



Report on Stakeholder Analysis Workshops for the Project: Property, Access and Exclusion along the Charcoal Commodity Chain in Ghana



Conducted by
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Lists of Abbreviations

DA	District Assembly
EC	Energy Commission
FC	Forestry Commission
FSD	Forest Services Division
GNFS	Ghana National Fire Service
KNUST	Kwame Nkrumah University of Science and Technology
MOFA	Ministry of Food and Agriculture
NADMO	National Disaster Management Organisation
NGO	Non-governmental organisation
PRA	Participatory Rural Appraisal
TBI	Tropenbos International
UCPH	University of Copenhagen
UG	University of Ghana
WWF-US	World Wildlife Fund – United States

Executive Summary

A partnership made up of University of Copenhagen (UCPH), University of Ghana (UG), Kwame Nkrumah University of Science and Technology (KNUST) and Tropenbos International Ghana is implementing a project titled 'Property, Access and Exclusion along the charcoal commodity chain in Ghana' dubbed the 'AX Project'. The Project investigates and analyses – in time and space - the processes of access, exclusion and property to natural resources, including the means applied by actors to gain or maintain access and property and the processes whereby the authority of different politico-legal institutions are formed and challenged by way of authorising rights. AX aims at understanding these processes to be able to suggest ways for equitable sharing of benefits from the charcoal commodity chain in Ghana.

A stakeholder analysis was first carried out to identify the actors in the charcoal commodity chain as well as those whose actions or inactions impact on or is impacted by the charcoal business. The analysis also looked at the power dynamics and conflicts associated with the commodity chain.

Three (3) stakeholder analysis workshops were organised in the Kintampo and Afram Plains Forest Districts. The two (2) Forest Districts were selected from reconnaissance visits as major charcoal producing districts in Ghana. Specifically, the exercise was meant to identify and define the characteristics of the key stakeholders; draw out their interests; understand the power dynamics; identify conflicts among different stakeholder groups; identify positive relationships as well as negative ones between different stakeholder groups. The exercise was also to identify appropriate strategies for engaging the different stakeholders.

The major findings of the stakeholder analysis were the following:

- i. Different scores for stakeholder importance and influence were recorded by different participants at different sites. The differences in score are related to peculiar cases at the sites.
- ii. Different stakeholder groups have different levels of power in the two Forest Districts. For instance, the Police was found to be very powerful at Kintampo, but not powerful at the Afram Plains.
- iii. The relationships among actors along the charcoal commodity chain are similar at both sites.
- iv. The nature and level of conflicts are similar among and between stakeholders. A deeper level of conflicts however exists between transporters and buyers on one hand, and the Forestry Commission (FC) on the other hand at the Afram Plains.
- v. Non-governmental Organisations (NGOs) were found to be inactive in the study areas as the participants classified them under low power/low interest group.

1.0 INTRODUCTION

1.1 Background

In Ghana, charcoal provides about 64% of the energy for cooking and heating in most urban homes (Anang *et al.*, 2011) and constitutes a major source of livelihood for people in rural areas endowed with woodlands suitable for charcoal production. Its production is predominant in the northern and transitional zones of Ghana (EC, 2010) and is readily available and can be purchased in small quantities. Taxes and levies on the charcoal trade are important sources of revenue for District Assemblies and traditional authorities (chiefs) in the producing areas (Brobbeey *et al.*, 2015).

The charcoal commodity chain is complex and has not received much attention in Ghana. It involves land owners, woodcutters, charcoal producers, transporters, traders (wholesalers, retailers, roadside sellers, mobile sellers, homestead sellers) and commercial and household end users. The industry has remained informal and unregulated owing to the lack of coherent policies.

Charcoal burning has however been identified as a key driver of deforestation in Ghana (FIP, 2012) and have faced ban or threat of ban in certain parts of the country (Amanor, Osei and Gyampoh, 2005). The charcoal industry is also affected by a lot of issues ranging from land and tree tenure (rights and access), environmental and health impacts from combustion, mode of transportation, taxation and marketing.

To investigate and analyse (both in time and space) the processes of access and exclusion along the charcoal commodity chain in Ghana, the University of Copenhagen Denmark (UCPH), University of Ghana (UG), Kwame Nkrumah University of Science and Technology (KNUST) and Tropenbos International Ghana (TBI Ghana) are collaborating to implement a project titled “Property, Access and Exclusion along the charcoal commodity chain in Ghana”, simply called the AX project.

The AX Project aims at pro-poor and environmentally sustainable charcoal production in Ghana. The specific objectives are:

- 1) To analyse the processes of access and exclusion in the charcoal commodity chain in Ghana and their dynamics in time and space;
- 2) To analyse the environmental sustainability of charcoal production in Ghana;
- 3) To enhance the capacity for research and dissemination on access and exclusion and commodity chain analysis and its link to environmental sustainability;
- 4) To disseminate and discuss project results and implications with international scientific community, policy-makers at national level and actors in the commodity chain.

The ability of the AX Project to achieve the above objectives depend on the participation and support of individuals, groups, organisations, institutions, communities, land owners, and all actors (including external ones) involved in the charcoal commodity chain.

Stakeholder analysis workshops were therefore organised at the Kintampo and Afram Plains Forest Districts (the major charcoal producing districts in Ghana) to identify the stakeholders of the charcoal commodity chain, their level of interests and power relations.

1.2 Objectives

The objectives of the stakeholder analysis were:

- 1) to provide insight into who have a stake along the charcoal commodity chain in Ghana;
- 2) to identify the different stakeholders and their levels of stake along the charcoal commodity chain; and
- 3) to identify ways in which these stakeholders can influence the policies and issues along the charcoal commodity chain in Ghana.

1.3 Overview of Stakeholder Analysis

Stakeholder analysis is *'a methodology for gaining an understanding of a system, and for assessing the impact of changes to that system, by means of identifying the key stakeholders and assessing their respective interests'* (Grimble, 1998).

The analysis recognises the different interest groups involved in the utilisation and conservation of natural resources and provides tools that help to identify and resolve trade-offs and conflicts of interest. Stakeholder groups cut across society as a whole and range, for example, from formal or informal groups of men and/or women farmers to government bodies or international agencies and multinational companies (Ibid).

A stakeholder in the context of the AX project is defined as *'any individual, group, or institution that has a vested interest in the charcoal business and/or stand to be affected by the project activities and have something to gain or lose if conditions change or stay the same'*. These include landowners/chiefs, wood cutters and gathers, charcoal producers, farmers, loading boys, buyers, sellers, transporters, consumers, District Assemblies, Forestry Commission, etc.

A stakeholder analysis can help a project or programme to identify (WWF-US *et al.* 2005):

- i. the interests of all stakeholders who may affect or be affected by the programme/project;
- ii. potential conflicts or risks that could jeopardise the initiative;
- iii. opportunities and relationships that can be built on during implementation;
- iv. groups that should be encouraged to participate in different stages of the project;
- v. appropriate strategies and approaches for stakeholder engagement; and
- vi. ways to reduce negative impacts on vulnerable and disadvantaged groups.

1.3.1 Relevance of Stakeholder Analysis in Natural Resources Management

Stakeholder analysis is particularly relevant to the analysis of natural resource management where issues are characterised by (Grimble, 1998):

- i. **Multiple uses and users of the resource** – Different aspects of natural resources may be valued differently by different stakeholders. For instance, some charcoal producers use wood that may be suitable for timber and thereby result in conflict between them on one hand and the FSD and logging companies on the other hand.
- ii. **Multiple objectives** – Natural resources are subject to potentially crucial differences between economic, social and environmental concerns and the best interests of different stakeholders. Potential differences include those between wider society and local people. For instance, the declaration of an area as a protected area will deprive charcoal producers access to wood for carbonisation.
- iii. **Unclear or open-access property rights** – Where traditional management systems are breaking down as a result of demographic, economic and political pressures, property rights are often unclear. In these situations the economically rational actions of individual resource users may not be compatible with community interests, leading to degradation.
- iv. **Poverty and under-representation** – Land, water, rangelands and forests are essential to the livelihood systems of the majority of the world's poorest people, and those most directly dependent upon them are often the poorest. Stakeholder analysis can highlight the needs and interests of people who are under-represented both politically and, in terms of limited buying power, economically.
- v. **Improving the selection and design of research projects:** the explicit consideration of potential trade-offs between different stakeholders helps avoid the unexpected, facilitates good design, and improves the likelihood of successful implementation; and
- vi. **Addressing better the distributional, social and political impacts of research projects:** explicit analysis of the interests of and impacts of interventions on, different stakeholders (including the poor and less powerful) can help ensure that research outputs are designed effectively to meet the needs of those intended.

1.3.2 Categories of Stakeholders

The categories of identified stakeholders could be seen as active stakeholders and or non-active stakeholders. Ann (1997) identified the following four categories of stakeholders:

- i. High interest/importance, high influence: these stakeholders are the basis for an effective coalition of support for the project;
- ii. High interest/importance, low influence: these stakeholders will require special initiative if their interests are to be protected;
- iii. Low interest/importance, high influence: these stakeholders can influence the outcomes of the project, but their priorities are not those of the project. They may be a risk or obstacle to the project; and
- iv. Low interest/importance, low influence: these stakeholders are of least importance to the project.

“**Importance**” refers to stakeholders whose problems, needs and interests are the priority for the project. “**Influence**” refers to how powerful a stakeholder is.

1.4 Methodology

The study used Participatory Rural Appraisal (PRA) methods and ranking to analyse differences in interests, power and conflicts among the various stakeholders in the charcoal commodity chain (Plate 1.1). Reconnaissance survey, scoping and field visits were undertaken before the workshops. The Kintampo and Afram Plains Forest Districts were selected for their high volumes of charcoal production.



Plate 1: Stakeholder ranking with PRA method

Most of the communities within the Kintampo Forest District have recognised Charcoal Producers and Sellers Associations and therefore nominated their own participants for the workshop. The TBI Ghana team together with the FSD, Chiefs and Assembly Members nominated participants in communities without associations in the Kintampo and Afram Plains Forest Districts.

The analysis took into consideration the type and level of the different stakeholders groups as well as their levels of power. Participants first listed all the stakeholders along the charcoal commodity chain and indicated their choices of stakeholders in terms of importance and perceived or real power by voting with five pebbles each.

Three workshops were organised to interact with stakeholders. The workshops ensure that all stakeholders had the opportunity to contribute to the process and collectively streamline the list of identified stakeholders.

1.4.1 Consultation Process

Three multi-stakeholder workshops were organised – one in Kintampo Forest District and two in the Afram Plains Forest District due to the scattered nature of the settlements in the latter coupled with the difficulty in transporting participants to and from their villages for the workshops. A check list was developed to gather data on stakeholders. This was used to ensure that similar information was generated at all sites and also to create opportunity for discussions on any relevant issue raised by participants.

1.4.2 Study Sites

One hundred and sixty (160) participants from 12 and 23 major charcoal producing communities in the Kintampo and Afram Plains Forest Districts were respectively selected for the workshops. Each of the four and two respective political districts within the Kintampo and Afram Plains Forest Districts were represented in the selection of communities. The lists of participants and their communities can be found in appendixes one, two and three.

1.4.3 Identifying the key stakeholders

Given the resources available and the nature of stakeholders (mostly uneducated, operate in isolation, use crude equipment and technology) along the charcoal commodity chain in Ghana, key interventions in line with the recommendations of the WWF-US *et al.* (2005) was adopted. First, brainstorming guided by the following questions ensured that all stakeholders along the charcoal value chain were identified:

1. Who is most dependent on the resources at stake? Is this a matter of livelihood or economic advantage? Are these resources replaceable by other resources?
2. Who possesses claims – including legal jurisdiction and customary use – over the resources at stake? Are several government sectors and ministry departments involved? Are there national and/or international bodies involved because of specific laws or treaties?
3. Who are the people or groups most knowledgeable about, and capable of dealing with, the resources at stake? Who is managing these resources? With what results?
4. Are the stakeholders and their interests geographically and seasonally stable, or are there migration patterns?
5. Are there major events or trends currently affecting the stakeholders (e.g., development initiatives, land reforms, migration, population growth, etc.)?
6. Has there been a similar initiative in the region? If so, to what extent did it succeed? Who was in charge and how did local stakeholders respond?

1.4.4 Assessing the influence and importance of each stakeholder as well as the potential impact of the project upon each stakeholder

Key questions asked at this second step were:

1. Who is directly responsible for decisions on issues important to the project?
2. Who holds positions of responsibility in interested organisations?
3. Who is influential in the project area (both thematic and geographic areas)?
4. Who will be affected by the project?
5. Who will promote/support the project, provided that they are involved?
6. Who will obstruct/hinder the project if they are not involved?
7. Who has been involved in the area (thematic or geographic) in the past?

2.0 RESULTS AND DISCUSSIONS

2.1 Introduction

The stakeholder analysis workshops were undertaken to identify potential stakeholders to be involved during the implementation of the AX project. The workshops were done at the early stage of the project to influence the development of effective strategies for the successful implementation of the project. This chapter presents the results from the three workshops.

2.2 Stakeholders Identification

Identifying relevant actors to take part in the implementation of almost all forest programmes is always an important step to take. Stakeholders must be identified by their particular relevance based on need, benefits, interest, strength and influence.

Participants were tasked to make a list of stakeholders, their expected roles and responsibilities and score the level of importance. Tables 3.1, 3.2 and 3.3 present the results from the participatory ranking exercise on the ranking of stakeholders in terms of perceived importance by the participants. It is worth noting that most charcoal producers double as farmers and the ranking for farmers reflect those that not involve in charcoal production.

Table 1: Ranking of stakeholders in-terms of importance by participants at Kintampo Forest District

Stakeholder	Roles and Responsibilities	Importance	%
Charcoal Producers	<ul style="list-style-type: none"> Produce or burn charcoal Pack charcoal Sell charcoal 	44	25.1
Chief/ Landowners	<ul style="list-style-type: none"> Give out land Sell wood for charcoal production Make arrangements and collect royalty on wood Settle disputes among actors 	41	23.4
Buyers	<ul style="list-style-type: none"> Pre-finance producers Provide ready market for producers 	23	13.1
Consumers/ End users	<ul style="list-style-type: none"> Buy and use charcoal 	22	12.6
Chainsaw operators	<ul style="list-style-type: none"> Fell wood Cut wood into smaller sizes 	11	6.2
Transporters	<ul style="list-style-type: none"> Transport charcoal to end users Get profit from operations 	7	4.0
Forestry Commission	<ul style="list-style-type: none"> Take conveyance fees Enforcement forest laws Provide education on good harvesting methods and environmental 	6	3.4

	conservation		
Farmers	<ul style="list-style-type: none"> Keep trees for charcoal producers Provide food for charcoal producers 	5	2.8
District Assembly	<ul style="list-style-type: none"> Collect levy Enact bye-laws 	5	2.8
Loading Boys	<ul style="list-style-type: none"> Carry produced charcoal into vehicles Carry charcoal from inaccessible to accessible areas Acquire money to finance education 	3	1.7
Ghana National Fire Service	<ul style="list-style-type: none"> Enforce ban on charcoal production in the dry seasons Provide education on fire prevention 	3	1.7
Sack Sellers	<ul style="list-style-type: none"> Provide sacks for packaging 	2	1.1
Police and Judiciary Services	<ul style="list-style-type: none"> Arrest and prosecute offenders and loan defaulters Arrest over loading trucks Enforce payment of DA and FC levies 	2	1.1
NGO's	<ul style="list-style-type: none"> Tree planting campaigns Provide education on environmental issues 	1	0.6
Total		175	100

Table 2: Ranking of stakeholders in-terms of importance by participants at Afram Plains North

Stakeholder	Roles and Responsibilities	Importance Ranking	%
Chief/ Landowners	<ul style="list-style-type: none"> Owners of the land Give permission to use trees 	47	26.1
Chainsaw operators	<ul style="list-style-type: none"> Speed up the charcoal process by cutting logs and trees into smaller pieces 	31	17.2
Charcoal producers	<ul style="list-style-type: none"> Convert the wood to charcoal 	30	16.7
Buyers and Sellers	<ul style="list-style-type: none"> Purchase produced charcoal to keep the business going 	20	11.1
Forestry Commission	<ul style="list-style-type: none"> Regulate the charcoal business Issue permit 	19	10.6
Consumers/ End users	<ul style="list-style-type: none"> Provide ready market for charcoal production 	11	6.1
Transporters	<ul style="list-style-type: none"> Convey charcoal products to the end users 	7	3.8
District Assembly	<ul style="list-style-type: none"> Enact bye-laws in the district 	5	2.7

Police service	<ul style="list-style-type: none"> • Arrest defaulters • Check over loading 	5	2.7
Ghana National Fire Service	<ul style="list-style-type: none"> • Provide education on fire prevention during the dry season 	2	1.1
Farmers	<ul style="list-style-type: none"> • Tend trees for producing charcoal 	1	0.6
Sack Sellers	<ul style="list-style-type: none"> • Provide packaging material for charcoal 	1	0.6
Loading Boys	<ul style="list-style-type: none"> • Convey charcoal into trucks for distribution 	1	0.6
Total		180	100

Table 3: Ranking of stakeholders in-terms of Importance by participants at Afram Plains South

Stakeholder	Roles and Responsibilities	importance Ranking	%
Chief/ Landowners	<ul style="list-style-type: none"> • Allow or disallow charcoal production within their area • Settle disputes among producers and buyers 	35	28.9
Charcoal producers	<ul style="list-style-type: none"> • Produce charcoal. Without them, all other stakeholders will be non-functional 	16	13.2
Forestry Commission	<ul style="list-style-type: none"> • Manage the forest • Collect conveyance fees from drivers 	15	12.3
Chainsaw operators	<ul style="list-style-type: none"> • Cut logs/trees into smaller pieces (save working time and energy of producers) 	13	10.7
District Assembly	<ul style="list-style-type: none"> • Collect revenue from drivers • Enact bye-laws 	12	9.9
Transporters	<ul style="list-style-type: none"> • Convey charcoal from the producers to consumers 	9	7.4
Farmers	<ul style="list-style-type: none"> • Reserve trees on their farms for charcoal production 	8	6.6
Buyers and Sellers	<ul style="list-style-type: none"> • Pre finance charcoal producers • Provide market for charcoal production 	4	3.3
Sack sellers	<ul style="list-style-type: none"> • Provide sack for packaging charcoal 	3	2.5
Fire Service	<ul style="list-style-type: none"> • Educate public on fire prevention 	2	1.6
Police Service	<ul style="list-style-type: none"> • Settle disputes between stakeholders • Enforce driving regulations 	2	1.6
Consumers/ End users	<ul style="list-style-type: none"> • Provide ready market for charcoal 	1	0.8
NADMO	<ul style="list-style-type: none"> • Assist during fire out break 	1	0.8
Loading Boys	<ul style="list-style-type: none"> • Carry produced charcoal from the bush to drivers 	0	0
Wood gatherers	<ul style="list-style-type: none"> • Help convey dry wood especially from 	0	0

	farms		
Total		121	100

In the Kintampo Forest District, participants identified charcoal producers, land owners/chief, buyers and consumers as the four (4) most important stakeholders. Charcoal producers are first because according to the participants they initiate the charcoal production processes. Other actors like NGOs, Ghana National Fire Service and the Judiciary were ranked very low (Table 3.1). This can be attributed to the minimal role they play within the industry.

Unlike the Kintampo Forest District, participants at Afram Plains North indicated that landowners/chief were the most important stakeholders along the charcoal value chain. This is attributable to the active role they play in the selling of wood for charcoal production and the settlement of disputes among different actors along the chain. Other stakeholders with high level of importance included chainsaw operators, charcoal producers, buyers and sellers as well as the Forestry Commission (FC). Chainsaw operators have a high stake in charcoal production due to the heavy dependence on the industry for their livelihoods and the use of the chain saw machine in the felling and cross cutting of trees before carbonisation (Table 3.2).

Similar results were obtained at Afram Plains North and South. Both districts ranked Landowners/chief as the most important stakeholders. Charcoal producers, the FC and chainsaw operators were all mentioned among the top five (5) most important stakeholders (Tables 3.2 and 3.3).

The FC has banned charcoal production at certain portions of the Afram Plains and charges a higher conveyance fees than the remaining parts of the country. This might explain the position of the FC among the top five (5) most important stakeholders at the Afram plains as compared to Kintampo (Tables 3.1, 3,2 and 3.3). NADMO and wood cutters/gatherers were mentioned as actors with some level of stake in charcoal industry; this gives a different picture from the other two sites.

2.3 Assessment of Stakeholders’ Power and Influence

Both real and perceived power wielded by different stakeholders along the charcoal commodity chain were analysed to determine how different stakeholders control and influence decisions in the charcoal industry in Ghana (Plate 3.1).

The weighted power and influence among the different stakeholders at the three sites are presented in Figure 3.1, 3.2 and 3.3.



Plate 2: Representative from the Afram Plains South District Assembly reporting on the nature and level of conflicts between stakeholders along the charcoal value chain at the district

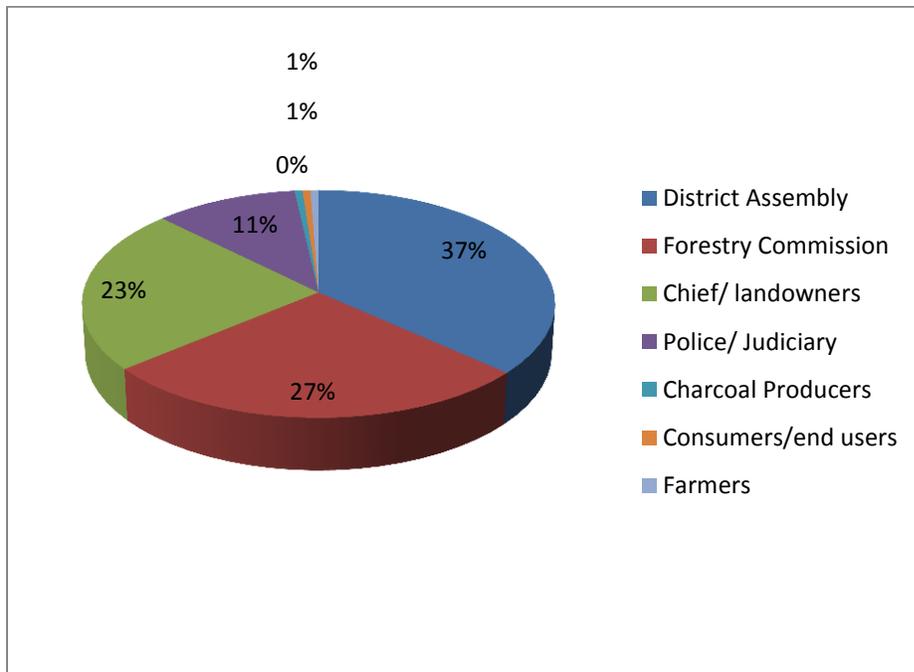


Figure 1: Power ranking among key stakeholders along the charcoal commodity chain at the Kintampo Forest District

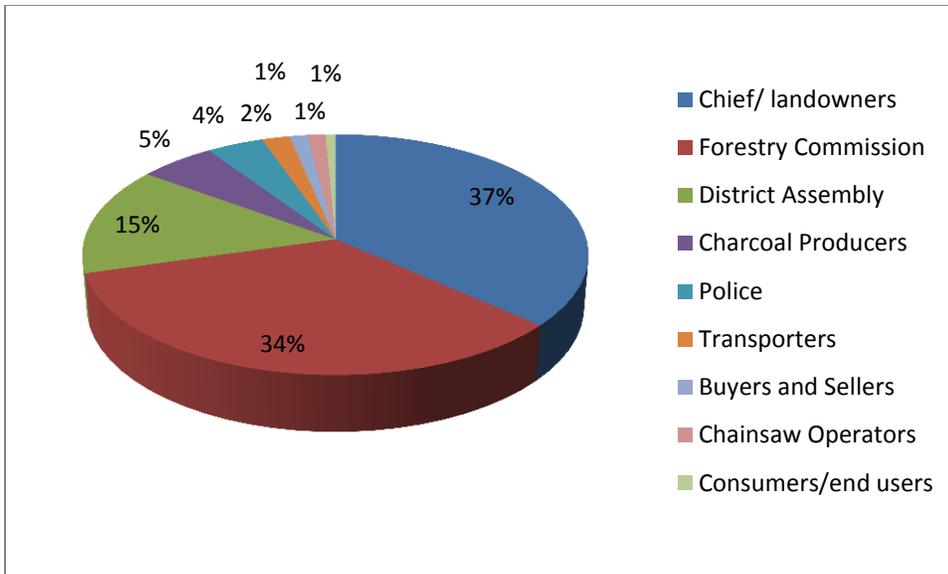


Figure 2: Power ranking among key stakeholders along the charcoal commodity chain at the Afram Plains North

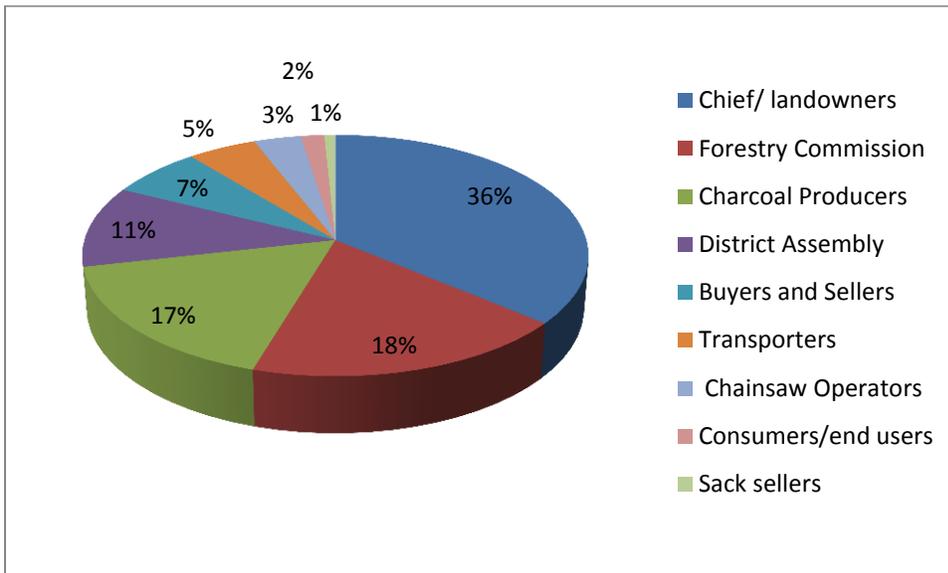


Figure 3: Power ranking among key stakeholders along the charcoal commodity chain at the Afram Plains South

Stakeholders at the Kintampo Forest District voted the District Assembly (DA) as the most powerful stakeholder. This could be attributed to the decision by the District Assembly to ban charcoal production at the area sometime ago (Figure 3.1). The DA was however voted as the third and fourth most powerful stakeholder at the Afram Plains North and South respectively

(Figures 3.2 and 3.3). It is only at Kintampo that the Police was seen as an important stakeholder along the charcoal commodity chain (Figure 3.1).

Chiefs/land owners were voted as the most powerful stakeholders at Afram Plains Forest District (i.e. both North and South). Participants indicated they own and sell trees at the area. They have the power to even confiscate charcoal from buyers when producers fail to pay them their 20% share of the produced charcoal (Figures 3.2 and 3.3).

The FC was ranked the second most powerful stakeholder by participants at all the three workshops (Figures 3.1, 3.2 and 3.3). Participants acknowledged the FC's role in managing trees on both reserves and off-reserves.

Table 3.4 summarises the roles and responsibilities of the three most powerful stakeholders along the charcoal commodity chain as indicated by participants at each workshop.

Table 4: Roles and responsibilities of the most powerful stakeholder groups

Forest District/ Political District	Stakeholder	Power
Kintampo	District Assembly	<ul style="list-style-type: none"> • Enacts bye-laws • Takes the final decision within the District • Generates revenue
	Forestry Commission	<ul style="list-style-type: none"> • Enforces laws • Manages trees
	Chief/ landowners	<ul style="list-style-type: none"> • Have control over land/trees • Sell trees • Enforce laws
Afram Plains North	Landowners/ Chiefs	<ul style="list-style-type: none"> • Allow or disallow production of charcoal • Give consent letters to the DA and FC before permits can be issued
	Forestry Commission	<ul style="list-style-type: none"> • Have the mandate to protect the forest
	District Assembly	<ul style="list-style-type: none"> • Have the power to take the final decisions within the district
Afram Plains, South	Landowners/ Chief	<ul style="list-style-type: none"> • Custodian of land • Can allow or disallow charcoal production within the area
	Forestry Commission	<ul style="list-style-type: none"> • Seen as the licensed governmental body that allow or disallow people to harvest trees
	Charcoal Producers	<ul style="list-style-type: none"> • Have the power to stop production/charcoal business
	District Assembly	<ul style="list-style-type: none"> • Take the final decision within the district

2.4 Relationships among Stakeholders along the Charcoal Value Chain

Participants indicated the type of relationships that existed among different stakeholders along the charcoal value chain. This was done to assist in deciding on appropriate future interventions.

2.4.1 Relationship Model among Stakeholders

The types of relationships among various stakeholders have been presented as a model in Figure 3.4. The model indicates the level of collaboration and linkages among the different stakeholders along the charcoal commodity chain. Stakeholders are represented by circles and the sizes of the circles indicate the level of power of the respective stakeholders. The distances or closeness of a stakeholder to the rectangular box indicates its perceived contribution or relevance to the charcoal industry. The closeness of the circles to each other indicates the perceived closeness of the relationships that different stakeholders have with each other.



Figure 4: Relationships between Important/Powerful Stakeholders at Kintampo and Afram Plains (North and South) Forest Districts

At Kintampo, close relationships exist among chiefs/landowners, charcoal producers and buyers. Since landowners/chiefs hold the right to access to wood resources in the area, they are heavily depended on by charcoal producers. Charcoal producers relate very closely to buyers since in most of the cases, their activities are pre-financed by buyers. These three actors also seem to affect and/or are affected more by social, economic and environmental issues relating to charcoal than any of the stakeholders. This explains their closeness to the rectangular box. While transporters relate closely to buyers, chainsaw operators on the other hand relate closely with charcoal producers. Consumers were found not to have strong relationship with the other stakeholders (Figure 3.4).

Like Kintampo, close relationships exist between chief/landowners, charcoal producers and buyers in Afram Plains probably for the same reasons. The closeness of the FC to the rectangular box gives an indication of the role it plays within the charcoal industry in the area. The FC has banned charcoal production at certain portions of the Afram Plains and increased the conveyance fees paid by transporters. The Police and DA do have some form of relationship with the FC. FC collaborates with the DA to determine fees to be paid by transporters. Police and DA are distant from the rectangular box because they do not play any substantive role within the industry. The DA's interest is to take levy from transporters (Figure 3.4).

The relationship between stakeholders at Afram Plains North and South are almost the same. Landowners, producers and buyers exhibit very close relationships (Figure 3.4).

2.4.2 Strengthening Relationships among Stakeholders

After identifying the nature of the relationships among stakeholders, participants mentioned some deviant behaviour among certain stakeholder groups that tend to destroy the good relationships or breed tension among different stakeholder groups and proposed strategies aimed at improving these relationships (Table 3.5).

Table 5: Strategies for improving relationships among Stakeholders

Stakeholders	Nature of deviant behaviour	Suggested strategies
Charcoal producers and Buyers	<ul style="list-style-type: none"> • Selling of charcoal to different buyers other than those who pre-financed producers • Delay in supplying charcoal to buyers at agreed time • Delay or failure by buyers to pay charcoal producers on products bought on credits 	<ul style="list-style-type: none"> • Producers should sell charcoal to buyers who pre-finance their activities. • Producers should deliver charcoal on time to Buyers • Buyers who purchase on credit should pay on agreed time
Charcoal producers and Chiefs/Land owners	<ul style="list-style-type: none"> • Refusal of charcoal producers to pay 20% royalty to landowners/chiefs 	<ul style="list-style-type: none"> • Charcoal producers should pay 20% royalties and/or cost of wood to land owners

	<ul style="list-style-type: none"> • Multiple sale of trees on the part on land owners/chiefs 	<ul style="list-style-type: none"> • Land owners/Chiefs should desist from multiple sale of trees
Charcoal producers and Chainsaw operators	<ul style="list-style-type: none"> • Delay and/or refusal of chainsaw operators to fell and crosscut trees after taking money from charcoal producers 	<ul style="list-style-type: none"> • Chainsaw operators should stick to agreed deadlines
Buyers and Transporters	<ul style="list-style-type: none"> • Delay and/or failure by buyers to pay transporters on time • Delay and failure by transporters to cart charcoal at agreed time 	<ul style="list-style-type: none"> • Buyers should pay transporters on time • Transporters should stick to agreed time for carting charcoal to designated points
District Assembly and Transporters	<ul style="list-style-type: none"> • Attempts by transporters to conceal some bags of charcoal to escape payment of levies • Transporters conniving with revenue collectors to pay lower levies 	<ul style="list-style-type: none"> • Transporters should pay correct levies on their trucks
FC and DA	<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> • Must collaborate with each other in the collection of levies
FC and Landowners/Chief	<ul style="list-style-type: none"> • Lack of consultation in the issuance of permits 	<ul style="list-style-type: none"> • Should collaborate to regulate the charcoal industry
FC and Transporters	<ul style="list-style-type: none"> • Lack of consultation in the setting of conveyance fees • Under declaring quantity of charcoal in trucks 	<ul style="list-style-type: none"> • FC should involve transporter unions in the setting of new conveyance fees • Transporters should comply with FC in the payment of levies

2.5 Conflicts among Stakeholders

With the differences in interest among stakeholders, it is anticipated that conflicts exist or may arise at different stages of their interactions. It is therefore important to analyse the existing and potential conflicts to provide guidelines for resolving them for successful implementation of the project.

2.5.1 Nature of Conflict

The nature of conflict between the different stakeholders groups along the charcoal commodity chain are presented in Table 3.6.

Table 6: Nature of conflict among different stakeholders along the charcoal value chain

District	Stakeholder groups	Sources of Conflict
Kintampo Forest District	Producers and Buyers	<ul style="list-style-type: none"> • Failure to supply agreed quantity of charcoal • Failure to pay products purchased on credit
	Producers and Chainsaw operators	<ul style="list-style-type: none"> • Delay in felling and cross cutting wood
	Producers and Landowner/Chief	<ul style="list-style-type: none"> • Delay or failure in paying 20% royalty • Stealing or illegal harvesting of wood
	Buyers and Transporters	<ul style="list-style-type: none"> • Delay in payment of fees • Failure of drivers to transport goods on agreed time
	Buyers and Consumers	<ul style="list-style-type: none"> • Refusal to pay buyers on agreed period
Afram North Plains	Police and Chainsaw operators	<ul style="list-style-type: none"> • Police arrest operators at the sound of the chainsaw machine without interrogations
	Police and Transporters	<ul style="list-style-type: none"> • Collection of unapproved monies
	Forestry Commission and Charcoal producers	<ul style="list-style-type: none"> • Producing charcoal without permit • Felling prohibited trees
	District Assembly and Transporters	<ul style="list-style-type: none"> • Refusal to pay fees to the Assembly
	Forestry Commission and Chainsaw Operators	<ul style="list-style-type: none"> • Operating without permit from FC
	Chief and Charcoal Producers	<ul style="list-style-type: none"> • Multiple sale of land
	Charcoal producers and Buyers	<ul style="list-style-type: none"> • Not producing charcoal on the agreed time
Afram South Plains	Forestry Commission and Chainsaw operators	<ul style="list-style-type: none"> • Producing charcoal without permit • Felling prohibited trees
	District Assembly and Chainsaw operators	<ul style="list-style-type: none"> • Operating with unregistered machines
	Buyers and Charcoal producers	<ul style="list-style-type: none"> • Delay supply of products
	Chief/Landowners and Producers	<ul style="list-style-type: none"> • Both Sub chiefs (i.e. <i>Odikro</i>) and Main Chiefs claiming money from producers over

		a same piece of land
	Forestry Commission and Transporters	<ul style="list-style-type: none"> • Forestry Commission charging higher conveyance fees as compared to other parts of the country

Table 3.6 indicates some similarities in the sources and nature of conflict among the three sites. The most critical actors who are involved in conflicts are: Producers and Buyers, Producers and landowners/chiefs, FC and chainsaw operators, FC and transporters and Police and Chainsaw operators.

2.5.2 Degree of Conflicts among Stakeholders of the Charcoal Commodity Chain

Figure 3.5 gives a visual view of the degree/level of conflict existing among the different actors along the charcoal commodity chain in the study areas. The degree of conflicts varies among different stakeholders and among the three sites. Arrows with red lines indicate conflicts among stakeholders while those with blue line show harmonious relations among stakeholders. The size of the lines shows the extent or degree of conflict or harmony among stakeholders (Figure 3.5).

For Kintampo, the major conflict exists between producers and buyers. While some level of conflict exists between buyers and consumers, it is rather on few occasions. At Afram Plains (both North and South), intense conflict exists between FC and Chainsaw operators; Police and Chainsaw operators; Police and Transporters; and FC and Charcoal producers. Conflicts existing between Buyers, Sellers and Charcoal producers is not as intense as that of Kintampo. Very cordial relationship exist between Chiefs/Landowners and FC. This indicates the high level of involvement of FC in the charcoal industry (Figure 3.5).

At Afram Plains South, a high degree of conflicts exists between the FC and Chainsaw Operators; and the DA and Chainsaw Operators. Some low level conflict exists between Chiefs/Landowners and Charcoal Producers; and FC and Charcoal Producers. A higher degree of conflict also exists between FC and Transporters due to the high conveyance fees the FC charges Transporters.

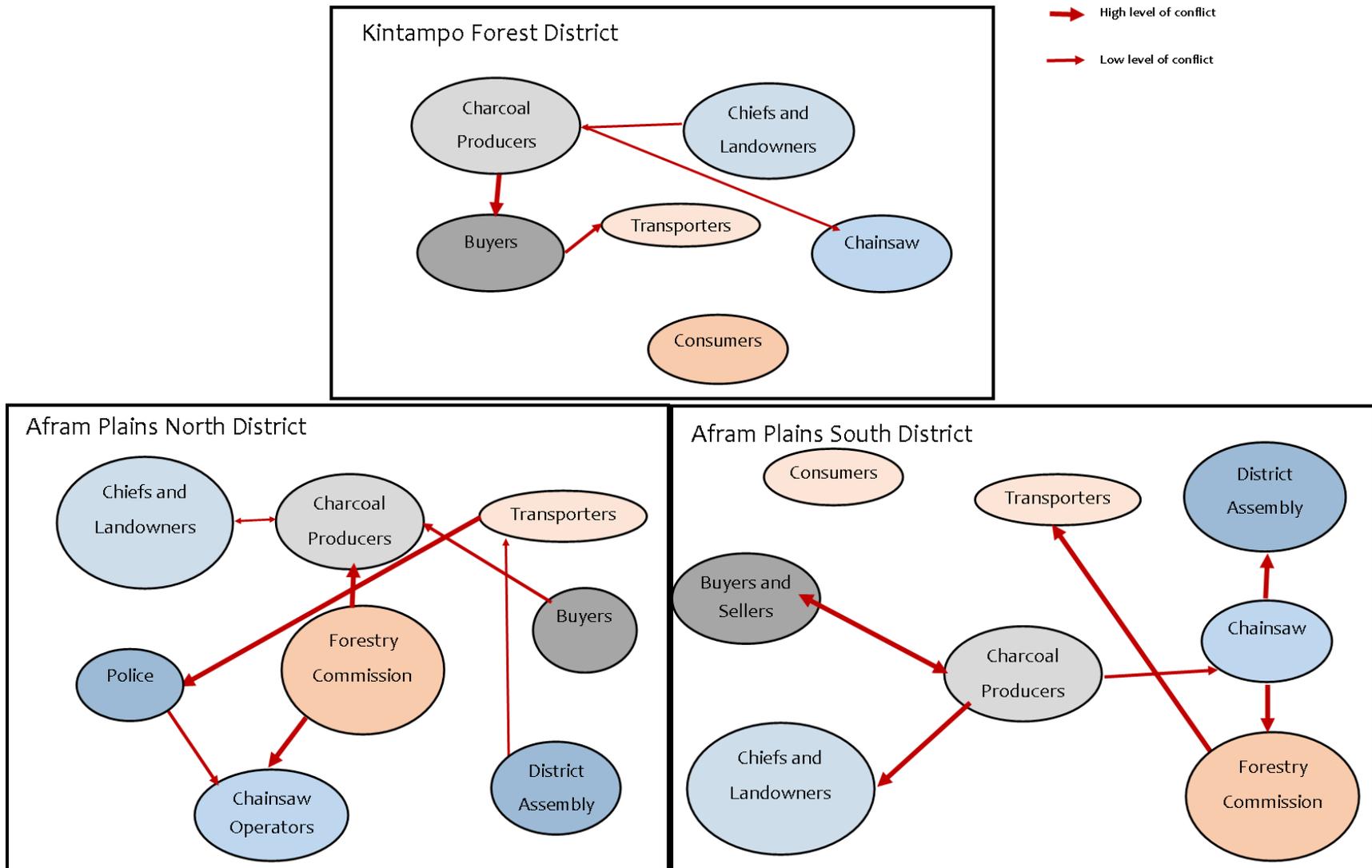


Figure 5: Existing level of conflicts among Stakeholders at Kintampo and Afram Plains Forest Districts

3.0 CONCLUSIONS

The charcoal industry provides substantial energy to urban areas and serves as source of livelihood for majority of people in Ghana. Its commodity chain involves land owners, woodcutters, charcoal producers, transporters, traders (wholesalers, retailers, roadside sellers, mobile sellers, and homestead sellers), commercial and household end users and some state agencies. The industry is however seen as a menace and attempts have been made to previously ban it. The negative image and threat of ban of the charcoal business breeds conflicts among the various actors along the commodity chain.

The use of participatory rural appraisal method for the stakeholder analysis encouraged greater participation. The good relationships existing between different stakeholders provide fertile grounds for the AX Project. The stakeholders or actors however exhibited different interests and power relations and are therefore entitled to different considerations which need to be managed to win their support for the project. The choice of the topmost two charcoal producing districts in Ghana for the workshops makes the findings and issues raised applicable to all parts of the country.

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Appendix

Appendix 1: List of Participants at Kintampo Forest District

No.	Name	Community	Stakeholder Group	Contact no.
1.	Ayama Ibrahim	Asantekwa	Charcoal producer	0505930670
2.	Joseph Nkrumah	Asantekwaa	Assembly member	0247083716
3.	Georgina Affrah	Asantekwaa	Buyer	0206836977
4.	Konyib Solomon	BawaAkura	Producer/farmer	0245900385
5.	Michael Njafuni	BawaAkura	Producer	0500011285
6.	Kofi Okyer	Bredi	Charcoal producer	0207973603
7.	Kofi Anane	Cheranda	Chief Rep	
8.	Yaa Gyigaa	Cheranda	Farmer	
9.	Phillip Kwasi Laar	Dawadawa	Producer	0243076097
10.	Joseph Yaw Frimpong	Dawadawa	Producer	0243497158
11.	Mr. Opoku Antwi	Kintampo	District Manager, FSD	0244043657
12.	Regina Adjei	Kintampo	Assistant District Manager, FSD	0243946399
13.	Osei Kofi T.	Kintampo	Range Supervisor, FSD	0275004142
14.	Festus Tzdusah	Kintampo	Range Supervisor, FSD	0201691785
15.		Kintampo	Range Supervisor, FSD	
16.	Addai Anthony	Kintampo	Business Advisory Centre	0249105002
17.	Mr Effah Appiah	Kintampo	Sub-Chief	0274655133
18.	Nana Owusu Nkrah	Kintampo	Sub-Chief	0203248866
19.	D. O. Boampong	Kintampo	Police	0244995357
20.	Wiafe Akenten	Kintampo	Adars FM (media)	0209567741
21.	Nelson Doku	Kintampo	Ghana National Fire Service	0243344486
22.	Clement Adu	Kintampo	Ghana National Fire Service	0243943580
23.	Emmanuel Ofori Sarkodie	Konsu	Committee Chairman	0541031975
24.	Musa Basavil	Konsu	Charcoal producer	0263514454
25.	Nana Yaw Goinde II	Moe	Moe Chief	0272859446

Appendix 2: List of Participants at Afram Plains North

No	Name	Community	Stakeholder Group	Contact no.
1	Rose Adamtey	Abomosafo	Buyer	020-714-5626
2	Bosu Patience	Abotanso	Buyer	054-953-6388
3	Seth Alibeji	Abotanso	Chainsaw Operator	020-753-8517
4	Botchway Gershon	Abotanso	Chainsaw Operator	020-739-4349
5	IbrabimAlhassan	Adiemra	Charcoal Producer	026-888-9594
6	Yussif Imma	Adiemra	Chainsaw Producer	050-888-8706
7	Nana Wusuaa Ataa	Adiemra	Land Owner	020-518-8626
8	Nana Mireku	Adiemra	Land Owner	020-895-6725
9	Nana Kofi Badu	Adiemra	Land Owner	020-442-5063
10	Aboagye Bekwen	Akroso	Chief	020-580-4201
11	Benjamin Agbede	Amankwaa	Producer	
12	Nana Siaw Tutu li	Amankwaa	Land Owner	
13	Nyadedzor Francis	Amankwaa	Farmer	050-460-7587
14	Nana Osarfo Awuku	Amankwaa	Kontihene (sub-chief)	050-037-9024
15	Patrick Akpini	Amankwaah	Farmer	050-217-0358
16	Kwaku Agika	Amankwaah	Farmer	
17	Hassan Salifu	Bondaso	Producer	027-333-3151
18	Rev. Jonathan Obour-Wiredu	Donkorkrom	District Manager, FSD	020-322-4597
19	Kazaare Francis	Donkorkrom	Assistant District Manager, FSD	024-323-3072
20	Mohammed Baba Isaah	Donkorkrom	FSD	020-742-6857
21	Devor Samuel	Donkorkrom	FSD	020-928-9811
22	Eric Gonu	Donkorkrom	FSD	020-750-2089
23	Abdul Ramani	Donkorkrom	FSD	020-750-2441
24	Emit OheneGyan	Donkorkrom	FSD	050-531-2266
25	Charles Ankoma	Donkorkrom	FSD	020-909-6555
26	Kwabena Asare	Donkorkrom	FSD	024-610-2790
27	Jampou Zakia	Donkorkrom	FSD	054-053-0007
28	Asante Twumasi	Donkorkrom	FSD	020-480-6346
29	Mumuni Ibrahim	Donkorkrom	Wildlife Division	020-902-1261
30	Ofori Andrews	Donkorkrom	Wildlife Division	020-941-5433
31	Lawrence Tetteh	Donkorkrom	DM	020-709-5121
32	Michael Asante	Donkorkrom	District Assembly	020-734-3611
33	George Otchere	Donkorkrom	District Assembly	020-830-2368
34	Adamu Osmani	Donkorkrom	Chainsaw Operator	020-893-7898
35	Kwadwo Baah	Donkorkrom	Charcoal Trader	020-322-6664
36	Fredick Adeye	Donkorkrom	Chainsaw Operator	020-760-5460
37	Eric Afari Acquah	Donkorkrom	Fire Service	024-343-3410
38	Emmanuel Amprasu	Donkorkrom	Transporter	020-128-8408

39	Emmanuel Bona	Donkorkrom	Farmer	
40	Abudullah Patella	Donkorkrom	Chainsaw Operator	020-862-3022
41	IwusahBokoru	Donkorkrom	Chainsaw Operator	050-383-8715
42	LatoAlhassan	Donkorkrom	Machine Owner	020-015-5105
43	Kofi Sarfo	Donkorkrom	Chainsaw Operator	050-981-0178
44	Michael Brenya	Donkorkrom	Chainsaw Operator	020-474-3622
45	Charles Owusu	Donkorkrom	Central Administrator	050-897-5043
46	Papa NtiAmoa-Lamtey	Donkorkrom		024-405-0979
47	Daniel Amevor	Donkorkrom	Police	020-830-074
48	Evan Agewoda	Donkorkrom	Chainsaw Operator	020-782-2718
49	Joyce Anim Okyere	Donkorkrom	Trader	020-750-2158
50	Bertha Aboagye	Donkorkrom	Charcoal Trader	020-015-5266
51	Latif Hamza	Donkorkrom	Driver	020-928-9095
52	Abdul Hakim	Donkorkrom	Farmer	020-633-9100
53	Georgina Darkwaa	Donkorkrom	Trader	020-927-7866
54	Julius Effah	Donkorkrom	Producer	020-761-9275
55	Mustapha Nuhu	Kofi Nyina	Producer	
56	Nobel Agabo	Kofi Nyina	Producer	054-262-5504
57	Dodedzui Gabriel	Koranteng	Chainsaw Operator	020-419-5956
58	Mohammed Adam	Koranteng	Producer	020-012-5025
59	Tekpui Aziakru	Kweakesse	Producer	
60	Nana Kwabena Akwanua II	Ntaaboam	Chief	020-951-8439
61	Nana Akuamodu Boateng II	Ntoaboma	Chief	020-918-0154
63	Kwaku Inusah	Ntoaboma	Producer	
64	Alhassan Chokaya	Ntoaboma	Chainsaw Operator	020-798-4981
65	Kwadwo Simon	Ntoaboma	Producer	020-944-5954
66	Nana Yaw Kesse II	Ntoaboma	Chief	
67	Michael Sarfo Amankwaa	Ntoabomaa	Producer	050-897-5149
68	Nana Timaa	Ntoabomaa	Buyer	
69	Ibrahim Kwokwan	Ntoabomah	Producer	
70	Abudu Mahama	Ntobomaa	Producer	
71	Emmanue L Annchun	Ntomaboma	Producer	
72	Regina Oppong	Ntomaboma	Buyer	020-404-1194
73	Doris Achiaa	Ntomaboma	Buyer	024-843-4357
74	Cynthia Asare Somuah	NtonaAboma	Buyer	020-825-5655
75	Enoch Larbi	Odomasi	Chainsaw Operator	050-907-7989
76	Kwabena Adensu	Odumase	Chainsaw Operator	050-582-4088
77	Adu Charles	Odumase	Chainsaw Operator	050-633-1511
78	Emmanuel Doku	Odumase	Chainsaw Operator	020-631-4889
79	Nana Obeng Marfo	Somusei	Land Owner	020-940-8977

80	Annewere Akwasi	Tease	Transporter	024-515-9852
81.	Baba Haruna	Tease	Driver's Mate	

Appendix 3: List of Participants at Afram Plains South

No.	Name	Community	Stakeholder Group	Contact no.
1	Eramus Adoako	Agya Atta	Producer	
2	Kwasi Owusu Manase	Agya Atta	Driver	
3	Rockson Dankwa	Agya Atta	Buyer	
4	Abdul Fattah Sulemani	Agya Atta	Chainsaw operator	
5	F.K Kpordotsi	Anyinasu	Chainsaw operator	
6	Nana Kofi Acheampong	Bonkrom	Land owner	
7	Abase Gyaboka	Bonkrom	Buyer	
8	Ibrahim Zari	Bonkrom	Chainsaw operator	
9	Adams Ibrahim	Bonkrom	Chainsaw operator	
10	Animdu Ibrahim	Bonkrom	Chainsaw operator	
11	Dorothy Adobia	Dedeso	Buyer	
12	Appenteng Stella	Dedeso	Landowner	
13	Osmanu Adam	Dedesu	Producer	
14	Nana Agyei Ababio II	Dedesu	Chief	
15	Kazaare Fremani	Donkokrom	FSD	
16	Mohammed Dabalssah	Donkokrom	FSD	
17	Rev .Obour-Wiredu	Donkorkrom	FSD	
18	Razak Nyamamero	Dumesua	Chainsaw operator	
19	Nana Yaw Yeboah	Dumesua	Producer	
20	Joyce Oduro	Dumesua	Buyer	
21	Charity Owusuah	Dumesua	Buyer	
22	Charlotte Asantewaa	Dumesua	Buyer	
23	Somiala Temereto	Faso	Producer	
24	Nana Asante Dankwa	Forifori	Landowner	
25	Adamu Issah	Forifori	Farmer	
26	Nabeh Rakibu	Forifori	Farmer	
27	Issaka Issa	Forifori	Farmer	
28	Samuel Asante	Maame Krobo	Chainsaw operator	
29	Zack Adu	Maame Krobo	Chainsaw operator	
30	Joseph Tenkrang	Maame Krobo	Chainsaw operator	
31	John Sewu	Maame Krobo	Chainsaw operator	
32	Nana Yaw	Maame Krobo	Chainsaw operator	
33	Yaw Nuhu	Maame Krobo	Chainsaw operator	
34	Martin Doe	Maame Krobo	Chainsaw operator	
35	Mohama Basalin Teoko	Maame Krobo	Producer	
36	Adusei Osei Eric	Maame Krobo	FSD	
37	Badu Sintim	Maame Krobo	Buyer	
38	Kude Yaw	Maame Krobo	Producer	

39	Yaw Nuhu	Maame Krobo	Chainsaw operator	
40	Kwadwo Daniel	Maame Krobo	Driver	
41	Yaw Adjei	Maame Krobo	Driver	
42	Atura John	Maame Krobo	Chainsaw operator	
43	Wordi Besa	MaameKrobo	Chainsaw operator	
44	Kofi Yeboah	Oseikrom	Chainsaw Owner	
45	Onwona Osarfo	Tease	Chainsaw Operator	
46	Michael Kpordotsi	Tease	Chainsaw Operator	
47	Samuel Antwi Bosiako	Tease	Kapsda	
48	John Abieku Dennis	Tease	FSD	
49	Wudu Adam	Tease	FSD	
50	Damouah Douglas	Tease	FSD	
51	Beatrice Frimpomaa	Tease	Buyer	
52	Regina Yeboah	Tease	Buyer	
53	Mary Boadiwaa	Tease	Buyer	
54	Mireku Nyanpon	Tease	Buyer	

Appendix 4: Pictures from the workshops

