectively.

Conflict type (CT) 1: Compensation and land use-related conflicts

Recommended steps:

1. A priority step towards resolution should be a negotiation process among conflict parties (i.e. timber operators, farmers, FC staff, landowners, etc.) from which a win-win situation must be achieved.

2. In the event that this does not work, an alternative could be 3rd party mediation (e.g. FSD official, traditional leaders, a District Chief Executive, or any other person with up-to-date mediation skills).
3. If the conflict remains unresolved, the Land Valuation Division under the Lands Commission must be called in to intervene to assess the cost of the damage.

4. If all these attempts fail, the parties could resort to legal proceedings although these often lead to a win-lose outcome (see Figure 6.2). The flow chart in Fig. 6.2 indicates the four conflict management pathways.

**Box 6.2 Action Plan 1 - Effective strategies to achieve an integrated conflict management (ICM) model that reconciles statutory and customary mechanisms**

Existing conflict management options are subject to several challenges. The workshop participants therefore designed what they called an integrated conflict management (ICM) model to deal with these challenges (Figure 6.1). This model revolves around three key sources of forest and tree conflicts that are very prevalent in the sector, i.e. conflicts relating to (i) compensation and land use (e.g. illegal farming in forest reserves and crop damage compensation payments), (ii) forest boundary conflicts, and (iii) illegal chainsaw operations and logging. As seen in Figure 6.1, each of these conflict types is associated with specific conflict management strategies. In the proposed model, the Forestry Commission is the mediating actor (provided it maintains close linkages with traditional authorities) who indicates the steps to achieve each solution.

**Box 6.3 Action Plan 2 - Assessment of the feasibility of re-introducing the forest prosecution system into the forest sector with a prosecuting mandate for the FC and of adapting the curriculum of natural resource academic institutions accordingly**

The workshop participants highlighted the fact that the current law to prosecute forest offences in Ghana gives the mandates to the Attorney General (AG) through the Ghana Police Service (GPS). In the past, FC officials were trained and mandated as prosecutors but the FC lost this mandate to the Ghana Police Services due to a change in national policy. The rationale behind calling for a re-introduction of the prosecution system into the forest sector is twofold. First, the Ghana Police Service officials are not very conversant with the forest laws, and that is the reason why the FC often loses forest-related lawsuits. Second, with the emerging perspective of governance as multi-actor and multi-sector steering, it is necessary for prospective natural resource managers to have a more interdisciplinary focus. It was revealed that the Forestry Commission has sent a proposal to the Attorney General to reacquire the legal mandate to prosecute forest criminal cases in court, but the sector is still awaiting approval. Within the educational sector, the Faculty of Renewable Natural Resources (FRNR) of Kwame Nkrumah University of Science and Technology (KNUST) arranges courses in forest policy and law, but not in legal proceedings.

*Source: Workshop organised by the researcher with forest governors and experts.*
Conflict type (CT) 2: Forest boundary conflict (e.g. admitted farms, modified taungya system (MTS), etc.)

Recommended steps:
1. The starting point is that the conflict management strategy must take the form of either an agreement or a memorandum of understanding and should therefore begin...
with negotiations between the conflict parties (FSD, admitted farmers, taungya farmers etc.).

2. In the event that this does not work, 3rd party mediation (i.e. FSD, taungya heads, and traditional leaders) must be explored.

3. If the second stage fails, conflict parties can resort to forming an arbitration team, with representative arbitrators from each conflict party to facilitate the resolution process.

4. As a final resort, legal proceedings can be started if these initial strategies fail.

Conflict type (CT) 3: Illegal logging or chainsaw milling

Recommended steps:
1. This kind of conflict should be settled in court with an FC official as prosecutor.
2. Arbitration could be used through administrative means by the FSD or through ‘pardon with bond’ if the timber is intended for community development.

This conflict management pathway starts with a legal battle with the offender in court, but the workshop participants acknowledged that either the FSD or the offender must have the option of settling the case out of court based on an affidavit. In such instances, the FSD could fine the offender according to legislation and the fines could be paid into the coffers of the FC.

The workshop participants concluded that the forest policymakers and governors must pilot the proposed ICM model in an integrated way and ascertain how effective it is as regards managing conflicts about forest and tree resource and strengthening ongoing governance processes. In addition, natural resource governance could benefit greatly from the incorporation of the ICM perspectives into teaching curricula (not only the forestry professional but for primary and secondary school teachers) and research.

In view of the failure to manage forest offences and conflicts amicably, the workshop participants used a SWOT (strength, weakness, opportunity and threat) analysis and confrontation matrix tools to assess the potential of re-introducing the prosecution system in the forest sector. This system would mandate forest resource managers to prosecute forest offences cases. These officials must receive judicial prosecution training to acquire the skills to prosecute offenders using existing legislations and laws.

Five strengths and two weaknesses representing the internal factors and five opportunities and three threats making up the external factors were identified during the workshop brainstorming session (Table 6.3). The group then concentrated on a few issues from each quadrant to develop the confrontational matrix based on the key issues shown in Table 6.4. This resulted in the following points of action:

1. Facilitate collaboration between institutions – the FC, training institutions and the judiciary.

2. Make the prosecution system part of the Natural Resources and Environmental Governance (NREG) programme; a sectoral programme with the Ghana Forestry Commission through the Ministry of Lands and Natural Resources. Lobby the Attorney General and Parliament to endorse the proposed mandate and to create an Administrative Dispute Resolution Act that enables the Ghana Forestry Commission to exer-

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13 Pardon with bond means that the community in question has to sign an affidavit not to fell trees for timber without a permit from the FSD for community development.
exercise the right to use alternative dispute arrangements besides adjudication to manage the numerous conflict cases.

3. Lobby the Attorney General and Parliament to endorse the proposed mandate and to create an Administrative Dispute Resolution Act that enables the Ghana Forestry Commission to exercise the right to use alternative dispute arrangements besides adjudication to manage the numerous conflict cases.

4. Empower and motivate FC staff to take up the new challenge.

5. Create awareness and sensitise institutions such as traditional authorities, judiciary and timber industries.

6. Foster collaboration between the FC, police and judiciary for the common good.

7. Solicit donor support through the Voluntary Partnership Agreement with the EU to improve governance and combat illegal logging and the NREG programme to champion the proposed plan.

8. Enforce forest codes and ethics among FC officials, police and the judiciary.

9. Teach forest law and prosecution procedures by training staff at the institutions and by posting students as interns at the Police and Judiciary institutions and by integrating these topics into all academic curricula related to natural resource management.

### Table 6.3 SWOT matrix of re-introduction of forest prosecution system in the forest sector and curriculum of natural resource academic institutions

<table>
<thead>
<tr>
<th><strong>Strengths</strong></th>
<th><strong>Weaknesses</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>S1: Well-established institutions</td>
<td>W1: Non-availability of funds</td>
</tr>
<tr>
<td>S2: Human resources are abundant</td>
<td>W2: Lack of transparency among FC staff</td>
</tr>
<tr>
<td>S3: Larger % of stakeholders likely to embrace FC prosecuting its cases and similarly, the university training the professionals</td>
<td></td>
</tr>
<tr>
<td>S4: Historical reference</td>
<td></td>
</tr>
<tr>
<td>S5: Proposal has been sent to Attorney General by FC legal unit</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Opportunities</strong></th>
<th><strong>Threats</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>O1. Universities have a desire to teach skills in addition to current curricula</td>
<td>T1. Problems with the current prosecuting system especially with the Ghana Police Service</td>
</tr>
<tr>
<td>O2. Financial support can be tapped from donors – VPA, Africa Forest Legislation</td>
<td>T2. Traditional norms and customs</td>
</tr>
<tr>
<td>O3. Availability of training institutions – Law schools, Ghana Police Training School</td>
<td>T3. Interference from elites (e.g. politicians, chiefs, etc.).</td>
</tr>
<tr>
<td>O4. Further lobbying of Attorney General and Parliament</td>
<td></td>
</tr>
<tr>
<td>O5. Ongoing constitutional and forest policy reviews</td>
<td></td>
</tr>
</tbody>
</table>

**Key:** VPA = Voluntary Partnership Agreement between Ghana and the EU to improve forest governance and combat illegal logging.
Table 6.4  Confrontation matrix

<table>
<thead>
<tr>
<th>Opportunities O1, O2, O3, 04, 05</th>
<th>Strengths (S1, S2, S4)</th>
<th>Weaknesses (W1, W2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Facilitate collaboration between institutions – FC, training institutions, and the judiciary</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Make the prosecution system part of the NREG programme</td>
<td></td>
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<tr>
<td>3. Lobby the Attorney General and Parliament</td>
<td></td>
<td></td>
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<tr>
<td>4. Empower FC staff</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Awareness creation, sensitisation of people (chiefs, politicians, etc.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Collaboration between FC, police and judiciary for the common good</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Threats T1, T3</th>
<th>1. Solicit donor support – VPA, NREG</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Enforce forest codes and ethics</td>
<td></td>
</tr>
<tr>
<td>3. Teach ethics via training institutions</td>
<td></td>
</tr>
<tr>
<td>1. Motivation of FC officials</td>
<td></td>
</tr>
</tbody>
</table>

Key: NREG = Natural Resources and Environmental Governance; FC = Forestry Commission; VPA = Voluntary Partnership Agreement.

Discussion
This section commences with a discussion of the nature of forest and tree livelihood conflicts from two perspectives. It first discusses respondents’ perspectives of forest and tree-related livelihoods conflicts and its contributions to conflict debates. Secondly, it examines conflict management strategies and ways of strengthening them as perceived by respondents.

Images: Respondents’ perspectives of forest and tree related livelihoods conflicts and its contributions to conflict debates
The respondents’ synthesised view of conflict definition is relevant to conflict theories, which have no commonly agreed definition of conflict (Fink 1968, Schmidt & Kochan 1972, Wall & Callister 1995). Their common understanding of forest and tree-related livelihood conflict refers to a dispute over natural resources by two or more parties regarding the allocation, access, use, ownership and benefits of dwindling resources. This definition and other answers revealed that policymakers, resource managers and forest experts in Ghana use the terms ‘conflict’ and ‘dispute’ interchangeably when discussing types of forest and tree-related conflicts prevailing in the high forest zone. This confirms the statement by Spangler & Burgess (2003) that it may, in fact, be difficult for most people to recognise the difference between the two. The definitions provided by the respondents were also evasive in respect of seeing conflict as violent incidences, which could result in destruction of properties and even death. However, the case studies in Chapters 7-9 confirm that local people perceive most of the forest conflict types as being non-violent rather than violent.

The range of forest and tree-based livelihoods found in Ghana’s high forest zone and acknowledged by the respondents corresponds with assertions in literature (World Bank 2001, Sunderlin et al. 2005) that hundreds of millions of people depend to varying degrees on forests for their livelihoods. The various livelihood and other economic interests in the forest and tree resources lead to conflicts around each of the identified livelihoods types, confirming the need to look beyond the timber sector when analysing conflicts over forest and tree resources.

The findings also confirm that the context in which conflicts occur is essential when defining the type of conflict, even though the actors can change from one conflict type to another (Wall & Callister 1995, Moore 2003). 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 (Tyler 1999), perceived goal incompatibility and perceived opportunities for deliberate interference with the other’s goals resulting in blocking behaviour (Schmidt & Kochan 1972), and environmental scarcity, including structural scarcity related to the unequal distribution of natural resources (Homer Dixon 1994). These categories cover most of the conflict causes mentioned by the respondents, but are not mutually exclusive. As can be seen in Box 6.1, most of the perceived opportunities for deliberate interference with the other’s goals are created by policy failures and institutional failures. Many of the conflict types identified by the respondents arise because of violations of key forest laws and regulations\(^{14}\) 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 together with the Timber Resources Management Regulations, 1998, L.I. 1649 (see Chapter 5). This confirms the need for improved forest governance and law enforcement, as is currently being addressed under the ongoing Natural Resources and Environmental Governance (NREG) programme (a sectoral programme with the Ghana FC through the Ministry of Lands and Natural Resources) and the Voluntary Partnership Agreement (VPA) agreement between Ghana and the EU (Beeko & Arts 2010). Another basic trigger is the conflict of interest between people (Glasl 1999), particularly between livelihood needs and other interests in declining resources, be they economic or in biodiversity conservation (Ros-Tonen & Dietz 2005). 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.

Conflict incidences are dynamic because latent conflicts may escalate into violent ones depending on the people involved, the scale at which the conflict occurs and the conflict management approaches employed (see Chapter 2). The distinction between latent, emerging and escalating conflicts proved to be highly useful for the analysis of forest and tree-related livelihood conflicts in Ghana.

**Instruments: Integrated approaches of strengthening existing conflict management strategies**

There is a recognition that conflicts need to be managed in order to prevent them from escalating (Buckles & Rusnak 1999, Yasmi *et al.* 2006) and that conflict management should be an intrinsic part of natural resource management (Castro & Nielsen 2003). As indicated by Yasmi & Schanz (2007), conflict incidences require different resolution approaches. Currently, all conflict management mechanisms from scholars such as Moore’s (2003) and Wehmann’s (2008) conflict management continuum (see Chapter 2) are being applied in Ghana’s high forest zone. These conflict management strategies operate within the three different social systems distinguished by Engel & Korf (2005), *i.e.* the national legal system, the collaborative system and the customary system. It is often assumed that the latter does not play a functional role in the forest context of Ghana (e.g. Mayers & Kotey 1996). The reason is that customary authorities (particularly the stool landowners) are owners of the resources and benefit from royalties, but have no legal role with respect to forest management and, for that matter, managing conflicts emanating from the same resources they own. According to Mayers & Kotey

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\(^{14}\) Both the forest law and the regulations can be accessed at [http://www.fcghana.com/publications/index.htm](http://www.fcghana.com/publications/index.htm).
(1996: 30), legislation has turned these traditional authorities in Ghana into passive and marginalised recipients of insignificant and irregular share of revenue, with no formal decision-making roles in any aspect of forest management despite their legal position as owners. However, in a study of conflicts about forest resources in Ghana’s protected area, Derkyi et al. (submitted b) found out that the role of customary institutions in forest conflict management at local level is greater than generally acknowledged – including by the forest governors and experts involved in this study (see Chapter 7).

**Action**

According to the forest governors and experts involved in this study, what is needed to manage forest and tree-related conflicts is not only legislation and administrative conflict management strategies, but also integrated and practical conflict management systems with active involvement of forest actors in the formulation and implementation processes. The designed system in Figure 6.1 proposed as Action plan 1 is a closed loop with various options that policymakers and practitioners can use according to the applicable situation and the preferred outcome. Such a systemic approach to forest and tree resources conflict management is badly needed. This means that the implementation of the integrated conflict management model proposed should be embedded within ‘interactive governance’ processes. Only then can a fostering and enabling environment be created in which integrated conflict management can thrive.

This is also necessary for the implementation of the proposed Action Plan 2, which is feasible only if the principles of good governance are applied. From the interactive governance theory point of view, such principles are referred to as third-order or meta-governance (Kooiman et al. 2005). The related discussion with the forest governors and experts is examined in Chapter 5 of this thesis. Without such principles, the proposed FC prosecution system may be prone to corruption and a lack of transparency. The workshop participants considered the ongoing forest policy and legislation reviews as potentially positive triggers to consider these proposed strategies in order to minimise forest and tree-based conflicts once these strategies have been properly implemented.

**Conclusion**

This chapter has shown that a methodology that combines a survey and interviews with a workshop to synthesise and discuss the findings with policymakers, resource managers and forest experts enables an overall picture to be acquired of forest and tree-related conflicts and conflict management strategies in a specific region. More importantly, such combined methodology also creates a consensus on desirable improvements among those who bear primary responsibility for forest governance. 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 interests and policy and institutional failures, it is also a contested ‘battlefield’. The solutions to these problems call for proactive initiatives and a practical conflict management system with active involvement of forest actors in the formulation and implementation processes.

There is, therefore, an unequivocal call for the forest governors, some of whom were the respondents in this study, to initiate the revision of forest laws and regulations and the implementation of the recommended conflict management strategies with the support of the other actors. For actors to be properly integrated into effective conflict management, policymakers and practitioners alike should take into consideration the spe-
cific but inter-linked recommendations proposed by the forest governors involved in this study, which were specified for the national, regional, forest district and community management levels. This requires adaptations in forestry and natural management curricula at universities that need additional reflection and elaboration. The author stresses, however, that the proposed ICM model and re-introduction of a prosecution mandate for the FC cannot be effectuated in isolation of ongoing efforts to improve forest governance in Ghana. Conflict management and law enforcement only thrive in an accountable, transparent, responsive and inclusive governance context. In addition, such a conflict management system should encompass a stepwise approach in which negotiation is priority, legal proceedings are the last resort, and which involves close links between statutory and customary institutions.