

CONFLICTS AROUND COMMERCIAL FOREST PLANTATION DEVELOPMENT IN GHANA'S HIGH FOREST ZONE



Slopes cleared for commercial forest plantation development in the Kwamisa forest reserve, Ghana, April 2011.

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Conflicts around commercial forest plantation development in Ghana's high forest zone

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Abstract

In order to curb the disturbing pace of deforestation in Ghana, the Government launched the National Forest Plantation Development Programme (NFPDP) in 2001. One of the components of the NFPDP is commercial plantation development, which involves the allocation of degraded portions of forest reserves to private actors for the development of forest plantations. Mapping the implications of the NFPDP is one of the objectives of the joint research programme ‘Governance for Sustainable Forest-related Livelihoods’ undertaken by the Dutch NGO Tropenbos International, the University of Amsterdam and the Kwame Nkrumah University of Science and Technology, Kumasi. Being part of this programme, this thesis focuses on conflicts around commercial plantation development, conflict management and the implications for forest governance. It provides a basic overview of conflicts around commercial plantation development and presents two case studies. The thesis is based on fieldwork carried out in Ghana’s high forest zone from March-May 2011.

Six types of conflict were identified, namely (1) conflicts between investors and farmers regarding illegal encroachment, (2) conflicts between investors and plantation workers, (3) conflicts concerning the benefit-sharing agreement, (4) conflicts among investors, (5) conflicts between indigenous workers and migrant workers, and (6) conflicts between investors/plantation workers and Fulani herdsmen. Most common are conflicts between developers and farmers and conflicts between developers and plantation workers.

The most important underlying causes of commercial plantation-related conflicts were found to be poor provision of information, faulty coordination and the limited availability and accessibility of land. Forest-fringe communities generally depend on access to forest land and resources, but are increasingly being denied such access. Although CPD can be typified as a form of co-governance, in which the government and private actors join hands with a common purpose in mind, from the perspective of the local communities it is nothing more than a modified form of hierarchical, top-down governance, in which private investors have taken over the role of the government in controlling access to forest land and resources.

With respect to conflict management the main conclusion is that local community members generally are oriented towards customary modes of dealing with conflicts, whereas private investors more often opt for statutory modes, putting the latter in an advantageous position. On the basis of this research, it is recommended to actively involve local communities in commercial plantation development, critically review the benefit-sharing agreement and institutionalise the role of traditional authorities in conflict management.

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Acronyms and Abbreviations

AfDB	African Development Bank
BSA	Benefit-sharing agreement
CFC	Community Forest Committee
CFMP	Community Forest Management Project
DA	District Assembly
DCO	District Chief Officer
DISEC	District Security Council
ECOWAS	Economic Community of West African States
FAO	Food and Agriculture Organization of the United Nations
FC	Forestry Commission
FDMP	Forest Development Master Plan
FORIG	Forestry Research Institute Ghana
FPDF	Forest Plantation Development Fund
FSD	Forest Services Division
GPDP	Government Plantation Development Programme
GSBA	Globally Significant Biodiversity Area
HIPC	Highly Indebted Poor Countries
KNUST	Kwame Nkrumah University of Science and Technology
MLNR	Ministry of Lands and Natural Resources
MTS	Modified Taungya System
NFPDP	National Forest Plantation Development Programme
NGO	Non-governmental organisation
NTFPs	Non-timber forest products
OASL	Office of the Administrator of Stool Lands
PADO	Private Afforestation Developers Organisation
PD	Plantations Department
RMSC	Resource Management Support Centre
SRA	Social Responsibility Agreement
STV	Standing Tree Value
TBI	Tropenbos International
TUC	Timber Utilization Contract
UN	United Nations
UvA	University of Amsterdam

1. Introduction

1.1 Background to the study and problem statement

Over the past decades the world's forest cover has been rapidly decreasing, with average annual decline rates of 0.22% between 1990 and 2000 and 0.13% between 2000 and 2010 (FAO 2011: 3). The West-African country of Ghana, originally well endowed with natural forests, has formed no exception to this general trend. Quite to the contrary, the Ghanaian extent of forested land declined from 2000-2010 with a staggering annual rate of 2.1% to a total forest area of 4,940,000 ha in 2010, accounting for about 21.7% of all land in Ghana (FAO 2011: 111). While the portion of forested land in Ghana is still higher than the corresponding figures for West-Africa and Africa in total, which are 14.9% and 21.4% respectively, the country's forests are disappearing relatively faster than those in the entire region and on the whole continent, which have had annual decline rates of respectively 1.1% and 0.5% over the period 2000-2010 (*ibid.*: 112).

In order to curb the disturbing pace of deforestation in Ghana, the Government launched the National Forest Plantation Development Programme (NFPDP) in 2001 (FC 2008: 3). This programme seeks to re-establish a sustainable forest resource base that, by satisfying the future demand for industrial timber, is both of great economic benefit and of high environmental quality (FC 2008: 1). Moreover, the programme aims at creating employment and considerably increasing food production and is therefore expected to contribute significantly to rural poverty reduction and wealth generation.

The advent of the NFPDP should be viewed in the context of flourishing forest plantation development worldwide. Globally new forest plantations are being established at a rate of 4.5 million ha annually (Evans & Turnbull 2005: 35). Amounting to 187 million hectares in 2000, the global estate of plantations had seen decades of explosive growth, up from 17.8 million hectares in 1980 and 43.6 million hectares in 1990 (Garforth *et al.* 2005: 3). Since the 1960s there has been a particularly large increase in the establishment of forest plantations in the tropics (Evans & Turnbull 2005: 13). Between 1965 and 2000 the total area of forest plantations in the tropics increased over thirteen times, and the rate of planting in the 1990s was double that of the 1980s (*ibid.*). By 2000 almost 40% of the global estate of forest plantations was in the tropics. Of all world regions West Africa has seen the greatest increase in the area of forest plantations over the past decades, with average annual growth rates of 4.26% between 1990 and 2000 and 6.35% between 2000 and 2010 (FAO 2011: 4).

The NFPDP is being implemented under various components, one of them being to involve private actors in reforestation by allocating them land to develop forest plantations. This strategy of privatisation - generally referred to as commercial plantation development - reflects the global trend of increasing private-sector involvement in forestry in general and plantation development in particular (Garforth *et al.* 2005: 10). In the year 2000 an estimated 29% of industrial plantations worldwide were privately owned, against 37% of non-industrial plantations.

In many countries, including Ghana, private-sector involvement in plantation development has been encouraged by government incentives and supportive tax policies aimed at creating favourable policy and market environments (Garforth *et al.* 2005: 29). It is widely believed that commercial plantation development potentially entails significant benefits, including increased efficiency and profitability, poverty reduction, and improved rural livelihoods (*ibid.*: 17). However, there is also widespread concern about the impacts of growing private investment in forestry, as many believe that private companies are not accountable to public demands and have no incentive to provide important environmental and social goods and services (*ibid.*).

Despite growing concern about the increasing role of the private sector in forestry, there has been little research on conflicts that occur around commercial forest plantation development. Previous assessments² of the situation in Ghana, however, pointed out that such conflicts do indeed occur and that there is a need for research on this topic.

1.2 Research objectives and questions

This research aims at generating insight into the causes and nature of commercial plantation-related conflicts in Ghana's high forest zone. It intends to present an analytical view not only of conflicts as such, but also of conflict management strategies that can be identified in the field. Central to the latter part of the inquiry are questions concerning the incidence, features and outcomes of strategies that occur among different actors in conflict situations. Based on the analysis of commercial plantation-related conflicts and conflict management, this research aspires to identify bottlenecks in forest governance. Hence, it also aims at providing recommendations for improved forest governance and conflict management.

² Prior to the fieldwork period, Mercy Derkyi, PhD researcher with the University of Amsterdam and Tropenbos International-Ghana, provided me with an inventory she had made of conflicts concerning commercial plantation development that had occurred in Ghana's high forest zone in previous years.

As little research has so far been carried out on this topic, this research is essentially exploratory. It does by no means pretend to provide a comprehensive overview of commercial plantation-related conflicts in Ghana's high forest zone, nor does it aim to do so. Rather, it tries to identify and concisely typify the types of conflict that occur around commercial plantation development. In order to gain deeper understanding of the conflict dynamics, moreover, two types of conflict are examined in more detail in two case studies.

This research is part of the joint research programme 'Governance for Sustainable Forest-related Livelihoods' undertaken by the Dutch NGO Tropenbos International (TBI), the University of Amsterdam (UvA) and the Kwame Nkrumah University of Science and Technology (KNUST), Kumasi, Ghana. This programme aspires to generate knowledge for improved forest governance and thereby pays ample attention to the role of forest plantations and the implications of plantation development. Previous research within this project has focused mainly on the implications of forest plantation development for the livelihoods of forest-fringe communities that depend on natural resources, and to the livelihood strategies that they employ in coping with all kinds of challenges (e.g. Hoogenbosch 2010, Ledger 2010).

By contrast, little attention has thus far been paid to the potentially discordant roles that different actors play within the NFPDP and to conflicting interests in forest plantation management. These lacunae are being addressed by Mercy Derkyi's PhD research on forest governance and conflict management in Ghana's high forest zone, in which she provides a general overview of forest and plantation-related conflicts (Derkyi forthcoming a). This research is complementary to that of Mercy Derkyi and focuses on conflicts concerning commercial plantation development, since very little research has so far been done on this type of forest plantation in particular.

The main question guiding this research is:

- What conflicts occur around commercial forest plantation development in Ghana's high forest zone and what are the causes, dynamics and ways forward?

In order to answer the main research question the following sub questions are addressed:

- What conflict issues occur and what actors are involved?

- What institutions are in place to deal with these conflicts and what conflict management strategies are employed?
- What implications do patterns of conflict and conflict management have for forest governance?

1.3 Study area

The Republic of Ghana is situated in West Africa on the Gulf of Guinea and shares borders with Cote d'Ivoire to the West, Burkina Faso to the North and Togo to the East. Administratively, the country is divided into ten regions, which together comprise 170 districts. Ghana, with a population estimated to be 24.4 million in 2010 (United Nations Population Division 2010), is a poor country with low human development, ranking 135th out of 187 countries in the United Nations' (UN) Human Development Index (UNDP 2011: 126).

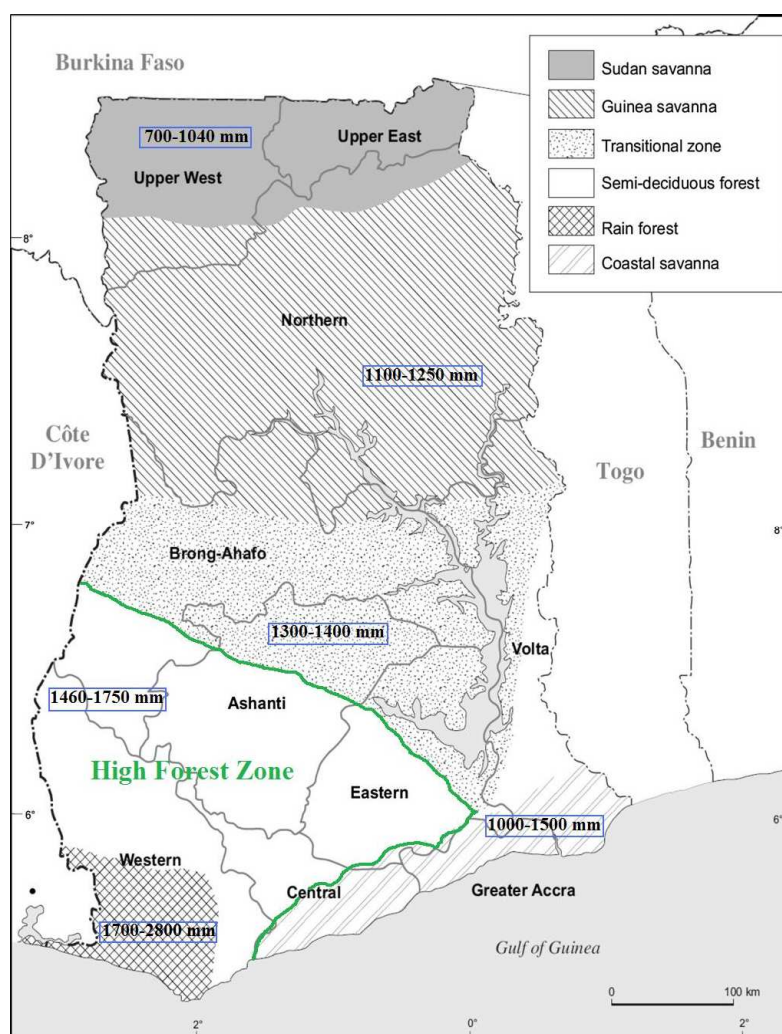
The whole country has a tropical climate, but there are marked regional variations in average annual temperature and precipitation. The far Southwest has relatively moderate temperatures and receives most rainfall, and the climate gets hotter and drier towards the North and East (Hawthorne & Abu-Juam 1995). The geographical patterns of temperature and rainfall roughly correspond to the three main vegetation zones found in Ghana: the high forest zone, the savannah zone and the transition zone (see Figure 1.1). The high forest zone takes up roughly the southwestern third of Ghana, the savannah zone covers roughly the northern half of the country as well as a narrow coastal strip, and the transition zone lies in between.

The fieldwork was carried out in high forest zone, where commercial forest plantation development in Ghana has so far concentrated (see Chapter 4). The high forest zone contains over 70% of the floral diversity of Ghana and forms part of the 'biodiversity hotspot' of West Africa's Guinean forests (Wagner *et al.* 2008: 105). There is a variety of forest types in the high forest zone, ranging from wet evergreen forests in the southwest to dry semi-deciduous forests towards the transition zone. Just like the variation in vegetation zones, the differences in forest types can be largely attributed to climatic variations (Hawthorne & Abu-Juam 1995).

Ghana's high forest zone has seen extensive deforestation and few isolated pockets of untouched forest remain, almost exclusively within forest reserves. Deforestation has been caused mainly by pervasive illegal logging and unsustainable agricultural practices such as slash-and-burn farming (ITTO 2006: 98). Regular bush fires have also contributed significantly to the degradation of forests, especially in the drier parts of the high forest zone. Moreover, domestic use of wood is ubiquitous as most rural households rely on firewood and

charcoal for cooking (UNDP 2007: 10). As a result of widespread exploitation and cultivation, the landscape in the high forest zone is characterised by a mosaic of degraded forests and tropical agriculture. Subsistence farming forms the mainstay of the rural economy and the crops most commonly planted are plantain, cocoa, cassava, maize, yam and cocoyam (*ibid.*: 25-26).

Figure 1.1: Map of Ghana showing the administrative regions and agro-ecological zones with annual mean precipitation (in blue boxes).

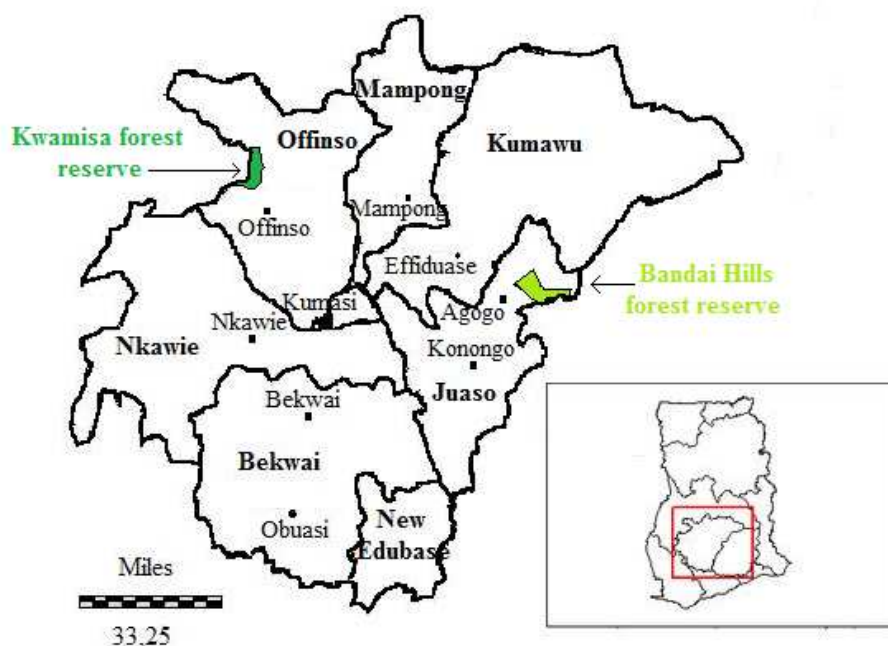


Source: adapted from Antwi-Agyei *et al.* (forthcoming).

The exploration of commercial forest plantation-related conflicts in this research is limited to the Offinso and Juaso forest districts (see Figure 1.2). The Offinso forest district falls within the Ashanti region and has a total area of 1,255 km² (UNDP 2007: 10). It administers nine forest reserves (see Box 1.1) which cover an area of 753 km², accounting for approximately 60% of the total area of the forest district (Hawthorne & Abu-Juam 1995: 111-178). The

Juaso forest district is situated in the Ashanti region as well, and also encompasses nine forest reserves, covering a total area of 468 km² (*ibid.*: 127-184). Furthermore, it contains the Bomfobiri Wildlife Sanctuary which covers 50 km² (*ibid.*: 135).

Figure 1.2: Schematic map of the Ashanti region showing forest districts, major towns and locations of forest reserves under study.



Source: adapted from Kyem (online).³

Fieldtrips were undertaken to the Kwamisa forest reserve in the Offinso forest district and the Bandai Hills forest reserve in the Juaso forest district.⁴ The Bandai Hills forest reserve consists of dry semi-deciduous forest, while the Kwamisa forest reserve contains both dry semi-deciduous and moist semi-deciduous forest (Hawthorne & Abu-Juam 1995: 127, 160). In both forest reserves last official logging was recorded in 1991. Both reserves are hill sanctuaries which are in urgent need of fire protection and extra care to protect remnants of forest (*ibid.*). In order to promote the protection of its forest resources, about 14 km² of the Bandai Hills forest reserve were designated a Globally Significant Biodiversity Area (GSBA) in 1999 (Anyomi *et al.*: 10). Questionnaires were administered in the villages of Ahwerewam and Breme around the Kwamisa forest reserve, and Abrewapong and Mankala around the Bandai Hills forest reserve (see Section 3.2).

³ <http://www.ncgia.ucsb.edu/varenius/ppgis/papers/kyem/kyem.html>

⁴ Section 3.2 contains detailed maps of the areas where the conflicts discussed in the case studies took place, accompanied by more information on the visited villages, forest reserves and administrative districts.

Box 1.1: Forest reserves in forest districts under study and their area (square kilometers).

Offinso forest district		Juaso forest district	
<u>Forest reserve</u>	<u>Area</u>	<u>Forest reserve</u>	<u>Area</u>
Afram Headwaters	201 km ²	Bandai Hills	161 km ²
Afrensu-Brohuma	73 km ²	Bobiri	55 km ²
Asubima	79 km ²	Dome River	9 km ²
Asufu Shelterbelt East	11 km ²	Mirasa Hills	67 km ²
Asufu Shelterbelt West	14 km ²	North Bandai Hills	73 km ²
Gianima	17 km ²	North Fomangsu	43 km ²
Kwamisa	83 km ²	Onyimsu	9 km ²
Mankrang	86 km ²	Prakaw	10 km ²
Opro River	189 km ² +	South Fomangsu	41 km ² +
	-----		-----
	468 km ²		753 km ²

Source: data from Hawthorne & Abu-Juam (1995).

1.4 Thesis outline

The thesis is divided into six chapters. The current chapter has served to introduce the research topic and study area, and has set out the research objectives and questions. Chapter two presents the theoretical framework in which literature with relevance to the study is explored. It thereby builds on literature on forest governance, natural resource conflict and conflict management. Chapter three deals with the methodological aspects of this study. It presents the conceptual model and operationalisation of the major concepts, and describes the selection of study sites, the research methods employed and some of the limitations encountered during fieldwork. Chapter four is a contextual chapter addressing forest governance and plantation development in Ghana. It first deals with the characteristics of forest governance, forest reservation and land tenure in Ghana, then describes plantation development in the country in general and eventually zooms in on commercial plantation development. Chapter five presents the empirical findings. It starts with a general overview of commercial plantation-related conflicts in the two forest districts under study and then presents two case studies, in which two conflicts are analysed in-depth. Chapter six comprises the discussion of research findings, conclusions and recommendations for policy and further research. It specifically tries to relate the research findings to the theoretical framework.

2. Theoretical framework

This chapter presents the theoretical framework in which this research is embedded. It builds on three strands of literature: forest governance, natural resource conflicts and conflict management.

2.1 Forest governance

In studying plantation-related conflicts, it is imperative to reflect on the ways in which forests and natural resources are governed, as adequate governing of forest and natural resources may prevent conflicts from occurring, whereas faulty governing may contribute to the emergence of conflicts. With respect to Ghana, Derkyi (forthcoming a) points out that the absence or ineffectiveness of mechanisms to manage competing claims to forest and tree resources is an important source of conflict. This example suggests that enhanced insight into forest governance may deepen our understanding of forest and plantation-related conflicts and, consequently, may add greatly to preventing such conflicts and achieving constructive conflict management.

2.1.1 Governance as interaction

Like in many policy areas, there has been a trend in environmental governing of increasing devolution of tasks and responsibilities from central governments to lower levels of administration, as well as to private actors, communities and civil society (Lemos & Agrawal 2006: 302-305). This general trend of decentralisation and privatisation has often been characterised as the shift from government to governance. There is, however, no uniform definition of governance, as it has become a catchword in both the social sciences and the policy world (Kooiman *et al.* 2008: 2). Accordingly, there is a wide variety of conceptualisations of governance, with some taking an analytical approach, whereas others look at governance from a normative perspective (see Section 2.1.2).

Analytically, this study takes the notion of ‘interactive governance’, developed by Kooiman *et al.* (2005), as a starting point. In harmony with most approaches to governance, the interactive perspective of governance assumes that the governing of societies involves a multiplicity of actors in different positions and levels of society, including the state, market actors and civil society actors. The novelty of the interactive governance approach, then, is that it highlights the interactions between the whole range of societal parties, as well as the

governance outcomes of such interactions (Kooiman *et al.* 2008: 2-3). Interactive governance is defined as ‘the whole of interactions taken to solve societal problems and to create societal opportunities; including the formulation and application of principles guiding those interactions and care for institutions that enable and control them’ (Kooiman *et al.* 2005, cited in Kooiman *et al.* 2008: 17). Dependent on their configuration, interactions between societal actors may produce divergent governance outcomes. In this respect, Kooiman *et al.* (2008: 8-9) distinguish three modes of governance:

- *Self-governance* – which refers to situations in which actors take care of themselves, outside the purview of government;
- *Hierarchical governance* – which is a top-down style of intervention and interaction between the state and its citizens with a focus on steering, planning and control, expressed in policies and laws;
- *Co-governance* - which is a collaborative mode of governing in which the state and societal parties join hands with a common purpose in mind. Co-governance is characterised by horizontal relationships and implies the use of organised forms of interaction for governing purposes.

With reference to the notion of co-governance, Lemos and Agrawal (2006: 311) identify several hybrid environmental governance strategies, including co-management (between state agencies and communities), public-private partnerships (between state agencies and market actors) and private-social partnerships (between market actors and communities).

2.1.2 Good governance

In accordance with environmental governance in general, forest governance worldwide has recently seen the emergence of new policy trends, and has in particular been characterised by decentralisation efforts (Agrawal *et al.* 2008: 1460-1461). Private sector participation in forest ownership, management and operations has been increasing as governments around the world have been encouraging individuals, communities and firms to provide goods and services traditionally provided by government (Landell-Mills & Ford 1999). With regard to plantation development, there has also been a distinct shift away from direct state participation and towards increased private sector involvement (Garforth *et al.* 2005: 49).

As the management of forests and natural resources has seen increasing devolution and decentralisation, as well as growing involvement of non-public actors, there has been a

growing academic debate on how the shift from government to governance in forest management should take shape. Gradually, this debate has centred around the concept of good forest governance, following on the wider debate on good governance. According to Brown *et al.* (2002:1), good governance lies at the heart of sound environmental management, in particular the public management of natural resources. Indeed, these authors contend that forestry can serve as an entry point for governance reform, as this sector has extensive experience of general relevance to the good governance debate. However, there is by no means consensus on what good governance is.

In a general sense, Plumptre and Graham (1999: 8) argue that ‘good governance might be defined as a mode or model of governance that leads to social and economic results sought by citizens.’ What these results are, however, varies across cultures and over time. Although understanding of good governance is therefore essentially normative and highly context-specific, some norms and values seem to be universally recognised. In an effort to identify such universal values, the UN propose nine principles of good governance: participation, the rule of law, transparency, responsiveness, consensus orientation, equity, effectiveness and efficiency, accountability and strategic vision (UNDP 1997).

In addition to general conceptualisations like the UN’s, there are several conceptualisations of good governance specifically related to forestry, which bear close resemblance to each other, but have differences in nuance and put emphasis on different aspects (e.g. Brown *et al.* 2002, Mayers & Vermeulen 2002, Ros-Tonen & Kusters 2011). The conceptualisation of Garforth *et al.* (2005) best fits this research, as it pays specific attention to plantation development. Garforth *et al.* (2005: 35) identify four cornerstones of an effective forest governance framework, being (1) public policy, (2) the system of tenure and use rights, (3) the design and functioning of forestry-related institutions, and (4) the mix of legislation and other instruments for delivering policy goals. For each of these building blocks, then, they propose a number of characteristics of good governance.

With respect to public policy, Garforth *et al.* (*ibid.*) suggest that clear signals should be sent by formulating transparent policy goals. In relation to land tenure and land-use rights they state that rights must be exclusive, clear and defensible (*ibid.*: 40). They acknowledge, however, that outright tenure for one may imply injustice for another. Therefore, it is crucial to provide tenure security while ‘protecting communities’ underlying land and other informal tenure rights’ (*ibid.*: 78). In order to achieve this, poor people need to be aware of their rights and must be able to access effective routes to recourse. Concerning institutions, then, Garforth *et al.* (*ibid.*: 42-43) mention as characteristics of good governance the separation of

management and regulatory roles, coordination among government agencies and partnerships between different actors. In addition, they argue that ‘devolution of forest use and management rights requires effort to establish the effectiveness, legitimacy and accountability of local institutions’ (*ibid.*: 72). Such institutions, moreover, need sufficient autonomy to act on, modify and enforce local rules. In the context of increasing decentralisation and privatisation, a key challenge is ensuring local participation in forest governance (*ibid.*: 71). Major constraints in this respect, however, are communities’ lack of capacity to get involved and the lack of political will to actually devolve responsibilities. Lastly, with respect to laws and regulations, Garforth *et al.* (*ibid.*: 43) stress the importance of regulatory instruments and incentive structures to address potential negative impacts of plantation development, while not unduly impeding investment.

2.1.3 Legal pluralism

The complexity and uncertainty that characterise forest use and management are also reflected in the wide variety of laws and regulations that concern environmental governance in general and land tenure in particular. In developing countries land and natural resource management generally involve complex configurations of both customary and statutory institutions. In many African countries, for instance, land is held under customary law, while the ultimate ownership of the land is vested in the State (Evans & Turnbull 2004: 56). In other parts of Africa traditional authorities are not only in control of land, but are also the actual landowners. In both situations, land is generally given out to farmers by traditional authorities, such as a chief or village council (*ibid.*). Forests, moreover, are usually considered communal property, which means that community members can freely enter a forest to use its resources. Traditionally, therefore, many communities did not take an interest in formal landownership, as long as they had customary rights of access to the forest and to the use of its resources (*ibid.*).

However, this situation is changing as local communities realise customary rights do not longer guarantee access to forests and their resources (Moeliono 2002). Customary control of forests resources in Africa has been drastically curtailed, as vast areas of forest land have been compulsorily acquired by governments to be designated logging concession areas or forest reserves (Warner 1997). In contrast to land tenure and management, the forestry sector in most African countries is entirely based on statutory laws and regulations. The resulting entanglement of statutory and customary governing structures has far-reaching consequences for plantation development, as it may involve confusion about landownership and

contradictory claims to land. Evans and Turnbull (2004: 56) point out that 'it is not uncommon for land allocated by governments for industrial plantation development to have customary tenure claims and for subsequent conflicts to arise.' With respect to plantation development in Papua New Guinea, Bass (1993) describes customary landowners' general incomprehension of the concept of a 'lease', resulting in constant negotiation on the use of land. In multiple African countries, moreover, governments have embarked on ambitious land administration programmes involving formal registration of land ownership (Quan *et al.* 2008). As such programmes entail increasing entwinement of customary and statutory governing structures, they tend to only exacerbate confusion concerning land access and ownership.

Legal pluralism may also have a profound influence on the management of conflicts (Ubink 2008). In most rural communities in Africa, conflicts were customarily settled in an informal way through mediation by traditional authorities. With the advent of formal contracts and statutory laws in forestry, however, formal methods of conflict management increased in importance. Although local community members generally still try to resolve conflicts through the customary system, other actors in the forestry sector more often appeal to statutory means to deal with a conflict. Local community members generally find themselves in a weak position, as a result of their reliance on customary conflict management strategies and the contrariety between customary and statutory conflict management.

In Ghana natural resource management has for decades been mainly concerned with clarifying the definition of private land rights and improving formal tenure security (e.g. Larbi 2006). This has led to a proliferation of statutory regulations and laws concerning resource use and ownership, next to the various customary laws that still apply (*ibid.*: 4). Public institutions also exercise extensive land administration functions in the customary sector, which has its own traditional authorities such as chiefs (Kasanga & Kotey 2001: 1-2). This illustrates the fact that natural resource management in Ghana involves highly complex configurations of both customary and statutory rights and regulations.⁵ Correspondingly, Larbi (2006: 2) comments that 'the land administration system in Ghana over the years has operated within a plural environment, with statutes and customary laws, public and indigenous institutions, traditional values and corporate norms all operating side by side.' The plurality of management institutions, which operate under different regulatory systems, has

⁵ Legal pluralism in the governing of land and forest resources in Ghana is described in more detail in Section 4.1.4., which pays specific attention to land and tree tenure in the country.

resulted in the fragmentation of land management in Ghana. This fragmentation entails widespread uncertainty about rights to natural resources and contradictory claims to land. Consequently, recent years have seen a proliferation of natural resource conflicts.

2.2 Natural resource conflict

The literature on natural resource conflict can be divided into three main domains: the literature that deals with the causes of conflict, the nature of conflict and conflict management. The remainder of this chapter deals with these respective domains. First, the literature on causes of natural resource conflicts is explored, followed by a theoretical discussion of the nature of such conflicts. In the next section, then, theories on conflict management are discussed.

2.2.1 Scarcity and conflict

It has often been argued that scarcity of natural resources is inextricably linked to environmental disputes and that it forms a fertile soil for the emergence of violent conflict (e.g. Kaplan 1994; Homer-Dixon 1999). According to this line of reasoning, population growth and changing consumption patterns evoke more intense competition over a dwindling and deteriorating resource base, thus rendering the occurrence of natural resource conflict more probable. Homer-Dixon (1999: 15) distinguishes between three sources of environmental scarcity: (1) declining supply of natural resources; (2) increasing demand for natural resources; and (3) uneven distribution of natural resources. This last form of scarcity, which Homer-Dixon terms structural scarcity, results from disparity in the distribution of wealth and power. Based on the above types of scarcity, Homer-Dixon (1994: 39-40) advances the argument that the incidence of natural resource conflicts will continue to rise, as resource stocks are being degraded while competition becomes fiercer and inequalities persist.

Many authors, however, challenge such universal, neo-Malthusian narratives of the relation between scarcity and conflict, dismissing them as overly simplistic and deterministic (e.g. Tiffen et al. 1994; Witsenburg & Adano 2009). Authors taking such a perspective generally emphasise the flexibility and adaptability of human communities and societies in natural resource use. Witsenburg and Adano (2009: 535-536), for instance, advance the argument that pastoral conflicts in northern Kenya are less prevalent and less intense during the dry season when, in spite of far greater scarcity of pasture, pastoralists tend to act more cooperatively than during the rainy season.

2.2.2 Access and power

From such accounts it becomes clear that environmental scarcity does not necessarily correlate positively with the occurrence of natural resource conflict and that, even though it may indeed play an important role, it certainly is not the only factor that should be taken into consideration. This implies that one should reflect not only on how changes in the environment affect security, but also on how ownership, management and control of natural resources are linked to environmental conflict (Alao 2007: 22). These linkages namely reflect the major importance of the socio-cultural and political contexts, which determine to a large extent the degree to which different actors have access to a particular natural resource. Thus, either having or lacking access to natural resources often highly depends on bargaining power, societal influence and the ability to exert political pressure.

The extent of access to natural resources, then, ultimately defines the utility of resources to people and is therefore often an important factor in causing conflict. As expressed in his notion of structural scarcity, Homer-Dixon (1999) acknowledges that having access is not only connected with the availability of resources, but also with unequal power dynamics. In the Ghanaian context, accordingly, it has been argued that most resource-related conflicts in rural areas are as much about access to natural resources as about political power (Fred-Mensah 1999: 952).

In fact, as Addo-Fening (1987) indicated some twenty years ago, the control over natural resources in Ghana is a major indicator of political power itself. This implies that one should not turn a blind eye on power relations within natural resource use, all the more since such relations are generally of decisive importance in shaping resource-related conflicts. Such an approach corresponds with political ecology (Adams 2008) or environmental political geography (Dietz 1996), which stresses the politics of the relationships among people and between people and nature, as well as the problems associated with uneven access to natural resources and power imbalances. Furthermore, political ecology stresses the multi-scalar nature of environmental and social phenomena.

2.2.3 Categorising causes of natural resource conflicts

From the preceding discussion it is evident that natural resource conflicts are complex, multifaceted phenomena which cannot be understood properly when analysed in a narrow sense. It is therefore imperative to take a holistic view in analysing the causes and characteristics of resource conflicts. With regard to the causes of natural resource conflicts,

Alao (2007: 26) distinguishes between three interconnected categories, being the quantity and quality of availability of a resource; the politics of ownership, management and control; and the extraction process. The first category deals with the demand a resource is supposed to meet, thereby distinguishing between lack, scarcity and abundance. In the second category, which centres on management mechanisms and the governance of natural resources, Alao (*ibid.*) differentiates between factors of ownership, distribution, management, allocation and control. The third and last category focuses on the methods through which natural resources are processed to benefit human beings, which can be subdivided into methods of exploration and of exploitation. Exploration refers to the ways in which an extractable resource is mapped, and to the preparations and management mechanisms that are employed prior to exploitation, which refers to the actual extraction of a resource.

In addition to the differentiation in categories of causes, a distinction should be made between the underlying factors that are at the basis of social tensions and the actions that spark off actual conflict. In this vein, Pondy (1967) differentiates between antecedent conditions, such as political exclusion or economic hardship, and manifest behaviour, such as strikes, protests or violent actions. While the antecedent conditions form a fertile ground for the emergence of discordant situations, manifest behaviour ultimately triggers off conflict. In other words, apparent actions and behaviour form the direct or manifest causes of conflict, while the antecedent conditions constitute the indirect or underlying causes.

2.2.4 Nature and characteristics of natural resource conflicts

Conflicts are dynamic, context-specific social situations that evolve over time and generally go through several stages of escalation. Improving insight into the different stages of conflict is of crucial importance, as it may contribute enormously to constructive conflict management. However, as Yasmi (2004) points out, research on natural resource conflict has been mainly concerned with underlying causes of conflict and has failed to address the stages of conflict and the sequence of conflict escalation.

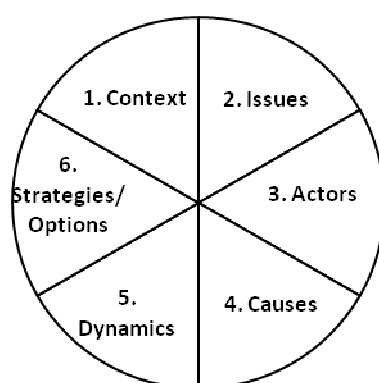
While the literature on natural resource conflict is thus lacking a theoretical underpinning of conflict escalation, other disciplines, such as organisational studies, have a long-standing tradition in conceptualising conflict stages. In a classic study on organisational conflict Pondy (1967) distinguishes five stages of escalation: (1) latent conflict; (2) perceived conflict; (3) felt conflict; (4) manifest conflict; and (5) conflict aftermath. Although Pondy's (*ibid.*) categorisation allows for the fact that conflicts are dynamic social situations evolving

over time, it does not further specify the properties of different stages of conflict. Subsequent conceptualisations (e.g. Pruitt & Rubin 1986) focused on elaborating the characteristics and manifestations of different conflict stages. In a highly influential study in this tradition, Glasl (1997) presents a nine-stage model of conflict escalation that specifies the stages of escalation and identifies manifestations and thresholds of each escalation stage.

Inspired by Glasl's model, Yasmi *et al.* (2006) reconceptualised conflict escalation specifically geared toward natural resource management. They distinguish eight stages of escalation: (1) feeling anxiety, (2) debate and critique, (3) lobby and persuasion, (4) protest and campaigning, (5) access restriction, (6) court, (7) intimidation and physical exchange, and (8) nationalisation and internationalisation. The model of Yasmi *et al.* (*ibid.*) covers everything from feelings of discomfort to violent international conflict and identifies manifestations of each conflict stage. The authors emphasise that escalation patterns in natural resource conflicts are complex and hardly generalisable, as such conflicts generally involve a variety of actors, issues and management strategies. Nevertheless, their model of conflict escalation provides a framework which enables comparative analysis of the violence and intensity of natural resource conflicts.

In addition to being broken up into stages of escalation, conflicts can be analysed in terms of dimensions. The conflict wheel (see Figure 2.1) distinguishes between six dimensions of conflict: context, issues, actors, causes, dynamics and strategies/options.

Figure 2.1: The conflict wheel.



Source: Derkyi *et al.* (forthcoming a); adapted from Mason and Rychard (2005).

Although the conflict wheel is basically an analysis tool and has little theoretical relevance as such, its dimensions all relate to a specific domain of conflict theory. The issues, actors and

dynamics pertain to the nature of a conflict, while the causes obviously represent the manifest and underlying factors that brought about a conflict. Context, then, refers to the geographical and societal setting of a conflict and is concerned with all external factors that have a bearing on a conflict. Lastly, the strategies/options represent the conflict management strategies that different actors employ or could employ.

2.3 Conflict management

In order to obtain a clear understanding of the dynamics and evolution of conflicts, it is of pivotal importance to reflect on the ways in which conflicts are dealt with and the factors that influence the adoption of certain strategies. Enhanced insight into bottlenecks in conflict resolution may contribute to achieving constructive conflict management and reducing the incidence of conflict. This section explores literature on conflict management, respectively dealing with the role of power relations, conflict management strategies and the notion of conflict management as a process.

2.3.1 Power relations

Just like the form and intensity of a conflict, the ways in which different stakeholders act in a conflict situation vary enormously according to place and over time (Castro & Nielsen 2003: 8). The types of responses that actors display depend fully on the context and typically mirror diversity in authority, social status and material well-being. Dimensions of power, and especially asymmetries in the balance of power, thus determine to a large extent which strategies different actors employ.

Therefore, a thorough understanding of power relations should constitute the background against which conflict management is analysed (Wehrmann 2008: 49). It is important in this respect to not only consider the steps that actors do take, but also the steps that they do not or cannot take in case power imbalances discourage, respectively disable them to do so. For instance, a relatively powerless stakeholder in a discordant situation may either opt not to publicly engage in a conflict because of fear, peer pressure or distrust, or be purposefully excluded from certain conflict resolution procedures (Castro & Nielsen 2003: 8-9).

2.3.2 Conflict management strategies

The contextual nature of conflict management implies that innumerable nuances exist in the strategies that all kinds of actors develop. Essential though it remains to recognise this, it is possible to classify conflict management strategies into six general categories (Castro & Nielsen 2003: 9), namely avoidance, negotiation, mediation, arbitration, adjudication and coercion (see Box 2.1). These general classes, except from avoidance, can be further subdivided into consensual (negotiation, mediation), mid-consensual (arbitration) and non-consensual (adjudication, coercion) approaches of conflict management (Derkyi *et al.* forthcoming a, Moore 2003, Engel & Korf 2005, Wehrmann 2008).

The latter classification is based on the degree of consensus inherent in the various strategies, which is indeed a major factor of differentiation. The different conflict management options, however, also vary in other respects (Engel & Korf 2005:41). These include the degree of formality and legality of a strategy, as well as the amount of coercion that is exercised (Moore 2003). Moreover, the various strategies differ according to the involvement of external parties and the likelihood of generating win-lose outcomes.

Box 2.1: Types of conflict management strategies

Avoidance: acting to prevent a conflict from becoming publicly acknowledged.

Negotiation: voluntary process in which parties reach agreement through consensus building.

Mediation: using a third party to facilitate the negotiation process.

Arbitration: submitting a conflict to a mutually agreeable third party, who renders an often non-binding decision.

Adjudication: relying on a judge or administrator to make a binding decision.

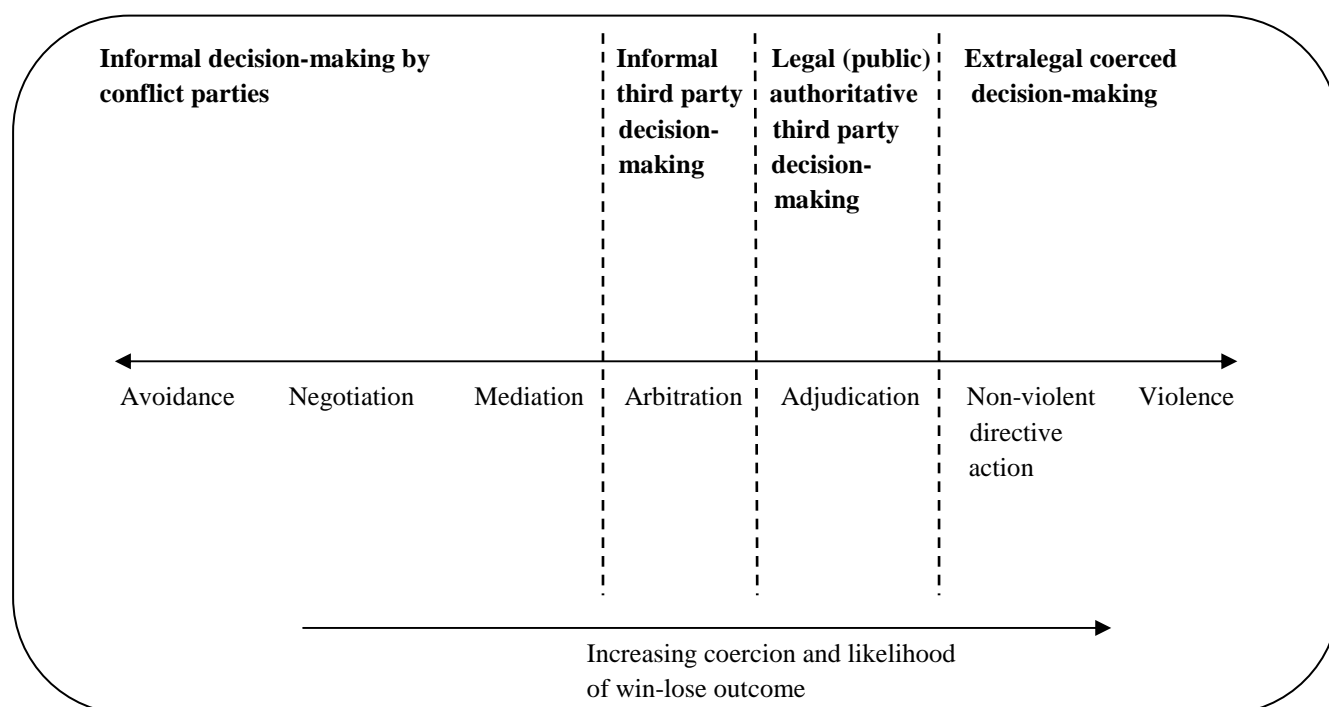
Coercion: threatening or using force to impose one's will, including violence, protests, extortion and political contacts.

Sources: adapted from Castro and Nielsen (2003: 9).

Although such distinctions are indispensable in categorising and analysing conflict management strategies, they should not be considered in terms of static categories. Rather than providing them with clear-cut labels, Moore (2003) situates the various strategies of conflict management along a continuum which incorporates information about several characteristics. This continuum, which is graphically represented in Figure 2.2, embodies

multiple variables beside the degree of consensus. The extent of formality, privacy and legality, for instance, are all represented in the upper part of the continuum, whereas the amount of coercion and the likelihood of win-lose outcomes make up its lower part. The continuum should be interpreted as a flexible line with two extremes, conflict avoidance and physical violence, in between which there are many different options for managing conflict (Engel & Korf 2005: 41). By omitting rigid divides the continuum tries to acknowledge the enormous versatility within conflict management.

Figure 2.2: Continuum of conflict management strategies.



Source: adapted from Moore (2003).

2.3.3 Conflict management as process

Assessing conflict-related strategies by means of a continuum also allows one to take a process-oriented perspective of conflict management. This is of vital importance, as conflicts evolve over time and people tend to employ different strategies at different stages of conflict. Wehrmann (2008: 54) points out that there is a strong connection between the degree of escalation of a conflict and the strategies that actors employ. Avoidance and mediation, for instance, may be common in an early phase when people still try to prevent outright conflict, while the occurrence of physical violence obviously marks a high degree of escalation. Of course, there is a question here of the direction of causality, which renders the analytical value of these insights quite low.

Nonetheless, such a process-oriented perspective enables one to evaluate conflict management in a dynamic manner and to appreciate the various interrelated stages of conflict management. In this respect Wehrmann (2008:49) distinguishes between conflict prevention, peacemaking, peacekeeping and peacebuilding. The transitions between these phases are gradual and fluid. Conflicts may be latent for a long time and then suddenly erupt, or rather develop slowly and gradually. The boundaries between various stages and strategies are thus by no means absolute, making it crucial to look at conflict management from a process-centred point of view.

2.4 Summary

This chapter described the theoretical framework in which my research is embedded. It explored relevant literature on forest governance, natural resource conflict and conflict management. Analytically, the concept of ‘interactive governance’, which highlights the interaction between the state and other societal parties, is taken as a starting point. Notions of governance generally have a strong normative component, which is reflected in the growing academic debate on ‘good governance’. For the purpose of this study, the conceptualisation of Garforth *et al.* is adopted in which they suggest characteristics of good governance relating to public policy, tenure and use rights, forestry-related institutions, and legislation for delivering policy goals. Another important aspect of governance is legal pluralism, as forest governance generally involves both customary and statutory arrangements, the entanglement of which may give rise to conflicts.

Natural resource conflict has often been linked to scarcity, but many authors now stress the importance of imbalances in access and power in causing and perpetuating conflict. In the causes of conflict, a distinction should be made between antecedent conditions and manifest behaviour. It should also be acknowledged that conflicts are dynamic and typically evolve through different stages of escalation. This notion of evolution also applies to conflict management, which should not be viewed in terms of static decisions, but rather as an interactive process in which power imbalances may play an important role. As regards conflict management strategies six basic types are distinguished, namely avoidance, negotiation, mediation, arbitration, adjudication and coercion. Before the empirical results are presented in Chapter 5, Chapter 3 and Chapter 4 respectively describe the methodological aspects of this study and the context of forest governance and plantation development in Ghana.

3. Methodology

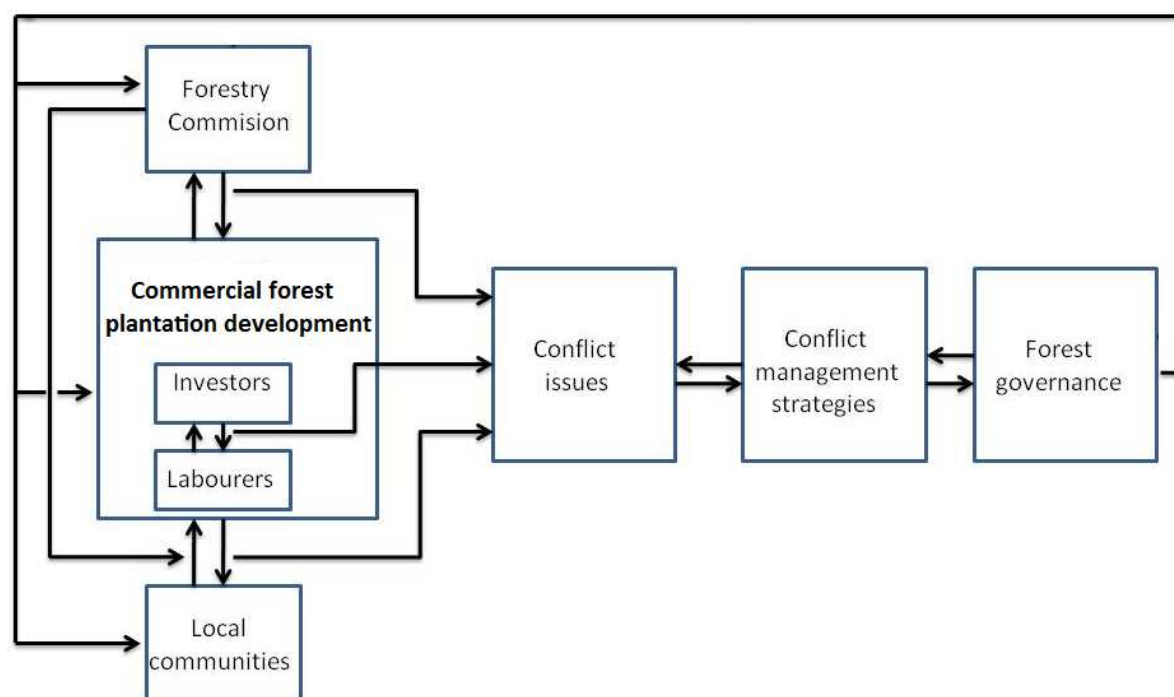
This chapter deals with the main methodological aspects of this study. It first presents the conceptual scheme, which serves to display the interrelations between the actors and concepts that are central to the study. Attention is then paid to the operationalisation of the main concepts, which involves the systematic breakdown of the broad concepts into more specific elements. Next, the selection of cases and study sites is described, followed by a discussion of the research methods employed. The chapter concludes with some remarks on limitations and ethical concerns that arose during the research.

3.1 Conceptual scheme and operationalisation of the main concepts

The concepts that constitute the theoretical backbone of this study have been explored in Chapter 2. The conceptual model outlined in Figure 3.1 schematically represents both these concepts and the key actors within commercial plantation development, as well as the mutual relations between them. The left side of the scheme comprises the actors that play an essential role within commercial plantation development, and the arrows that interconnect the various actors reflect the interaction between them. The right side of the scheme displays the central concepts and their interconnectedness, as well as the links between these concepts and the various actors. From the interactions between the actors conflict situations may arise, which can be dealt with in a wide variety of ways. The conflict management strategies that actors employ not only react on a conflict issue, but also carry implications for forest governance. Subsequently, alterations in forest governance are likely to induce changes in the tasks and attitude of the actors involved in commercial plantation development, possibly giving rise to new conflict situations by affecting the relations between different actors.

In order to enable efficient data collection, it is necessary to reduce the level of abstraction by operationalising the concepts from the conceptual scheme. The operationalisation involves a step-by-step dissection of the different concepts, which first requires the subdivision of broad concepts into several dimensions. Then, the dimensions are broken down into variables, which are subsequently translated into indicators. The indicators, ultimately, serve as a guideline for formulating questions, as they refer to concrete pieces of information that are of relevance to the study. To enable the gathering of relevant data, it is imperative that the operationalisation of the main concepts is specifically aligned with the purpose of the study. Table 3.1 demonstrates the operationalisation of this study's three main concepts.

Figure 3.1: Conceptual scheme.



3.2 Selection of cases and study sites

Due to the exploratory character of this study, the exact nature of the conflicts that I would study was still unclear by the time I arrived in Kumasi. Consequently, the fieldwork locations had yet to be determined. There was a list with cases that had previously been identified, but, considering their unsettled nature, it was uncertain whether these conflicts were still existent. To put me on the way, TBI-Ghana organised an introductory meeting, at which a wide range of forestry actors attended the presentation of my research proposal. After the presentation, a lengthy and lively discussion ensued regarding the incidence and intensity of conflicts around commercial plantation development in Ghana. The discussion made particularly clear that commercial plantation related-conflicts constitute a rather delicate topic and that the different stakeholders hold widely divergent perceptions of such conflicts.

Several private investors were present at the meeting and one of them indicated that he was experiencing many problems on his plantation. He further explained his situation and stated that he was having disputes with various local communities.⁶ My local supervisors and me then decided to select this case for closer examination.

⁶ A (local) community is in this study interpreted as a group of people that shares a particular geographical space (usually a village). It is recognised that communities are not necessarily homogeneous with regard to their members' interests and socioeconomic status.

Table 3.1: Operationalisation of the main concepts.

Concept	Dimension	Variable	Indicators
Natural resource conflict	Issues	Land conflicts	Competing claims over land
		Tree/forest benefit conflict	Competing claims over tree/forest benefits
		Labour conflict	Wage; wage payment on time
		Conflicts over working conditions	Perceived workload Provision of working equipment Provision of food crops or land to grow food crops Provision of housing Provision of transportation
	Actors	Statutory government	Kind and number of government agencies involved
		Customary authorities	Kind and number of traditional authorities and institutions involved
		Private sector	Number of private plantations investors involved Professional organisations involved
		Communities	Communities involved Specific community groups involved Labourers involved
		Civil society organisations	NGOs involved Community-based organisations involved
	Causes	Land tenure arrangements	Land tenure arrangements in place Tenure security Control and enforcement
		Benefit-sharing arrangements	Benefit-sharing arrangements in place Degree of formalisation of benefit-sharing arrangements
		Resource management arrangements	Resource management arrangements in place (scale and mode of exploration and exploitation, plantation maintenance, community contracts, allowance of other types of land use e.g. growing food crops)
		Labour provisions	Labour laws to be met
	Dynamics	Duration	Number of days, weeks, months, years
		Scale	Geographical level of scale (local, district, national, international) Positions of actors involved Disputed area (in case of land conflict)
		Intensity	Actors' perceptions of conflict intensity Emotional/financial/ social/physical damage Degree of violence

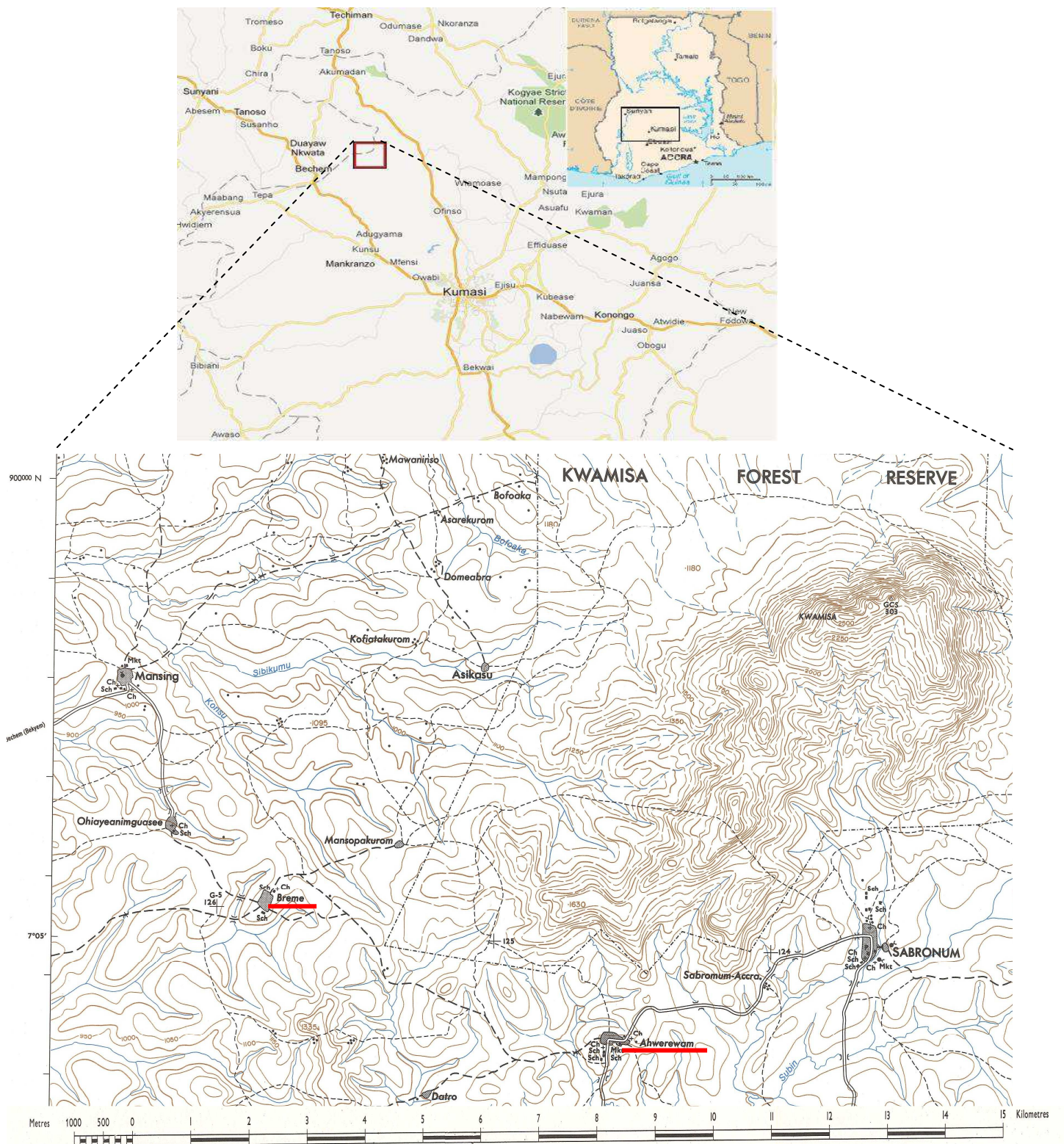
Conflict management	Power	Power imbalances	Actors' relative power positions / decision-making power
	Conflict management strategy	Degree of consensus	Mutual consultation/understanding?
		Degree of formality	Third party / intermediary involved? Any form of formal registration?
		Degree of legality	Authoritative third party involved? Based on laws/law suit?
		Degree of coercion/violence	Incidences of violence/physical clashes Use of physical force
	Process	Degree of escalation	Perceived stage of conflict management (prevention, outburst)
		Stage of conflict management	Prevention, peace-making, peacekeeping, peace building
Forest governance	Regulation	Policies	What policies on plantation development? National and international policies/donor agreements Concessions
		Laws/regulations	Benefit-sharing arrangements Statutory/customary tenure arrangements Legal access Forest laws/land use laws Statutory/customary laws and regulations Relevant labour laws
	Interaction	Actors	Government; private sector; community members/plantation labourers; civil society
		Management arrangements	Permits/restrictions Voice in decision-making Labour unions Statutory/customary rights
	Implementation	Enforcement	Monitoring
			Sanctions

3.2.1 Case one: Kwamisa forest reserve

The private investor concerned had been assigned one compartment⁷ in the Kwamisa forest reserve. The Kwamisa forest reserve falls under the Offinso forest district and is situated to the northwest of Kumasi, in the borderland of the Ashanti and Brong-Ahafo regions (see Figure 3.2). The reserve was established in 1928 and comprises 83 km² of mostly degraded forest land (Hawthorne & Abu-Juam 1995: 160-161). More than two decades ago, Hawthorne and Abu-Juam found that heavy logging damage occurred throughout the reserve and that large portions of forest had been heavily burnt (*ibid.*). When we visited the Kwamisa forest reserve, we could, from a hilltop at the fringe of the reserve, overlook a rather large territory to the north, which looked highly degraded indeed (see Figure 3.3).

⁷ A compartment is equal to 128 hectares.

Figure 3.2: Map showing a part of the Kwamisa forest reserve and fieldwork sites.



Sources: upper map adapted from Google Maps⁸; inset adapted from U.S. Department of State⁹; topographical map adapted from Survey of Ghana map 1:50,000, Sheet 0702C3, acquired from Lands Commission, Kumasi.

⁸ <http://maps.google.nl/maps?q=ghana&oe=utf-8&rls=org.mozilla:nl:official&client=firefox-a&um=1&ie=UTF-8&hl=nl&sa=N&tab=wl>

⁹ <http://www.state.gov/r/pa/ei/bgn/2860.htm> .

Figure 3.3: Degraded forest land in the Kwamisa forest reserve.



To study this case in greater detail, we decided to administer questionnaires in the forest-fringe villages of Ahwerewam and Breme; the communities where the private investor said he was having most difficulties. Both villages are situated near the southwestern border of the forest reserve. Administratively, Ahwerewam lies in the Ahafo Ano South district within the Ashanti region, while Breme is located in the Tano South district of the Brong-Ahafo region. The population of Ahafo Ano South district is estimated to be approximately 160,000.¹⁰ The capital Mankranso had a population of approximately 20,800 in the year 2000.¹¹ In 2006, the population of Tano South district was estimated at 61,693, of which 12,591 individuals lived in the district capital Bechem.¹² Both Mankranso and Bechem are sizeable towns with plenty of amenities, including high schools, guesthouses, banks and medical facilities. Besides, both towns are characterised by heavy traffic and a lot of market activity, due to their location along the Kumasi-Sunyani highway.

The population of Ahwerewam probably lies somewhere between 1,500 and 2,500, while Breme had 1,579 inhabitants in 2006.¹³ In both Ahwerewam and Breme agriculture constitutes the main source of income. The two villages, however, both have to cope with a shortage of arable land, compelling many farmers to cultivate plots far from home. In both villages some small shops and primary schools can be found, but the communities are reliant on other towns for all other services. A typical dwelling in Ahwerewam or Breme is a small concrete building with a roof of corrugated iron (see Figure 3.4). Both villages are connected to the electricity grid and in either case standpipes provide access to drinking water. Most people in the two communities are Christian, but Breme is also home to a considerable number of Islamic migrants from northern Ghana.

¹⁰ http://www.ahafoanosouth.ghanadistricts.gov.gh/?arrow=atd&_id=13&sa=4567

¹¹ <http://www.tageo.com/index-e-gh-cities-GH.htm>

¹² http://www.ghanadistricts.com/districts/?r=10&_id=41&sa=4455

¹³ http://www.ghanadistricts.com/districts/?r=10&_id=41&sa=4455

Figure 3.4: Typical dwellings along unmetalled road in the village of Ahwerewam.

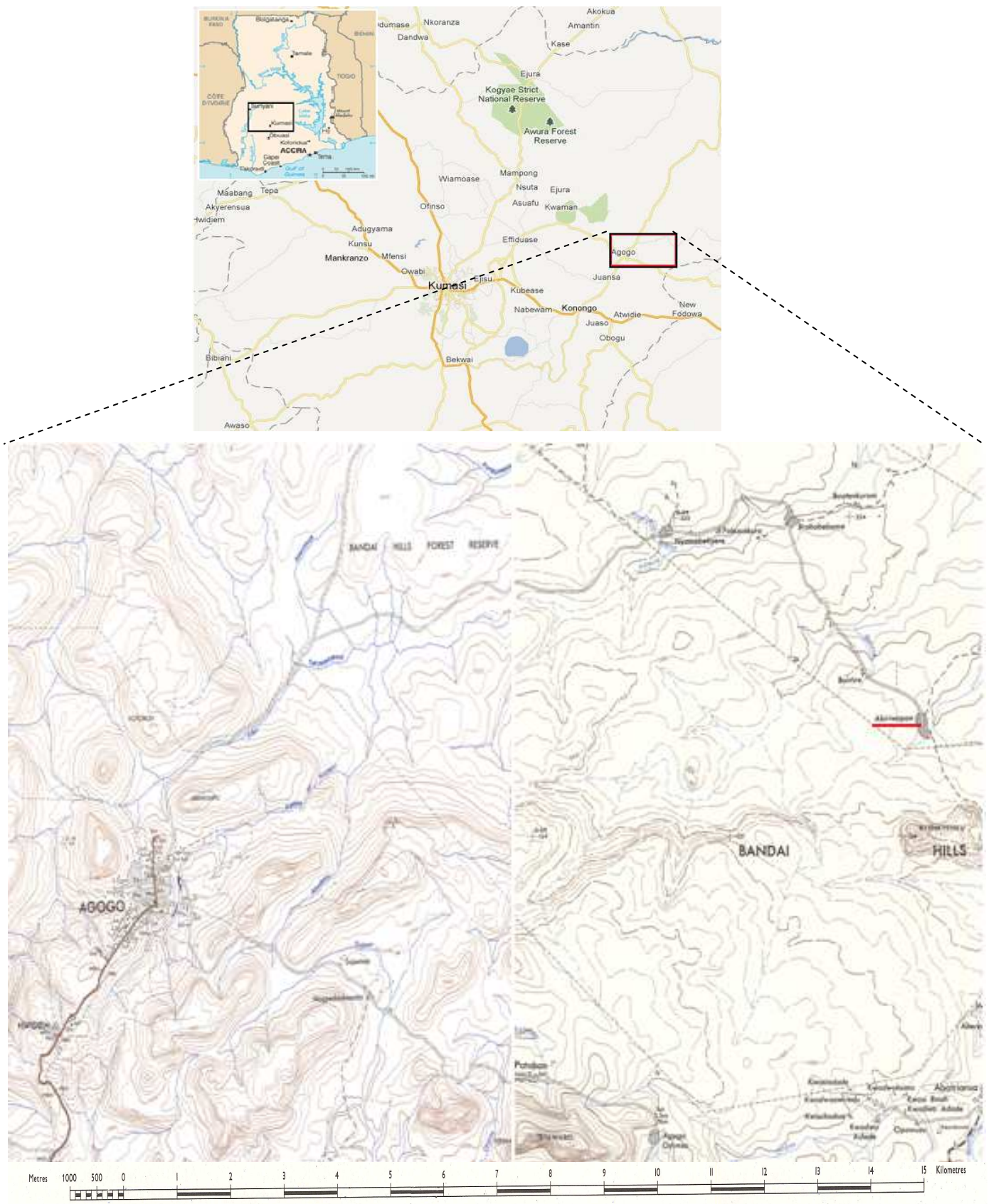


3.2.2 Case two: Bandai Hills forest reserve

We traced a second major conflict on the basis of interviews with several private investors and key informants, who were aware of commercial plantation-related conflicts in the area around Agogo. When we visited Agogo, the investors we interviewed referred us to one particular plantation in the Bandai Hills forest reserve where conflict had been going on for some years. We decided to select this conflict for a second case study and returned to the Agogo area three weeks later to visit the plantation and interview its owners and the plantation workers.

The Bandai Hills forest reserve is located in the eastern periphery of the Ashanti region and falls within the Juaso forest district (see Figure 3.5). The reserve was established in 1928 and covers an area of 161 km², of which the greater part is severely degraded (Hawthorne & Abu-Juam 1995: 126). As a result of large-scale logging, the reserve's landscape is predominantly open and grassy and in fact more typical of savannah than forest.

Figure 3.5: Map showing a part of the Bandai Hills forest reserve and fieldwork site.



Sources: upper map adapted from Google Maps (see Footnote 8); inset adapted from U.S. Department of State (see Footnote 9); topographical map adapted from Survey of Ghana map 1:50,000, Sheet 0601A1 and Sheet 0602B2, acquired from Lands Commission, Kumasi.

In examining this case, we administered questionnaires at the plantation in question, as well as in the nearby villages of Abrewapong and Mankala.¹⁴ Both these villages are situated in the Asante Akim North municipal district, which in 2010 had an estimated population of about 170,000.¹⁵ The merged towns of Konongo and Odumasi, which are favourably located along the Accra-Kumasi highway, form the capital of the district. However, with almost 50,000 inhabitants in the year 2000, Agogo is the district's most populous town.¹⁶ Agogo offers numerous amenities, including restaurants, hotels, banks and high schools, and also serves as gateway to many nearby villages.

Abrewapong and Mankala respectively lie about 20 and 25 km from Agogo. There were no official figures available, but the population of each of the villages does probably not exceed 500. Agriculture is by far the most important productive activity in both communities and many farmers trade their produce at the Agogo market. The commercial plantation we visited provides employment to some 20 individuals from Abrewapong. Furthermore, there is charcoal production in both communities and one of the respondents in Abrewapong showed me the grasscutters¹⁷ he is raising. Apart from a tiny shop in each of the two villages, there are no services whatsoever. In both villages there is a borehole where everyone collects water. Most houses in Abrewapong and Mankala are made of mud, wood and other natural materials (see Figure 3.6).

Figure 3.6: Typical dwellings in the village of Abrewapong.



¹⁴ Mankala is not on the map shown in Figure 3.4. This tiny village is situated a few kilometres from Abrewapong (named Abiriwapon on the map), along the track (discontinuous line) to the Northeast.

¹⁵ <http://asanteakimnorth.ghanadistricts.gov.gh/>

¹⁶ <http://www.tageo.com/index-e-gh-cities-GH.htm>

¹⁷ The grasscutter, also referred to as cane rat or cutting-grass, is a large rodent occurring in grassland and wooded savannah throughout the humid and sub-humid areas of sub-Saharan Africa (OIA 1991: 233-235). In Ghana grasscutters are considered a delicacy and are popularly hunted as a source of bush meat. Moreover, as a means of agricultural extension, grasscutters are increasingly raised as backyard livestock for sale of their meat.

3.3 Research methods

3.3.1 Units of analysis and units of observation

The units of analysis in this research are conflicts regarding commercial plantation development in Ghana's high forest zone and the units of observation are the actors that are involved in commercial plantation development. The central dependent variable in the research is conflict issues, and the independent variables include the actors, institutions, conflict management strategies, laws and regulations involved in commercial plantation development.

At the plantation we visited during the second field trip we managed to include all workers in the survey, providing us with the best attainable view of their experiences and perceptions. In administering the questionnaires in the villages, however, we used purposive sampling in order to select individuals (formerly) involved in commercial plantation development. Within this target group we tried to select respondents as randomly as possible, but there were a few things hampering this. Firstly, due to the fact that we visited the villages in the afternoon, a lot of potential respondents were not available, because they had gone out to work on the land. Secondly, we relied on the chiefs to inform potential respondents about our intentions; a procedure that could involve arbitrary selection of respondents and therefore might entail an unbalanced reflection of those eligible for taking part in the survey. Thirdly, most respondents came forward to find us after they had been made aware of our presence, which may have led to the exclusion of warier and less assured individuals, while those more confident were more likely to be included in the sample.

Even though the sampling was not random nor based on a clear methodological principle, our pragmatic approach best fit the purpose of the research, as it quickly introduced us to the relevant persons and assured us of a relatively large number of respondents in the little time available.

3.3.2 Data collection methods

A variety of data collection methods were used, geared towards the several categories of respondents that participated in the research. Below is a description of the various data collection methods employed.

Desk study

Both before and during the fieldwork period, I gathered secondary data such as laws, detailed maps of study areas and official documents regarding plantation development. Data from such sources greatly enhanced my understanding of legal provisions on forest resource use, land use and access to land, and the differences between customary and statutory laws and tenure arrangements.

Semi-structured interviews with key informants

In order to obtain a general overview of the current state of plantation development in Ghana, I conducted semi-structured interviews with key informants at TBI-Ghana, the Forestry Research Institute of Ghana (FORIG) and various offices and divisions of the Forestry Commission (FC) (n=10). These key informants provided me with clarifying information on the differences between various types of plantations, the functioning of governance arrangements and the roles and responsibilities of the various actors involved in commercial plantation development. Moreover, several FC officials were so kind to hand me particularly helpful official documents and detailed statistics on the extent and progress of commercial plantation development.

Interviewing key informants also enabled me to generate a nuanced view of the wide variety of issues and perceptions that characterise conflicts regarding commercial plantation development. As the forestry officials and researchers were not actively involved in any plantation-related conflicts themselves, they could comment on such conflicts in the role of objective observer. Therefore, this type of data collection was of crucial importance in obtaining a well-balanced dataset and avoiding a black-and-white representation of plantation-related conflicts.

Semi-structured interviews with private investors

To generate a global understanding of the points of contention in commercial plantation development, I held semi-structured interviews with private investors operating within the Juaso and Offinso forest districts (n=12). In addition to being the most obvious respondents in this research, the investors also were the most accessible persons directly involved in commercial plantation development, because most of them speak English and live in major, well accessible towns. Since private investors are fully responsible for their own plantations, they generally are familiar with the ins and outs of commercial plantation development and are well aware of potentially controversial aspects within plantation development. Indeed, the

general overview of conflicts around commercial plantation development in Chapter 5 is mainly based on the accounts of private investors, which also formed the decisive factor in the selection of cases. Apart from introducing me to conflicts, however, these interviews also revealed some of the successes achieved through commercial plantation development and provided insight into how plantation development works in practice.

Interviewing private investors was a straightforward and efficient means to get a basic view of conflicts around commercial plantation development. It is important to realise, however, that the reliance on information from private investors affects the research in such a way that it could lead to biased results. Although the private investors generally spoke candidly about all aspects of commercial plantation development, it is possible that some of them painted a picture that differs from reality. It is not inconceivable that investors purposively trivialised discordant situations or that they did not interpret a certain situation as a conflict, whereas another party would have done so. An empirical focus on another group of actors would therefore probably yield different research results. During fieldwork I have only visited the plantations of those investors involved in the case studies, and consequently only interviewed the workers at those two plantations. Ideally, I would have visited more plantations and local communities to obtain a more balanced general overview, but this was beyond the time and financial means available for this research.

Questionnaire

Local community members and plantation workers at the several fieldwork sites were interviewed using a questionnaire (see Appendix) which took around 35 minutes to complete (n=62). Table 3.2 shows the distribution of the respondents to the questionnaire among the visited villages and according to sex. The questionnaire contained closed as well as open questions and was made up of sections on 1) biodata, 2) livelihood aspects, 3) commercial plantation development and 4) conflict issues and management. Conflicts are complex and changeable social situations, and are therefore extremely difficult to comprehend by means of a standardised questionnaire. To nevertheless enable respondents to comment on a conflict in their own words, most of the questions in the fourth section were open-ended. Although a structured questionnaire remains an imperfect means to study conflicts, a large number of open questions gives respondents considerable freedom to express their feelings and perceptions, which are central to any conflict.

Table 3.2: Number of respondents to the questionnaire per village and according to sex.

Village	Number of respondents		
	Female	Male	Total
Ahwerewam	9	7	16
Breme	10	6	16
Abrewapong	9	11	20
Mankala	4	6	10
Total	32	30	62

Focus group discussion

In Ahwerewam, one of the villages bordering the Kwamisa forest reserve, a group discussion developed spontaneously when we were planning on administering questionnaires. Upon our arrival in the village, an introductory meeting was staged at which a substantial number of people assembled. It immediately became apparent that the villagers were fed up with the conflict situation and that they were eager to voice their opinion about the matter. When they started to debate fervently among themselves, we seized the opportunity to turn the meeting into a focus group discussion. This group discussion was invaluable in understanding the conflict dynamics and gave us a good sense of the intensity and the impact of the dispute. It should be noted, however, that a handful of those present dominated the discussion and that some of the attendants might have been intimidated by the presence of the chief and village elders. Nevertheless, I believe the focus group discussion was instrumental in generating a more articulated view of the feelings and perceptions of the villagers involved in the conflict.

3.4 Limitations and ethical issues

3.4.1 Limitations during fieldwork

The most obvious constraints during fieldwork were the narrow time frame and the limits to my budget. In relation to these factors several other limitations arose, including the restricted possibility to undertake field trips. The fact that the commercial plantations we visited were quite remote and difficult to access implied that the field trips required careful planning and could not be taken opportunistically. Besides, the field trips were quite costly, as they entailed

expenses on fuel, accommodation, bars of soap¹⁸ for the respondents and the remuneration of research assistants.

The limited possibility to spend time in the villages entailed other limitations, notably that we were not able to do in-depth interviews and therefore could not interact with respondents in a more personal way. In each of the villages the locals received us with open arms and treated us with great hospitality and obligingness. Nevertheless, I felt a certain distance persisting between the community members and me. In my eyes this is hardly surprising, since we each time entered a village in the morning, announced why we were there, administered the questionnaires, and already left the same day in the afternoon.

In each village we first introduced ourselves and carefully explained the reason of our visit, but the fact remains that trust, rather than arising spontaneously, has to develop gradually. It is perfectly understandable if people were somewhat wary, or even harboured suspicion, when we entered their village in the NGO's four-wheel drive. Moreover, the fact that I am evidently an outsider to Ghanaian society might have caused people to exercise more caution than they normally would. Even though I had the impression that most respondents spoke frankly, it is possible that some of them exercised restraint or gave answers they considered socially desirable. When I would have spent more time with the locals, such reserves might have faded away and cultural differences would have been likely to play a less important role. Although our short visits to the villages served the goal of learning some of the perceptions of local community members, I therefore would have preferred to stay in the villages longer to have more elaborate, qualitative discussions.

My ability to interact with local community members was diminished even more owing to the existing language barrier. Even though the national language of Ghana is English, most people in the villages only spoke local languages, notably the Akan language Twi. Initially, I tried to administer some of the questionnaires myself, but this turned out to be very time-consuming and unproductive. The interviews with local community members and plantation labourers were therefore conducted in Twi by my Ghanaian colleagues,¹⁹ whereas I myself interviewed government officials in English. It should be stressed that my fellow

¹⁸ At TBI-Ghana respondents to questionnaires are usually compensated for their time by presenting them a small token of gratitude, such as a bar of soap.

¹⁹ On the first field trip, I was accompanied by Joseph Yaw Mensah and Patrick Opoku, who were introduced to me by Mercy Derkyi. At the time of my fieldwork, Joseph was an MSc student of agroforestry at KNUST; Patrick is a former intern with TBI-Ghana. On the second field trip, I was accompanied by Joseph and Thomas Insaiddoo. Thomas is a PhD student with KNUST and TBI-Ghana, with support of the UvA. In addition to assisting me during the second fieldtrip, Thomas and I jointly interviewed private investors several times.

researchers were highly capable and knowledgeable about forest governance and plantation development. Nevertheless, it remains essential to acknowledge the potentially distorting effects of translation. During the focus group discussion the translation process led to some complex interview situations, and there probably has been a certain loss of nuance in some of the questionnaires.

This is particularly important to realise in studying conflict, because ways and words to describe conflicts are to a large extent culturally bound and therefore difficult to render into another language. In Twi there basically are two words to refer to a conflict situation: *ntawatawa* and *ntokwa*. The former most closely corresponds to the English word ‘misunderstanding’, whereas the latter indicates outright violent conflict. As there is no word in Twi to describe any stage of antagonism between *ntawatawa* and *ntokwa*, the English word ‘conflict’ is difficult to translate into Twi and thus requires some explanation. The other way around, certain phrases in Twi that denote a specific type of controversy may just be translated into ‘conflict’. In this way a subtle choice of words can easily get lost in translation. Although translation inevitably has an effect on the research results, I am confident that the loss of information with particular value to this research was limited due to my colleagues’ competence and familiarity with the fieldwork objectives.

3.4.2 *Ethical issues*

In doing research it is of crucial importance to reflect on ethical aspects during the entire research process. This particularly applies to fieldwork in international development studies, where large imbalances in economic opportunities and access to information do often exist between the researcher and the research participants. It is imperative to acknowledge these unequal power dynamics and to be aware of the fact that research participants invest their precious time in a foreign student’s research that they do not necessarily consider beneficial to them. As a token of gratitude and as compensation for their effort and time, we gave each survey participant a bar of soap after completing the questionnaire. Besides, I will send the research results²⁰ to all parties involved and I do hope that the research, humble as it is, might eventually contribute to more equitable and harmonious forest governance. The principle of

²⁰At the end of my stay in Kumasi, I held a presentation at TBI-Ghana in which I presented my preliminary research findings and some tentative conclusions. This is standard procedure when students carry out fieldwork under the auspices of TBI-Ghana, just like presenting a research proposal shortly after arrival. Furthermore, within the UvA-KNUST-TBI project info sheets are usually produced on the basis of research results of students’ fieldwork.

reciprocity is central in this respect; I hope that not only I, but also the research participants and other parties concerned will gain from the research.

Furthermore, all primary data collection took place only after interviewees had given their consent in the form of a verbal agreement. It was thereby stressed that participation would take place on a voluntary and anonymous basis and that all information would be treated confidentially. We always tried to be perfectly clear about this, since anonymity and confidentiality are particularly desirable in research on a sensitive matter like conflict situations.

In order to encourage people to speak frankly, it is also of crucial importance to make the research participants comfortable with being interviewed and to establish an atmosphere of mutual trust. To achieve this during fieldwork, we each time tried to create an informal atmosphere in which both the interviewer and the interviewee felt at ease. At the beginning of each interview, moreover, we emphasised that the interviewee could refuse to answer any question and that they could abort the conversation whenever they wanted. At the end of the interview, then, participants were asked whether they had any further questions in relation to the interview or the research.

3.5 Summary

This chapter presented the conceptual scheme and the operationalisation of the main concepts. It also elucidated the approach taken in selecting conflict cases and study sites. Conflict cases were selected on the basis of an introductory meeting organised by TBI-Ghana and interviews with private investors. The two conflicts that were selected for further examination occurred on plantations in respectively the Kwamisa forest reserve and the Bandai Hills forest reserve. Data were gathered by means of semi-structured interviews with key informants (n=10) and private investors (n=12), questionnaires (n=62) and one focus group discussion. The main limitations during fieldwork were the limits to the time and budget available, and the language barrier that existed between me and most people in the visited villages. Ethical considerations mainly concerned compensating respondents for their lost time and ensuring informed consent. The next chapter describes the governance context in which commercial plantation-related conflicts in Ghana take place.

4. Forest governance and plantation development in Ghana

This chapter deals with forest governance and plantation development in Ghana. It first gives a description of the evolution of the governing of forests and forest reservation in Ghana, followed by an overview of the variety of actors involved in forest governance and a discussion of land and tree tenure. Attention is then paid to plantation development in general, with a description of the different types of plantations and the extent of plantation development. Subsequently, the chapter zooms in on commercial plantation development, with particular attention for benefit sharing and the extent of commercial plantation development.

4.1 Forest governance in Ghana

4.1.1 Forest governance in historical perspective

The forestry sector in Ghana has undergone great transformation since the first forest policy was issued in 1909, marking the advent of scientific forestry in the country (Derkyi forthcoming a). During the first half of the twentieth century the focus was on forest protection and preservation. In this period large tracts of land were appropriated by the colonial government for the creation of forest reserves (see Section 4.1.2). In the process of forest reservation, customary systems were created that vested land in paramount chiefs, thereby empowering the state through the chiefs (Amanor 1995) (see Section 4.1.4). By colonising forests through the traditional authorities the colonial government gained control over local communities as well as over land and forest resources.

The 1948 Forest Policy marked the shift from the focus on protection towards a utilitarian perspective, with a focus on ‘maximum productivity and value on the basis of sustained yield’ (Smith 1999, cited in Opoku 2005: 20). However, the state-centred organisation of Ghana’s forestry sector continued to exist in the second half of the twentieth century. After gaining independence in 1956 the structure and functioning of the forestry sector remained largely intact. Indeed, state control over natural resources was intensified by succeeding governments and the timber industry retained its central position (Sasu 2004: 7). As timber exploitation was prioritised in the period of the 1948 Forest Policy, this period is sometimes referred to as the era of ‘timberisation’ (Kotey *et al.* 1998; Bilijo 2005: 29).

In the 1990s, influenced by global changes in governing approaches to natural resources, Ghana's forestry sector saw a major paradigm shift towards decentralisation and collaboration, marked by the establishment of the 1994 Forest and Wildlife Policy (Derkyi forthcoming a). This policy, which is supposed to embody the shift from government to governance in Ghanaian forestry, focused attention on local access to natural resources and participatory forest management and protection (*ibid.*). The 1994 Forest and Wildlife Policy is implemented through the Forest Development Master Plan (FDMP, 1996 - 2020) (Odoom 2002: 42). The main purposes of the FDMP are to ensure sustainable production of timber and to increase the involvement of individuals and communities in the protection and management of forest resources. In accordance with the global trend of increasing decentralisation and privatisation in forest governance, which was described in Chapter 2, the FDMP envisages the involvement of a wide range of actors in tree planting and plantation development. Specifically, it seeks to increase the engagement of private actors in forest governance (*ibid.*).

Although the 1994 Forest and Wildlife Policy set clear objectives for achieving inclusive forest governance, it has received a lot of criticism for not living up to its aims. According to Agyeman *et al.* (2003), the policy failed to provide a clear framework for benefit sharing and participatory forest governance. Concordantly, Agyeman *et al.* (2010: 24) argue that farmers and members of forest-fringe communities are still underrepresented and that there is a lack of consultation with local people in the formulation of forest policies. Other critics altogether dismiss the 1994 Forest and Wildlife Policy as empty rhetoric, stating that the forestry sector in Ghana is still excessively centralized and essentially a vehicle of the timber industry (e.g. Opoku 2006; Treue 2001). It should be noted, however, that the government recognises that progress has been slow in increasing the efficiency and inclusiveness of forest governance (FC 2001). It is acknowledged that, although the policies may be in place, the real challenge is to enforce the laws and translate notions of sustainability and participation on paper into equitable collaborative forest governance in practice.

With reference to the interactive governance approach (see Section 2.1.1), Ros-Tonen *et al.* (2010: 64) argue that the forestry sector in Ghana is currently characterised by a 'blend of hierarchical and co-governance modes of governance'. The hierarchical mode of governance, which is a legacy of colonial forest management, is embodied by the FC. The co-governance arrangements find their origin in the 1994 Forest and Wildlife Policy and mainly refer to provisions relating to community forestry. However, Ros-Tonen *et al.* (*ibid.*) conclude that 'in practice the hierarchical mode of governance prevails over co-governance', both in customary and statutory governance arrangements (see Section 4.1.4).

4.1.2 Forest reservation

Ghana's high forest zone covers approximately 8.2 million hectares, representing about a third of the country's total land area (Agyeman *et al.* 2010: 1). However, the greater part of the tropical forests that originally covered this vast area have been cleared. By 1987, over 75% of Ghana's originally wooded land had been deforested (*ibid.*). The remaining forests in Ghana are classified into two categories: reserved forests (forest reserves) and unreserved forests (off-reserve areas).

The reservation of forests in Ghana was started in 1927 by the British colonial administration following the establishment of a forest ordinance in the same year (Hawthorne & Abu-Juam 1995: 5). The forest ordinance, which was formulated in reaction to land right disputes and early reports of alarming deforestation, enabled the newly formed Forestry Department (the predecessor of the FC) to reserve forest areas for management by the state (Thompson 1910). The initial target had been to reserve 25% of the forest zone, and anything below this figure was considered inadequate (Foggie 1962). Ultimately, 204 forest reserves²¹ were established in the high forest zone, representing about 20% of its area (Agyeman *et al.* 2010:1). Today, a similar percentage of Ghana's original forest cover remains (Hawthorne & Abu-Juam 1995: 11). This is not coincidental: current satellite images of southern Ghana display a mosaic of forest fragments corresponding very closely to a map of the forest reserves within the high forest zone (Mayers & Kotey 1996: 2). Outside the forest reserves there is virtually no closed canopy forest left.

This pattern of forest fragmentation could, ironically, be interpreted as a manifestation of the success of forest reservation in Ghana. However, deforestation continues to date and the fact that there are no significant areas of unreserved forest left puts enormous pressure on the forest reserves in Ghana (Hawthorne & Abu-Juam 1995: 49). Even though the boundaries of most reserves have been respected, there has indeed been serious and widespread degradation of many reserved forests from within. In 1995, Hawthorne and Abu-Juam (1995) systematically assessed the state of forest reserves in Ghana's forest zone, using a point system in which they classified the forest's condition into six categories (see Table 4.1).

²¹ Although the number of forest reserves in Ghana has remained the same over the past few decades, divergent numbers are mentioned in the literature. According to Boakye and Baffoe (2006: 2) there are 282 forest reserves in the whole of Ghana. Abebrese (2002) gives a number of 266 gazetted forest reserves, of which 200 fall within the high forest zone. Agyeman *et al.* (2010: 1), whom I follow, also mention a total of 266 forest reserves, but count 204 reserves in the high forest zone.

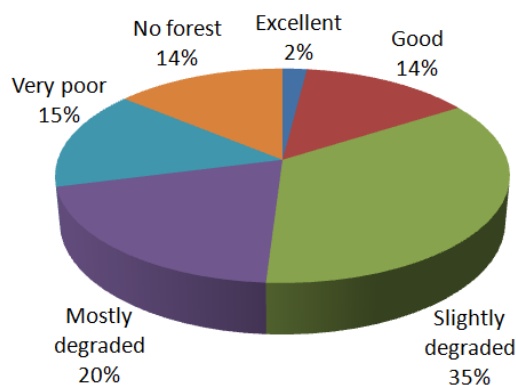
Table 4.1: Condition scores for forest reserves.

Score	Definition
1. Excellent	Few signs (< 2%) of human disturbance (logging/farms) or fire damage, with good canopy and virgin or late secondary forest throughout.
2. Good	With < 10% heavily disturbed. Logging damage restricted or light and well-dispersed. Fire damage none or peripheral.
3. Slightly degraded	Obviously disturbed or degraded and usually patchy, but with good forest predominant. Maximum of 25% with serious scars and poor regeneration; maximum of 50% slightly disturbed, with broken upper canopy.
4. Mostly degraded	Obviously disturbed and patchy, but with bad forest predominant; 25-50% serious scars, but maximum of 75% heavily disrupted canopy. Or: forest lightly burnt throughout.
5. Very poor	Forest with coherent canopy < 25% (more than $\frac{3}{4}$ disturbed), or more than half the forest with serious scars and poor or no forest regeneration; or almost all heavily burnt with conspicuous <i>Eupatorium</i> and other pioneers throughout.
6. No significant forest left	Almost all deforested with savannah, plantation or farm; < 2% of good forest or 2-5% of very disturbed forest left; or 5-10% left in extremely poor condition (e.g. as scattered trees or riverine fragments). Remnants with little chance of surviving 10 years.

Source: Hawthorne & Abu-Juam (1995: 13).

The authors found that, according to their categorisation, only 16% of the forest reserves in Ghana's forest zone were in good condition, while the other 84% of the reserves were in a state of slight degradation at least (see Figure 4.1). The Kwamisa forest reserve and the Bandai Hills forest reserve, the respective locations of the two case studies in this research, were assessed heavily degraded and were both assigned a score of 5 (*ibid.*: 127, 160).

Figure 4.1: The state of Ghana's forest reserves.



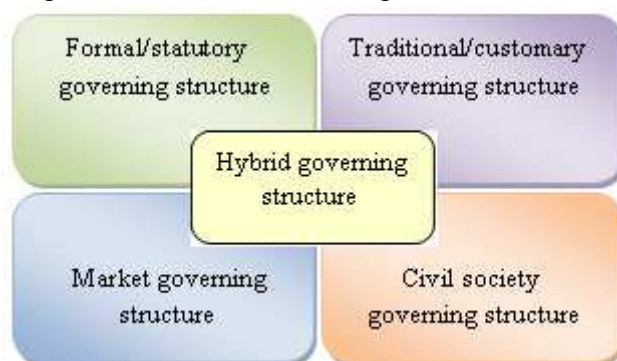
Source: data from Hawthorne & Abu-Juam (1995).

Ghana's forest reserves serve a number of distinct purposes. Merely 21% of the total area of reserved forests is designated for permanent protection, whereas 47% is managed as production areas from which timber is harvested (Agyeman *et al.* 2010: 1). The remainder of the reserved forest areas are earmarked for conversion, convalescence and other purposes, such as research regarding Ghana's policy towards environmental conservation and management.

4.1.3 Actors in forest governance

There are a multiplicity of actors involved in forest governance in Ghana, including forest-fringe communities, traditional authorities, private investors, timber operators, millers, government officials, NGOs and research institutions (Ros-Tonen *et al.* 2010: 65-70). The roles, responsibilities and interests of the various actors are widely divergent, but all parties in forest governance are somehow interrelated as there are countless interconnections between the several actors. This implies that forest governance is a dynamic process, as the (in)actions of one actor carry implications for others. The different actors can be classified into five separate categories: the formal/statutory governing structure, the traditional/customary governing structure, the market governing structure, the civil society governing structure and the hybrid governing structure, which includes actors that could be assigned to two or more of the other categories (*ibid.*: 65) (see Figure 4.2).

Figure 4.2: Categories of actors in forest governance in Ghana's high forest zone.



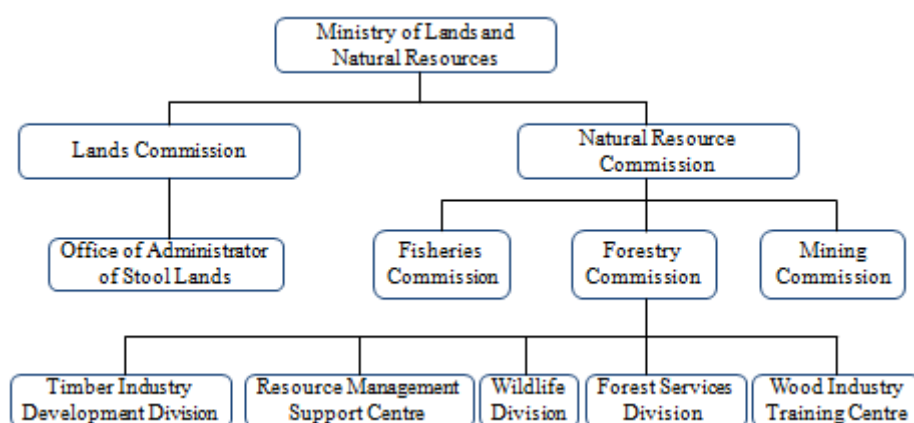
Source: Ros-Tonen *et al.* (2010: 65).

Actors in the formal/statutory governing structure

Actors within the formal governing structure include agencies that have a legal mandate to manage natural resources; these agencies are displayed in Figure 4.3. The Ministry of Lands

and Natural Resources (MLNR) is the central authority in Ghana in the field of natural resources and is responsible for legislation and policymaking with respect to land, forests, wildlife and mineral resources. The MLNR is split up into the Lands Commission and the Natural Resources Commission, of which the Forestry Commission (FC) is part. The FC is charged with regulating the use of forest and wildlife resources, the management and conservation of those resources and the coordination of policies relating to them.²² The FC embodies five different divisions, of which the Forest Services Division (FSD) and the Resource Management Support Centre (RMSC) are most relevant to this study.

Figure 4.3: Position of the Forestry Commission in the formal governing structure.



Source: adapted from Derkyi (forthcoming a).

The FSD is the executive agency of the FC in the sphere of forests resources and is responsible for the everyday management of those resources, as well as for the implementation of policies regarding forests and forest plantations. A special subdivision of the FSD, the Plantations Department (PD), is charged with the implementation and coordination of the NFPDP (FC 2008: 1). Furthermore, the FSD has regional and district departments, the latter of which are responsible for drawing up management plans for Ghana's forest reserves. The RMSC is the technical wing of the FC and is responsible for monitoring the state of Ghana's forest resources and the implementation of forest-related policies.²³ The RMSC also provides several technical services, as well as training to other divisions of the FC and other organisations within the forestry sector. Moreover, if a conflict concerning a commercial forest plantation is reported to the FC, RMSC officials usually visit

²² <http://76.12.220.51/page.php?page=46§ion=22&typ=1>

²³ <http://76.12.220.51/page.php?page=46§ion=22&typ=1&subs=252>

the plantation in question to inspect the situation and mediate between the parties involved (FSD assistant regional manager Ashanti region, interview, 23 March 2011). Actors that do not officially belong to the formal governing structure but are closely related to it include national academic and research institutions (e.g. KNUST; FORIG), as well as foreign governmental donor agencies and inter-governmental organisations such as the Food and Agriculture Organization of the United Nations (FAO) (Ros-Tonen *et al.* 2010: 67).

Actors in the other governing structures

The traditional governing structure consists of customary institutions and communities. In Southern Ghana, customary institutions include village chiefs²⁴, divisional chiefs and paramount chiefs, as well as councils of elders at all levels of chieftaincy (Asare 2000). Within the market governing structure the most important actors in the forestry sector are in the timber industries, with the main groups being loggers, buyers, millers and downstream wood processors (Owusu 2009). Actors within the civil society governing structure include national and international NGOs engaged in environmental advocacy and capacity building, such as Forest Watch Ghana, the Rural Youth Development Organisation and TBI-Ghana (Ros-Tonen *et al.* 2010: 68). Lastly, actors within the hybrid governing structure include Community Forest Committees (CFCs), Modified Taungya System (MTS; see Section 4.2.1) farmers and illegal loggers, chainsaw operators and millers (*ibid.*).

4.1.4 Forest land and tree tenure

As the majority of Ghanaians depend on land for their livelihood, access to land and security of tenure are prerequisites for community development and poverty reduction (Agyeman *et al.* 2010: 34). Whereas in many African countries customary ownership of land has been phased out by the extension of statutory control over land, Ghana has largely retained its traditional system of communal landownership (Sasu 2004: 7). In the course of the twentieth century, however, land administration in Ghana also underwent extensive state intervention and formalisation, with a view to easing land acquisition, securing tenure and promoting investment (Kasanga & Kotey 2001: 1). Public institutions came to exercise land administration functions in the customary sector and large tracts of customary land were compulsorily acquired by the state. As a result, the land sector in Ghana is characterised by a

²⁴ A village chief is locally called *Odikro*, which literally means ‘owner of the village’ (Ros-Tonen *et al.* 2010: 67).

mixture of customary and statutory control and landownership (*ibid.*). The coexistence of customary and statutory ownership is reflected in the fact that the 1992 Constitution officially recognises two tenurial systems: the customary system and the public system (Kasanga 2000: 8). Of all land in Ghana about 78% is under customary ownership, while around 20% belongs to the public system; the remaining 2% is held in dual ownership.

The two tenurial systems comprise a total of five main categories of land (Odoom 2002: 46). The public system, on the one hand, includes state land, which has been compulsorily acquired by the state under the State Lands Act, 1962 (Act 125), and vested land, which has been vested in the state in trust for the appropriate stool under the Administration of Lands Act 1962 (Act 123). As regards vested land, the legal title is transferred to the state, while the beneficiary interests remain with the community (Marfo 2009: 4). The customary system, on the other hand, includes family land, which is vested in a family represented by a head of family, privately owned land and stool land (Odoom 2002: 46). Stool land is land that is vested in stools²⁵ on behalf of communities represented by chiefs. Traditionally, chiefs allocate stool land to community members who are granted usufruct rights to the land and other natural resources on the land (*ibid.*).

Community rights to forest reserve lands and resources

In forest reserves land is vested in the state to be managed in trust for the stools. In order to ensure that rights of landowners and others with usufruct interests were protected in the forest reservation process, several customary rights to forest benefits were given formal recognition (Agyeman *et al.* 2010: 20). With respect to access to forest land and resources, the state recognised admitted farms, admitted rights and domestic use rights. Admitted farms denote the right of farmers who were already present to continue farming in designated areas after reservation. Admitted rights refer to customary rights held by individuals or communities to the forest reserve land and its natural resources (*ibid.*: 21). Domestic use rights, lastly, relate to the right of forest-fringe communities to access forest resources for domestic purposes, such as medicinal use, consumption and construction (*ibid.*).

²⁵ 'Stool' refers to the seat of a chief of an indigenous state which represents the source of authority of the chief (Kasanga & Kotey 2001: 13). Land owned by such a state is referred to as stool land. In the Ashanti region, all land eventually belongs to the *Asantehene*, the Ashanti king, but is vested in stools in 33 Traditional Areas. Each Traditional area is headed by a paramount chief, locally called *Omanhene* (pl. *Amanhene*). The *Amanhene* are the stool land owners in their respective Traditional Areas. In Northern Ghana, the equivalent of the stool is the skin.

Although until present admitted farm have been largely respected by the government, admitted rights and domestic use rights have to a large extent been denied and have consequently fallen into oblivion. Agyeman *et al.* (*ibid.*) observe that, as a result, ‘these rights are now virtually non-existent. Correspondingly, members of forest-fringe communities in Ghana feel that their access to forest resources has been very much restricted and that their tenurial rights have not been guaranteed (*ibid.*: 34). The failure to provide for the protection of land rights and rights to forest resources puts vulnerable groups in society, including the poor, illiterate, women, migrants and tenants at most risk.

In addition to the rights relating to access to forest land and resources, landowners’ rights to a share of the benefits from exploitation and development of the forest resource were established (Odoom 2002: 47). These rights are of specific importance in relation to commercial forest plantation development (see Section 4.3).

Tree tenure

In most parts of Ghana, land is traditionally conceived to include the soil and anything under the soil, such as minerals, and to exclude things on or attached to the soil such as houses and trees (Agyeman *et al.* 2010: 15). With respect to trees this implies that there is a distinction between the ownership of trees per se and ownership of the land on which the trees are. Accordingly, trees are not necessarily included in land transfers and may be purchased or inherited separately (*ibid.*: 33). The separation of land and tree tenure implies that in off-reserve areas tenant farmers do not have ownership rights to the trees on their land, even if they planted them themselves. In such areas, the right to the trees is vested in the owner of the land on which they grow (Odoom 2002: 46-47).

In forest reserves, until recently, all timber resources were vested in the state to be managed in trust for the communities concerned (*ibid.*: 47). However, under the Timber Resources Management (Amendment) Act, 2002 (Act 617) full tree ownership rights are granted to those who plant trees within forest reserves, such as commercial plantation developers (Agyeman *et al.* 2010: 35). The result is a situation in which there is private tree ownership on land that is owned by traditional authorities and managed by the state. In spite of having formal ownership rights to trees, tree planters are only allowed to harvest trees with a Timber Utilization Contract (TUC). In order to obtain such a TUC, tree planters need to be registered with the FC and have approved harvesting and environmental assessment plans.

Customary ownership vs. statutory control

With respect to the governance of Ghana's forest reserves, the traditional distinction between land and trees is reflected in the separation of management of these respective resources in the formal governing structure. Land ownership falls under the jurisdiction of the Office of the Administrator of Stool Lands (OASL), whereas tree ownership is administered by the FC. The fact that these government agencies perform administration functions in the customary sector, illustrates the entanglement of customary and statutory control in Ghana's forest. Kasanga and Kotey (2001: 1) maintain that, although the 1992 Constitution provided full recognition of customary law, statutory law still prevails in Ghana's land sector.

In a similar vein, Odoom (2002: 47) points out that, even though land and naturally occurring trees within forest reserves are under customary ownership, 'in practice the land and trees are managed by the central government with little or no input by stools, village communities and local authorities'. The government has full authority in determining whom, where and when access is granted to forest resources within forest reserves. Correspondingly, Agyeman *et al.* (2010: 40) argue that 'in practice most forestry legislation operates to expropriate all lands from the local communities, since the legal estate and management powers have been transferred to government'. As a result of the prevalence of statutory laws and regulations, the impact of traditional laws and customary practices on plantation development in forest reserves is minimal (*ibid.*: 25). Although the 1994 Forest and Wildlife Policy is aimed at increasing participation in forest governance, little has yet been done to actively promote collaborative resource management due to the reluctance of the state to actually devolve management authority to the local communities.

4.2 The National Forest Plantation Development Programme

In order to curb the disturbing pace of deforestation in Ghana, the Government initiated the National Forest Plantation Development Programme (NFPDP) in 2001 (FC 2008: 3). In September of that year the NFPDP, which is an integral part of the FDMP, was officially launched by the then President John Kuffuor at Ayigbe in the Wenchi district of the Brong-Ahafo region (*ibid.*). The NFPDP seeks to re-establish a sustainable forest resource base that, by satisfying the future demand for industrial timber, is both of great economic benefit and of high environmental quality (*ibid.*: 1). Moreover, the programme aims at creating employment and considerably increasing food production and is therefore expected to contribute significantly to rural poverty reduction and wealth generation.

4.2.1 Strategies of forest plantation development

The NFPDP is currently being executed under five components within three core strategies (FC 2008: 3). The first strategy is to directly involve rural communities in plantation development by assigning them an active role and letting them share in the profits that accrue from the plantations. Within this collaborative approach the best established component is the Modified Taungya System (MTS), which is an altered form of the original Taungya System introduced under British colonial rule. Under the MTS plantations are being established by the FSD in partnership with farmers (*ibid.*). The FSD supplies seedlings, offers technical support and surveys and demarcates plantation areas, while the farmers provide all labour inputs on the plantation, including site clearing, pegging, planting and maintenance. The MTS is an agroforestry system, meaning that farmers are assigned plots of land on the plantation to grow food crops, which they interplant with the trees during the first few years of a plantation's development (Blay *et al.* 2008: 505). The MTS farmers are entitled to 100% of the benefits from the food crops they produce and besides have a 40% share in the returns from timber from the plantation. The other shareholders are the FC, the landowner and the forest-adjacent community, whose respective shares are 40%, 15% and 5% (Agyeman *et al.* 2003: 41).

The second component that is part of this strategy is the Community Forest Management Project (CFMP). Concerning plantation development per se this component is practically identical to the MTS, but there are a few administrative differences (FC 2008: 3). The most important difference is that the CFMP receives its funding from the African Development Bank (AfDB), whereas the MTS is being financed by the Government of Ghana.

The second strategy involves the establishment of industrial forest plantations by the government under the Government Plantation Development Programme (GPDP) (*ibid.*). Because the GPDP is financed through the Highly Indebted Poor Countries (HIPC) funds, the plantations that are part of this programme are colloquially referred to as HIPC plantations. Under this scheme the government hires workers to establish and maintain plantations under the superintendence of plantation supervisors that offer technical direction. The FSD, being responsible for the general management and supervision, monitors progress on the HIPC plantations to ensure compliance with the guidelines for plantation development.

The second government-led scheme within the NFPDP involves the establishment of model plantations (*ibid.*). This component is fully research-oriented and was introduced in

2007 to enable experimenting with tree spacing, mixing species and different planting designs.

The third strategy is to combine forces with private investors by allocating them portions of degraded forest reserves to establish plantations. This strategy of commercial plantation development is central to this study and is described in more detail in Section 4.3.

4.2.2 Extent of forest plantation development

At the outset of the NFPDP the annual planting target was set at 20,000 ha, and with the exception of the years 2004 and 2005, in which the target was lowered to 10,000 ha, this aim has since then been maintained. The total cumulative planting achievement over the first eight years of implementation (2002-2009) is estimated at 142,849 ha, which is slightly more than the cumulative planting target of 140,000 ha for the same period (FC plantations manager, email contact, 1 July 2011). Under the NFPDP a variety of indigenous and exotic economic tree species are planted (see Box 4.1).

Besides the area of replanted forest reserves, the volume of food production and the extent of employment creation are major indicators of the advance of the NFPDP. The programme was initially expected to annually produce 30,000 tonnes of food and create 80,000 jobs, mainly in rural communities (FC 2003: 2). Over the years these expectations have been adjusted several times and in 2008 the aims were 100,000 tonnes of food and 15,000 jobs per year (FC 2008: 4).

Box 4.1: Tree species planted under the National Forest Plantation Development Programme.

Under the NFPDP both indigenous and exotic tree species are planted. The indigenous species include *Mansonia altissima* (Ghanaian name: oprono; international trade name: bete), *Terminalia superba* (ofram; limba), *Terminalia ivorensis* (emire; black afara), *Ceiba pentandra* (onyina; kapok), *Heritiera utilis* (nyankom; niangon), *Khaya ivorensis* (African mahogany), *Entandrophragma angolense* (edinam; tiama) and *Triplochiton scleroxylon* (wawa; samba). It is required that at least 5% of each plantation consists of indigenous species.

The main exotic species are *Tectona grandis* (teak), *Cedrela odorata* (cedrela) and *Eucalyptus camaldulensis* (river red gum).

Source: information from FC (2008: 4).

In the period from 2002 to 2008 the NFPDP yielded an estimated total of 2,591,059 tonnes of food and provided approximately 199,752 full-time jobs, respectively exceeding and lagging behind the total cumulative targets of 550,000 tonnes and 280,000 jobs (*ibid.*: 10). The achievements regarding food production are remarkably well and show an upward trend; only in 2008 the NFPDP produced more than 500,000 tonnes of food.

4.3 Commercial forest plantation development

Commercial plantation development involves the release of portions of degraded forest reserves to private investors for the establishment of forest plantations. The basic idea behind this type of plantation development is that the government puts land at the disposal of private entities that have the financial means the government is lacking .

Potential investors are required to submit a detailed reforestation plan, in which they should elaborate how they intend to develop their plantation. Such a plan should include sections on fire prevention and environmental management. It also must contain information on planting and harvesting schedules, investment schemes and planned infrastructure. Moreover, the reforestation plan should encompass a social and economic plan, in which the investor has to elucidate how he intends to aid the development of the surrounding villages. The investor can only start planting trees in the designated area if the reforestation plan has been approved by the FC (FC plantations manager, interview, 10 May 2011).

After approval of the reforestation plan by the FC, the land lease agreement has to be signed by the private investor, the landowner and the FC. Through this agreement the investor is formally granted access to the land assigned to him/her. It is stated in the land lease agreement that the investor leases the land for an initial period of 50 years at a ground rent of the equivalent in Ghanaian Cedis of US\$ 2 per hectare per year. The ground rent accrues to the landowner, who is also entitled to the equivalent in Ghanaian Cedis of US\$ 7 (negotiable) of ‘drink money’ per hectare (Agyeman *et al.* 2010: 76).^{26 27} This concerns an upfront

²⁶ The private investor pays the ground rent to the FC, after which it is disbursed to the landowner through the OASL (benefit-sharing agreement for commercial forest plantation development). This is an interesting example of the entanglement of customary and statutory institutions in Ghana.

²⁷ The term ‘drink money’ derives from the historical practice to bring a small amount of money or a bottle of schnapps when requesting a chief for land (Ubink 2008: 180). However, rather than a symbolic gift when starting negotiations ‘drink money’ nowadays refers to a single payment per hectare in addition to the annual ground rent.

payment that should be made prior to starting plantation development. After the investor started developing the plantation, he/she is required to report quarterly to the FC on the progress made.

4.3.1 The benefit-sharing agreement

The next step in the formalisation of the project is the signing of the benefit-sharing agreement (BSA). The ‘benefit-sharing agreement for commercial forest plantation development’ is a contract drawn up by the FC with the purpose of providing a legal framework for the sharing of benefits from commercial forest plantation development. The most important provision in the BSA, which has to be subscribed by the private investor, the landowner and the FC, concerns the percentagewise division of proceeds from the plantation. It is stipulated in the BSA that ‘[t]he investor shall receive 90% of the Standing Tree Value²⁸ (STV) of thinnings and the final harvest obtained from the Commercial Forest Plantation.’ The remainder of the revenue accrues to the landowner, the FC and the local community, who are entitled to 6%, 2% and 2% of the STV, respectively.

The BSA also deals with the responsibilities of the various stakeholders within commercial plantation development. The investor, being the initiator and the major beneficiary of plantation development, is personally responsible for the general condition and development of the plantation. Therefore, the primary responsibility of the private investor is to provide the necessary financial, managerial and technical means to establish and properly maintain a forest plantation. This also involves the provision of specific training for plantation workers and the supervision of the plantation. Furthermore, the investor is required to provide labour on the plantation over the entire tree rotation period. To promote local employment, it is made compulsory to recruit unskilled labour from the local community that is a party to the BSA.

The primary responsibility of the FC is to ensure the security of tenure of all parties concerned. In this capacity, the FC is responsible for demarcating and mapping the land that has been allocated to an investor, as well as for monitoring and protecting plantation activities. FC officials regularly visit the commercial plantations to assess the progress that has been made and to check whether any difficulties have arisen. Besides, if the investor requests so, the FC has to provide technical advice on how to establish and manage a forest

²⁸ Standing Tree Value refers to the fee payable for each timber tree felled from the area, including thinnings. The STV of the plantation is determined in consultation with the Chief Executive of the FC.

plantation. Finally, the FC is responsible for the collection of ground rents and other fees, which subsequently are disbursed to the landowner through the Administrator of Stool Lands.

The sole responsibility of the landowner (i.e. the paramount chief of the stool land area concerned) is to guarantee the investor unhindered access to the land that has been allocated to him/her. Finally, the local community members are obliged to assist the investor in preventing and controlling fire on the plantation and in the rest of the forest reserve, as well as in averting illegal activities within the plantation area.

Another part of the BSA with particular relevance to this research is Section 11 on the settlement of disputes (see Box 4.2).

Box 4.2: Regulations concerning the settlement of disputes in commercial plantation development.

11. Settlement of dispute

11.1 Parties shall seek to resolve any disputes concerning the application or interpretation of this Agreement by means of prompt consultation.

11.2 Any dispute arising out of or in connection with this agreement which cannot be settled amicably shall be settled definitively and conclusively in accordance with the provisions of the Arbitration Act 1961 (Act 38) by a panel of three arbitrators. Each party shall appoint one arbitrator and the two arbitrators shall appoint a third arbitrator who shall be the umpire.

11.3 The award of the Arbitral Tribunal shall be final and binding on the parties.

Source: Benefit-sharing agreement for commercial plantation development.

4.3.2 Extent of commercial forest plantation development

In the period from 2002 to 2008 private investors in Ghana planted an estimated total of 15,032 ha, representing 11,1% of the total cumulative planting achievement over the same period of all components of the NFPDP combined (FC 2008: 13). The progress made in 2008 was remarkable, as the 5,374 hectares that were planted that year amounted to over one-third of the total area planted until then under commercial plantation development (*ibid.*). The tree species most commonly planted by commercial plantation developers in Ghana are teak and cedrela (FC plantations manager, interview, 10 May 2011). This is reflected in the fact that all twelve private investors involved in the research had planted teak, while seven of them had planted cedrela.

As of December 2008, 304 private investors were registered with the FC as commercial plantation developer (see Table 4.2). By the end of 2010 the number of registered investors had fallen remarkably to 280. This decline is due to the fact that over the past few years the number of terminated contracts has consistently been larger than the number of newly signed contracts. Indeed, due to poor performance of private investors, the FC in 2010 indefinitely suspended the allocation of land for commercial plantation development (FC plantations manager, interview, 10 May 2011). By adjourning the involvement of new private investors, the FC intends to separate committed investors from the ones that break their engagement. In order to streamline commercial plantation development, the intention is to allow new investors to the programme only when all negligent ones have been excluded. Moreover, the selection of private investors and the acquisition of land will henceforth be more strictly regulated.

Currently the number of private investors involved in commercial plantation development is still decreasing, as contracts continue to be terminated regularly. Investors generally have their contracts terminated either because of non-observance of the agreement or because they simply did not start developing the land that the FC had allocated to them (FC plantations manager, email contact, 1 July 2011).

As can be seen from Table 4.2, more than two-thirds of the private investors were assigned a plot of on-reserve land in the Ashanti region, which illustrates the fact that commercial plantation development in Ghana has so far been highly concentrated in this region. This is also reflected by the fact that the Ashanti region boasts the great majority of commercial plantations for which the land lease and benefit-sharing agreements have been signed.

Table 4.2: Number of private investors in on-reserve areas per region in 2008 and 2010.

Region	No of private investors, 2008	No of private investors, 2010
Ashanti	214	193
Brong-Ahafo	50	50
Eastern	32	28
Northern	4	4
Western	4	5
Total	304	280

Source: data acquired from Forestry Commission, Accra.

As at 28 February 2011, 46 land lease agreements and benefit-sharing agreements had been signed by 40 private parties (see Table 4.3). Out of these 46 sets of agreements, 40 referred to

commercial plantations in the Ashanti region (see Table 4.4). So far, fourteen commercial plantation developers from the Kwamisa forest reserve signed the BSA, against three from the Bandai Hills forest reserve.

Table 4.3: Number of land lease and benefit-sharing agreements signed per year, 2009-2011.

Year	Target	No of land lease and benefit-sharing agreements signed
2009	10	16
2010	10	22
2011*	20	8
Total	40	46

* Until 28 February 2011

Source: data acquired from Forestry Commission, Accra.

Table 4.4: Number of land lease and benefit sharing agreements signed per region.

Region	No of land lease and benefit-sharing agreements signed
Ashanti	40
Brong-Ahafo	3
Eastern	3
Total	46

Source: data acquired from Forestry Commission, Accra.

4.3.3 Limitations to commercial forest plantation development

Private investors may face a variety of challenges in developing a commercial forest plantation. According to Agyeman *et al.* (2010: 31) the main challenges experienced by private investors are related to gaining access to long-term credit and adequate technical facilities. Other constraints include the lack of adequate planting material, the occurrence of fire, the limited know-how in Ghana with respect to plantation development, the existence of illegal timber markets and the sale of plantation timber below the market price by the FC (Odoom 2002: 49-50). Moreover, in relation to land tenure and administration, which was described in Section 4.1.4, Odoom (*ibid.*: 49) identifies the following disincentives with respect to forest plantation development:

- The multiplicity of interests and rights in land, which may vary in different parts of the country, leading to conflicting claims to ownership;
- The lack of reliable maps indicating stool/skin land boundaries which can give rise to disputes; and

- The high probability of conflict concerning tenurial and management arrangements.

These constraints illustrate that current ambiguities in the situation concerning land administration in Ghana and the obscurity with regard to landownership constitute a major factor around which commercial forest plantation-related conflicts may evolve.

4.4 Summary

This chapter described forest governance and forest plantation development in Ghana. Although the 1994 Forest and Wildlife Policy is aimed at participatory governance of forest, hierarchical modes of governance still prevail. There is a wide variety of actors in forest governance, including forest-fringe communities, traditional authorities, private investors, timber operators, government officials and NGOs. The role of traditional authorities is particularly important, as they own most land in Ghana, including the land within the country's forest reserves. The greater part of these forest reserves have suffered substantial deforestation and cultivation. In order to restore tree cover, forest plantations are established in degraded parts of forest reserves. Plantations are being established under five components: Modified Taungya System, Community Forest Management Project, Government Plantation Development Programme, model plantation development and commercial plantation development. Commercial plantation development involves the release of degraded portions of forest reserves to private investors to establish forest plantations. The private investor, the FC and the landowner have to sign the benefit-sharing agreement, in which their rights and responsibilities are laid down. It is stipulated in the BSA that the private investor receives 90% of the plantation revenue, while the landowner, the FC and the local community are entitled to 6%, 2% and 2% respectively. Between 2002 and 2008 more than 15,000 ha were planted under commercial plantation development. Commercial forest plantation development has so far concentrated in the Ashanti region, but has been suspended indefinitely because of widespread non-performance of private investors. The next chapter presents the empirical results on conflicts around commercial plantation-related conflict in Ghana's high forest zone.

5. Conflicts around commercial forest plantation development

This chapter deals with conflicts related to Ghana's forests in general and commercial forest plantations in particular. It starts with a concise discussion of existing literature on conflicts in Ghana's high forest zone, followed by an overview of the types of conflict occurring around commercial plantation development, as identified during fieldwork. Then, two case studies are presented in which two types of conflict are dealt with in greater detail.

5.1. Overview of forest and forest plantation-related conflicts in Ghana's high forest zone

5.1.1. Overview of literature on forest conflict in Ghana's high forest zone

Literature on forest conflicts in Ghana has hitherto focused largely on issues around logging, such as compensation payments, SRA negotiations and illegal chainsaw lumbering (Kotey *et al.* 1998, Marfo 2004a and 2004b, Marfo 2010). Little attention has been paid to conflicts around the multiple functions that forests have besides providing timber. However, several recent studies (Derkyi *et al.* forthcoming b, Ros-Tonen *et al.* 2010) presented analyses that go beyond the timber sector and aim to cover the full range of forest-related livelihood activities around which conflicts occur in Ghana. In one of those studies, Ros-Tonen *et al.* (2010: 74) divide forest and tree-related livelihood conflicts in Ghana's high forest zone into three main categories:

1. Conflicts prevalent in gazetted forest reserves;
2. Conflicts prevalent in off-reserve forest management areas; and
3. Conflicts prevalent in both forest reserves and off-reserve management areas.

Each of these categories is characterised by specific types of conflict involving different actors.

According to Ros-Tonen *et al.* (*ibid.*), conflicts within Ghana's reserved forests typically evolve around illegality issues, the allocation and use of MTS land, and competing land uses (e.g. conservation vs. production, forestry vs. farming). Conflicts concerning illegality issues can be further subdivided into those relating to forest resource use and those relating to forest land use (Derkyi *et al.* forthcoming b). The former category includes conflicts regarding chainsaw lumbering and illegal extraction of NTFPs, while the latter incorporates conflicts

around illegal farming and the expansion of admitted farms. According to Derkyi *et al.* (*ibid.*), the most common type of on-reserve conflict involves FC/FSD officials coming into collision with farmers and NTFP collectors in their efforts to prevent illegal use of forest resources. The actors most commonly involved in on-reserve conflicts are FC officials, traditional authorities, forest-fringe communities, farmers (MTS farmers, illegal farmers, admitted farmers), NTFP collectors and timber operators (*ibid.*).

Conflicts prevailing in off-reserve areas generally concern competing land uses and the use of off-reserve forest land and resources (Ros-Tonen *et al.* 2010: 75). Issues that give rise to conflicts in 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 (Derkyi forthcoming b). Key actors in off-reserve conflicts include farmers, the FSD, tree planters, timber operators and Fulani herdsmen.

Conflicts occurring within as well as outside forest reserves, include conflicts over forest benefits between local community members and their chiefs, conflicts concerning illegal logging between timber operators and the FC or local farmers, and conflicts relating to illegal chainsaw milling between the FC or farmers and chainsaw millers, who are also regularly having disputes among each other (*ibid.*).

5.1.2 Outcomes of interviews with private investors and key informants

The following overview of conflicts related to commercial plantation development is, as explained in Chapter 3, mainly based on the accounts of private investors. However, it also draws from the interviews with key informants, whose input provided a more balanced and forward-looking perspective. Based on the interviews with these two groups of actors I identified the following six types of commercial plantation-related conflicts:

1. Conflicts between investors and farmers regarding illegal encroachment;
2. Conflicts between investors and plantation workers;
3. Conflicts concerning the BSA;
4. Conflicts among investors;
5. Conflicts between indigenous workers and migrant workers; and
6. Conflicts between investors/plantations workers and Fulani herdsmen.

Table 5.1 provides an overview of the incidence of each conflict type relating to the plantations of the twelve developers that were interviewed during fieldwork.

Table 5.1: Incidence of each conflict type relating to plantations of private investors interviewed.

Conflict type	Incidence among developers interviewed
Developers vs. farmers	8
Developers vs. plantation workers	6
Conflicts concerning the BSA ²⁹	0
Conflicts among developers	2
Indigenous workers vs. migrant workers	2
Developers/workers vs. Fulani herdsman	3

Source: interviews with commercial plantation developers, fieldwork 3 March - 12 May.

Below is a concise description of each type of conflict, in which attention is paid to the features, causes and incidence of each type, as well as to the conflict management strategies employed.

Conflicts between investors and farmers regarding illegal encroachment

Conflicts regarding illegal encroachment typically arise when farmers grow crops on a plantation without the permission of its developer. According to several private investors and key informants, farmers sometimes are unaware of the fact that they are impinging on a plantation, yet in other instances do so intentionally. The farmers themselves, however, hold the view that they are exercising their rights of access over land that historically belongs to them. For decades farmers have used reserved forest lands for the cultivation of food crops, mostly without intervention by the FC or its predecessor agencies. With the advent of commercial plantation development, however, large portions of forest reserves have come under the control of private investors, who generally do take action against encroachers.

Most conflicts concerning encroachment are settled informally among developer and farmers, which usually means that the developer drives out the farmers and denies them further access to the plantation. In some cases however, farmers refuse to leave the land, whereupon investors normally organise community meetings to discuss the problem. In exceptional cases encroachment continues after such meetings, causing investors to call in the

²⁹ Six out of twelve private investors whom I interviewed had not yet signed the BSA, in most cases due to unwillingness to sign on the part of traditional authorities. Just like the investors that *had* signed the BSA, however, these investors indicated not to have experienced conflict concerning the BSA.

police. Local community members generally turn to the local traditional authorities when they are experiencing conflict with a private investor. In fact, as their legal position is feeble, they usually rely on mediation by the chief. The role of traditional authorities in dealing with conflicts, however, has no formal recognition and therefore limited value. Consequently, when an investor decides to call in the FC or the police anyway, local community members have a disadvantageous position in conflict management.

Conflicts over illegal encroachment seem to be fairly common, as eight private investors from various forest reserves said to have experienced such issues. The majority of these cases solely involved the unauthorised cultivation of food crops, but on some plantations farmers also deliberately damaged or cut down trees. As there is population growth in many villages and virtually all unreserved forests have been converted into farmland, land scarcity is increasing in many rural areas within the high forest zone. It seems likely, therefore, that the number of conflicts concerning illegal encroachment will rise in the years to come.

Conflicts between investors and plantation workers

Conflicts between private investors and plantation workers occur around a variety of issues, including wage rates, the number of working hours, the size of farming plots on the plantation, and the use of pesticides and other agrochemicals that retard the development of trees. The various conflict issues differ greatly with regard to causes, characteristics and incidence. Discord over wages and working conditions is quite common, but generally short-lived, and is mostly resolved through informal negotiation. Conflicts regarding plantation maintenance and the cultivation of food crops are less common, but usually last longer and tend to be more intense. In some cases such conflicts are limited to repeated warnings, but sometimes they result in deliberate destruction of trees and food crops, threats from both sides and even acts of violence. Escalation of such conflicts often has to do with the absence of a clear contract and a lack of specified agreements.

Several private investors said to have contacted the FC in relation to escalated conflicts with plantation workers. In a few cases private investors even called in the police or took the matter to court. Conversely, plantation workers generally appeal to local traditional authorities in dealing with commercial plantation-related conflicts. In a few conflict cases, a meeting was organised at which the village chief mediated between the private investor and the workers concerned. This customary mode of conflict management, however, is not

formally recognised and can therefore easily be denied by private investors. This is illustrated by the fact that the private investors turned to statutory means of conflict management in case of escalation of the conflict with their workers.

Six investors indicated to have had some kind of conflict with plantation workers. The first case study comprises an in-depth analysis of a long-lasting, multi-issue conflict between an investor and plantation workers.

Conflicts concerning the BSA

So far, tensions concerning the BSA have been largely latent, but many private developers and key informants foresee a proliferation of BSA-related conflicts in the near future. As the NFPDP was commenced in 2001 and the rotation period of teak is at least 25 years, there has not yet been any harvesting of timber trees from commercial plantations and there consequently have not been any returns accruing from commercial plantation development. Expectations are that once commercial plantations yield profits, dormant tensions concerning the BSA will develop into actual conflicts. Indeed, the majority of the key informants were of the opinion that the BSA is potentially the greatest source of conflict in commercial plantation development.

Up till now the primary concern about the BSA, and the main indication of its potential to cause conflicts, has been that some traditional authorities are unwilling to sign the agreement because they deem their share in the returns too low. The *Offinsohene*,³⁰ for instance, recently refused to sign several BSAs, while he had already signed various others before (FSD plantations manager Offinso forest district, interview, 3 May 2011). A possible explanation for some chiefs' dissatisfaction with the BSA is that they feel cheated because they are entitled to 'only' 6 per cent of the timber revenue, as opposed to 15 per cent under the MTS.

Strikingly, the general perception among the other stakeholders in commercial plantation development is that the traditional authorities benefit relatively much and thus have no reason to complain. This view also prevails with respect to the private investors. Correspondingly, all investors I interviewed were satisfied with the BSA and saw no reason not to sign the agreement. Many investors and key informants considered the shares of the local communities and the FC disproportionately small. However, local community members

³⁰ The *Offinsohene* is the *Omanhene* or paramount chief of the Offinso Traditional Area and is, by virtue of his position, owner of all lands that fall within this area (see Footnote 25).

generally have very little knowledge of the BSA and do not have much of a say, as the local community is the only party to the BSA that is not required to sign the agreement. Most of the FC officials whom I interviewed considered the BSA unbalanced, but their influence is limited, as all BSAs must be signed by the chief executive of the FC. Various FC officials were of the opinion that the BSA was hastily put into effect after a cursory decision-making process and therefore advocate a revision of the BSA on the basis of a thorough, deliberative examination involving all actors involved in commercial plantation development.

In a few cases the BSA has not yet been signed because several chiefs claim the ownership of the land on which the plantation is situated. Such competing claims to land are quite common, because stool land boundaries are not clearly demarcated. Although such conflicting interests have not yet caused actual conflict in relation to commercial plantation development, they add to the slumbering tensions concerning the BSA.

Conflicts among investors

Conflicts among private investors generally are about the rights to and control over degraded portions of forest reserves and mostly arise from unclear demarcation of plantation boundaries or double allocation of compartments. According to several FC officials, private investors sometimes come into conflict with each other owing to a combination of poor demarcation and prolonged inactivity: *“When you have not established clear-cut boundaries and you are not developing your plantation, another developer might be working in your compartment”* (FSD plantations manager Offinso forest district, interview, 3 May 2011). In most cases, however, developers realise quite soon that they both claim a particular portion of land, after which they report the problem to the FC. In case of double allocation of a compartment, the FC relocates the developer that was last assigned the compartment in question. In case of a conflict over plantation boundaries resulting from inadequate demarcation, the FC inspects the plantations concerned, redefines the plantation boundaries and makes sure that each developer retains the same amount of hectares.

Two private investors (in separate forest reserves) said to have been involved in a conflict with another investor, but they both indicated that the argument was due to a misunderstanding and stressed that it was settled amicably after reporting the problem to the FC. This corresponds to the image that private investors generally maintain friendly relations among themselves and rather support than obstruct each other, which is also reflected in initiatives such as the Private Afforestation Developers Organisation (PADO) (see Box 5.1).

On the basis of the interviews with private investors and key informants, it can be concluded that conflicts among developers generally are short-lived quarrels resulting from administrative errors rather than lingering conflicts with structural causes.

Box 5.1: The Private Afforestation Developers Organisation.

The Private Afforestation Developers Organisation (PADO) is an organisation of private investors and individual tree planters that aims at stimulating commercial plantation development and tree planting. PADO was founded in 2006 by a group of commercial plantation developers from the Kwamisa forest reserve. Currently, the organisation has around 25 members involved in on-reserve plantation development, of which 15 are active in the Kwamisa forest reserve. So far, at least 8 PADO members have signed the BSA.

PADO endeavours to promote private afforestation by means of several activities, including fundraising, awareness creation and the establishment of nurseries. The organisation also has a technical committee which advises members on how to develop a plantation. Moreover, once a month a meeting is held at which the individual progress of members, as well as general issues like funding are discussed. In case a member experiences conflict, this is also discussed at the meeting and advice is given on how to deal with the situation.

Source: PADO president, interview, 2 May 2011.

Conflicts between indigenous workers and migrant workers

Conflicts between indigenous people and newcomers generally involve migrants from northern parts of Ghana, where the lack of economic opportunities causes many people to migrate southward to search for jobs. Many northerners settle in communities bordering forest reserves where they find employment on forest plantations. In most forest-fringe villages migrants peacefully coexist with the indigenous population, but in some cases there is a considerable amount of friction between the two groups. Such friction generally has to do with the fact that northerners tend to have lower salary demands than indigenous people, which makes them popular with commercial plantation developers. Consequently, indigenous people sometimes accuse migrants of taking their jobs, and in a few cases developers indeed partly replaced their indigenous workforce with migrant workers. Although competition for employment generally is the immediate cause of plantation-related conflicts between indigenous people and migrants, the underlying problem is the scarcity of land and the consequent fear among the indigenous population of losing their access to farmland.

Although the majority of private investors said to employ migrants from the North, only two of them indicated that the migrants' presence had led to tensions with the indigenous population. Moreover, in neither of these cases the tensions between the two groups had resulted in actual conflicts. This underlines the fact that conflicts between indigenous and migrant workers have so far been mainly latent and that both parties prefer to avoid actual clashes. However, considering the persistent influx of migrants from the North and the increasing scarcity of land, it seems likely that this type of conflict will occur more frequently in the future.

Conflicts between investors/plantation workers and Fulani herdsmen

Conflicts between plantation developers and Fulani herdsmen occur in severely degraded forest reserves where there is virtually no forest left, especially in the transition zone between the forested Southwest of Ghana and the savannah in the North and East. The Fulani utilise such degraded environments to graze their cattle, thereby setting foot on newly established plantations which are highly vulnerable to grazing and trampling. In addition to causing damage by trespassing on plantations, Fulani herdsmen have in some cases consciously inflicted damage on trees and food crops.

Three private investors from the Bandai Hills forest reserve indicated to have experienced problems with Fulani herdsmen. Out of twelve investors this may seem like a lot, but it should be recognised that this type of conflict is highly concentrated in the Bandai Hills forest reserve and is therefore over-represented in this research. Furthermore, it should be stressed that the three cases are interconnected and that they are in fact part of a broader societal problem that transcends plantation development. Although a comprehensive analysis of this type of conflict is therefore beyond the scope of this research, the second case study constitutes an attempt to gain more insight into the context, causes and characteristics of the 'Fulani issue', as well as into the conflict management strategies employed.

5.2. Conflict case study 1: Kwamisa forest reserve

This section presents an in-depth analysis of a conflict between a plantation developer on the one hand and plantation workers and local community members on the other hand. The plantation concerned is located in the Kwamisa forest reserve within the Offinso forest district. The conflict in fact involves three of the six conflict issues identified in the general

overview: conflict between the developer and farmers regarding illegal encroachment; conflict between the developer and plantation workers; and conflict between indigenous workers and migrant workers. However, the main issue has been the conflict between the developers and the plantation workers, and the other issues originated from this conflict.

The analysis is structured by using the conflict wheel, which has been introduced in chapter 2. The conflict wheel is an analysis tool that distinguishes between six dimensions in which various aspects of a conflict situation can be listed. By systematically subdividing factual data, observations and statements into several dimensions, analysis with the conflict wheel enables one to gain a concise and relatively orderly understanding of a conflict situation (Mason & Rychard 2005: 3).

5.2.1 Context

The plantation in question was established in 2005 by a Ghanaian architect, who is based in Kumasi, but also resides in the United States a few months per year. He established the plantation with the aim being to generate future income and does not gain any short-term benefits from it. The plantation offers employment to three permanent workers and about forty casual labourers who provide all labour inputs, such as planting, pegging and pruning (see Box 5.2). At the time of research, they had developed about hundred hectares which they had planted with teak, cedrela and the required 5% of indigenous species. The workers, moreover, are allowed to grow food crops on the plantation - interplanted with the trees - and

Box 5.2: Activities in forest plantation development and maintenance.

Clearing: Cutting or burning all existent vegetation in order to prepare an area for tree planting.

Pegging: Marking the spots where the tree seedlings are to be planted, usually with sticks.

Planting: Planting the tree seedlings on the designated spots according to a specific pattern of tree spacing.

Pruning: Cutting of branches from the main stem to focus growth of the stem and ensure a straight tree bole.

Weeding: Removing unwanted vegetation in order to prevent competition from other plants with planted trees.

Source: information from Hoogenbosch (2010: 42).

are entitled to the entire yield thereof. They mainly cultivate maize, yam and cocoyam. In addition to the workers, the investor employs a plantation manager, who is responsible for the everyday management of the plantation and the communication with workers and local community members.

The investor signed the BSA, which he said to be very content about. Furthermore, he is a member of PADO, which he joined “*for mutual support and the sense of collective strength*”. He finances the development of his plantation largely from his own resources, but also obtained a loan from the Forest Plantation Development Fund (FPDF).³¹ So far, the investor has not undertaken any development projects in the local communities nearby his plantation. He said to be willing to support the local population, but indicated to lack the necessary financial means. Indeed, he stressed that the shortage of funds for the further development of his plantation currently is his main concern.

5.2.2 Issues

The main conflict evolved around the fact that the workers, according to the investor, did not take good care of the trees and did not do what they were supposed to. They repeatedly damaged or even cut tree seedlings when they were maintaining their food crops, which they had interplanted with the trees. Moreover, they damaged the trees by using pesticides and other agrochemicals to promote the growth of their food crops. In the words of the investor:

“The local people are not interested in teak, only in plantain and cocoyam; they only care about their food crops.”

Another issue was that the workers had planted plantain in between the trees, while the developer had explicitly told them not to do so. Initially, the developer had allowed the workers to grow plantain, but after two years he decided to ban the crop from the plantation, because the plantain trees started to overshadow the seedlings and would thus hamper the seedlings’ growth. The investor then repeatedly urged the workers to remove the plantain trees and, when the workers did not comply with his demands, ultimately decided to cut the plantain. In addition, he dismissed the indigenous workers and took on migrant workers from

³¹ In order to support private investors, the government created the Forest Plantation Development Fund (FPDF). Under the FPDF, the government gives out both grants and loans to stimulate investment in commercial plantations. The impact of the FPDF, however, is fairly modest as its resources are limited and many private investors make an appeal to the fund (FC plantations manager, interview, 10 May 2011).

the North who had settled in the village of Breme. Consequently, tensions arose between the indigenous population and the migrant workers as well, but the conflict between these groups has so far remained latent. Although the indigenous people have the feeling that the migrants steal their jobs, they have directed their anger at the plantation developer. The migrant workers are tolerated in Breme, but the balance between them and the local population is fragile.

As the plantation is situated at the edge of the forest reserve nearby two substantial villages that rely mainly on subsistence agriculture, it is not surprising that encroachment by local farmers has occurred repeatedly. In such cases, farmers who were not employed by the investor planted food crops on the plantation without the investor's permission. Although the incidence of illegal encroachment on the plantation first rose considerably after the investor had dismissed the indigenous people as workers, unauthorised farming on the plantation now only occurs sporadically.

5.2.3 Actors

The actors directly involved in the conflict are the private investor, former plantation workers, migrant workers and some local community members. Other local community members have played an indirect role in the conflict by attending meetings at which the issue was discussed. The actors involved in the conflict management process include traditional authorities, police officers, District Assembly members, FC officials, lawyers and magistrates (see Section 5.3.6).

5.2.4 Causes

In analysing the causes of the conflict a clear distinction should be made between direct and indirect causes. The direct causes of the conflict are (1) that the workers inflicted damage on the trees by cutting them and by using pesticides and other agrochemicals, (2) that the workers planted plantain trees all over the plantation and refused to remove them after the investor had urged them to, and (3) that the developer subsequently dismissed the workers and destroyed their food crops. The investor said the workers caused the conflict, as they had refused to follow his instructions:

“There is absolutely no cooperation from the villages; the people from the local communities act very hostilely”.

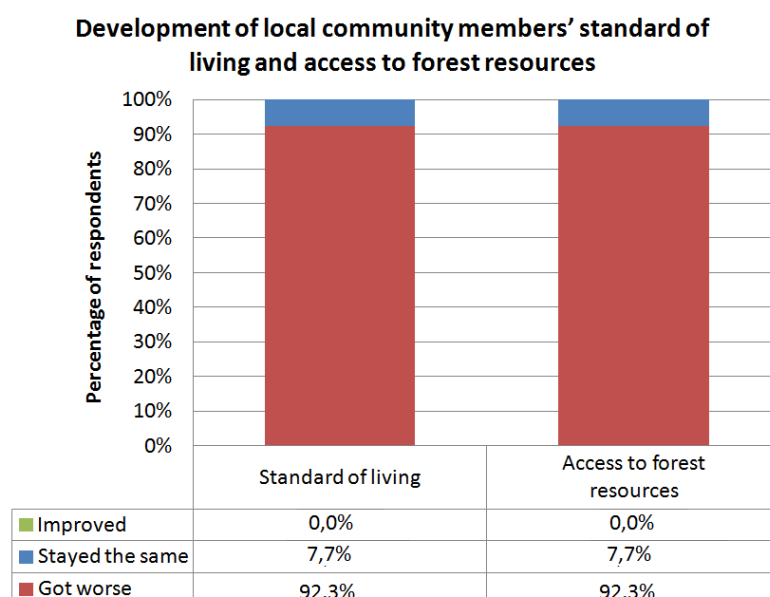
By contrast, the respondents from the villages of Breme and Ahwerewam uniformly stated that the investor started the conflict. Irrespective of who is to blame, it is evident that the above-mentioned events triggered the conflict.

The factors that underlie these events - the indirect causes of the conflict - are however not as obvious and are related to land and forest governance, the provision of information on commercial plantation development, and the training of plantation workers. One of the factors that have contributed to the emergence of the conflict is the limited availability and accessibility of land. The competition for land in the high forest zone is intense and ever increasing, as almost all off-reserve areas have been converted into farmland, while the demand for land is still growing. The great majority of people from the villages that surround the Kwamisa forest reserve make a living by farming and thus are dependent on access to land. Indeed, all local community members we interviewed indicated that they have farming as a source of income and that they need land to support themselves. They formerly had easy access to land, as they used to enter the Kwamisa forest reserve without hindrance to collect NTFPs and to grow food crops.

Due to the introduction of commercial plantation development, however, most people in the area lost access to the forest reserve and hence to farmland. All respondents from Breme and Ahwerewam stated that they do not have access to commercial plantations and that they do not gain any benefits from commercial plantation development. Accordingly, the great majority of the respondents indicated that their standard of living and access to forest resources have diminished since the introduction of commercial plantation development (see Figure 5.1). The decreased availability and accessibility of farmland have caused some local farmers to encroach on commercial plantations and have also been the source of the tensions between the indigenous people and the migrant workers, for the latter do have access to the forest reserve.

The competition for land, however, is not what caused the initial conflict between the plantation developer and the former workers, because the latter still had access to the forest reserve and were allowed to grow food crops on the plantation when the conflict arose. Based on interviews with both the plantation developer and the former workers, it can be concluded that major causes of this conflict have been the failure to make clear agreements and, as will be shown below, the fact that the provision of information on commercial plantation development has been inadequate.

Figure 5.1: Development of local community members' standard of living and access to forest resources since the introduction of commercial plantation development.



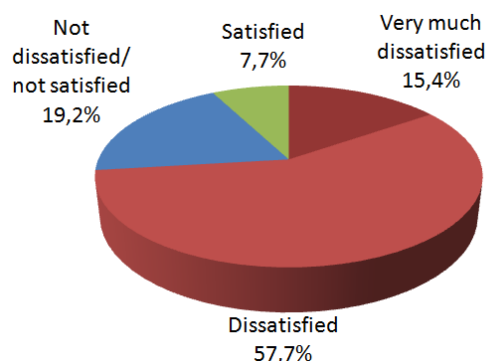
Source: fieldwork March-May 2011.

Before the investor started the development of the plantation, he did organise a meeting in each of the villages, together with the respective chiefs. Those meetings were attended by the plantation manager and a number of community members, and dealt with issues like benefit sharing, employment on the plantation and the rights and responsibilities of the different actors. Strikingly, however, all but a few respondents from Breme and Ahwerewam stated that there have never been meetings to inform the local population about commercial plantation development. All respondents indicated that they do not have a say in the decision-making on plantations and a great majority indicated to be dissatisfied with the provision of information on commercial plantation development (see Figure 5.2). In addition, only a few local community members said to be aware of the BSA and of the differences between commercial plantation development and the MTS.

Although the investor acknowledged that the provision of information on commercial plantation development has been faulty, he said he does not consider it his responsibility to enlighten the local population:

“The FC should educate the local communities around the reserves before investors are made to care for the site; the chiefs should also educate their people”.

Figure 5.2: Local community members' degree of satisfaction* with the provision of information on commercial plantation development.



Source: fieldwork March-May 2011.

*: not one respondent said to be 'very much satisfied'.

Clearly, the failure to inform and actively engage the local community members has played a major role in the emergence of the conflict, as it entailed many uncertainties about the rights and responsibilities of the local population. As a result, the workers were not committed to the development of the plantation and remained focused on the cultivation of food crops.

Another factor that contributed to the emergence of the conflict is the lack of training of plantation workers, which entailed inadequate maintenance of the plantation. Except for some quick demonstrations of how to plant and peg, the investor never arranged training for his workers. In the early stages of the development of the plantation he merely provided the seedlings and did not actively monitor the activities of the workers. When he found out that the workers were not doing what he was expecting them to do, the investor intensified the supervision and made the plantation manager directly responsible for all activities on the plantation. The investor commented:

"The farmers do not know how to plant, nor how to prune, nor how to peg. We let them do the work and paid them without monitoring them; it was all in vain."

This case illustrates how a lack of training can contribute to the emergence of conflicts. When workers are not properly instructed to maintain the trees, they are more likely to focus their attention on the food crops and to damage trees, as a result of which conflicts may arise.

5.2.5 Dynamics

The conflict arose in 2007, two years after the plantation had been established. First, there were only some misunderstandings regarding the supply of seedlings and the cultivation of

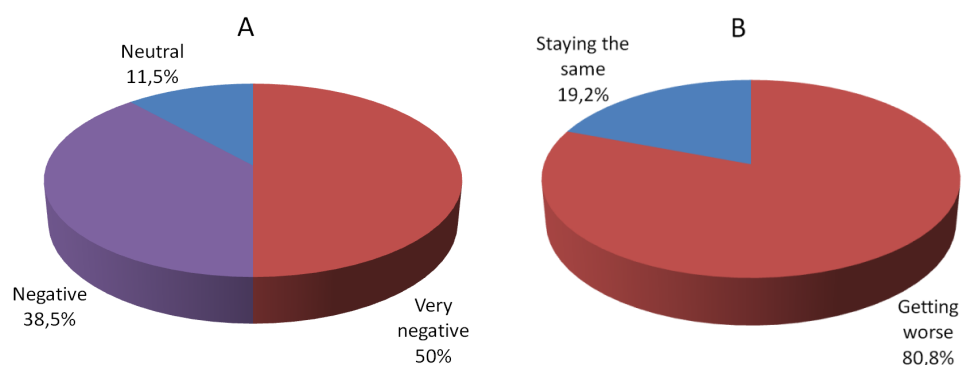
food crops. These misunderstandings, which could be attributed to poor communication between the investor and the workers, seemed to be eliminated after the investor had made the workers clear what their rights and responsibilities were. However, when the workers failed to remove their plantain trees from the plantation and the investor subsequently cut those trees, the situation escalated and developed into outright conflict. For several months, the investor and the former workers respectively cut the plantain and the teak on the plantation. At the height of the conflict mutual threats were uttered and physical force was being used. The plantation manager said to be chased and beaten up by local community members, and to have received dead threats.

The conflict started in Ahwerewam and after a few months spread to Breme. The scale on which the actual conflict issues occurred was limited to the plantation and the surrounding villages, but the conflict management process took place up to the regional level and involved a wide range of actors.

After approximately two years the situation diminished in intensity and, according to the investor, the conflict was resolved in 2009. However, the former workers and many other local community members still have a grudge against the investor and tensions between the two camps persist. In fact, all respondents from Breme and Ahwerewam indicated that the conflict has never been resolved, which implies that the conflict, although latent, continues to exist.

Most of the respondents in Breme and Ahwerewam characterised the communities' relationships with private investors as negative, and the great majority of them found that these relationships were deteriorating (see Figure 5.3). When asked to specify their opinion,

Figure 5.3: Local community members' characterisation* of the communities' relations with private investors (A) and the evolution** of these relations (B).



Source: fieldwork March-May 2011.

*: not one respondent characterised the relationship as 'positive' or 'very positive'.

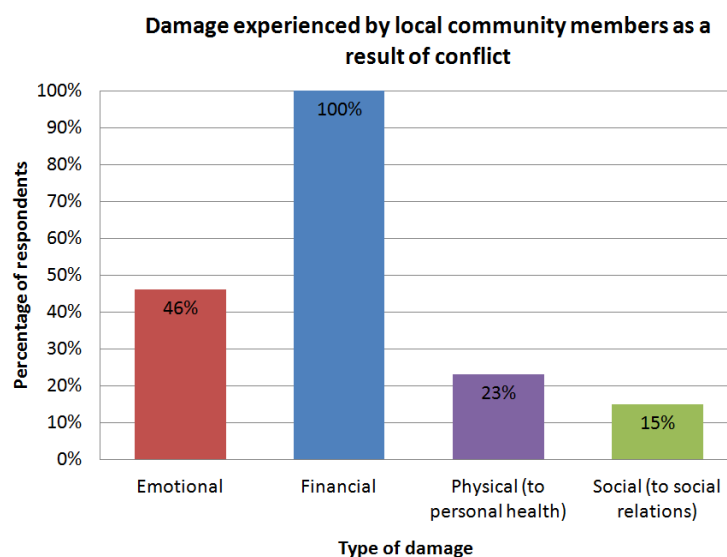
** : not one respondent said the relationship was 'improving'.

many respondents stressed the fact that they have never been compensated by the developer for the destruction of their food crops. Others said the developer cheated them and has ignored them completely after he dismissed them as workers. One former worker commented:

“He cheated us; he destroyed our farms without paying for it and abandoned us for the northerners”.

All respondents in Breme and Ahwerewam indicated to have suffered financial damage from the conflict, as they have not been compensated for the destruction of the food crops they were growing within the forest reserve (see Figure 5.4). Almost half the respondents said to

Figure 5.4: Damage experienced by respondents from Breme and Ahwerewam as a result of the conflict.

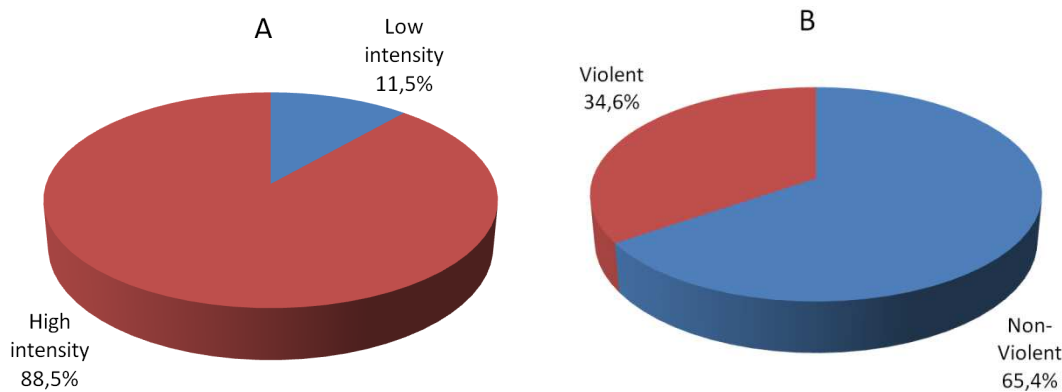


Source: fieldwork March-May 2011.

have suffered emotionally as a result of the permanent stress inherent in the conflict and the conflict’s adverse influence on their livelihoods. Furthermore, almost a quarter of the respondents said the conflict has had a negative impact on their personal health, while 15% stated that the conflict has been detrimental to their social relations.

The great majority of the respondents from Breme and Ahwerewam typified the conflict as non-violent yet of high intensity (see Figure 5.5). Just a few respondents considered the conflict of low intensity, whereas a considerable minority deemed the conflict violent. Clearly, the conflict has had a considerable impact on the local communities and continues to rouse the emotions of the local population.

Figure 5.5: Local community members' perception of the intensity (A) and the degree of violence (B) of the conflict.



Source: fieldwork March-May 2011.

5.2.6 Strategies and options

The different conflict issues have been addressed by different conflict management strategies. The conflict between the indigenous population and the migrant workers has so far remained latent and both parties have avoided confrontations. As for the conflicts concerning illegal encroachment, the investor and farmers have been able to resolve their issues among themselves by means of informal discussions and agreements. With respect to the conflict between the investor and his former workers/local community members, the conflict management process differed between the two villages.

In Ahwerewam, the investor first tried to resolve the conflict by having informal discussions with the workers and by pointing out their rights and responsibilities. When this turned out to be futile, he decided to take a hard line against the workers and cut down the plantain trees. The workers, who had first turned to the chief to discuss the problem, reacted by cutting down many of the teak trees on the plantation, on the initiative of an influential man who had lost many plantain trees. Thereupon, the investor contacted the FC, which sent officials to the plantation to inspect the situation. He also brought in the police, who arrested the man who initiated the destruction of the teak trees. After this man had been hold in detention for several days, he was bailed out and subsequently sued the investor in the Kumasi court. He had lost many plantain trees and demanded compensation for the money this had cost him. However, after only a few days he came round, withdrew the case from court and asked the investor for pardon. Meanwhile, the investor had also started a lawsuit against the former workers. He, however, soon decided to drop the case as well, because he desired a mutually agreeable settlement of the conflict. The investor explained:

“We have to deal with the farmers for a long time, because teak takes a long time to grow; we have to get along with the local people”.

Subsequently, the issue was discussed once more at a community meeting in the chief's palace in which the investor and the workers reconciled the conflict.

In Breme, the conflict management process started with a similar meeting, which was organised after local community members had reported the problem to the chief. The workers, however, were not satisfied with the outcome of the discussion and took the matter to the District Assembly (DA) and the District Security Council (DISEC). Then, the DISEC organised several meetings in which all relevant actors participated: the investor, FC officials, the chief of Breme, the Bechem *Omanhene*, DA members, the District Chief Officer (DCO), the workers and community representatives. In these meetings the DISEC was acting as an intermediary between the investor and the workers. After two months the DISEC passed their judgement, which was in favour of the investor. The workers, however, did not give up and turned to the DCO and the Bechem *Omanhene*. Subsequently, the DCO and the Bechem *Omanhene* visited the plantation themselves to mediate and to inspect the situation. According to the investor, they both came to the conclusion that the workers had not done their job properly and that the investor had the right to deny them access to the plantation. Thereupon, the former workers left the plantation. Since then the situation has been stable, but the tensions between the investor and the local community members have remained. Currently, both parties are avoiding any further clashes, but the conflict, although latent, lingers on.

5.3. Conflict case study 2: Bandai Hills forest reserve

This section presents a detailed analysis of one particular conflict between plantation developers/workers and Fulani herdsman in the Bandai Hills forest reserve. Like in the first case study, the analysis is structured by separately treating the six elements of the conflict wheel.

Before presenting the step-by-step analysis of the conflict, however, two important side-notes should be made. Firstly, it should be mentioned that I did not manage to interview any Fulani due to lack of time and the difficulty to locate them. The primary data on which this case study is based therefore solely consist of interviews with plantation developers and workers, which implies that my empirical view of the conflict is one-sided. Nevertheless, I made an

endeavour to balance the analysis by referring to several online sources that quote experts who look at the issue from the Fulani's perspective.

Secondly, it must be stressed that conflicts involving Fulani herdsmen transcend commercial plantation development and need to be addressed in a wider context of land tenure, societal relations and (inter)national politics. This case study is therefore not an attempt at a comprehensive analysis of this type of conflict and should rather be seen as an exploratory case study within an exploratory research.

5.3.1 Context

In order to gain insight into the background of this particular conflict, it is imperative to have a basic overview of the development and characteristics of the plantation concerned, as well as of the migratory history of the Fulani (see Box 5.3) and their relation with the indigenous population of the Agogo area.

The plantation in question is owned by the Apostolic Church Ghana, which established the plantation in 2007 in order to secure farmland for church members in the short term and generate revenue for the church in the long term. The plantation offers employment to twenty workers who provide all labour inputs, such as planting, pegging and pruning. At

Box 5.3: The Fulani

The Fulani

The Fulani (also known in English as Fula or Fulbe; named Peul in French) are an ethnic group that live throughout West Africa, forming a minority in all countries they live in except Guinea (World Factbook³²). They are a nomadic, pastoralist people, traditionally herding their cattle through the arid lands of the Sudano-Sahelian zone (Bassett & Turner 2006: 33). Over the last three decades, however, Fulani have increasingly moved southwards into the more humid Guinea savannah zone where the influx of their herds has been popularly viewed as an invasion from the North (*ibid.*) Accordingly, Fulani herdsmen have in many southern savannah areas been met with hostility, which over the years has manifested itself in an increased incidence of conflicts with national park rangers in Niger (Turner 1999), and farmers in Cote d'Ivoire (Bassett 1988) and Nigeria (Fabusoro 2009). Also in northern Ghana, an increase in the number of conflicts between Fulani herdsmen and indigenous farmers has occurred in recent years (Tonah 2005).

³² https://www.cia.gov/library/publications/the-world-factbook/wfbExt/region_afr.html

the time of research, they had developed almost one compartment which they had planted with teak and the required 5% of indigenous species. The workers, who are all members of the Apostolic Church, also grow a variety of food crops on the plantation, including tomatoes, yam and plantain. The plantation owners have not yet signed the BSA and are not associated with PADO or any other organisation of private plantation developers or tree planters.

Fulani first moved into the Agogo area in the early 1990s when the *Agogohene*³³ leased land to them to set up their camps and graze their cattle (see Figure 5.6). During the first few years following their initial settlement, more and more Fulani migrated to the area and the number of cattle grazing the deforested hills around Agogo rose rapidly. As a consequence, the Fulani needed progressively more land and started to encroach on areas outside their leased territory. Although this did cause tensions between local farmers and Fulani herdsmen, a delicate balance between the two groups existed for a number of years.

Figure 5.6: Fulani herders' zebu cattle at a pool along the road to Abrewapong, near the Bandai Hills forest reserve.



³³ The *Agogohene* is the *Omanhene* or paramount chief of the Agogo Traditional Area and is, by virtue of his position, owner of all lands that fall within this area (see Footnote 25).

This however changed dramatically in 2001, when conflicts between farmers and Fulani proliferated and the situation threatened to escalate (Agogo Urban Council Chairman, interview, 1 April 2011). In an effort to stabilise the situation, the government called in the army to drive away Fulani from the Agogo area. Initially, this approach had the desired effect, but after a few years many Fulani returned to the hills around Agogo, causing old conflicts with farmers to resurface. Simultaneously, new conflicts arose over encroachment on commercial forest plantations that had meanwhile been established in forest reserves around Agogo. At the time of research, three commercial plantation developers were having a conflict with Fulani herdsmen in the Agogo area.

5.3.2 Issues

The Fulani have in several ways inflicted damage on the trees and food crops on the plantation. They have repeatedly cut some of the trees with their cutlasses and damaged food crops by trampling on them or piercing them with sticks (see Figure 5.7). Moreover, they several times set fire to portions of the plantation in order to promote the growth of fresh pasture. In addition to causing damage on the plantation, the Fulani have been polluting local

Figure 5.7: Plantation worker holding trunk of plantain tree pierced with stick by Fulani.



water sources by watering their cattle at pools and streams around the plantation. Although the aforementioned conflict issues vary in many respects, they all have their origin in the competition for land and natural resources.

The conflicts have resulted in direct confrontations, ranging from intimidation and mutual recriminations to specific threats and attempts to hurt one another. The most serious incident in this respect involved a few Fulani who pursued a female plantation worker while they were threatening to rape her. Fortunately, the woman managed to get away and warn the other workers. Another issue has been that the Fulani intimidate the plantation workers by occasionally firing warning shots when they approach the plantation.

5.3.3 Actors

The actors directly involved in the conflict are the group of private investors, the twenty plantation workers and several groups of Fulani herdsmen. The actors that indirectly play a role in the conflict include local community members, chiefs, politicians, FC officials and police officers. The local community members participate in meetings on the issue, while the various government officials are mainly involved in the conflict management process. The role of the *Agogohene* is particularly interesting, as he leased land to the Fulani herdsmen and reportedly granted them renewed access to this land after they had been driven away by the military. Such deals about land generally involve large sums of money and many local community members consider the *Agogohene* a traitor who is only interested in personal financial gain.

5.3.4 Causes

As explained in Chapter 2, it is of crucial importance in analysing the causes of conflict to distinguish between direct or manifest causes and indirect or underlying causes. The manifest causes of the conflict are that Fulani trespass on the plantation and cause damage to the trees and food crops. All plantation workers argued that the Fulani had started the conflict and were of the opinion that the herders' presence in the area is incompatible with farming and plantation development. One worker commented:

“They are slowing down the development of plantations, they are slowing down the growing of trees, they are slowing down the whole process.”

Although remarks like this are subjective and based on the perception of the workers, it is obvious that the conflict was a direct result of the fact that Fulani were encroaching on the plantation.

The underlying causes of the conflict are less evident and are connected with government policies, land tenure and societal relations. One of the factors that have indirectly contributed to the emergence of this type of conflict, is that the Ghanaian government has been negligent in implementing the ‘protocol on free movement of persons, right of residence and establishment’ of the Economic Community of West African States (ECOWAS). It is stated in this protocol under Article 2.1 that:

The Community citizens have the right to enter, reside and establish in the territory of Member States (ECOWAS 1979: 3).

Although Ghana ratified the protocol, it has not lived up to some of the inherent obligations, such as facilitating the integration of incoming migrants.³⁴ The government has failed to create corridors for the Fulani to pass through, to designate grazing reserves, to install boreholes and to set up veterinary outposts. Consequently, the Fulani have to rely on themselves in obtaining access to land and other natural resources.

This relates to another root cause of the conflicts with Fulani herdsmen: the limited availability and accessibility of land. The majority of the Ghanaian workforce is employed in subsistence agriculture and many Ghanaians, especially in rural areas, depend on land for their livelihoods. This also applies to the Fulani, who need considerable tracts of land to graze their cattle. As both farmers and cattle herders are dependent on access to land, which is becoming increasingly scarce, the competition for land in Ghana is intensifying. In this competition, migrants like the Fulani are in a disadvantageous position, since access to land in Ghana is regulated predominantly through the customary system, in which indigenes generally are given preferential treatment (Kasanga & Kotey 2001). For many Fulani, therefore, the only way to gain access to land is by leasing marginal lands from stool land owners at very high rates. The great difficulty to acquire land causes some Fulani to encroach on cultivated farmlands or plantations, which subsequently causes conflicts.

Another aspect that undoubtedly has been contributing to the emergence of conflicts with Fulani, is the prevalence of prejudice against Fulani among Ghanaians of other ethnicities. Many Ghanaians consider the Fulani troublesome and uncompromising, and

³⁴ <http://www.irinnews.org/report.aspx?reportid=88957>

therefore adopt a hostile attitude towards them.³⁵ Moreover, Fulani are often held responsible for unsolved crimes, but such accusations generally have no solid foundation and seem to be dictated by stereotypes.³⁴

5.3.5 Dynamics

The conflict came into being about five years ago, just after the establishment of the plantation, and has been going on ever since. There have been periods without significant incidents, but the friction between the two parties has been unremitting. The great majority of plantation workers considered the conflict violent and of high intensity and indicated that the situation was still deteriorating. Two workers deemed the conflict non-violent and of low intensity, although they acknowledged that the conflict had grown more severe over the past few years.

The plantation owners and all workers said to have suffered financial damage as a result of the destruction of trees and food crops. In addition, five workers indicated to have sustained emotional distress as a consequence of the continuous threat inherent in the conflict. According to the workers, the Fulani always carry guns and do not restrain themselves from using them. Accordingly, most workers considered the Fulani to be violent and dangerous and indicated to fear them.

The scale on which the actual conflict issues have occurred is limited to the plantation, but the impact of the conflict reaches far beyond the plantation's borders. In Agogo the matter has exercised many minds over the past few years and has been discussed at numerous community meetings. At the national level, the issue has attracted extensive media coverage³⁶ and has even come up for discussion in the Ghanaian parliament (Agogo Urban Council Chairman, interview, 1 April 2011). Of course, all this commotion is about the general problem with the Fulani and not about this specific case, but that does not alter the fact that this conflict is of concern to many people outside commercial plantation development.

³⁵ http://www.adomonline.com/index.php?option=com_content&view=article&id=10282:agogo-residents-must-direct-anger-at-the-state-not-on-fulanis-kwesi-aning&catid=25:general&Itemid=233

³⁶ Both during and after my stay in Ghana, the 'Fulani issue' received a lot of attention on Ghanaian television, radio and websites. While I was writing my thesis, the situation worsened and several [violent incidents](#) took place. I was shocked when I came across a [report](#) that a farmer had been shot dead in Abrewapong, one of the villages I visited. In September, a [demonstration](#) was staged in Agogo, at which Agogo residents urged the government to take action against the Fulani. On 24 October 2011 the Fulani herdsmen in the Agogo area were given an [ultimatum](#) by the National Security Council to leave the area within 14 days. According to [several websites](#), all Fulani herdsmen had left the Agogo area by the end of November 2011. Although it may seem that the 'Fulani issue' in the Agogo area has by that been resolved, the underlying problems are not addressed by evicting the Fulani from the area.

5.3.6 Strategies and options

The strategies employed in dealing with the conflict depend on the actor and vary over time. The supervisor and workers have so far avoided direct encounters with the Fulani by leaving the plantation around 10 a.m., when the Fulani start grazing their cattle. By contrast, the Fulani seem not to shun confrontations, as they regularly pass through the plantation and have several times approached some of the workers. The private investors have so far tried to resolve the conflict through the appropriate channels, as they have more than once reported the problem to the FC. Consequently, FC officials have visited the plantation several times to try and mediate, but this has not yielded significant progress. Both the plantation workers and the private investors now advocate harsh measures against the Fulani, but they stressed that they will not confront them themselves. The plantation supervisor realised that their conflict with the Fulani is part of a broader problem which should be tackled by the national government. He argued:

“We cannot deal with this issue; without military intervention the Fulani will never leave.”

As mentioned before, the military has previously intervened in conflicts between farmers and Fulani herdsmen, without resulting in a sustainable solution.

In addition to the actors that are directly involved in the conflict, there is a variety of other actors that have engaged in the conflict management process. The issue has been discussed several times in community meetings in which plantation developers, farmers, local community members, local politicians, government officials and chiefs took part. Moreover, Agogo has seen a few demonstrations in which the local population urged the government to take action against the Fulani. The *Agogohene* also plays a role in dealing with the issue. At the end of February 2011 he withdrew the Fulani's permit to stay on the stool land, but, although some of the herdsmen left indeed, many of them stayed. Just a few weeks before I visited Agogo, the *Agogohene* had urged the Fulani once more to leave the area, but again many of the herdsmen ignored the message. By then, the *Agogohene* had also requested the national government to assist in dealing with the Fulani. As mentioned before, the issue has been discussed in parliament, and several high ranking government officials have visited the Agogo area to inspect the situation. However, the national government finds itself in an awkward position, as it cannot refrain from interfering, but it is very much limited in its scope of action by the ECOWAS protocol.

5.4 Summary

This chapter shortly discussed literature on forest conflicts in Ghana and presented an exploratory overview of conflicts around commercial forest plantation development in Ghana's high forest zone, followed by two case studies. During fieldwork, six types of conflict were found to occur around commercial forest plantation development in Ghana's high forest zone. These are (1) conflicts between investors and farmers regarding illegal encroachment, (2) conflicts between investors and plantation workers, (3) conflicts concerning the BSA, (4) conflicts among investors, (5) conflicts between indigenous workers and migrant workers, and (6) conflicts between investors/plantation workers and Fulani herdsmen. Most common are conflicts regarding illegal encroachment and conflicts between private investors and workers. However, most FC officials envisage a proliferation of conflicts regarding the BSA, as many traditional authorities are unwilling to sign the agreement.

In most cases conflicts are settled informally between the parties involved. Moreover, chiefs are often involved in conflict management as mediators. In other cases, conflicts are reported to the FC, after which FC officials visit the plantation concerned to inspect the situation and mediate. Only incidentally conflict management involves the police, a lawsuit or the use of violence.

The case studies respectively referred to a conflict between an investor and plantation workers and a conflict between plantation developers and Fulani herdsmen. The conflicts were analysed using the conflict wheel, which was introduced in Chapter 2. Both conflicts involved the destruction of food crops and trees that had been planted on the plantations. Different factors underlay the two conflicts, but the emergence of both conflicts is connected with the limited availability and accessibility of land. The next chapter summarises the research findings and relates them to the theoretical framework.

6. Conclusions and recommendations

This chapter summarises the most important findings from the general overview of commercial plantation-related conflicts and the two case studies. Subsequently, it tries to relate the research results to the theoretical framework. Based on the conclusions and discussion, then, recommendations are made for further research and policy.

6.1 Summary of research findings

The central question in this research is: ‘What conflicts occur around commercial forest plantation development in Ghana’s high forest zone and what are the causes, dynamics and ways forward?’ In order to answer this question, three sub-questions were formulated (see Chapter 1). This section formulates an answer to each of the sub-questions by summarising the empirical results presented in Chapter 5.

6.1.1 What conflict issues occur and what actors are involved?

On the basis of the interviews with private investors, six types of commercial plantation-related conflict were identified. These types are (1) conflicts between investors and farmers regarding illegal encroachment, (2) conflicts between investors and plantation workers, (3) conflicts concerning the benefit-sharing agreement (BSA), (4) conflicts among investors, (5) conflicts between indigenous workers and migrant workers, and (6) conflicts between investors/plantation workers and Fulani herdsmen. The most common conflicts are those between investors and farmers regarding illegal encroachment and those between investors and plantation workers. The former generally relate to unauthorized cultivation of food crops on the plantation, while the latter typically refer to terms of employment, salary demands or the cultivation of food crops. The conflicts concerning the BSA constitute a special category, because no actual conflicts of this type were identified. However, FC officials foresee a proliferation of BSA-related conflicts when the first trees will be harvested and revenues will actually accrue from commercial plantations.

The actors that are involved in commercial plantation-related conflicts include private investors, plantation workers, local farmers, FC officials and Fulani herdsmen. Conflicts between indigenous and migrant workers constitute the only type of conflict that does not

directly involve private investors. In addition to private investors, plantation workers and local farmers are most commonly involved in commercial plantation-related conflicts.

Conflict causes commonly mentioned by investors include illegal encroachment on plantations, unauthorised cultivation of food crops, destruction of trees and inadequate maintenance by workers. A distinction should be made, however, between such manifest behaviour, which forms the direct source of conflict, and the antecedent conditions, which are the factors underlying this behaviour. With respect to commercial plantation development, the most important antecedent conditions appear to be poor communication and coordination, and the limited availability and accessibility of land. The former condition, which generally refers to a lack of clear agreements between investors and plantation workers/farmers, gives rise to inadequate maintenance and unauthorised cultivation of food crops; the latter condition is the most important factor in causing illegal encroachment.

6.1.2 What institutions are in place to deal with these conflicts and what conflict management strategies are employed?

As mentioned in Chapter 4, the BSA contains a section on the settlement of conflicts, which states that ‘any dispute (...) which cannot be settled amicably shall be settled definitively and conclusively (...) by a panel of three arbitrators’. This is the only provision specifically geared towards the management of commercial plantation-related conflicts. In addition, relevant statutory institutions involved in conflict management include the FC, the police, the DISEC and courts. Customary institutions with a significant role in conflict management include paramount chiefs and village chiefs, who traditionally mediated between discordant parties in case of conflict.

The conflict management strategies that are employed differ considerably according to the types of conflict. Most conflicts are settled amicably between the parties involved. This applies to the conflicts among private investors, which are generally short-lived quarrels resulting from administrative errors, but also to most conflicts between private investors and plantation workers. Some of the conflicts between investors and local farmers were also settled by means of informal negotiation, without interference by a third party. However, such conflicts more often involved mediation by traditional authorities, especially in the case of repeated encroachment on the plantation. In only a few cases encroachment persisted after mediation by the chief, upon which investors brought in the FC or even the police. These government institutions generally also limit themselves to mediation between the parties

involved, although the police was said to sporadically arrest illegal encroachers. With respect to conflicts concerning the BSA, avoidance prevails, as traditional authorities express their disagreement about the BSA by not signing the agreement rather than directly confronting other stakeholders. Avoidance also seems to be the dominant strategy in relation to conflicts between indigenous and migrant workers and conflicts involving Fulani herdsmen. In a few isolated cases, such as in the first case study, adjudication and coercion were employed, but these strategies are not common in relation to any of the conflict types.

Considerable differences were distinguished as well in the conflict management strategies that the various actors employ. Customarily, conflicts were generally settled through mediation by traditional authorities, and local community members usually still try to resolve conflicts by turning to the chief. Private investors, conversely, more often opt for statutory institutions in dealing with conflicts. Several private investors said to have reported conflicts about encroachment to the FC and a few had even brought in the police. Moreover, the private investor from the first case study started a lawsuit against his former workers. Although in that particular conflict a local farmer took the same step against the investor and a group of farmers turned to the District Assembly and the District Security Council, local community members in general are strongly oriented towards customary modes of conflict management.

6.1.3 What implications do patterns of conflict and conflict management have for forest governance?

The likelihood of commercial plantation-related conflicts to arise seems greatest in areas where there is little awareness of plantation development, limited availability of land and relatively high population density. In the context of widespread poverty, pervasive deforestation and ignorance of forest governance arrangements, conflicts about access to forest reserves easily arise. It is clear that, in order for such conflicts to be prevented, the involvement of local communities in forest governance in general, and commercial plantation development in particular, should be drastically increased. Ideally, this would involve active engagement of local community, perhaps in some form of co-management. What is minimally required, however, is increased awareness-raising about commercial plantation development in local communities. Private investors should be required to organise a meeting, prior to starting plantation development, in which they elucidate the consequences of the establishment of a commercial plantation.

With respect to conflict management, most striking is the entanglement of customary and statutory modes of dealing with conflicts. In addition to causing uncertainty, the entanglement of the two systems may, in case of discrepancy, retard the conflict management process and work in favour of some actors and against others. In order for constructive, equitable conflict management to be achieved, customary and statutory modes of conflict management must therefore be reconciled. Furthermore, the current absence of actual conflicts about the BSA should not be interpreted as a sign of general satisfaction with the agreement. Quite to the contrary, many traditional authorities are discontent with the BSA and the shares of the FC and local communities are generally considered disproportionally small. The imbalance of and dissatisfaction with the BSA imply that the agreement seems untenable in its current form.

6.2 Discussion

The previous section summarised the research results and presented some general conclusions in relation to the sub-questions formulated in Chapter 1. Taking a more analytical approach, this section aims to relate the empirical results to the theoretical framework presented in Chapter 2. It tries to check the applicability of the chosen theoretical perspectives to this particular research and critically examines the approach taken in analysing conflicts.

6.2.1 Forest governance

The introduction of commercial plantation development can be viewed as an exponent of the shift from government to governance in the Ghanaian forestry sector. However, as governance is by no means a uniform concept, it is of crucial importance to consider the specific features and impact of such a new governance arrangement. With reference to the interactive governance approach (Kooiman *et al.* 2005) (see Section 2.1.1), it can be observed that the introduction of commercial plantation development has brought about a reconfiguration of interactions in governing portions of forest reserves. The nature and implications of this reconfiguration of interactions are discussed below.

In the forest reservation process the formal recognition of several customary rights, which were discussed in Section 4.1.4, was supposed to ensure that forest-fringe communities would retain access to the forest after reservation. Over the years, however, many of these rights have not been respected by the government, and communities, consequently, have to a

large extent been denied access to forest reserves. Nevertheless, as enforcement by the FC has been weak, forest-fringe communities generally have been able to freely enter forest reserves for NTFP collection and the cultivation of food crops. In areas where commercial forest plantations have been established, however, this situation has changed over the past decade. Private investors, provided they are committed, check on the land far more regularly than the FC and tend not to tolerate any encroachment on their plantation. Thus, in consequence of the advent of commercial forest plantation development, the *de facto* access of local communities to forest land and resources has diminished. This change is reflected in the fact that the great majority of respondents in the first case study indicated that their access to forest resources had decreased since the introduction of commercial plantation development in the Kwamisa forest reserve.

As investors are obliged to recruit labourers from the nearest communities, and workers are generally allowed to grow food crops on the plantation, local people may still have access to on-reserve land and forest resources. However, local community members have little room for manoeuvre and effectively are at the mercy of private investors, as the latter are free to employ whoever they want. With respect to the first case study, this is illustrated by the fact that the investor dismissed the indigenous workers he initially employed and took on migrant workers who had settled in the village.

The limited involvement and influence of local communities in commercial plantation development is also illustrated by the fact that many local community members were neither aware of the BSA nor of the differences between the MTS and commercial plantation development. This lack of awareness is largely due to faulty communication and a lack of consultation in commercial plantation development. Private investors often fail to make clear agreements with workers and local community members. From the interactive perspective of governance this could be interpreted as a manifestation of hierarchical governance; whereas there has been an intensification of relations, the interaction between investors and local communities is often hierarchical and without consultation. The same applies to the interaction between the FC and local communities. In fact, commercial plantation development, which entails major changes in local access to forest land and resources, is imposed by the authorities without previous consultation with local forest users.

In this way, increasing privatisation and decentralisation of forest governance have, at least in the case of commercial plantation development, reduced rather than increased the active participation of the people that directly depend on the forest. While the relationships between the government, represented by the FC, and private investors are fairly horizontal,

forest-fringe communities still find themselves in a subordinate position, with little or no influence in the governance process. It can be argued, therefore, that even though commercial plantation development can be considered a form of co-governance, from the perspective of local communities it is merely a disguised form of hierarchical governance, in which private actors have joined the government in regulating access to forest land and resources.

In addition to taking an analytical approach, commercial plantation development can be assessed from a normative perspective, based on the dimensions of good governance suggested by Garforth *et al.* (2005) (see Section 2.1.2). First, as regards public policy, it can be argued that, although the policy goals regarding commercial plantation development are clear, the provision of information on the programme leaves much to be desired. With respect to land tenure, then, the rights of private investors are exclusive, clear and defensible. While tenure security is provided to private investors, however, communities' underlying land and other informal tenure rights are compromised. Moreover, local community members frequently are unaware of their rights. In relation to institutions, next, commercial plantation development meets the good governance requirements of being a partnership between different actors and having management and regulatory roles separated. However, as local institutions have limited legitimacy and no autonomy to enforce customary rules, local participation in forest governance is limited. Lastly, with respect to laws and regulations, the BSA and SRA are meant to address potential negative impacts of commercial plantation development. However, there is uncertainty about the extent to which such agreements actually entail benefits for local communities.

Although it is a nice exercise to assess a particular governance arrangement in general terms of 'good' governance, the analytical value of such an endeavour is limited. It should be noted that good governance has a different meaning for different actors. For instance, whereas exclusive tenure rights are suggested as a characteristic of good governance, in the case of commercial plantation development they entail the denial of local communities' customary rights. This serves to illustrate that the implications of governance are highly dependent on the situation. What constitutes 'good' governance should therefore be determined according to the context, based on the perceptions and interests of the different stakeholders.

6.2.2 *Legal pluralism*

As was discussed in Section 4.1.4, the governance of land and forests in Ghana is based on a mix of customary and statutory laws and regulations. In regulating access to forest resources the customary and statutory systems often come head to head. According to customary law, for instance, forest-fringe communities have rights of access to forest reserves. Under the statutory system, however, community members have often been denied these rights by the FC. Such inconsistency between the two legal systems frequently leads to conflicts, for instance between the FC and NTFP collectors or the FC and 'illegal' loggers. In case of such incompatibilities, the statutory system generally prevails over the customary system, implying that formal rights and regulations have precedence over traditional ones. The dominance of statutory regulation is particularly pronounced with regard to commercial plantation development, in which the only significant customary feature is that the traditional authorities own the land. In commercial plantation development customary law and regulations on which local community members generally rely in gaining access to land are entirely overshadowed by statutory control. Therefore, it can be argued that, in the context of legal pluralism, unequal power dynamics are exacerbated by commercial plantation development.

With regard to commercial plantation-related conflicts, legal pluralism further manifests itself in relation to the BSA, because discord regarding this statutory agreement generally involves the landowners (i.e. traditional authorities). In several cases, traditional authorities refused to sign the BSA, while in other cases several chiefs laid a claim to the land on which a plantation had been established. In case of the latter, not only are management and ownership of land separated, but there also is a lot of uncertainty about landownership as such. This uncertainty is also expressed in the fact that there is a lack of reliable maps indicating stool land boundaries.

Legal pluralism also has a profound influence on conflict management, since the dichotomy between the customary and the statutory system is also present in this sphere. In Ghana, conflicts over land and forest resources were customarily settled in an informal way through mediation by traditional authorities. As forest reserves have come under state control, however, the management of on-reserve conflicts has been increasingly bound by statutory provisions and regulations. Although local community members generally still try to resolve conflicts through the customary system, other actors in the forestry sector, including private investors, often appeal to statutory means. Whereas customary conflict management generally involves informal mediation, statutory conflict resolution is largely based on binding decisions. The entanglement of the two systems entails that conflict management in Ghana is

often uncertain and ambiguous, although sometimes customary and statutory institutions work side-by-side. This is illustrated by the conflict from the first case study, in which the DCO and the Bechem *Omanhene* jointly mediated between the investor and the farmers. However, if there is discrepancy between customary and statutory modes of conflict management, the latter generally prevail over the former. As a result of their considerable reliance on customary conflict management strategies, therefore, local community members generally find themselves in a relatively weak position in dealing with conflicts.

6.2.3 Conflict

The fact that there is hardly any forest left outside the forest reserves, and that most of the off-reserve land has already been put to use, puts enormous pressure on the remaining reserved forests. This pressure is still increasing, as rural population figures are rising and most rural dwellers are still directly dependent on natural resources for their livelihoods. The lack of available land and the dependence on forest resources contribute to widespread encroachment by local communities on forest reserves and commercial plantations, which subsequently leads to conflicts. In this way, scarcity of land and forest resources indirectly contributes to the emergence of conflicts around commercial forest plantation development.

More important in analysing the causes of such conflicts, however, are questions of access and power. Under commercial plantation development, local community members are excluded from ownership, control and management of land and forest resources. While traditional authorities own the land and the FC ultimately controls the forest resources, tree ownership and management of the land and forest resources are in the hands of the private investors. Based on their relative wealth and strong legal position, moreover, private investors have far greater bargaining power and ability to exert pressure than local communities. These unequal power dynamics are also apparent in the extent of access to on-reserve land and forest resources. Whereas private investors can easily gain access to forest reserves for establishing a plantation, forest-fringe communities' access rights are very much restricted and conditioned. In fact, while many local community members are dependent on land and forest resources, they largely rely on private investors in gaining access to those resources. In case this access is denied, local community members may have no options left but to illegally enter a commercial plantation for NTFP collection or the cultivation of food crops. Following the above argument, encroachment on plantations, and the resulting conflicts, should rather be interpreted as a result of limited accessibility of land and forest resources than as a result of scarcity of those resources.

The two conflict cases in this study were analysed using the conflict wheel (see Section 2.2.4), which distinguishes six dimensions of conflict: context, issues, actors, causes, dynamics and strategies/options. Although the conflict wheel proved to be a suitable tool for structuring the analysis of a conflict and quickly obtaining a basic overview of a conflict situation, it is inadequate for gaining a thorough understanding of the causes and dynamics of a conflict. By solely employing the conflict wheel certain conflict aspects remain particularly underexposed, such as the perceptions of the actors involved in a conflict. This is highly unfortunate, as perceptions are actually what conflicts revolve around, making them crucial to shed light on in conflict analysis. Mapping the perceptions of local community members was extra problematic, as they were interviewed using a questionnaire.

6.2.4 Conflict management

Just like in the causes of conflicts, power asymmetries may play an important role in conflict management. Divergence in social status and affluence, for instance, may to a large extent determine which strategies different actors employ. Whether this is the case in commercial plantation-related conflicts cannot be concluded on the basis of this research. What is clear, however, is that local community members generally rely on the customary system in dealing with conflicts, while private investors lean towards statutory means of conflict management. This may be explained by the fact that private investors have a far stronger legal position than plantation workers and local community members, as the former are backed by the BSA and statutory law, while the latter have little formal rights in commercial plantation development. Furthermore, as was discussed in Section 6.2.2, in case of discrepancy between the two systems the statutory system prevails over the customary system. As local communities therefore generally find themselves in a disadvantageous position, it can be concluded that there are large power imbalances in the management of commercial plantation-related conflicts.

Although local communities usually are oriented towards the customary system, this does not mean they have no other options in dealing with conflicts. As much as different actors may employ different conflict management strategies, the strategies that a particular actor uses may also vary in the course of a conflict. This is illustrated by the first case study, in which the various actors switched between strategies several times. Conflict management strategies should therefore not be considered in terms of rigid divides, but rather as situated on a continuum. Assessing conflict-related strategies by means of a continuum allows one to take a process-oriented perspective of conflict management. Although in this research such a

perspective was only employed in the two case studies, it gave me some valuable insights as it enables one to appreciate the choices made and challenges faced by different actors in the course of a conflict.

6.3 Suggestions for further research

This study explored conflicts around commercial forest plantation development in Ghana's high forest zone. It identified and typified several types of conflicts and tried to provide insight into the causes and dynamics of those conflicts. However, it should be stressed that the overview of conflicts presented in this study is by no means comprehensive and that the analysis is rudimentary. Consequently, a lot of additional research is required to map the conflicts occurring around commercial plantation development and to generate knowledge on patterns of conflict causes and conflict management. In order to achieve this, several specific recommendations for further research can be made, based on the discussion in the previous section.

First, further research is recommended on the implications of commercial forest plantation development for the livelihoods of forest-fringe communities. This research is mainly based on the accounts of private investors and questionnaires were only administered in communities where conflicts were known to occur. In a more general sense, it would be interesting to examine in detail the relation between commercial plantation development and communities' perceived access to land and forest resources. Such an enquiry could focus on the question whether certain patterns can be discerned in feelings of deprivation and restricted access in relation to commercial plantation development. In order to test the negative correlations that were found in this respect in the first case study, it is recommendable to undertake a comparative analysis involving multiple communities and a range of forest reserves.

In order for plantation development in the Bandai Hills forest reserve to be made sustainable, it is imperative that thorough research be done on conflicts involving Fulani herdsmen. Such an enquiry should however not focus solely on conflicts regarding commercial plantation development. Rather, it should examine the general problem of agro-pastoral conflicts in the Agogo area, involving a broad policy analysis, in which more light is shed on the role of the national government in the 'Fulani issue'. Although the eviction of the Fulani herdsmen seems to have relieved the pressure in the Agogo area, such an intervention

cannot be considered a structural solution to agro-pastoral conflicts in the area. For such solutions to be found, more research is needed on the causes and perceptions of conflict involving Fulani herdsmen.

If more research is to be undertaken on conflicts around plantation development in Ghana, it is recommendable to employ other conflict analysis tools in addition to or instead of the conflict wheel. Although the conflict wheel is a suitable tool for quickly gaining an overview of a conflict situation, a thorough understanding of a conflict can only be achieved by using more sophisticated conflict analysis tools. Likewise, further research on forest plantation-related conflicts would have to include other data collection methods than questionnaires in interviewing local community members. While questionnaires are useful for obtaining a concise overview of characteristics and opinions of a large number of respondents, they are utterly inadequate as a means of fathoming people's feelings and perceptions regarding a conflict situation.

Ideally, field trips to conflict locations would last at least a week and would involve a more qualitative approach aimed at describing the social embeddedness of a conflict on the basis of personal narratives of people involved. Such an approach, which would ideally involve the use of various qualitative research methods, such as in-depth interviews, focus group discussions, participatory conflict mapping and participatory observation, would enable a better understanding of the feelings and perceptions of different actors engaged in conflicts and, therewith, a more profound understanding of conflict as such. Enhanced understanding of conflicts, in turn, would enable constructive conflict management and collaborative forest governance to be achieved.

6.4 Recommendations for policy

Based on the previous sections, several recommendations for policy can be made. First, in order for equitable, inclusive forest governance to be achieved and conflicts to be prevented, local communities should be actively involved in commercial plantation development. Awareness raising and educational campaigns are needed to address the widespread ignorance of commercial plantation development among the general public. Moreover, private investors should be required to organise meetings, prior to starting plantation development, in which the rights and responsibilities of the various stakeholders are discussed. Awareness raising and

education, however, are not sufficient for qualifying commercial plantation development as a form of decentralised, participatory forest governance.

In order for this to be achieved, local community members should actually be given a say in plantation development, both in terms of management and decision-making. In the current situation, local community members have no influence whatsoever in decision-making on commercial plantation development. As a result, commercial plantations are generally detached from local communities, which frequently gives rise to tensions. In order to enhance the local embeddedness of commercial plantations, local communities should be involved in the whole governance process. First, they should have a say in the allocation of land to a private investor. One way to shape this, would be to involve local community members in judging investors' reforestation plans. Then, in the course of the development of a plantation, local communities should be given more rights to hold investors accountable. Moreover, customary rights of local communities to forest reserves should be safeguarded, so that access to forest resources is guaranteed to those who depend on such resources for their livelihoods.

Although tensions concerning the BSA have so far remained largely latent, the conflict-causing potential of the agreement cannot be underestimated. In order to prevent widespread conflict in the future, it is recommendable to critically review the BSA in consultation with all relevant stakeholders. A more balanced and commonly accepted BSA would greatly enhance the societal support for commercial forest plantation development. Indeed, increased benefits from commercial plantation development would constitute a major incentive for traditional authorities and local communities to dedicate themselves to cooperating with private investors. Consequently, a revision of the BSA is likely to contribute significantly to the prevention of commercial plantation-related conflicts.

Furthermore, in order to achieve constructive conflict management, it is imperative to reconcile customary and statutory modes of conflict management. In practice, this can be achieved by integrating 'mixed' conflict management strategies in forest governance. In this respect, the joint mediation by the District Chief Officer and the Bechem *Omanhene* discussed in the first case study can be taken as an example. On a local level, moreover, it is advisable to institutionalise the function of traditional authorities in dealing with conflicts. By formally recognising the mediating role of chiefs, local community members' position would be enhanced and the power imbalance in the management of commercial plantation-related conflicts would consequently be limited.

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Appendix: Questionnaire for local community members

University of Amsterdam



Tropenbos International



Conflicts around commercial forest plantation development

Date	Interviewer	Interview nr.	Village/community	Forest reserve	Forest district	District

We would like to invite you to take part in an academic study. We are students from the Kwame Nkrumah University of Science and Technology and the University of Amsterdam, and we are currently undertaking a joint research project with Tropenbos International Ghana on forest-related livelihoods and governance. In this study our focus is on commercial plantation development, and we are specifically interested in conflicts around commercial plantation development.

We will not take your name and all the information you provide will be treated anonymously, meaning that nobody else will see your answers. You may refuse to answer any question and you can interrupt the interview at any time. You are very welcome to ask questions during or after the interview.

I Biodata								
1	Sex	<input type="checkbox"/> Male			<input type="checkbox"/> Female			
2	Age Years						
3	Education	Primary	JHS/ MSLC	SHS/secon- dary	Vocational	Tertiary	Non- Formal	None Other
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	Origin	<input type="checkbox"/> Native/indigenous (→ to question 7)				<input type="checkbox"/> Migrant		
5	Place of origin	Village/town		District		Region		
			
6	Years settled Years						
7	Household size	Nucleus		Extended		Others		
			
8	Source of income	Farming (please specify)	Collection of NTFPs for sale	Worker on forest plantation	Trading	Formal employment (please specify)	Remittances	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
			
		Others						
							

II Livelihood aspects							
9	Do forest and tree resources contribute to your livelihood? If yes, how? If no, why not?	<input type="checkbox"/> Yes		<input type="checkbox"/> No, because... (→ to question 12)			
10	What forest activities contribute to your livelihood?	Collection of NTFPs for domestic use <input type="checkbox"/>	Collection of NTFPs for commercial use <input type="checkbox"/>	Hunting <input type="checkbox"/>	Chainsaw lumbering <input type="checkbox"/>		
		Farming in forest reserve without permit <input type="checkbox"/>	Forest boundary clearing <input type="checkbox"/>	Formal (e.g. worker with timber company) <input type="checkbox"/>	Other		
11	Which of the forest activities contributes most to your livelihood?						
12	Do you have off-reserve land for farming? If so, under what tenure type and how many acres?	Yes, acres of family land <input type="checkbox"/>	Yes, acres of purchased land <input type="checkbox"/>	Yes, acres of rented land <input type="checkbox"/>	Yes, acres of abunu share-cropping land <input type="checkbox"/>	Yes, acres of abusa share-cropping land <input type="checkbox"/>	No <input type="checkbox"/>
13	Do you have on-reserve land for farming? If so, how many acres and under what plantation scheme?	Yes, acres on an admitted farm <input type="checkbox"/>	Yes, acres under the HIPC scheme <input type="checkbox"/>	Yes, acres under the MTS scheme <input type="checkbox"/>	Yes, acres under the commercial scheme <input type="checkbox"/>	No <input type="checkbox"/>	

III Commercial plantation development				
14	Are you familiar with CPD?	<input type="checkbox"/> Yes		<input type="checkbox"/> No (→ to question 16)
15	Do you know the differences between CPD and MTS?	<input type="checkbox"/> Yes, namely		<input type="checkbox"/> No
16	Do you have access to the commercial forest plantations?	Always <input type="checkbox"/>	Sometimes <input type="checkbox"/>	Never (→ to question 18) <input type="checkbox"/>
				Other

17	What types of access do you have to commercial forest plantations?	Far- ming <input type="checkbox"/>	Collection of NTFPs <input type="checkbox"/>	Fire- wood <input type="checkbox"/>	Accommo- dation <input type="checkbox"/>	Labour <input type="checkbox"/>	Other 	No access <input type="checkbox"/>
18	What benefits do you gain from CPD?	Employment <input type="checkbox"/>	Food crops <input type="checkbox"/>	Firewood <input type="checkbox"/>	Income from food crops <input type="checkbox"/>			
		Future income from trees <input type="checkbox"/>	Other 		No benefits <input type="checkbox"/>			
19	What benefits does the community gain from CPD?	Employment <input type="checkbox"/>	Food crops <input type="checkbox"/>	Firewood <input type="checkbox"/>	Income from food crops <input type="checkbox"/>			
		Future income from trees <input type="checkbox"/>	Other 		No benefits <input type="checkbox"/>			
20	Since the introduction of CPD, how has your standard of living developed? Why?	Got worse, because <input type="checkbox"/>	Stayed the same, because <input type="checkbox"/>		Improved, because <input type="checkbox"/>			
21	Since the introduction of CPD, how has your access to forest resources developed? Why?	Got worse, because <input type="checkbox"/>	Stayed the same, because <input type="checkbox"/>		Improved, because <input type="checkbox"/>			
22	Do you have a say in the decision-making on commercial plantation development? If so, in which way?	Yes, very much <input type="checkbox"/>	Yes, a little <input type="checkbox"/>	No, not really <input type="checkbox"/>		No, not at all <input type="checkbox"/>		
23	Have there been meetings to inform the people in (name village) about CPD?	<input type="checkbox"/> Yes		<input type="checkbox"/> No (→ to question 27)		<input type="checkbox"/> Don't know (→ to question 27)		
24	Have you attended such a meeting? Why (not)?	<input type="checkbox"/> Yes, because			<input type="checkbox"/> No, because			
25	Who organised the meeting(s)?	Investor <input type="checkbox"/>	Chief <input type="checkbox"/>	FC/FSD <input type="checkbox"/>	Other 			
26	What were the main issues raised at the meeting(s)?							
27	Are you satisfied with the provision of information on CPD?	Very much dissatisfied <input type="checkbox"/>	Dissatisfied <input type="checkbox"/>	Not dissatisfied / not satisfied <input type="checkbox"/>	Satisfied <input type="checkbox"/>	Very much satisfied <input type="checkbox"/>		

28	Do you know what the 'benefit-sharing agreement' on CPD is?	<input type="checkbox"/> Yes, namely			<input type="checkbox"/> No (→ to question 30)	
29	Are you satisfied with this 'benefit-sharing agreement'? Why?	Very much dissatisfied <input type="checkbox"/>	Dissatisfied <input type="checkbox"/>	Not dissatisfied / not satisfied <input type="checkbox"/>	Satisfied <input type="checkbox"/>	Very much satisfied <input type="checkbox"/>
30	How would you characterise the communities' relationship with private investors?	Very negative <input type="checkbox"/>	Negative <input type="checkbox"/>	Neutral <input type="checkbox"/>	Positive <input type="checkbox"/>	Very positive <input type="checkbox"/>
31	How is this relationship developing? Why?	Getting worse, because <input type="checkbox"/>		Staying the same, because <input type="checkbox"/>		Improving, because <input type="checkbox"/>
32	Have private investors here helped the community with development projects?	<input type="checkbox"/> Yes, namely			<input type="checkbox"/> No	
33	How often do you see the investors here at the plantations? times per week / month / year				
34	How often do you see forestry staff (FC/FSD) here at the plantations? timer per week / month / year				

IV Conflict issues and conflict management					
35	Have you experienced conflict in relation to CDP? If yes, is it still going on?	<input type="checkbox"/> Yes, still going on	<input type="checkbox"/> Yes, has been resolved	<input type="checkbox"/> No	
36	What type of conflict is/was it?	<input type="checkbox"/> Land	<input type="checkbox"/> Labour provisions	<input type="checkbox"/> Working conditions	<input type="checkbox"/> Other
37	What are/were the issues that the conflict is/was about?				
38	What are/were the causes of the conflict?				

39	What are/were the effects of the conflict on your livelihood?						
40	What are/were the parties involved in the conflict?						
41	What party started the conflict?						
42	Have you experienced damage as a result of the conflict? If so, what type(s)?	Emotional <input type="checkbox"/>	Financial <input type="checkbox"/>	Physical (to your health) <input type="checkbox"/>	Social (to social relations?) <input type="checkbox"/>	Other	None <input type="checkbox"/>
43	How would you typify the intensity of the conflict and is/was it violent or not?	Low intensity <input type="checkbox"/>	High intensity <input type="checkbox"/>	Non-violent <input type="checkbox"/>	Violent <input type="checkbox"/>		
44	What is/was the duration of the conflict? days / weeks / months / years						
45	What are/were the actors involved in the conflict resolution?						
46	What steps do/did the actors take to resolve the conflict?	1: 2: 3:					
47	At what level does/did the conflict resolution process occur?	Community <input type="checkbox"/>	District <input type="checkbox"/>	Regional <input type="checkbox"/>	National <input type="checkbox"/>	Other	
48	What is/was the duration of the resolution process? days / weeks / months / years						
49	Has the conflict completely been resolved?	<input type="checkbox"/> Yes			<input type="checkbox"/> No (→ end of interview)		

50	Are you satisfied with the outcome of the resolution process?	Very much dissatisfied <input type="checkbox"/>	Dissatisfied <input type="checkbox"/>	Not dissatisfied / not satisfied <input type="checkbox"/>	Satisfied <input type="checkbox"/>	Very much satisfied <input type="checkbox"/>
51	What measures have been put in place to ensure that the conflict does not arise again?					

Thank you very much for your cooperation and your knowledge!