Access to timber trees for commercial purposes in off-reserve areas in Ghana

MSc Thesis

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> > August, 2009

Summary

Illegal logging has serious environmental economical and social implications, leading to deforestation, government revenue losses and increased poverty. Yet, it is a worldwide practice, particularly widespread in tropical countries. In Ghana alone, it is estimated that illegal logging contributes to as much as 70% of total timber harvest and loss of 120 000 ha of forests annually.

In recent years, numerous international initiatives aiming at tackling illegal logging were launched. One of them is FLEG-T, an European Union (EU) Action Plan that aims at initiating policy changes in tropical timber producing countries that are expected to decrease illegal logging. Those changes focus on the introduction of more transparent and accountable legality standards and the promotion of the good governance of timber resources.

In order to evaluate the potential effects of FLEG-T in respect to its objectives related to good governance, the *Illegal or Incompatible* project was launched by Wageningen University and Research Centre in cooperation with Ghana Forestry Commission.

This study is undertaken within the *Illegal or Incompatible* project framework. It aims to contribute to better understanding of the legal context in which timber exploitation takes place in Ghana. This knowledge is expected to provide for development of legislation that effectively addresses existing problems and provide for the good governance of timber resources.

The study analyzes access rights to timber trees in off-reserve areas in Ghana and access practices in an integrative way. The main research questions of the study are:

- WHO can access timber trees for commercial purposes in off-reserve areas in Ghana?
- HOW is the access to those trees gained?

More specifically the study looks at:

- What are the various categories of actors who access timber trees for commercial purposes?
- Who control access to timber trees?
- What are the legal and customary rules of access?

What are de facto access practices?

The concluding research question is formulated as:

 Is the current legislation regulating access to naturally-growing timber trees in off-reserve areas in Ghana in line with the FLEG-T aims related to good timber governance?

In order to answer these questions data was collected in Kumasi through literature study and expert interviews. Field data collection took place in six forest districts in four regions of Ghana. In each district two or three communities were selected and visited. The study locations were selected according to the following criteria:

- Variability in terms of vegetation type and land tenure arrangements
- Ongoing exploitation of trees for timber or charcoal

In regards to the WHO question, the study revealed that legislation give direct benefit rights to timber contractors awarded timber permit and indirect benefit rights to Forestry Commission (FC), District Assemblies (DA) and the traditional authorities. Yet, customary arrangements give benefit rights to holders of the usufruct rights to the land.

In regards to the HOW question, access control rights and mechanisms of the access-gaining are investigated. Four types of the access control rights (the right to give access, the right to deny access, the right to restrict access and the right to specify conditions of access) hold by different actors are distinguished. In respect to who is entitled to control access to timber trees, the state based and non-state based regulations differ. Legislation gives most of the access control rights to the FC. Moreover some of the control rights are devolved to the traditional authorities and the farmers. Yet, according to customary arrangements, access control should remain in the hands of the informal owners of the land where trees grow.

In regards to mechanisms of access, there exist legal procedures that regulate how access should be gained. Yet, they are somewhat unrealistic. Not only they do not fit local context but they are also complicated and time and labor intensive. Moreover they are ambiguous and therefore difficult to interpret. Consequently, the implementation of those procedures is weak.

Customary procedures regulating access to timber trees are also not implemented. As a result, access is gained in various mechanisms that can be ascribed into one of the following categories: a) the access-gaining based on the working rules; b) the access-gaining based on the *ad hoc* arrangements and c) gaining access by using the force. The access-gaining based on working rules is observed mainly in well organized communities that have previous experience in dealing with timber contractors. Access-gaining based on *ad hoc* arrangements and gaining access by using power are common in many parts of Ghana and prevail in the communities that did not develop working rules regulating access to timber trees.

The study reveals weaknesses of current legislation. It is argued that lack of recognition of customary land tenure and access rights do not conduce good timber governance. Moreover it does not contribute to successful management of timber resources in off-reserve areas. The following suggestions for legislative improvements are made: a) customary rights of the informal landowners to benefit from and control access to timber trees should be recognized in legislation; b) devolution of the power over timber trees to informal landowners should be carried out carefully and combined with the development of new mechanisms of benefit sharing and management of timber resources; c) current procedures of accessgaining should be reviewed., simplified and made more explicit; d) communication between different stakeholders and the dissemination of information about legislation should be improved. Studying working rules regulating access to timber trees in different communities and the way they developed can inspire policy-makers in search for better legislative solutions.

This study focuses on naturally-growing timber trees, which currently are of major economical importance in off-reserve areas in Ghana. Yet, there is also another category of timber trees, namely planted trees. At the moment their significance is minor, however potentially this will change in the future.

A different regulative framework apply to planted timber trees than to naturally-growing timber trees. State-based and non-state based regulations concerning planted trees are relatively consistent and give benefit as well as access control rights to the actors who planted trees. Yet, legislation concerning those trees is rather ambiguous which can lead to problems in the future.

Acknowledgements

Numerous people contributed to this research project, helping me and supporting until the final report was completed. I would like to sincerely thank all of them.

In the Netherlands, Dr. Ir. K.F. Wiersum patiently and with dedication supervised the project. I would like to thank him for his time and guidance.

Thanks to my father and Rogier for being with me in all good and bad moments.

In Ghana, people working for Trobenbos International Ghana rendered me great assistance that I can not overestimate. Thank you, Mr. Nketiah, Mr. Parker, Mercy, Patric, Jo... and all other wonderful friends. Special thanks to Mr. Asamua and Mr. Dankwa for driving me all around Ghana.

I am also very grateful to the FSD officers who, with true devotion, assisted me during the field work. Special thanks to Kow, for great time!

Finally, I would like to express my gratitude to the people who patiently answered my endless questions: representatives of the FC and timber industry, the chiefs, the opinion leaders, the community members...

In Poland my family, Lisia, Andrzejek, Jadzia and Marian, were my greatest supporters. Without them nothing ever could be possible. I can not express my true gratitude for who they are to me. Nevertheless, dziekuje za wszystko!

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1 Introduction

1.1 Background information

Over the past two decades increasing illegal logging caught international attention and triggered debates addressing this problem from different perspectives. It has been recognized that illegal logging has serious environmental, economical and social implications, leading to deforestation, government revenue losses and increased poverty. Moreover, illegal logging threatens democratic processes and can become a funding source for armed conflicts (Hansen and Treue 2008). It is estimated that worldwide illegal logging takes place in 70 countries and that up to 90% of total log volume is produced illegally (Hansen and Treue 2008). Illegal logging is widespread in key tropical timber producing countries, such as Indonesia, Brazil and Central and West Africa (Hansen and Treue 2008).

One of the important timber producing countries in West Africa is Ghana. Its total area is estimated at 6.34 million hectares (FAO 2005). Over 50% of Ghanaian timber is exported to European Union (EU). According to numerous authors (e.g.: Bird et al. 2006; FAO 2005; Hansen and Treue 2008), in Ghana illegal logging is common practice. Hansen and Treue (2008) estimate that it contributes to as much as 70% of total timber harvest. According to FAO (2005), each year 120 000 ha of forest are illegally harvested in this country. Illegal timber operations are observed in forests reserved for timber production as well as in off-reserve areas that consist of patches of ancient forests, fallow lands and farmlands with single timber trees. In fact the majority of illegal timber comes from off-reserve areas (Hansen and Treue 2008).

In order to tackle illegal logging, numerous international initiatives have been launched recently. One of such initiatives is the Forest Law Enforcement, Governance and Trade (FLEG-T), an EU Action Plan. The reasoning behind the FLEG-T is that the EU, as one of important timber consumers, shares the responsibility to combat illegal logging. The FLEG-T aims at initiating policy changes in tropical timber producing countries that should result in a decrease of illegal logging. This objective is to be achieved on one hand by introducing more transparent and accountable legality standards and on the other by promoting the good governance of timber resources. This approach results from assumption that

the decrease of illegal logging practice cannot be achieved by the introduction of the bureaucratic procedures only.

The governance is about changing vision of roles and responsibilities of the government from the governmental steering to co-steering by several actors (van Bodegom et al. 2008). International organizations differ in regards to what makes the governance 'good', however following aspects are commonly considered essential: participation, fairness, accountability, transparency and efficiency. In regards to timber resources, the good governance means adherence to the rule of law, transparency, low levels of corruption, voice of all stakeholders, accountability of all officials low regulatory burden and political stability (definition by World Bank; after van Bodegom et al. 2008). Those principles are incorporated into the FLEG-T and translated into concrete aims that the FLEG-T should achieve, namely: a) strengthening land tenure and access rights; b) strengthening effective participation of all stakeholders; c) increasing transparency in association with forest exploitation operations; d) reducing corruption; e) engaging private sector of timber producing countries in the efforts to combat illegal logging and f) addressing the financing of violent conflicts.

A tool to put the FLEG-T into effect are Voluntary Partnership Agreements (VPA), negotiated between the EU and timber-producing countries. By signing a VPA, timber producing countries oblige themselves to fulfil agreed conditions in order to gain access to the European timber market. When the FLEG-T put into the effect, only timber originating from the countries that signed a VPA will be let to the EU. Signing of a VPA is preceded by the long preparation stage. During that phase the content of a VPA is prepared with the involvement of stakeholders.

The research program *Illegal or Incompatible*, run by Wageningen University and Research Centre in partnership with the Ghana Forestry Commision (FC), looks at the potential effects of FLEG-T in respect to its aims related to good governance. The program has been created in the FLEG-T context, however its final outputs are expected to contribute to the development of the mechanisms for an improved policy dialogue in timber resources management in general (IoI 2009). In two countries (Ghana and Indonesia) chosen as case study locations, limited number of pilots takes place. In Ghana, the program focuses on a VPA recently signed between the EU and the Ghanaian government.

This study, looking at access to timber trees in off-reserve areas in Ghana, is undertaken within the *Illegal or Incompatible* framework. It aims to contribute to better understanding of the context in which timber exploitation takes place.

1.2 Problem statement

With increasing demand for tropical timber, the Ghanaian timber resources are under growing pressure. Most of the timber for export is exploited from forest reserves, yet the domestic market is supplied mainly with timber from off-reserve areas. Off-reserve areas are also a source of trees for plywood production that is a common Ghanaian export good. Thus, the greater than ever exploitation of timber trees from areas outside forest reserves. For many years, the importance of timber resources outside forest reserves has been overlooked by policy makers. Yet, with the growing understanding of the economical importance of those resources, they attract increasing attention. It is realized that unless trees outside forest reserves are managed in a sustainable way, they will be spent in the near future.

The management of timber resources outside forest reserves is somewhat problematic. Trees outside forest reserves are dispersed over large areas consisting of a mosaic of patches of old-grown forests, undeveloped land overgrown with trees as well as farmlands, especially cocoa farms. Most of this land is not public land but has different owners and is ground of various interests for different groups of people. Those people are important stakeholders and their involvement is prerequisite for effective management of timber resources.

In Ghana, access to timber trees for commercial purposes is strictly regulated by legislation. Officially, cutting any tree, regardless of land ownership or nature of the tree requires permission issued by the FC. Permits valid for a defined acreage of forest are granted to professional timber companies. Also local actors, such as communities or individual community members have to apply for permits to cut the trees on their land.

According to Hansen and Treue (2009) access to timber trees is unequal. The situation is a paradox: actors who manage timber trees (farmers) do not gain any benefits, whereas actors who do not contribute to timber resource management (state actors, traditional authorities) keep the benefits.

This contributes to rapid degradation of timber resources (Opoku 2006). Study by Slesazeck (2008) shows that due to the lack of legal incentives, local communities not only neglect management of timber trees but often destroy existing ones. Moreover, Opoku (2006) describes situations where farmers supported illegal logging because, contrary to legal timber operations, it brings them benefits.

From this perspective, a logical legislative measurement providing for the good governance of timber resources would be to recognize the rights of the local communities to benefit from timber trees. Yet, the existing body of knowledge shows that in off-reserve areas there is not one strict set of legal regulations on access to timber, but a pluri-form institutional setting. Apart from legislation, *de facto* access to timber trees is regulated by other rules, for instance customary arrangements. It means that legislative changes will not have the indented impact unless properly embedded in the broader off-reserve context. This requires a good understanding of the access related processes in off-reserve areas in Ghana.

Yet, in spite of existence of data related to access to timber trees in Ghana, there is still a need for a more integrated study, that assesses in a systematic manner who actually does benefit from timber trees and how access to timber trees is gained. This study attempts to fill the identified knowledge gap by analyzing the mechanisms of access to timber trees in off-reserve forest areas in Ghana.

1.3 Objectives of the study

The objective of the study is to contribute to a better understanding of the context in which timber exploitation takes places in off-reserve areas in Ghana by analyzing access to timber trees for commercial purposes. The study focuses on access rights and access practices, looking at who and how can benefit from timber trees. The generated knowledge can be used by policy makers to design policies that are well embedded in the local context and therefore more effectively address the existing problems.

The following research questions for the study were formulated:

- WHO can access timber trees for commercial purposes in off-reserve areas in Ghana?
- HOW is access to those trees gained?

On the basis of the conceptual framework that is presented in Chapter 2, those questions are made operational by a set of more specific questions:

- What are the various categories of actors who access timber trees for commercial purposes?
- Who control access to timber trees?
- What are the legal and customary rules of access?
- What are the *de facto* access practices?

The following concluding research question was formulated:

 Is the current legislation regulating access to naturally-growing timber trees in off-reserve areas in Ghana in line with FLEG-T aims related to good timber governance?

2 Theoretical Framework

2.1 Introduction

As discussed in Chapter 1, good governance is about participation, fairness, accountability, transparency and efficiency. Within the FLEG-T framework, principles of the good governance are translated into concrete aims to be achieved, *i.a.* strengthening land tenure and access rights. Underlying assumption is that equitable access to timber resources can contribute to the good governance. Therefore understanding of access rights and practices is important for two major reasons. First, it helps to diagnose current situation, in particular in relation to the equitability and fairness of access. Second, it is necessary to indentify possible legislative improvements.

Access can be defined as ability to benefit from a thing (Ribot and Peluso 2003). In case of natural resources, those 'things' are plant and animal species and their products. Natural resources can contribute to people's well being in numerous way. Some of the plants, animals and their products have market value and their sales generate income. Others are used directly to sustain people's needs. Natural resources can also be exchanged for other goods or services. Benefits from natural resources have different importance for various people, however they play a role in most of the rural livelihoods. Within most of the communities, benefits are shared unequally. Some people have better access to natural resources, whereas access of the others is limited.

In order to understand mechanisms that determine access to natural resources, a number of theories were developed. Several factors that influence ability to benefit were pointed out, namely: environmental conditions, rights and means that people dispose and socio-economical and political context. In the 1980s the scholars focused mainly on property rights. Recently influence of institutions on access to natural resources gained recognition and is acknowledged by the growing number of authors. This shift is a consequence of more complex understanding of the concept of access, recognizing importance of broad framework within which benefit gaining takes place.

This study builds on the theory of access proposed by Ribot and Peluso (2003), the tenure theories (Fortmann and Bruce, 1988) and the endowment and entitlement model introduced by Leach et al. (1999). The theory of access classifies mechanisms of access and provides an important distinction between institutions that regulate people's access and institutions through which people maintain their access. Property theories reveal different dimensions of the concept of property rights to natural resources. They distinguish between property rights to land and property rights to natural resources. Further, they provide typology of rights to natural resources in respect to things that people can and can not do with a resource. The endowment and entitlement model distinguishes between the rights to and the actual command over natural resources. Moreover it identifies place of the institutions in benefit gaining.

In this Chapter the theoretical framework of the study is discussed in following order: in the first section the concept of access is defined and analyzed. Following section investigates different types of property rights, with special focus on the tree tenure. Subsequently the difference between having rights and having access to natural resources is discussed in relation to the endowment and entitlement model. The role of institutions in benefit gaining is presented next. Conceptual framework developed for the purpose of this study concludes the Chapter.

2.2 The concept of access

The concept of access describes 'all possible means by which a person is able to benefit from things' (Ribot and Peluso, 2003). Those means can be property rights, skills, knowledge, labour power, as well as violence or threat. The more means people have the more benefits they can gain. At the same time, lack of some of the means may prevent people from gaining benefits. For instance, people might not benefit from natural resources, despite the fact that they live in the close proximity, due to lack of the appropriate tools or the property rights.

The access have four different dimensions and can be described by a) WHO have access; b) to WHAT resources; c) in what ways (HOW) and d) WHEN (Ribot and Peluso 2003). It can vary within a community, depending on gender or social status, and between the communities. Some resources might be accessible to everybody, whereas other might be reserved for exclusive use of a certain group. In addition, under the different circumstances, access to the same resource can vary between

the community members. For example it might be unrestricted when resource is abundant and strictly controlled in the periods of resource scarcity.

Benefits from resources can be gained in the multiplicity of ways depending on what means people dispose. Access might be enabled directly, through the property rights or indirectly, through the other means such as the ideological manipulation, without allocating rights per se (Ribot and Peluso, 2003). Therefore even people who do not have the legal rights to resources can benefit under certain circumstances.

Theory of access recognizes four mechanisms of access. The law-based and the illicit mechanisms encompass the direct ways of gaining benefits from natural resources. The law-based access is about gaining access through acquiring the rights to the natural resources. Those rights can be legal, customary or conventional and can be obtained in the multiplicity of ways, such as trade, inheritance, gift, etc. Unlike the law-based access, the illicit access is based on the violation of such rights and the theft (Ribot and Peluso, 2003).

The two above-described mechanisms are complemented and reinforced by the indirect mechanisms of access that reflect political-economic and cultural context in which access is sought (Ribot and Peluso, 2003). Two such mechanisms can be distinguished: structural and relational. The structural mechanism depends on the people's knowledge, skills and access to technology, capital, markets, and labour power. It is assumed that the people who have more knowledge, better skills or access to the technology, the capital, the markets and the labour power are able to benefit more from their rights than the others. Furthermore the good relations, especially with people who have power or means and high social status enforce the ability to benefit from natural resources. The social relations and the social identity determine the relational mechanisms of access.

2.3 Dimensions of the property rights

Commonly quoted definition by Henry Maine (1920) conceptualizes the property as 'a bundle of rights'. This definition reveals the multi-dimensionality of the concept of the property, that encompasses range of different rights and responsibilities concerning a thing. A property right can be described as 'the authority to undertake particular actions related to a specific domain' (Bruce, 1998). Those rights are legitimized and recognized either by the statutory law (the formal property rights) or by the local

informal arrangements (the informal property rights). Whereas the formal property rights are recognized by the official authorities and therefore can be claimed in the legal action, the informal laws appeal to the customary authorities and cannot be enforced by the official bodies. Often the formal and the informal property rights overlap resulting in the conflicting claims over natural resources. The property rights can be held by the various right holders that can be classified into one of the three categories: the state, the individuals and the groups. The former category can be further divided into the kin-groups, where group members are kindred and the non kin-groups such as the communities, the cooperatives or the corporations (Fortman, 1985).

Depending on who is the right holder, the property can be a) a private property,; b) a public property; c) a common property and d)a communal property (Bruce, 1998). First three categories are widespread in the Western societies, whereas the communal property is a term used to describe a tenure system specific to Africa and Asia that was developed by the Western social-scientists (Bruce, 1998). The communal property is owned by the community but the land is vested in community members for different uses, mainly cultivation.

In case of the natural resources it is important to distinguish between the rights to the land and the rights to those natural resources. The recognition that natural resources can be owned separately from the land on which they are located took place in the 1980s and was followed by the period of intensive field studies. Further research revealed that similarly to the property rights to the land, the rights to the natural resources have multiple dimensions. Hereby the different dimensions of the tree tenure are discussed more in detail.

According to Fortman (1985), there are four different types of the rights to trees, namely: a) the right to own or inherit trees, b) the right to plant trees, c) the right to use trees and tree products and d) the right to dispose of trees. Right to own or inherit trees establish person's ownership over growing trees. Right to plant trees entitles people to plant trees on a land. In some places planting trees is a way to establish ownership over the land. Use rights is more complex category. It encompasses several different rights, such as right to a) gather (i.e. dead branches, hanging bark or things growing on tree such as fungi, insects or bird's nests); b) use standing trees; c) cut all or part of the living tree; d) harvest tree products; e) use products under/ inside the tree. Similarly, disposal rights consist of four sub-

categories. Those are rights to: a) destroy the tree; b) lend the use of the tree; c) lease, mortgage or pledge the tree and d) give away or sell a tree.

Rights to trees are distributed among the people depending on three main factors (Fortmann, 1985). Those are: a) nature of the tree; b) nature of the use of the tree; c) nature of the land tenure system. First category emphasizes difference between self-grown and planted trees, based on assumption that rights are gained through investing labour (Fortmann, 1985). Second category focuses on difference between trees used to fulfil subsistence needs, for commercial purposes or for special (for example religious) purposes. Third category recognizes that tree and land tenure influence each other. Therefore rights to trees growing on private land are usually allocated differently than those to trees growing on communal land.

2.4 The concept of endowments and entitlements

Holding property rights does not necessarily secure access to natural resources. Often people who have actual property rights cannot benefit from them because they lack necessary knowledge, skills, tools, labour power, access to the market or due to numerous regulations. People who have rights to natural resources cannot access them because they lack command.

This situation has been conceptualized by Leach et al. (1999) in endowment and entitlement model. The model dismantle access into 'rights and resources that social actors have' (endowments) and 'alternative sets of utilities derived from environmental goods and services over which social actors have legitimate effective command and which are instrumental in achieving well-being' conceptualized as (entitlements). Property rights or tools are example of endowments, whereas timber, fuel wood or fruits are entitlements. Only if endowments can be translated into entitlements people's access to natural resources is established.

2.5 Institutions

Theory of access recognizes that ability to benefit from natural resources depends on the socio-economical and political context. This broad context is shaped by institutions. Mearns (1995) define institutions as 'regularized patterns of behaviour between individuals and groups in society'. They clearly distinguish from organizations, which are 'groups of individuals bound together by some common purpose to achieve objectives' (Leach et al., 1999 after North, 1990). Institutions are

diverse, operate on multiple-scale levels and undergo constant changes (Leach et al., 1999). Legislation, custom, social norms or codes of behaviour are examples of institutions. Influence of institutions is two-fold. First, to large extent they determine means that people have. Second, they directly influence people's access to natural resources.

Institutions are main focus of the entitlement and endowment theory. According to Leach et al. (1999) differences in access to natural resources between different actors to large extent depend on institutional framework. According to Leach et al. (1999) besides institutions officially dedicated to resource management, such as conservation laws or management policies, numerous other institutions influence access. For instance, gender division of labour or norms of fairness are examples of the later.

2.6 Conclusions

In this Chapter theories relevant for the analysis of access to timber resources were presented. First, access was conceptualized as an ability to benefit from things and Next, four dimensions of access i.e. WHO access, to WHAT resources, in what ways (HOW) and WHEN were discussed. Four complementary mechanisms of access were identified, namely the law-based, the illicit, the structural and the relational mechanism. The law-based access is sought through the property rights whereas the illicit access is based on the violation of those rights. Often there is relation between the property rights, the benefit rights and the access control rights. Therefore in this Chapter the property rights were discussed more in-depth. The different dimensions of the land and tree tenure were revealed.

Subsequently, the endowment and entitlement model was presented. This model conceptualizes a common phenomenon that the rights (endowments) that actors have often do cannot be translated into the things to which those actors are entitled (entitlements) due to the context in which access is sought. This context is strongly influenced by the institutions, however it also depends on the capabilities (e.g. knowledge, skills, tools, labour power, access to the market) that actors have.

In this Chapter institutions were defined as the 'regularized patterns of behaviour between individuals and groups in society'. They are diverse, operate on multiple-scale levels and undergo constant changes. The institutions regulate the access-

gaining as well as the access control. The institutions can be formal as well as informal.

Based on the above discussed theories, a conceptual framework of the study was developed. The aim of the study is to analyze access to timber trees in off-reserve areas in Ghana. It was decided to focus on two of the four aspects of access, namely WHO access timber trees and HOW access is gained. The study looks at the different institutions (the legislation and the customary arrangements) that shape the regulative framework in which access to naturally-growing timber trees is sought. In regards to WHO access timber trees, the study identifies the actors who have the right to benefit from timber trees and actors who access timber trees without having right to do it.

In regards to HOW access is gained, the study looks at how the rights that actors have (endowments) are transformed into utility (or entitlement) i.e. timber for commercial purposes. The study looks at the law-based and illicit access. The mechanisms of the access-gaining and the access control are analyzed more indepth. Theh mechanisms of the access-gaining are studied by looking at the procedures and their implementation. Moreover, *de facto* mechanisms of the access-gaining are studied. In regards to the mechanisms of the access control, the main focus is on the access control rights. The study distinguish different control rights (the right to give access; the right to deny access; the right to restrict access and the right to define conditions of access) and identify actors holding those rights.

3 Methodology

3.1 Research design

The study is an exploratory research. It investigates WHO benefit from timber trees and HOW. It analyzes access in an integrative manner, putting different aspects of access together.

The research design is comparative case study. Data collection process consisted of two parts. In the first phase in Kumasi an extensive literature study and expert consultations took place. Moreover future field study locations were selected on consultation with experts from hosting organization, Trobenbos International Ghana (TBI Ghana). In the second phase, a field study of access to timber trees was carried out in those locations.

In order to enhance internal validity of the research different qualitative methods of data collection were applied. Those included study of literature, observations, unstructured and semi-structured interviews with key-informants and group interview. Data collection design is summarized in Table 1.

Table 1 Data collection design

Main research question	Specific research question	Data collection method	Place
WHO access timber	Who are benefit right holders recognized in legislation?	Study of legal documents	Kumasi
trees?	Who are benefit right holders according to customary arrangements?	Semi-structured interviews with key-informants in selected communities (representative of traditional authority, local opinion leaders, knowledgeable community members)	SL
	Who are the other benefit holders?	Study of reports from previous studies	Kumasi
		Semi-structured interviews with key-informants	SL
		Group discussions with community members	

		Focused observations	
HOW access to timber	Who are access control right holders recognized in legislation?	Study of legal documents	Kumasi
trees is gained?	Who are access control right holders according to	Study of reports from previous studies	Kumasi
	customary arrangements?	Semi-structured interviews with key-informants in selected communities	SL
		Group discussions with community members	
		Focused observations	
	What are legal procedures of access-gaining?	Study of legal documents	Kumasi
	What are customary procedures of access-gaining?	Study of reports from previous studies	Kumasi
		Semi-structured interviews with key-informants in selected communities	SL
		Group discussions with community members	
		Focused observations	
	What are <i>de facto</i> procedures of access-gaining?	Study of reports from previous studies	Kumasi
	gairiirig !	Semi-structured interviews with key-informants in selected communities	SL
		Group discussions with community members	
		Focused observations	

^{*} SL states for 'study location'

3.2 Data collection techniques and selection of the respondents in Kumasi

In Kumasi, data was collected from individual interviews with key-informants and from study of available literature. At the beginning, relevant key-informants were selected based on suggestions of experts from TBI-Ghana. Next interviewees were identified using snowball sampling technique. Several categories of key-informants were addressed for data collection:

- researchers working for Forestry Research Institute Ghana (FORIG) and TBI Ghana
- FC staff (mainly from Resource Management Support Centre)
- representatives of timber industry

In total fifteen interviews took place. The interviews had unstructured and semistructured character. Set of questions was developed gradually. First interviews were less structured and oriented towards gaining an overall picture whereas later focused on selected topics.

Secondary data was obtained from following categories of documents:

- Reports from previous studies (MSc, BSc and studies done by independent researchers working for TBI Ghana and FORIG)
- Policy documents
- Internal Forestry Service Division (FSD) reports
- Other FSD documentation (copies of Social Responsibility Agreements,
 Timber Utilization Contracts, complaints, minutes from meetings)

The documents were selected upon arrival to Ghana, based on suggestions from key-informants and own bibliographical research. Some secondary data was obtained prior to departure to Ghana, from published documents available in the Wageningen Universities' library.

3.3 Data collection techniques and selection of the respondents in field study locations

Six districts in four regions in Ghana were selected as field study locations. Visited districts were: Juaso and Mampong in Ashanti region, Goaso and Sunyani in Brong-Ahafo region, Buipe in Northern region and Jesikan in Volta region.

Districts were selected upon arrival to Ghana on consultations with experts from TBI Ghana. The objective was to select districts that are representative in regards to different conditions of timber exploitation. Following criteria were taken into account:

- Variability in terms of vegetation type and land tenure arrangements
- Ongoing exploitation of trees for timber or charcoal

In Table 2 selected districts are compared in regards to vegetation type and customary land tenure arrangements.

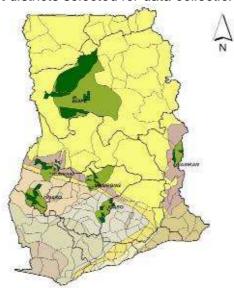
Table 2 Comparison of the selected districts in terms of customary land tenure rights and vegetation type

Forest district	Region	Traditional land tenure arrangements	Vegetation type
Juaso	Ashanti	Land belongs to the stool	Moist Semidecidous (South East Subtype)
Mampong	Ashanti		Dry Semidecidous
Goaso	Brong-Ahafo		Moist Semidecidous (North West Subtype)
Sunyani	Brong-Ahafo		Dry Semidecidous
Jesikan	Volta	Land belongs to the clans	Dry Semidecidous
Buipe	Northern	Land belongs to the community	Savannah

Communities where data collection took place were selected on arrival to the district, on consultation with FSD officer. Access to two or three communities was sought. Assisting FSD officer was asked to point out communities that differed in terms of access-gaining practices, for instance where an access is sought illegally or where it is well regulated by various rules.

In each district two or three communities were visited. Map 1 shows location of selected districts (district area is marked with light green colour and name of the district capital is written with block letters).

Figure 1 Location of forest districts selected for data collection



In the selected districts key-informants such FSD officers, timber contractors, representatives of traditional authority and local opinion leaders were interviewed. In addition, meetings with members of local communities were organized during which open discussions took place. In every district desk study of reports and other internal document available in FSD office was carried out.

3.4 Data analysis

Preliminary data analysis took place simultaneously to data collection. All interviews were recorded and notes were taken down. Next, the interviews were reviewed and relevant information was extracted. This information was briefly summarized in written form. Similar procedure was used in regards to literature study. The notes were taken down for each document and later they were condensed into a written summary. At the initial stages much information not directly related to the topic of the study was collected in order to understand better the local context. Therefore in the following stages of the analysis it was necessary to reduce the amount of the information. Simultaneously to elimination of some data, relevant data was preliminary grouped by coding. Data was sorted out using codes based on main and specific research questions as broad categories. Data relevant to answer question WHO access timber trees were put together. The same procedure was applied to data relevant to answer question HOW. Next, data on state-based and non-state based regulations were separated.

During following stages, data attributed to each of the categories were analyzed separately. In regards to WHO question, benefit right holders were distinguished from actors who gain access illegally. Next, different categories of benefit right holders were established. In regards to benefit right holders recognized in legislation, direct and indirect right holders were distinguished. Direct benefit right holders were defined as actors who have right to exploit timber for commercial purposes, whereas indirect benefit right holders were actors who have right to get share of royalties for timber exploitation. In regards to customary arrangements, differentiation was made between traditional customary laws and current customary arrangements. Whereas traditional customary law distinguish between usufruct right holders and ownership right holders, this distinction is hardly recognizable in current customary arrangements. Nowadays, former usufruct right holders have almost full right to the land and available resources, thus *de* facto they are the landowners. Simultaneously,

rights of formal owners are limited. Therefore categories of *formal* and *informal* owners were introduced.

In regards to HOW question, access-control and access-gaining were analyzed separately. Analysis of access control focused mainly on access-control rights. Different types of those rights were distinguished, namely: right to give access, right to deny access, right to restrict access and right to specify conditions of access Next, actors holding different types of rights were identified, separately for state based and non-state based institutions. Access-gaining analysis looked at procedures of access-gaining, implementation of those procedures and de facto mechanisms of access. Procedures based on legislation were distinguished from procedures based on customary arrangements. In regards to *de facto* mechanism of access tree broad categories were developed, namely a) access-gaining based on working rules; b) access-gaining based on *ad hoc* arrangements and c) gaining access by using the power.

4 Results

4.1 Introduction

The objective of this study is to contribute to better understanding of context in which timber exploitation takes place in off-reserve areas in Ghana by analyzing access rights and practices. As discussed in Chapter 2 the study focused on the questions WHO access timber trees and HOW access is gained. Those questions were specifically oriented at one category of trees, namely naturally growing timber trees for commercial purposes.

In the first section of this Chapter results that aim to answer the question WHO access timber trees are presented. This part focuses on actors entitled to benefit from timber trees. As benefit right holders defined in legislation differ from actors whose right to benefit from timber trees is based on customary arrangements, state-based and non-state based regulations are discussed separately. Next, actors who access timber trees without having access rights.

In the second section of this Chapter results that answer question HOW access is gained are presented. In this part access control and procedures of access-gaining are discussed separately. First control right holders defined in legislation and by customary law are described. Next part focuses on procedures of access-gaining. Next problems with implementation of those procedures are highlighted. Possible sources of those problems are subsequently presented. The Chapter ends with brief overview of *de facto* mechanisms of access-gaining that were observed in different study location.

4.2 WHO access naturally growing trees?

4.2.1 The access rights holders

The state based regulations

Ghanaian legislation separate land tenure from tree tenure. Whereas landowners have full right to benefit and control access to their land, rights to naturally growing trees are vested in the President. It means that landowners have no right to benefit from trees growing on their land.

Depending on whereas timber trees grow in forest reserve or in off-reserve area, their situation is regulated by different regulatory framework. In 1927 'forest reserve' concept has been introduced by Native Authority Ordinance No.18. Since then, timber trees in forest reserves and timber trees outside forest reserves are considered separately.

Holders of the access rights to timbers trees for commercial purposes in off-reserve areas are defined in Constitution of Ghana (1992) and major documents that constitute forestry legislation namely Timber Resources Management Act (1997) and Timber Resources Management Regulations (1998) with their amendments, Act 617 (2000) and L.I. 1721 (2001). The legislation identifies several actors with different rights to benefit from timber trees. Two main categories of beneficiaries can be distinguished: a) actors with right to direct benefits from timber trees and b) actors with right to benefit indirectly. Timber for commercial purposes can be classified as direct benefit, while share in revenues from timber trees (revenues from stumpage fee) are indirect benefits.

Direct right to benefit from timber trees is acquired by obtaining special permission (timber permit). Rights to indirect benefits are allocated to actors identified in legislation and cannot be acquired. Those actors are: FC, Administration of Stool Lands (ALS), District Assembly (DA), traditional authority on paramount level and Traditional Council (traditional authority on stool level, TC). Benefit sharing scheme is defined in Constitution of Ghana and further specified in forestry legislation.

Holders of direct and indirect right to benefit from timber trees for commercial purposes identified in legislation are presented in Table 3

Table 3 Benefit right holder from timber trees for commercial purposes identified in legislation

Benefit-right holder	Type of benefits		
Direct benefit-rights: right to timber			
Registered timber companies with	Timber for commercial purposes		
timber permit	·		
Indirect benefit-rights: right to share in stumpage fee			
FC	40% of stumpage fee		
ASL	10% of remaining amount		
Traditional Authority on paramount	20% of remaining amount**		
level			
TC	25% of remaining amount**		

** amount after subtracting 10% of share for ASL from 60% of stumpage fee

The non -state based regulations

Main source of non-state based regulations are customary laws as well as common believes and shared logic of action. In regards to natural resources, such as timber trees, rights to benefit are closely linked to land tenure rights. Customarily in Ghana there is no distinction between land and tree tenure (with an exception of planted trees) benefit-right holders to timber trees are *de facto* the landowners. Yet, this does not answer the question WHO is entitled to benefit from timber trees as customary land tenure arrangements are complex and the holders of the specific ownership rights difficult to indentify.

This is mainly due to the fact that traditional land tenure differ from current land tenure arrangements. Traditionally, land in Ghana was owned by communities. It was not subject to outright sale or disposal. Community members could gain usufruct rights to the land, however formal ownership always rest with the community as a group. In the course of history, various group and individual actors acquired usufruct rights to the land. As a result, different categories of the land depending on usufruct right-holders were created. Some lands where vested in families or individuals. Those became 'family' and 'individual' lands. The usufruct rights to unallocated land remained in hands of the whole community i.e. stool, skin or clan. Those lands became 'stool', 'skin' or 'clan' lands. From formal perspective, regardless of category of land the landowner is always the community because it still holds allodial title. From this perspective, the usufruct right holders are only custodians of the land.

Yet, in modern Ghana allodial title to the land s of minor importance. It is the usufruct rights that matter and give the holder *de facto* full right to the land. Usufruct right holders define themselves as 'landowners' and their claims to the land are recognized by the community. In some regions such as Ashanti, custodians of the land are still somewhat depended from the allodial title holder. For instance, in Juaso (Ashanti region) annually they have to pay certain amount of money to the TC that represents the community as a tribute. Moreover, they need to consult traditional authority before selling the land. Yet, in Volta region, usufruct right holders claim all rights to the land, including right to dispose the land independently as well as retain all benefits from it.

The consequence is that *de facto* there are two categories of landowners in Ghana, formal i.e. allodial title holders and informal i.e. usufruct rights holders. Accordingly, several categories of communal land can be distinguished: stool or skin land; clan land; family land and private land.

Natural resources available on each of the above described categories of land the informal landowner. It is believed that the owner have full right to benefit from those resources. Theoretically, also formal landowners have right to share in benefits from the land vested in usufruct right holder. This is why in some communities the informal landowners still pay some money or give an offering to the chief during festivals. Yet, this custom is often not practiced anymore.

Table 4 summarizes differences between traditional land tenure and customary land tenure arrangements and presents holders of the right to benefit from timber trees growing on different categories of land.

Table 4 Traditional land tenure and customary land tenure and customary holders of the right to benefit from timber trees

Formal category of land	Customary category of land	Formal landowner (allodial title holder)	Informal landowner (holder of usufruct rights to the land)
Communal land	Stool land	Stool	Stool
	Family land	Stool or Clan	Family
	Private land	Stool or Clan	Individual
	Clan land*	Clan	Clan

^{*}only in Volta region

Within Ghana, distribution of customary categories of land differs. In some places community land dominates and private lands are few or does nor exist, whereas in other private lands dominate, while community lands are few. In Table 5 Distribution of informal categories of land in study locations is presented.

Table 5 Distribution of customary categories of land in Ghana

Forest district (study location)	Dominant categories of land	
Juaso	Community, family and private land	
Goaso	Mainly individual but also family and community land	
Sunyani	Family, individual and community land	

Mampong (Atonso)	Mainly family and community land but also private
Mampong (Ejura) Stool land	
Buipe	Skin land
Jesikan	Mainly family land

4.2.2 Other actors that access timber trees

As already mentioned, some actors do access timber trees even though they have no access rights. Two categories of such actors can be distinguished: a) actors who access timber trees without formal permit; those are mainly chainsaw operators and b) actors who have formal permit to fell trees but fell trees to which are not entitled; those are timber contractors. Those actors have appropriate tools and skills to access the trees and benefit from them, however they have no right to do so.

Formerly, individuals who used chainsaw to fell trees and convert logs into lumber were recognized by Ghanaian legislation and they could apply for timber permit on equal terms with timber contractors. Yet, chainsaw lumbering was banned in the mid-1990s and since then chainsaw operators cannot work legally. Nevertheless, due to high demand for timber, they remain active in many parts of Ghana seeking access to timber trees outside the law. In some places chainsaw operators are tolerated by local communities and carry out their activities with community consent. Otherwise they seek access secretly, for instance in the night or in absence of the landowner. In extreme cases, access is gained by force.

During this study an increased activity of chainsaw operators was observed in Volta region. In Jesikan forest district, one of the study locations, they operated almost professedly, during the day in easy to spot locations. They were passively tolerated by local communities, however not supported by them. They made agreements with informal landowners who literally sell them trees growing on their land. In other locations, the practice was much less visible and, according to FSD staff, limited to forest reserves where more valuable and better suitable for chainsaw lumbering species were to be found.

From interviews and administrative reports considerable body of evidence was collected illustrating illegal tree felling by timber contractors. Basically three main strategies were observed: a) felling more trees that specified in timber permit; b) felling valuable tree species instead of species indicated in timber permit and c) trespassing boundaries of area allocated for timber exploitation. Most of the timber

contractors operating in off-reserve areas were at least once caught on attempt to access the timber illegally which gives the idea of the scale of the practice.

4.3 HOW access to naturally growing timber trees is gained?

4.3.1 The access control right holders

In relation to access-control right holders the distinction between the access control right holders identified in legislation and customary access control right holders have to be made.

The access control right holders are not directly indicated in the legislation. Rather various legislative documents mention roles of different stakeholders in respect to timber trees. Here, following rights have been defined as access control rights: a) right to give access; b) right to deny access; c) right to restrict access and d) right to specify conditions of access. Consequently, an actor entitled to any of those rights is considered an access control right holder.

In regards to forest reserves, FC has full right to control access to timber trees. In off-reserve areas role of the FC is somewhat limited in favour of other stakeholders, especially traditional authority. Recently an attempt has been made to recognize role of farmers in maintenance of timber resources on farms. Provisions in Timbers Resource Management Act (1997) give them limited access-control right i.e. right to restrict access to timber trees growing on the farmland. Theoretically, prior to entering the farm, timber contractor should ask farmer's consent. In reality, those access control rights are rarely recognized. Very often timber contractors seek access to trees without asking anybodies permission, and even use force if a farmer tries to deny access to the farmland.

In Table 6 access control right holders mentioned in legislation are presented. Table 7 present actors whose right to control access to timber trees is based on the custom. In principal those actors are informal landowner who, as already explained, hold all rights to natural resources growing on their land.

Customarily, the land that belong to a group (stool, skin, clan or family) is not administrated collectively but by individuals who are recognized as custodians. Those individuals *de facto* dispose the land and, consequently, also control access to

timber trees. In principal, chiefs are custodians of stool or skin lands whereas clan and family heads administer the clan and the family lands respectively. In spite of ultimate decision-making right, custodians have to consult their decisions with other members of the landowning group. Chief asks opinion of the council of the elders and local opinion leaders, clan head consults family heads and family head discusses decisions with respected family members. This mechanism is meant to ensure that custodians really act on behalf of the group and not in their own interest.

Table 6 Different categories of right holders and control rights as in legislation

Access control right holder	Type of control right		
FC	Right to give access to timber trees (granting timber right)		
	Right to restrict access to certain areas and species Right to specify conditions of access		
Traditional	Right to deny access to the area where timber trees grow		
authority on			
paramount level			
DA	Right to restrict access to certain areas		
TC	Right to restrict access to certain areas and species		
	Right to specify conditions of access		
Farmers	Right to restrict access to the land they cultivate and trees		
	growing on this land (in specified circumstances)		

Table 7 Right holders and control rights to different categories of land based on customary arrangements

Informal category of land	Right to give access	Right to deny/ restrict/ specify conditions of access	Actor executing control rights
Stool land	Stool	Stool	Chief on consultation with council of elders
Clan land	Clan	Clan	Clan head on consultation with family heads
Family land	Family, sometimes formal landowner	Family	Family head on consultation with important family members and sometimes the chief
Individual land	The informal landowner, sometimes formal landowner *	The informal landowner	The informal landowner, rarely on consultation with local or stool chief*

^{*} not in Volta region

4.3.2 The procedures regulating the access-gaining

The legal procedures

Gaining access to timber trees for commercial purposes is regulated by detailed procedures incorporated into legislation. Those procedures are described in *Logging Manual*. Section F of this manual, focuses specifically on exploitation of timber trees in off-reserve areas. The procedures regulate issues concerning acquisition of timber permit, exploitation of timber, dealing with local communities and ensuring legality of exploited timber. Apart from normalizing access-gaining, they aim to ensure that exploitation of timber trees is done in fair and environmentally sound way. Table 8 presents main provisions made for social responsibility and environmental sustainability.

Table 8 Provisions for the social responsibility and the environmental sustainability of timber exploitation

Issue	Provisions made in forestry legislation
Social	Community involvement in preparation of Timber Utilization
responsibility	Contract (TUC)
	During preparatory phase FSD should consult relevant sections of TUC with local communities. Community members should have an
	opportunity to express their opinion on TUC and enter their remarks.
	Social Responsibility Agreement (SRA)
	Timber contractors should negotiate and sign SRA with
	communities affected by logging activities.
	Farmer's consent
	Timber contractor should ask consent of the farmer before
	exploiting trees on his farmland.
	Crop damage compensations
	Timber contractors should pay compensations for crops damages
	that occur due to timber exploitation
Environmental	Timber Operational Specifications (TOS)
sustainability	TOS define how timber exploitation should be carried out so that their environmental impact is limited. For example, TOS define
	which areas should be excluded from timber operations, which species cannot be felled and what felling techniques can be used.

The procedure of access-gaining starts with application for timber permit. Only registered timber companies can acquire timber permit for commercial purposes.

This kind of permit should be granted in form of Timber Utilization Contract (TUC). Nevertheless, in many locations timber contractors still operate under another type of permit, namely salvage permit or Timber Utilization Permit (TUP). As explained by FSD officers this is temporary arrangement, until procedures for granting TUC are made operational. Timber permits of any type (TUC, salvage permit or TUP) are granted for limited period and for delineated area. Only selected trees can be exploited. Selection is made by FSD according to FC guidelines specified in Logging Manual.

Timber permit is awarded to timber contractor by FC on fulfilment of formal requirements and after ascertain that the area has not been allocated to another timber contractor. Award of timber permit is followed by preparation of documents specifying conditions of access. First, pre-felling inspection takes place. During this inspection all timber trees in selected area are recorded and measured. Next, FSD officer select trees to be felled. All selected trees are listed in Timber Information Form (TIF). This document is meant to guide timber operation, so that only selected trees are felled.

Next, FSD prepares Timber Operational Specification (TOS). This document describes how timber exploitation should be carried out. For instance, it can include provisions concerning logging techniques to be used or areas to be excluded from timber operations.

Finally, timber contractor has to sign Social Responsibility Agreement (SRA) with communities affected by logging operations. Logging Manual (1998) defines SRA as 'a mechanism for ensuring that all TUC operations are carried out in a socially responsible manner with due respect for the rights of the land owners. It is a schedule of the TUC and is legally binding. The SRAs are negotiated by the Forest Service with the communities in advance of the contract being advertised'. SRA should consist of two sections: Code of Conduct and Social Obligations.

Code of Conduct specify how timber contractor should deal with the community. For instance, it can include provisions for respecting the taboos, community consultations during planning of the logging operations or payment of crop damage compensations payment. Social Obligations are core part of SRA. Here material provisions that timber contractor will to make for the community (i.e. construction materials for

school building, clinic, etc) are defined. The value of those provisions should come to at least 5% of accrued annual stumpage fee.

Once conditions of access are specified, timber exploitation takes place. All felled trees are measured and recorded by FSD staff in Log Information Form (LIF). Based on those records, stumpage fee and other taxes are calculated. Moreover, FSD ensure that initial conditions of access are fulfilled. On successful accomplishment of all above mentioned procedures, the contractor obtain Conveyance Certificate. This document entitles the holder to convey logs legally. With Conveyance Certificate timber can be transported to the mill, converted into timber and sold. From formal perspective, only timber that has been processed in the mill can be sold legally.

Legal procedures regulating access-gaining are summarized in Figure 2.

Figure 2 Legal procedures regulating gaining access to timber trees

STEP 1

Fulfilment of formal requirements
Application for permit to exploit timber trees on certain area

Award of timber permit

STEP2

Pre-felling inspection and selection of trees to be felled down
Preparation of TOS
Negotiations and signing of SRA

FSD permission to start exploitation of timber trees

STEP 3

Exploitation of timber trees
(Only selected trees can be felled down.
Logging operations need to be carried out in manner specified in TOS)
Fulfilment of obligations specified in SRA
Measurement of logs and calculation of stumpage fee

Issuance of Conveyance Certificate

STEP 4

Transportation of logs to the mill Conversion into timber Sale of timber

Financial benefits

(Share of benefits should be paid to the state in form of stumpage fee)

Implementation of the legal procedures

Implementation of legal procedures is somewhat problematic. In reality, those procedures are never strictly followed. Table 9 summarizes main differences between formal procedures and situation *de facto*.

Table 9 Differences between legal procedures and situation de facto

Stage of	Procedure	Situation de facto
access-gaining		
Award of timber permit	Before granting timber permit intensive consultations with local communities should take place Timber permits should be granted in bidding process.	Such consultations rarely take place. Rather consent of the paramount chief is considered as sufficient. Timber permits are rarely awarded in biding process. Usually they are allocated to the timber contractor whose timber rights are about to expire or who applied for the permit first.
Pre-felling inspection	Community members should be involved in pre-felling inspection.	Usually pre-felling inspection is made by FSD officer in presence of timber contractor only.
SRA negotiations	SRAs should be negotiated between timber contractor and representatives of the community. It should be witnessed by FSD and DA. SRA should be written down and signed by representatives of community, FSD and DA. The provisions incorporated into Social Obligations section should benefit all community members. SRA oblige community members to cooperate with timber contractor during timber exploitation	SRA negotiations look differently in various communities. Very often SRAs are negotiated between Traditional Council and timber contractor only, without involvement of other community members. Provisions benefit the stool but not members of the local communities who are the most affected by logging operations. Most of the timber contractors fulfil their SRA obligations only partially Apart from SRA timber contractors often have to make additional negotiations with local communities. In Volta region timber contractors have to negotiate access with every landowner separately and they need to pay for every single tree they want to pay.
Timber exploitation	Timber exploitation should start only when all documents specifying conditions of timber exploitation are ready. Only trees specified in TIF can be felled down. Timber contractors should ask farmer's consent before exploiting timber trees on the farmland	Often timber contractors start logging before documents are ready. Often trees other than specified in TIF are logged. Consent of the farmers is rarely sought. Right of the farmers to object tree-felling is usually ignored and timber exploitation often takes place against will of the
		farmer. FSD staff accept consent of the TC as binding and therefore do not insist on obtaining permission from each individual landowner and farmer. This often causes conflicts between farmers and timber contractors

Crop damage compensations should be paid to farmers whose crop was damaged due to timber exploitation	Official crop damage compensations are lower than real value of damage, therefore farmer asks for more money than defined in the law. Timber contractors often postpone payment of the compensations and give the money only to most insisting farmers
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Problems with implementation of legal procedures can be attributed to several factors. First, the procedures are not explicitly formulated and therefore can be interpreted in numerous different ways. Some concepts, such as 'community' or 'a farmer' are used without proper definition. Moreover provisions regulating issues such as SRA negotiations or payment of crop damage compensations are not detailed enough to clearly guide the stakeholders. For instance, interviewed timber contractors complained that often they do not know with whom they shall negotiate SRAs. As a result they approach actors who are not the most appropriate to represent interests of communities affected by logging activities, such as paramount or stool chief. Consequently, all benefits from SRA go to the stool and not to the initial target group i.e. local communities affected by logging activities.

In regards to crop damage compensations, there are no clear guidelines how timber contractor should deal with farmers. It is not specified when compensations should be paid and to whom: a farmer or a landowner? Moreover no mechanism exist to ensure that crop damage compensations are really paid.

Another issue affecting implementation of legal procedures is that information about legislation is not passed to the stakeholders. Community members, timber contractors and even FSD officers are often not aware of what are actual procedures. Often they follow old rules without knowing that they have already changed. Moreover stakeholders who have an access to the information about legislation often do not know how to interpret it. Theoretically FSD should serve as FC mouthpiece and explain all the rules to community members and timber contractors, however FSD officers themselves have problems with understanding of legislation.

Yet, some procedures are too difficult to implement. They require time and resources that are lacking. For example preparation of TUC should be preceded by intensive consultations with local communities. At least two meetings should be take place

where preliminary version of TUC is presented to community members so that they can comment on it. Yet, organization of this kind of consultations requires much time and effort. FSD, an actor formally in charge of this task, lack sufficient human resources. Therefore the procedure is usually simplified and instead of consulting local communities, paramount chief is asked to express his consent in regards to TUC.

Finally, there are procedures that do not fit local context because they are based on wrong assumptions. For instance, in Volta region chief do not have right to dispose land other than stool land. Therefore decision giving access to the trees on clan, family or individual land singed by a chief is not biding for anybody. Yet, legislation assumes that chief always act on behalf of the community and request his signature on SRA rather than signatures of *de facto* owners of the land.

The procedures based on customary arrangements

Customarily, an actor who seeks access to natural resources growing on a land, should ask permission of the control right holder or the actor executing control rights on behalf of the landowning group. During the initial negotiations conditions of access will be specified and timber trees to be exploited will be defined. On successful agreement, actors might pour libation to seal the deal. Traditional agreement is oral and based on mutual trust.

4.3.3 De facto mechanisms of the access-gaining

In spite of existence of legal and customary procedures regulating access gaining, *de facto* access to timber trees is acquired differently. The actual mechanisms of access-gaining are difficult to describe as they depend on local context and therefore vary significantly between different locations. Here, mechanisms of access-gaining are separated into three different categories: a) access-gaining based on working rules; b) access-gaining based on *ad hoc* arrangements and c) gaining access by using power.

The access-gaining based on the working rules

In this study working rules are defined as rules based on informal arrangements between actors that regulate access-gaining to timber trees for commercial purposes. In contrast to *ad hoc* arrangements, working rules are somewhat formalized and therefore less variable. Working rules are mixture of legislation, customary

arrangements and common logics of action. They are known and biding to all involved actors. Even though there is no legal backup, for the sake of harmony actors tend to follow working rules.

Working rules define who have right to benefit from timber trees, what are the procedures of access-gaining and who can control access. During fieldwork it was observed that access-gaining was regulated by working rules in well organized communities that had established relation with FSD and experience in dealing with timber contractors. An example of working rules developed by local community in Atronie is presented in Table 10.

Table 10 Working rules developed by local community in Atronie

Access right holders	Conditions of access	Access control right holders
Timber contractors recognized by FDS and traditional authority after negotiating	Valid timber permit of any type (TUC, salvage permit, TUP)	FC: give timber rights to exploit timber trees for commercial purposes
conditions of access with local communities	Consent of paramount chief	FSD: defines how exploitation of timber trees has to be done (TOS); selects trees to be felled
	SRA negotiated with	
	TC	Paramount chief: gives consent to use area for timber
	Informal agreement with local traditional	exploitation
	authority concerning provisions to be made	TC: defines what provisions timber contractors have to make
	for local community	to the stool (content of the SRA)
	Consent of the informal landowner	Local traditional authority: defines provisions that timber contractors should make to the
	Payment of the crop	local community
	damage compensations	Informal landowners: restrict access to timber trees in justified cases

The access- gaining based on the ad hoc arrangements

Ad hoc arrangements, in contrast to working rules, flexible. They are negotiated ad hoc between actor seeking access (timber contractor or chainsaw operator) and actors who control access to timber trees in the location (traditional authority, informal landowner). The output of the negotiations depend on power and ability of

actors to impose their conditions. Both sides involved in negotiations are expected to respect the arrangement, however in reality they are often broken.

This type of access-gaining is commonly observed in Volta region. There informal landowners are more powerful than in other regions. They have total control over the land and available natural resources. Timber contractors cannot start timber exploitation without informal landowner's consent which is acquired after tough negotiations concerning conditions of access. Issues such as payments for each felled tree, amounts of crop damage compensations, felling techniques, etc. are specified during such negotiations.

Gaining access by force

Gaining access by using the force is strategy based on violation of conditions of access. It happens when timber contractor or chainsaw operator breaks earlier agreements or seek access secretly without asking consent of relevant stakeholders. This kind of access is not regularized by any rules. The final output depend mainly on power relationship between different stakeholders. The powerful ones benefit from timber trees on detriment of less powerful ones.

This mechanism of access has been observed in less organized communities where role of traditional authority was reduced and in the communities that were lacking experience in dealing with timber contractor. In particular communities that lived in areas where timber exploitation started recently were often abused by timber contractor.

An example of gaining access by force was observed in two communities in Goaso forest district where timber exploitation was carried out by Musdina timber company. The timber contractor signed SRA with Traditional Council in Goaso and made some provisions for the stool from which local communities did not benefit. Local chiefs negotiated extra provisions for the local communities with timber contractor: the toilets and water pump. Moreover, prior to timber exploitation the contractor made promises to informal landowners in order to gain access to trees growing on their farms. If informal landowners did not express their consent, access to timber trees was sought on their absence. During timber exploitation, roads were destroyed and stream banks eroded. Nevertheless, once logs were transported to the mill, timber contractor disappeared without fulfilling his promises. When approached by

community members he simply throw them out without further negotiations, threatening calling the police.

4.4 Conclusions

In this Chapter information gained about WHO and HOW access naturally-growing timber trees for commercial purposes in off-reserve areas in Ghana was presented.

In regards to WHO question, several benefit right holders were identified. It was pointed out that state-based and non-state based regulations concerning access to timber are not consistent. Legislation gives direct benefit rights to timber contractors awarded timber permit and indirect benefit rights to FC, DA and traditional authorities. Yet, customarily right to benefit from naturally growing trees is hold by holders of the usufruct rights to the land (here defined as 'informal landowners').

HOW question was answered by describing holders of the right to control access to timber trees and mechanisms of access-gaining. In regards to access control, different types of access control rights (right to give access, right to deny access, right to restrict access and right to specify conditions of access) were attributed to various actors. The legislation give most of the access-control rights to FC. Traditional authorities can restrict access to timber trees and specify conditions of access. Theoretically, farmers can also specify conditions of access to timber trees growing on their farms and, in justified cases, deny access. Yet, their rights are weak and often ignored.

According to customary arrangements access control is in hands of informal owners of the land where trees grow. Presently very little power over land and natural resources is retained by formal landowners.

In regards to mechanisms of access, there exist legal procedures that regulate how access should be gained. Yet, the implementation of those procedures is somewhat problematic. Formal procedures do not fit local context and are time and labour intensive. Furthermore, they are not explicitly and clearly formulated. Consequently, implementation dependent on local interpretations. Besides access to information about legal procedures is unequal. Many actors know the procedures only fragmentarily and some do not know them at all. In addition, actors who know the procedures, do not know how to implement them.

As a result, access to timber trees is gained in numerous ways depending on local context. Various mechanisms of access-gaining can be ascribed into one of the following categories: a) access-gaining based on working rules; b) access-gaining based on *ad hoc* arrangements and c) gaining access by using power. First type of access-gaining can be observed mainly in well organized communities, that have an experience in dealing with timber contractors. Working rules are adaptations of legal procedures to local context and are based on consensus between stakeholders. They are well known and binding to all actors and relatively firm.

Access-gaining based on *ad hoc* arrangements takes place in less organized communities. *Ad hoc* arrangements are more flexible than working rules. They differ form one timber contractor, farmer or community to another. The content of the arrangements depends on abilities and power of the actors to negotiated their conditions. Chainsaw operators often gain access to timber trees based on *ad hoc* arrangements.

Yet, often access is not regulated by any rules but it is gained by force. In such instances timber contractors or chainsaw operators ignore benefit and access control right holders and seek access secretly.

5 Discussion

5.1 Empirical relevance

Although there are few studies that address access to off-reserve timber trees in Ghana in a comprehensive and systematic manner, several authors dealt with some of the aspects of access. In respect to WHO access timber trees, different authors looked at the benefit sharing (Amanor 1997; Hansen and Treue 2009; Opoku 2006) and the land and tree tenure (Appiah and Taabazuing 2004; Dei 1992). In regards to HOW access is gained two aspects were addressed, the illegal logging (Hansen and Treue 2008) and the implementation of forestry legislation (Appiah and Taabazuing 2004; Marfo 2000; Marfo and Schanz 2007; Opoku 2006; Slesazeck 2008).

In this section the results of this study are compared with the earlier studies. First, the body of evidence concerning the benefit right holders identified in legislation is presented. Next, the same issue is discussed from the perspective of the customary arrangements. Finally, the mechanisms of access observed by other authors are presented and compared with the findings of this study.

In the various studies (Amanor 1997; Hansen and Treue 2009; Opoku 2006) following actors are consistently mentioned as the main beneficiaries of the timber trees in off-reserve areas: a) the timber contractors in terms of the direct benefits from timber trees and b) the state actors and the traditional authority in terms of the indirect benefits from timber trees.

Hansen and Treue (2009) suggest that due to the stumpage fee calculation procedures, the timber contractors are the most prominent beneficiaries of timber trees. Similarly, Opoku (2006) highlights that the flow of benefits from timber trees is geared towards the timber industry.

Regarding the indirect benefit sharing, Hansen and Treure (2009) as well as Appiah and Taabazuing (2004) point out that the current arrangement favors the state actors and the traditional authority on paramount level to the detriment of local actors, i.e. the TC and the local community. Moreover, according to Hansen and Treue (2009) the effective instruments to ensure the top-down flow of the indirect benefits are missing and therefore the local actors get even less than they should. The most

substantial benefits are captured at the source, by the state actors and the higher levels of the traditional authority.

At the same time, legislation does not recognize the rights of the local communities affected by the timber exploitation to benefit from timber trees. As pointed out in this study, according to the state based regulations, the local community members are not entitled to any of the benefits from timber trees. Theoretically, they can gain access to limited amount of timber for non-commercial purposes by applying for Timber Utilization Permit (TUP), yet this is rarely the case. Opoku (2006) points out that "TUPs are clearly a legislative afterthought not mentioned in parent legislation. The regulations do not specify application and operational procedures for these permits. The result is that communities cannot make use of TUPs".

Considerable body of evidence illustrate negative consequences of those legislative arrangements. Many authors (for example: Amanor 1997; Appiah and Taabazuing 2004; Hansen and Treue 2009; Slesazeck 2008) suggest that the state based regulations work as disincentive for the local farmers resulting in lack of the interest in the management of timber trees on the farm and, in extreme cases, even destruction of growing trees. Furthermore, the deprivation of the legal access to the benefits from timber trees stimulates farmers to enter into the informal agreements with chainsaw operators who fell trees illegally and pay the farmers for cooperation.

During this study no data were obtained to support those findings but this topic was not explicitly included in the interviews. The farmers did not admit destroying timber trees purposefully, neither cooperating with the timber contractors. Even though the illegal chainsaw operations took place in some of the study locations, community members claimed that they did not benefit from those illegal activities. Only in Volta region the landowners received money for exploited trees, either from the chainsaw operators or the timber contractors

Even though the legal regulations deprive the local communities right to benefit from timber trees, there is a strong feeling among community members that they are entitled to such benefits. This feeling has its source in the customary arrangements concerning the land and tree tenure. Appiah and Taabazuing (2004) give examples of conflict situations where community members did not want to give the contractors access to timber trees. They claimed that they but not the timber contractors have

the right to benefit from timber trees, referring to the customary law to justify those claims.

Amanor (1997) suggest that the distinction made in legislation between the land and tree tenure is based on the "colonial myths about traditional ownership of the land and trees". Customarily land and tree tenure are separated only in case of the planted timber trees that grow on the land that does not belong to the actor who planted them. In case of the naturally-growing timber trees, the benefit rights correspond with the usufruct rights to the land.

Legislation gives the right to the indirect benefits from timber trees to the traditional authorities. This arrangement is believed to be just as traditional authority is formal custodian of the communal land. Yet, *de facto* part of the communal land in Ghana is no more communal property but have other owners. As Appiah and Taabazuing (2004) point out, *'land leased for a period of say 50 or 90 years are sometimes regarded as having been sold outright'*. Also Dei (1992) describes the informal acquisition of the land:

When the chief assigns stool land to a local resident or citizen in recognition of latter's contribution to wider community, the recipient has to go through the public payment of aseda i.e .thanks in form of token cash payment and customary drinks to the chief and his elders. Achieved land is generally considered self-acquired property.

Moreover, the study of the communities in Ashanti region by Dei (1992) shows that in regards to land and natural resources, the rights of the the formal landowner are limited. As Appiah and Taabazuing (2004) point out, nowadays the allodial title to the land has minor importance. Therefore the right of the traditional authority to the indirect benefits from timber trees is based on wrong assumptions.

This study suggest that *de facto* mechanisms of access differ from mechanisms of access specified in legislation. Study by Marfo and Schanz (2009) shows that right of the farmers to restrict access to timber trees is commonly ignored, that crop damage compensations are not paid and that the timber contractors often gain access by force. On the other hand, communities sometimes block access to timber trees, request additional fees for the timber exploitation or cooperate with the chainsaw operators who log trees illegally. Opoku (2006) recalls situations when *'forest*

communities confront timber contractors in an organized manner and demand rent illegally'.

In the previous Chapter it was argued that problems with implementation of legislation partly steam from the ambiguity of legislation. In regards to SRA negotiations Marfo (2000) notes that 'the provisions of the state and customary laws regarding the SRA was found to be ambiguous, leaving the definition of community vague'. The community members do not know what provisions they can request from the timber contractor, how to ensure enforcement of the negotiated rules, who is to monitor the timber contractor and how to deal with the situations when their rights are abused. Similarly, the timber contractors frequently doubt who is legitimate to represent the community and with which communities actually they have to negotiate the conditions of access (Appiah and Taabazuing 2004). Finally, the FSD officers have problems with defining their role. Moreover, most of the stakeholders either do not know the rules or do not know how to interpret and implement them. As a result implementation of legal procedures is troublesome.

Due to problems with the implementation of the legal procedures, the access-gaining depend more on the local context rather than the legal procedures. In this situation, three main mechanisms of access are observed. In well organized communities that have an experience in dealing with the timber contractors working rules are developed. Such working rules can be formalized, for example as part of SRA or take very informal form. In his study Marfo (2000) gives examples of SRAs that are very implicit and clearly define roles of all stakeholders. Regardless of whether formalized or informal, the working rules are known to stakeholders i.e. the community members, the FSD and the timber contractors and binding for all the parties involved. They precisely define the procedures of the access-gaining as well as specify the control right holders and beneficiaries.

In less organized communities as well as in communities that have less experience in dealing with timber contractors, two other strategies of gaining access to timber trees are observed: a) the timber contractors make *ad hoc* arrangements with communities and farmer or b) the timber contractors gain access by force. Night operations described by Marfo and Schanz (2009) are example of later mechanism of access.

Conclusion

As presented in this section findings of the study are, in general, consistent with the findings of the other authors, thus can be considered as representative. This study assesses in more integrated and systematic manner various access practices formerly studied separately. Thanks to this approach deeper insight into access practices is gained. This contributes to better understanding of the context in which timber exploitation takes place and helps to identify failures of the current legislation. The study is expected to contribute to legislative changes that address occurring problems more effectively.

5.2 Relevance of theoretical framework

Three main theories constitute the theoretical framework of this study: a) the theory of access by Ribot and Peluso (2003); b) the endowment and entitlement model by Leach et al (1998) and c) the property right theories as presented by Bruce and Fortman (1985). This section focuses on the relevance of adopted theoretical approach for the analysis of access to timber trees in off-reserve areas in Ghana and presents how they contributed to better understanding of the data.

The objective of the study was to contribute to better understanding of the context in which timber exploitation takes place by analyzing the access rights and practices. Hereby, access is defined as 'an ability to benefit from a thing' (Peluso and Ribot 2003).

Ribot and Peluso (2003) name four dimensions of access: a) WHO (who is seeking access?); b) WHAT (to what resources?); c) HOW (how is access gained?) and d) WHEN (when access is gained?). The answer to WHAT question was implicitly determined by the study objective. The natural resource in focus were timber trees in off-reserve areas in Ghana. Regarding WHEN dimension, the study sought to understand access perceived at present. Determination of two other dimensions i.e. WHO is seeking access and HOW access is gained was a hub of the study and guided the data collection process as well as the data analysis.

Ribot and Peluso (2003) distinguish different mechanisms of access. The distinction is made between a) the direct and b) the indirect mechanisms of access. The direct mechanisms of access involve the law-based and the illicit access. The indirect

mechanisms can be further divided into the structural and relational access. Yet, this study focused mainly on the direct mechanisms of access and no systematic data was collected to analyze the structural and the relational access to timber trees.

In the Ghanaian context the distinction between the law-based and the illicit access turned out to be particularly relevant. It was observed that indeed, apart from actors who gain access to timber trees based on their rights, some actors (chainsaw operators, sometimes timber contractors and local community members) gain access illegally. Illicit access is gained by stretching the law (logging more trees or other tree species than specified in timber permit), violating the law (logging trees without timber permit) or by force (logging trees without consent of the owners during their absence).

Law-based or illicit, access is regulated by institutions. Leach et al. (1998) characterize institutions as diverse, on-multiple scale levels and constantly changing. Ghanaian regulative framework is complex. It consist of legislation developed by the state and the customary arrangements developed by the non-state actors on multiple levels. In recent two decades legislation concerning timber trees in off-reserve areas has undergone rapid evolution. Similarly, customary law also changed as a result of the modernization of the Ghanaian society. This study explored those various institutions in order to gain better insight into WHO and HOW access timber trees, focusing mainly on law-based mechanisms of access.

The study was guided by the definition of institutions as 'regularized patterns of behaviour between individuals and groups in society' (Mearns 1995). The institutions are 'rules of the game' that regulate all aspects of access and therefore differ fundamentally from the organizations which are 'groups of individuals bound together by some common purpose to achieve objectives' (Leach et al., 1999 after North, 1990).

As concept of institutions is broad, the distinction between different types of institutions was made. Leach et al. (1998) classify institutions into two broad categories, namely 'formal' and 'informal'. According to the authors, the first category includes legislation whereas the second category includes all other rules that are not part of legislation, for example the customary law or social norms.

This distinction turned out to be confusing in Ghanaian context where the traditional customary laws are very formalized and even recognized in legislation. Therefore, in this study another distinction was made, between the state based and the non-state based institutions. The first category consist of legislation and includes laws, regulations, procedures and guidelines. The second category consist of two subcategories: the traditional customary laws and the customary arrangements. The traditional customary laws are formalized rules that organized community life in the past. Some of such laws persist until today. The customary arrangements are informal rules, sometimes contradictory with traditional laws that *de facto* organize community life.

In the course of the study, a need to better describe customary arrangements was recognized. Therefore concepts of working rules and *ad hoc* arrangements were introduced. The two concepts, developed for the purpose of this study are described in Chapter 4.3.3. Here, the focus was on the local-level, i.e. working rules and *ad hoc* arrangements developed collaboratively by communities, timber contractors and FSD officers.

In regards to the institutions another distinction was of relevance for this study i.e. the distinction between the institutions regulating who can benefit from timber trees and the institutions regulating access control. In Ghanaian legislation, the actors who hold the right to benefit from timber trees are different from the actors who hold the right to benefit from them.

In the process of the data collection it was revealed that the customary right to benefit from timber trees as well as the right to control access to timber trees depend on the land and tree tenure. The property theories as presented by Fortman and Bruce (1985) were useful to analyze access in relation to the land and tree tenure.

In regards to the land tenure Bruce and Fortman (1985) recognize three categories of the property right holders: the state, the groups and the individuals and four categories of land: the public, the private, the communal and the community land. Those categories are relevant also in Ghanaian context, yet they do not fully reflect the complexity of the customary land tenure arrangements that affect access to timber trees.

For this reason, in the study the concepts of the *formal* and the *informal* landowners were introduced. First concept describes actors whose rights to the land are based on allodial title to the land. Second concept describes actors whose rights to the land result from formal usufruct rights and recognition of the actors as the landowners by the community. Consequently, five sub-categories of communal land depending on who hold usufruct rights were distinguished: the stool, the clan, the family and the individual land (after Kasanga 1999).

In terms of access to timber trees, the land rights are important because the land and tree tenure are closely linked. Basically, the owner of the land also owns the trees. The owner have right to benefit from and to control access to timber trees. Clear distinction between land and tree tenure is made only in legislation that constitutes that trees are vested in President, whereas land remains in hands of customary landowners.

In regards to the access rights, the distinction was made between the direct and the indirect benefit rights to timber trees. In regards to the control of access, four types of the access control rights were distinguished: a) the right to give access to the land; b) the right to deny access to the land; c) the right to restrict access to the land and d) the right to specify the conditions of access.

The state based institutions define legal procedures regulating the access-gaining. Yet, the data collected during fieldwork shows that those regulations are not implemented. Neither are the non-state based regulations. To explain problems with the implementation of the rules concerning access to timber trees, the endowment and entitlement model was used. Leach et al. (1998) point out that often the rights that actors have (endowments) are difficult to translate into things to which actors are entitled based on their rights (entitlements) due to the context in which access is sought.

This indeed can be observed in Ghana. The actors whose right to benefit from timber trees is based on the customary arrangements i.e. the informal landowners, cannot access timber trees due to the legal regulations. Similarly, the actors whose right to benefit from timber trees is based on the state regulations i.e. the timber contractors, cannot to translate their endowments into the entitlements because of the resistance of the local communities. Consequently, *de facto* mechanisms of access divert from the formal mechanisms of access. In this study, *de facto* mechanisms of access were

classified into one of the three categories: a) the access-gaining based on working rules; b) the access-gaining based on *ad hoc* arrangements and c) gaining access by force.

Conclusion

Three theories that guided the study were useful to analyze access to timber trees for commercial purposes in off-reserve areas in Ghana. Yet, some limitations of those theories were identified. First, the distinction between 'formal' and 'informal' institutions turned out to be irrelevant in Ghanaian context and therefore replaced with the concept of the 'state based' and 'non-state based' institutions. In regards to the non-state based institutions, two sub-categories were distinguished i.e. the 'traditional customary laws' and 'current customary arrangements'. The later category consist of the 'working rules' and 'ad hoc' arrangements. In regards to the land and tree tenure, concepts of the 'formal' and 'informal' landownership were introduced to discriminate the holders of the allodial title to the land with few benefit and control rights from the holders of the usufruct right to the land who customarily have most of the access and control rights. Two categories of the access rights were distinguished: the 'direct' and 'indirect' benefit rights and four categories of control access rights: a) the right to give access; b) the right to deny access; c) the right to restrict access and d) the right to specify conditions of access.

Concerning the access-gaining, the formal procedures were distinguished from *de facto* access. Three mechanisms of the access-gaining were identified, namely the access-gaining based on the working rules; b) the access-gaining based on the *ad hoc* arrangements and c) gaining access by force.

5.3 Relevance of the research methodology

The methodological approach evolved in the course of the study. The initial outline was followed, however some elements were changed accordingly to the context in which the data collection took place.

The major change was decision about visiting twelve communities in different locations and spending less time in each, instead of focusing on two or three communities as initially planned. During the first phase of the study, the author was made aware that the patterns of access to timber trees in off-reserve areas vary in

different parts of Ghana. Therefore it was decided to capture those differences by visiting a larger variety of locations.

This strategy had its advantages and disadvantages. It helped to get good overview and capture prevailing patterns of access. Yet, at the same time the study had to be limited in scope. Hence, little attention was given to access rights to the planted trees as originally planned.

Process of the data collection in Kumasi was unproblematic. Yet, during the field data collection three types of problems were encountered. First, good communication with informants was difficult to achieve. The interviews' questions and the respondents' answers had to be translated, which led to the misunderstandings. Moreover, the interviews were usually assisted by the FSD staff and so the informants did not feel free to discuss the issues that they considered illegal or prosecuted by FSD.

Second, access to the relevant informants was limited. The field data collection was facilitated by the FSD staff and the decision on which communities to visit depended on the FSD. The author had only minor influence on the selection of the people to interact with. As a result, the interviews often took place in the communities and with the informants who had established relationship with FSD.

Third, the time for the interactions was restricted. In the given time, it was not possible to gain the full trust of the people and to penetrate the community. Therefore the in-depth study of access was not possible.

Conclusion

Despite of the above-described problems, the methodological approach adopted in this study turned out to be relevant and possible to handle. The data can be considered reliable as it is consistent despite the fact that is was collected from different sources and by different methods. The data gives good overview of access to naturally-growing timber trees in off-reserve areas in Ghana.

6 Conclusions

The objective of this study was to gain better understanding of access to timber trees for commercial purposes in off-reserve areas in Ghana. The scope of the study was limited to naturally-growing timber trees. The data collection process was guided by two main questions: WHO access timber trees for commercial purposes in off-reserve areas in Ghana and HOW the access is gained. Regarding the WHO question, the study focused on legal and customary rights to access timber trees and looked at the actors who gain access illegally. Four major categories of benefit right holders were indentified, namely FC, DA, traditional authority and informal landowners (the holders of the usufruct rights to the land where the trees grow). It was shown that the state based and non-state based institutions are conflicting. Legislation favors the state actors, whereas the custom gives the benefit rights to the informal landowners. Those findings are consistent with the existing body of knowledge concerning land and tree tenure in Ghana as well as benefit sharing arrangements.

Regarding the HOW question the study looked at a) who controls access to timber trees and b) what are the procedures of the access-gaining. The legal and customary arrangements were analyzed separately. Concerning the access control, the study revealed that there exist different control rights (the right to give access; the right to deny access; the right to restrict access and the right to specify conditions of access) that are hold by the different actors, such as the FC, the DA, the traditional authority and the informal landowners. Whereas legislation gives most of the control rights to the FC, according to the custom those rights should remain in hands of the community, especially the informal landowners.

In regards to procedures of access-gaining, customary procedures of access-gaining were briefly discussed whereas content and implementation of formal procedures were studied more in-depth. It was shown that those procedures are somewhat unrealistic as they do not fit the local context and as they are complicated and time and labor intensive. Moreover they are ambiguous and therefore difficult to interpret and implement. Consequently, the implementation of formal procedures is weak.

The study showed that *de facto* access-gaining is regulated by informal mechanisms rather than procedures. Those mechanisms can be ascribed to one of the following

categories: a) access-gaining based on working rules, b) access-gaining based on *ad hoc* arrangements and c) gaining access by using the power. Access-gaining based on working rules is observed mainly in well organized communities that have previous experience in dealing with timber contractors. Access-gaining based on *ad hoc* arrangements and gaining access by using power are common in many parts of Ghana and prevail in the communities that did not develop working rules regulating access to timber trees.

The study focused on naturally-growing timber trees. Those trees are of major economical importance as they supply an important share of timber for the domestic market. They are the subject of the conflicting interests of various actors who claim the right to the economical benefits from the timber exploitation. The naturally-growing timber trees are often illegally logged and managed in a poor manner, which leads to the successive depletion of this resource. Hence, they deserve urgent attention.

Yet, in off-reserve areas in Ghana another category of timber trees can be distinguished, namely planted trees. Currently, the economical importance of the planted trees is minor. The existing private timber plantations are small in number and size and dominated by exotic species exploited mainly for timber for the electricity poles. Apart from plantations, timber trees are rarely planted due to lack of incentives. Nevertheless, despite of minor status, with growing depletion of natural timber resources, the importance of planted timber trees will increase.

Interestingly, the regulative framework concerning planted trees differs from the framework concerning naturally-growing timber trees. The legislative and customary arrangements are less conflicting. Both, legislation as well as custom state that planted trees belong to actors who planted them. Those actors have the right to benefit and to control access. Yet, legislation concerning access to planted timber trees is ambiguous, which can lead to problems in the future. For instance, lack of provisions regulating access to planted timber trees growing on the land that does not belong to the actor who planted them can lead to the potential conflicts.

As indicated in Chapter 1, this study was carried out within the framework of a larger research project on the nature and scope of the FLEG-T process in Ghana. In relation to this project, the concluding research question was formulated as to whether current legislation regulating access to naturally-growing timber trees in off-

reserve areas in Ghana is in line with aims of the FLEG-T initiative related to the good timber governance. Here the focus was mainly on the land tenure and the access rights.

It is known that recognition and the strengthening of land tenure and access rights of relevant stakeholders is important for the good timber governance. Yet, in Ghana the access rights of the local community members are either not recognized or so weak that commonly ignored. Those important stakeholders do not directly benefit from timber trees, neither participate in the benefit sharing. Besides, they cannot participate in the decision-making processes as their control rights are also weak and ignored.

Current legislation not only does not conduce good governance but also does not contribute to successful management of timber resources in off-reserve areas. As pointed out by Van Bodegom et al. (2008), one of the principles that contributes to successful management of local natural resources is that rules should be adaptable to local conditions. This study showed that Ghanaian legislation does not comply with local norms. Legal access right holders differ from access right holders defined by custom. The same is valid for the control right holders. Moreover legal procedures are complicated, time and labor consuming and ambiguous and thus difficult to implement. This leads to the conclusion that current legislation requires improvements.

First, there is a need to recognize the rights of the informal landowners in order to make legislation more consistent with customary arrangements. The informal landowners should have the right to benefit as well as control access to timber trees. In addition, they should be more involved in decision-making.

This requires developing new mechanisms of benefit sharing and management of timber resources. Devolution of the power over timber trees to informal landowners should be carried out carefully. It will not reach its objectives unless, the informal landowners have the tools to exercise the power effectively are simultaneously introduced. Particularly, attention should be given to dissemination of the information so that stakeholders know what are their rights and how to exercise them.

Moreover, current procedures of access-gaining should be reviewed. Learning about working rules in different communities and the way they are developed could inspire

policy-makers. Some possible improvements include, on one hand the simplification of the procedures and on the other hand making them more explicit i.e. limiting the space for the local interpretations. Simultaneously, an effort should be made to explain procedures to the stakeholders.

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