

KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY

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KNUST

AN ANALYSIS OF HERDER-FARMER CONFLICTS IN THE ASANTE-AKIM NORTH
DISTRICT OF GHANA.

By

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(B.A. Geography and Resource Development)

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the requirements for the degree of
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DECLARATION

I hereby declare that this submission is my own work towards the award of M.Sc. in Development Policy and Planning, and to the best of my knowledge, it contains no material previously published by another person nor material which has been accepted for the award of any other degree of the university, except where due acknowledgement has been made in the text. I am therefore fully responsible for the views expressed, factual inaccuracy of the content and any other blemishes that this report might contain.

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ABSTRACT

The availability of fertile soils and climatic conditions in Asante-Akim North District are suitable for large scale crop cultivation and animal production. This has attracted several farmers and cattle owners, who rely on the services of Fulani herdsmen. The farmers cultivate variety of food crops such as plantain, maize and watermelon on a commercial basis all year round. Coincidentally, these crops have also been found to be of nutritious value for the cattle and as such alternative feed, especially during the dry season. This has caused massive crop destructions resulting in frequent acrimonies and often violent conflicts between these two landusers. Consequently, this development has affected the relationship between the two groups. The Fulanis have always been perceived to be violent in their interactions with the residents over the use of resources. The study examined the incessant conflicts that emanated from these interactions. It focused on the identification of the underlying causes, how it affects the livelihood security of the people and rural development. Additionally, the management strategies adopted by the people were also explored. The study used eclectic approaches of personal observation, questionnaire survey and key informant interviews to obtain data. By way of quantitative and qualitative analyses, the study contended that the recurrent herder-farmer conflict was attributable to competition over the use of land and water resources. This resulted in crop destruction, pollution of drinkable water, rape, killing and maiming of natives. In turn, the youths of the host communities resorted to reprisal attacks. The implication was that, several people lost their lives while others sustained various degrees of injuries. Besides, agriculture which is the mainstay of the economy was being disrupted leading to reduction in production and income. In the end, the livelihood of the people and the development of the communities were affected negatively. The study concluded with the recommendation that a committee of experts should be set up to determine appropriate compensation for the affected person, cattle owners should adopt agro-pastoralism which integrates crop production and animal rearing. Additionally, a portion of the vast Afram plains should be reserved for grazing where well fences could be provided to control the movement of the animal as practiced in Denmark.

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CHAPTER ONE: BACKGROUND TO HERDER-FARMER CONFLICTS IN AGOGO

1.1 Introduction

Arguably, land is the most important resource that supports human activities. Farming, hunting, mining, trading, road and building construction, all take place on a piece of land. Tonah, (2001) noted that fertile land offered an opportunity for crop and animal productions. It is in the light of this that Adisa, (2012) asserted that the socio-economic lives of both the farmers and the herders within a particular geographical setting revolved around land. Therefore, competition between crop farmers and animal rearers over access and control of fertile land within a particular area is inevitable and hence can easily escalate into violent conflicts. This is consistent with Blench's (2010) position that struggles over the control and ownership of economically viable land causes more tensions and violent conflicts among communities.

It is common knowledge that rural farmers and livestock producers are the primary source of the food production in Africa, principally for the urban areas of most African countries including Ghana. What has emerged recently in many parts of Ghana is an internecine warfare between farmers and herders, revolving around the use of resources. This results in crop damages, pollution of drinkable water and harassment of either group. For instance, Tonah, (2006) and Abdulai and Yakubu, (2014) have written about the violent conflicts between farmers and herders emanating from competition over land and damages to crops in the Volta basin and the Northern Region respectively. This is a threat to the peace and stability as well as food security in the country.

The availability of fertile land as well as reliable rainfall in the Asante-Akim North District has influenced the livelihoods of 79.7% and 64.4% of rural and urban households respectively who are engaged in agriculture (Asante-Akim North District Medium Term Development Plan, 2014-2017). It allows them to practice farming throughout the year and rear livestock. These favourable conditions in addition to the hospitality of the indigenes have attracted migrant farmers including Fulani herdsmen from different parts of Ghana and beyond into the district. However, the influx of Fulani herdsmen within the district since 1996 has caused more harm than what was expected to be a symbiotic relationship. People have been killed, maimed and raped. Others have had their crops and cattle damaged, with pupils having to drop out of school because of the insecurity in the area. This study therefore seeks to bring to the fore, the major causes of these conflicts, the effects it has caused and the management strategies.

Recommendations that will forestall the future occurrence of these violent conflicts in the district, particularly the Agogo stool lands will be made.

This chapter is structured to explain the background of the study in the first section and explores the land tenure system as operationalised in the traditional area in the second section. The next section elucidates the problem in which solution is being sought while the succeeding section deals with the objectives of this study. The subsequent section outlines the research questions that would be answered by the end of this study. The chapter continues with the general scope of the study, the significance of conducting this research and the structure of the thesis. Finally, the summary of this chapter appears in the last section.

1.2 Access and rights to land in the Agogo Traditional Area

Pastoralists' access to land in Agogo is the major issue this section tries to look at. Payne, (1997) as cited by Mends, (2006) defined land tenure as 'a set of rules and regulations that govern the holding, use and transfer of interest and rights in land'. According to the Economic Commission for Africa (2004), the livelihoods of people, both in rural and urban areas are very much affected by the tenancy arrangements being operated within an area. This is backed by the existing legislation and customary law. Their report further indicates that the major effect of land tenure on people's livelihoods is the decline in agricultural production for domestic food and industrial needs.

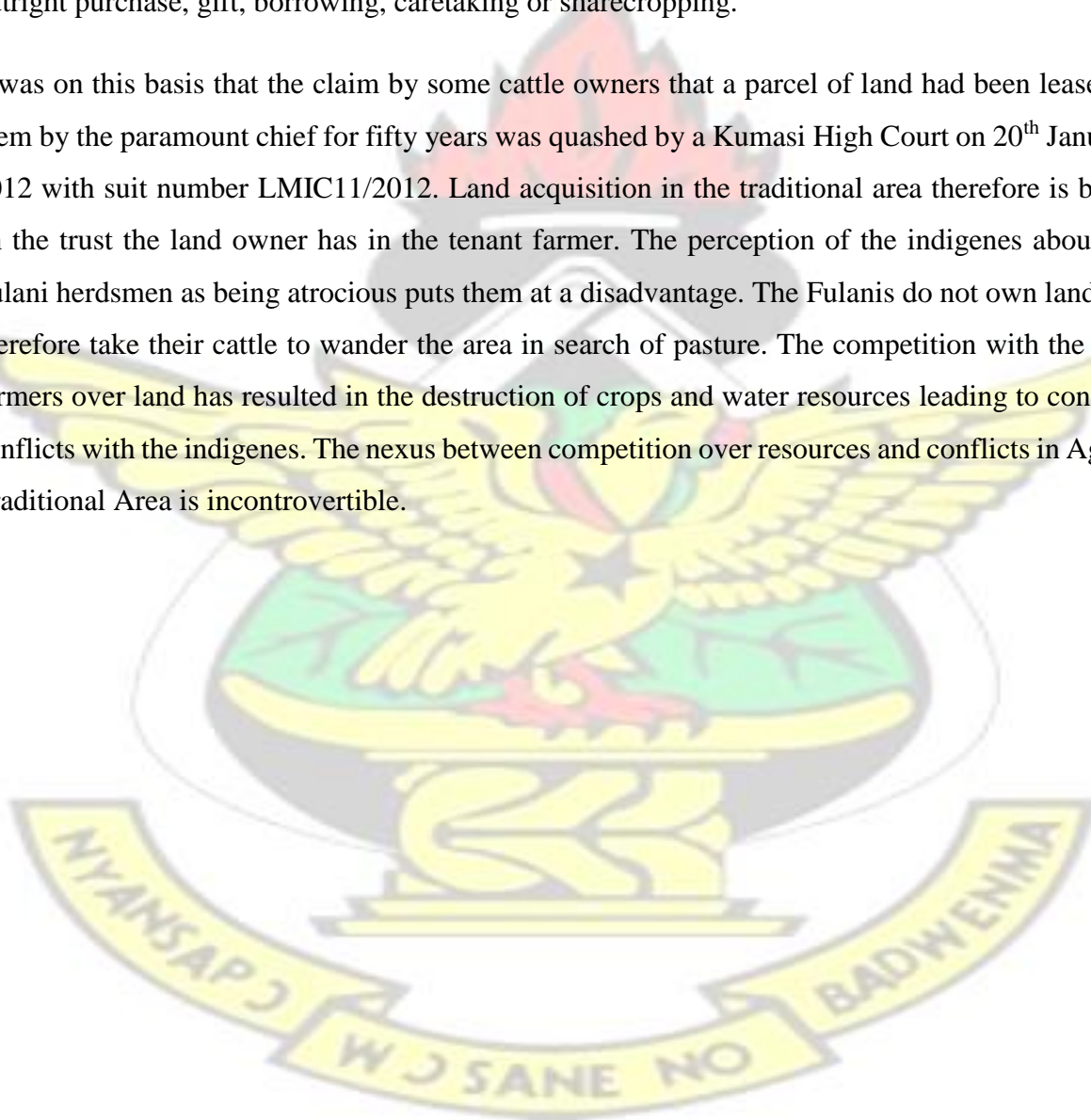
The 1992 constitution of Ghana recognizes three distinct land ownerships. These are the public lands, stool lands and private freehold lands. Public lands are those which the state has acquired compulsorily for public purposes. Stool or Skin lands are the ones held communally by traditional communities or confederation of communities, including families. And finally, a category of non-public or non-stool lands which are private freehold interests.

In Ghana, the customary land rights have been deeply rooted in the rural communities. Kasanga and Kotey, (2001) and Agbosu et al, (2007) claimed that the customary land tenure regimes in Ghana are diverse in concepts and practices. They are also location specific but exhibiting similar commonalities. That is, the management of customary land tenure is by a traditional ruler, earth priest, council of elders, family or lineage heads. They continued that these principles originate from rights which are established either through first clearance of land, conquest, gift or settlement. The members of the land owning community therefore enjoy usufructuary titles where each

member has an inalienable right to the portion of land on which he cultivates. In that case no other member has that same right to it.

In the Agogo traditional area, the forest land belongs to the government and it is managed by the forestry commission while the remaining portions are owned by families, held in trust by the family head or individual members. Indeed the Kontihene of the Agogo Traditional Council confirmed that the traditional authority no longer had any parcel of land to itself. Acquisition of land by non-members of the family can be obtained from the government or individual families through outright purchase, gift, borrowing, caretaking or sharecropping.

It was on this basis that the claim by some cattle owners that a parcel of land had been leased to them by the paramount chief for fifty years was quashed by a Kumasi High Court on 20th January, 2012 with suit number LMIC11/2012. Land acquisition in the traditional area therefore is based on the trust the land owner has in the tenant farmer. The perception of the indigenes about the Fulani herdsmen as being atrocious puts them at a disadvantage. The Fulanis do not own land and therefore take their cattle to wander the area in search of pasture. The competition with the crop farmers over land has resulted in the destruction of crops and water resources leading to constant conflicts with the indigenes. The nexus between competition over resources and conflicts in Agogo Traditional Area is incontrovertible.



1.3 Problem statement

El Hadary and Salamat (2008) have observed that for farmers, land is considered a highly valuable entity. It is not just considered a means of livelihood, but also a source of wealth, and a source of conflict. What this means is that lack of access to land does not only deprive them from their major source of livelihood, but it also threatens their existence as human beings. Okoli and Atelhe's (2014) research also claimed the most treasured object in a Fulani's life is his cattle, which are kept on land. The quantity he keeps is a measure of his wealth. To this end, both farmers and herders will do everything to maintain access and rights to any portion of land. The end result is the outbreak of conflict between these two land-users. Manu et al (2014) reported of a considerable increase in local clashes over agricultural land in many parts of Africa, since the beginning of the 1990s.

Of late, there are reports of increasing conflicts between farmers and Fulani herders in many parts of Ghana as well. As far back as 2003, the issue of herder-farmer conflict attracted the attention of parliament when the then Minister for Food and Agriculture proposed an identification exercise for both the owners and their cattle to help identify the illegal ones, Sosuh (2011). This and many other attempts by various interest groups have yielded very little results. Threats of full-scale attacks on either party have remained very active until now especially between 2007 and 2014, based on the various newspaper headlines assembled in table 1.

These headlines indicate how precarious the Fulani-farmer issue is in Ghana most especially Agogo and its environs. Again, the reports demonstrate the intensity of these disturbances over the years. One major policy that has been carried out is the policy of expulsion of the migrant herders and their cattle. But the media reports indicate the several unsuccessful attempts made by the government and other corporate institutions in finding lasting solution to the menace. The media reports always put the farmers at the receiving end. It thus suggests that herders are a bunch of people who go about perpetrating crimes. Some of these though have been confirmed but others have been denied. The reports failed to expose how vulnerable the herders are, and the frustrations they go through. The reports also did not assess the contributions of the herders to the economic development of the country. However, these reports call for a 'one stop shop approach' as the situation spreads across time and space.

Table 1 Examples of headlines in the Ghanaian media

No.	TOPIC	SOURCE	DATE
1	Volta police begin war against nomadic Fulanis	www.ghanaiantimes.com.gh	11 th may, 2015
2	REGSEC to flush Fulanis out of Agogo	<i>The Ghanaian times</i>	16 th January, 2015
3	Agogo residents reject Fulani herdsmen	www.peacefmonline.com	13 th January, 2015
4	Fulani herdsmen devastate northern region	www.peacefmonline.com	4 th April, 2014
5	Residents of Agbolekame call for evection of Fulani herdsmen	<i>etv Ghana news</i>	5 th April, 2013
6	Ayariga propounds antidote to Fulani menace	<i>The Ghanaian chronicle</i>	27 th March, 2013
7	Farmer butchered to death by Fulani herdsmen at Akuse	www.wordpress.com	12 th March, 2013
8	Sekyere Afram plains: farmers want Fulani herdsmen flush out	<i>Ghanadistricts.com</i>	25 th February, 2013
9	Fulani herdsmen to be forcibly evicted from Agogo area	www.omgghana.com	22 nd June, 2012
10	Fulani impasse: Ashanti regional security council inaugurates Fulani eviction plan committee	www.myjoyonline.com	3 rd February, 2012
11	Mounting tension in Agogo following the return of Fulani herdsmen	<i>Ghana Broadcasting Corporation</i>	24 th January, 2012
12	Cattle still destroying farms at Agogo	www.myjoyonline.com	17 th January, 2012
13	Fulani herdsmen killed 12 in 18 months in Eastern region	<i>VibeGhana</i>	23 rd November, 2011
14	Professional body to mediate in Agogo Fulani herdsmen conflict	<i>VibeGhana</i>	11 th November, 2011
15	Agogo farmers petition government on activities of Fulani herdsmen	www.ghanaweb.com	19 th September, 2011
16	Agogo residents and Fulani herdsmen tension dangerous, WANEP	www.citifmonline.com	10 th October, 2011
17	Agogo residents impose ban on funerals in protest over Fulani 'menace'	www.myjoyonline.com	28 th September, 2011
18	Farmer reportedly shot by Fulani man at Agogo	www.myjoyonline.com	7 th September, 2011
19	Fulani herdsmen leave Agogo to a new location	www.myjoyonline.com	24 th August, 2011
20	Agogo residents fume as Fulani herdsmen return	www.myjoyonline.com	9 th August, 2011
21	Nefarious activities of Fulani herdsmen bequeath traditional rulers sleepless nights	<i>Northernghana.com</i>	11 th August, 2010
22	Northern chiefs charged up	www.dagbon.net	6 th August, 2010
23	Activities of Fulani herdsmen pose security threat, GHANEP	Ghana News Agency	8 th August, 2008

Source: Author's Compilation. May, 2015.

The fertile soil and favourable climatic conditions in Agogo are suitable for crop cultivation and animal rearing. As a consequence, lots of farmers, including herders, have been attracted to this area from different parts of Ghana and beyond. In addition, the hospitality of the natives also attracted people. The crop farmers who cultivate variety of crops like plantain, maize, rice, cassava, cocoyam, yam and vegetables migrated from the three Northern and Volta Regions. On the other hand, there is a large scale cattle rearing being undertaken by indigenous Ghanaian business men and some aliens (see page, 22). They rely on the services of Fulani herdsmen who migrated from Mali, Niger, Burkina Faso and even Ghana.

Following the High Court ruling to expel the Fulanis the Ashanti Regional Security Council (REGSEC), set up an evacuation plan committee in 2012 to carry out this order. The report on the evacuation plan indicates that the influx of cattle in the area meant that conflicts between farmers and herders were to be expected and contained. However in recent times, there have been cases of murder, rape, destruction of crops and farmlands, bush fires and pollution of water bodies in the Traditional area. The local residents point accusing fingers at the Fulani herdsmen and their cattle. The pastoralists are in the news for all the wrong reasons. However, their contributions to food security, environmental sustenance and economic stability in the area are hardly mentioned. The news is always about pastoralist getting involved in violent attacks, killings, rape and armed robbery. For instance, the West African Network for Peace building (WANEP)¹ on Monday, 10th October, 2011 reported that out of every five armed robbery suspects busted by the security, all or three of the suspects appeared to be Pastoralists.

Meanwhile, the crimes are not limited to the Fulanis alone. The indigenes are also involved in some of these rapes, murder and armed robberies. The Fulani pastoralists have also suffered at the hands of the young native farmers. According to the spokesperson of the Fulani, the natives succeed in killing about 38 of Fulani herdsmen as a response to the state's failure to expel the Fulanis. Example in December 2011, conflict between Fulani herders and farmers in Zamashegu, a farming community in the Gushegu District of the Northern region of Ghana resulted in the death

¹ Agogo residents and Fulani herdsmen tension dangerous, WANEP. www.citifmonline.com retrieved on 14th July, 2014

of 30 people, most of them being Fulani herdsmen². The Fulani have also accused the farmers of deliberately poisoning their cattle or inflicting machete wound on them. For example, on 8th March 2015, 24 cattle were poisoned in Pataban, a farming community in the Agogo traditional area; the cattle owner accused the residents of this heinous crime. What necessitates these attacks is that the farmers resort to killing and attacking of the herders and their cattle for crop destruction, which also call for reprisal attacks from the herders. In response to these allegations, the chairman of the Fulani Community in Ghana, Iddrisa Bingle, said that not all cattle herdsmen were Fulani and said it was unfair to attribute every criminal activity to Fulani.

On the issue of farm destruction, he explained that more often than not, the animals “go crazy” leading to the destruction of farm produce. He added that in some cases, the owners of these farms engaged in peaceful discussions with the herdsmen who end up compensating the affected farmers³.

The alleged criminal activities by some Fulani herdsmen and the havoc caused by their cattle which reached its crescendo in 2011 resulted in:

- ✓ Widespread resentment and agitation in the Agogo community;
- ✓ A self-imposed ban on the observance of funerals by the Agogo community, until the Fulani herdsmen were flushed out. The ban was however lifted in February, 2012;
- ✓ Demonstrations, including calls for the destoolment of the Agogo paramount chief, who was alleged to have granted a fifty-year lease to Alhaji Grunsah and five others to rear their cattle there and thereby drawing many others in, including nomadic herdsmen;
- ✓ The engagement of the leaders of the Agogo community, the farmers and cattle owners by REGSEC but to no avail;
- ✓ The maintenance of a combined military-police taskforce in the Afram plains area but yielded no results;
- ✓ The paramount chief himself resorting to court action to compel the cattle owners to leave Agogo and;
- ✓ Finally a High court order directed at REGSEC to immediately expel all improperly confined cattle from the six communities in addition to Adonienu community.

² Parliament to investigate reports of criminal activities of Fulani herdsmen. www.myjoyonline.com. Retrieved on 14th July, 2014

The reconnaissance survey of some areas revealed destruction of farm produce, pollution of water bodies like rivers Bontre, Koowire and Oyem which serve the people of Koowireso,

³ Agogo residents and Fulani herdsmen tension dangerous, WANEP. www.citifmonline.com retrieved on 14th July, 2014

Mankala and the adjoining communities. Agriculture, which has remained the mainstay of the economy of Asante-Akim, is being disrupted by conflicts, making livelihood difficult for the two groups. Again, the education of children is affected since the schools are virtually closed down in times of conflicts as children from the surrounding villages stop schooling. Anecdotal evidence suggests that some Politicians, Traditional Authorities and even the Security agencies are condoning and conniving with the herdsmen in perpetrating these conflicts. They are accused of hiring these “criminals” to tender their cattle for them.

What remains to be established is the actual perpetrators of these activities and how these trigger conflicts. These accusations and counter accusations indicate that there is no clear consensus on the causes of these conflicts. Rising interests in the interactions of environmental factors (climate change and variability), social, economic and political considerations have increased conflicts and tensions between farmers and Fulani herders in Asante-Akim North District. The complexity of the issues demands some scientific studies to see how these factors influence conflicts between farmers and Fulani herders in order to bring out the findings for policy consideration.

1.4 Objectives of the study

In general, this study sought to analyze the socio-economic, political and environmental factors that influenced conflicts between Fulani herders and farmers in Asante Akim North District. Again, the implications of these increasing conflicts on peoples’ livelihoods and community development were examined.

Specifically, the research sought to:

- 1) Analyze the socio-economic characteristics of farmers and herders that precipitated conflicts;
- 2) Identify the major causes of conflicts between Fulani herders and farmers from the perspective of both parties in the study area;
- 3) Assess the effects of herder-farmer conflict on livelihoods;

- 4) Describe the institutions involved and analyze the strategies adopted in the resolution of herder-farmer conflict in the Asante-Akim north district of Ashanti.

1.5 Research questions

The following are some of the questions that would be asked in order to achieve the set objectives.

1. What are the socio-economic characteristics of herders and farmers?
2. What factors motivate herders to migrate to Agogo, in spite of the hostile reception they encounter?
3. What are the main causes of conflicts between farmers and Fulani herders in AsanteAkim North District?
4. How do these conflicts affect agricultural activities, environment, local businesses and human security?
5. What strategies do the parties adopt in the resolution of conflict?

1.6 Scope of the study

Geographically, the study was conducted in the Asante-Akim North District of Ashanti. More specifically, the study concentrated on the Agogo Traditional Area where the conflicts were centred. This area has seen many violent conflicts between farmers and Fulani herdsman since the beginning of the new millennium. The levels of these violent conflicts appear to be up and down cycle movement over the years. According to Olaniyan, Francis, and Okeke-Uzodike (2015), the conflicts started in 2001 but subsided in 2002. It again roared its ugly head in 2004 and decreased in 2005. The clashes resurfaced from 2009 to 2011 where hostilities reached its crescendo resulting in massive demonstrations by the indigenes in early 2012.

In examining the herder-farmer conflict in depth, and also to avoid the risk of over generalization the study was limited to six communities purposively selected. These are Abrewapong, Bebuoso, Brahabehome, Koowereso, Mankala and Nyamebekyere. Even though only six communities were selected, the conditions that triggered conflicts were similar in other communities within the traditional area.

Contextually, the study considered the activities of the Fulani herdsman. The variables of interest were the socio-economic characteristics of herders and farmers, motivating factors for migration, causes and effects of the conflicts. Additionally, the management strategies of the parties, and the

institutions involved in the resolution of conflicts was explored. The period for the study spanned from 2007 to 2015. These were time reports of violent conflicts had heightened.

1.7 Significance of the study

Manu et al (2014) have learnt that the competition over scarce land resources is progressively posing a challenge to agricultural activities as crop farmers and herders struggle for land for cultivation and grazing respectively. This has led to increasing conflicts in recent times between herders and farmers. Their attendant implications are felt in terms of human insecurity, food insecurity, deteriorating health and environmental conditions, which are paramount in good governance. With reported cases of deaths, maiming and damages to crops, the clashes between Fulani herdsmen and local farmers have had deleterious consequences both at the local and national levels. There have been accusations and counteraccusations from both groups. However, not much research has been conducted on the possible causes and effects of these clashes from the perspective of farmers as well as the reaction of the migrating Fulani herdsmen especially in the Agogo Traditional Area.

The purpose of the study therefore is to provide detail information on the causes of Fulani and Farmer conflicts in Asante Akim North District as well as implications of these clashes on development at the district in particular and the country as a whole. This will inform policy makers on the needs and aspirations of both parties. With this, suitable mechanisms required for the management of resource-use conflicts in the country would be adopted.

1.8 Organisation of the thesis

Methodically, this study is organized into five broad chapters. The first chapter has given the contextual circumstances under which farmers and headers engage in conflicts. The major consideration is that, when crop farmers and herders come into contact, competition ensues over the use of a common resource. This mostly results in conflicts between these two groups. The methods of land acquisition as enshrined in the 19992 constitution and operationalised at the district are outlined. The problem statement, the objectives of conducting this study and the scope of the research are also highlighted in this chapter.

In chapter two, the study presents the theoretical framework in which relevant literature relating to the understanding of herder-farmer conflicts are critically looked at. It begins with the explanation of conflict, conflict theory and the possible causes and effects of herder-farmer conflicts. The

chapter continues to look at the history of the Fulani herdsmen in Agogo and how the local people perceive the Fulanis. The ECOWAS protocol that allows citizens of member states to move freely is also examined. This chapter then ends with a conceptual framework where the variables under study are linked in diagrammatic form.

Following the exploration of literature regarding the resource-use conflicts, the next chapter presents the techniques employed to obtain data. The choice of data collection methods is informed by the literature reviewed. The chapter then begins with the research design, tools of data collection and administration of questionnaires. This chapter would end with the presentation and analysis of the results.

After the data has been collected, coded and edited using Statistical Package Social Sciences (SPSS) and Excel Spreadsheet, the next chapter would then be devoted to the analysis and discussion of the results. To begin with, the chapter starts with the geographical characteristics of the study area which have effects on the problem being explored. Again, the analysis of the socio-economic characteristics of farmers and herders would be examined. This would be followed immediately by the causes, effects, management strategies and the institutions involve in the resolution of conflicts to end this chapter.

Chapter five, which completes this study, will look at the summary of the key findings that have emanated from the study. Additionally, the way forward proposed by the parties would be outlined and recommendations regarding best practices elsewhere for policy consideration would be given. From the outline so far, the chapter can then end with a conclusion on the study.

In summary, the study has so far looked the increasing conflict between crop farmers and Fulani herdsmen in Asante-Akim north district of Ghana. This has come about due to competition over the use of land resource between crop farmers and herders. It emerged that the Fulanis are considered aliens and therefore do not have access to land but their determination to survive in this favourable environment has driven them to indiscriminately graze their cattle regardless of whether there are food crops or not. This has caused in destruction of crops leading to killing of cattle. A reprisal attacks results in killings and injuries to people.

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CHAPTER TWO: UNDERSTANDING HERDER-FARMER CONFLICTS

2.1 Introduction

The previous chapter provided an overview of the herder-farmer conflict in Agogo Traditional Area. It could be discerned that the favourable environmental conditions coupled with the hospitality of the people have attracted farmers and herders from different parts of the country and beyond. The increase in the number of farmers and herders has correspondingly increased competition between these two land-users leading to conflicts.

This chapter proceeds from the emergence of conflicts to understand the theoretical debates embedded in such resource-use conflicts. The chapter begins with the explanation of conflict. It then links it up with the theories underpinning resource-use conflicts in the subsequent section. Having established that the conflict arising out of the competition over the use of resource is rooted in theory, the next section looks at the theoretical causes of herder-farmer conflicts in the study area. This is immediately followed by an outline of the consequences likely to be associated with such conflicts. The exposition of various strategies adopted to manage such conflicts is explored. Subsequently, the history of the Fulani in Agogo and the ECOWAS protocol on transhumance are looked at. The chapter ends with a conceptual framework where the key factors are presented diagrammatically.

2.2 Explanation of Conflict

According to Hornby (1995), conflict is defined as a serious disagreement, argument, struggle and serious difference of opinions, wishes or a clash. In like manner, Wilson and Hanna (1979) earlier defined conflict as ‘struggle involving opposing ideas, values, and/or limited resources’. According to (Robinson 1972; as cited in Manu et al, 2014), the clash is mainly targeted at limiting or completely eliminating the access of one party to some resource. The realization of this interest by any of the parties could lead to violent conflicts. This could be observed in cases of resource-use conflicts between crop farmers and herders in the Asante-Akim North District where the two parties share the same resources for farming and grazing.

In a related development, Manu et al (2014), claim that conflict usually stems from insatiable wants of humans. They confirmed that competition for scarce resources is the foremost cause of community or inter-party conflicts. This situation is very common with crop farmers and cattle rearers who require the land for their daily activities. The farmers want to protect their means of

livelihoods while the herders are also determined to survive within such conducive environment. Thus, the two parties try to gain access and control over the scarce resources which is dwindling by the expansion of farm sizes and the increase in herd sizes resulting from population expansion.

Moritz (2010) insists conflict perceptions and emotions usually manifest themselves in the decisions and obvious behaviours of one party towards the other. He further explains that these conflict episodes may range from subtle non verbal behavior to warlike aggression. Conflicts also manifest by the style each side uses to resolve conflict such as whether one side tries to defeat the other or find a mutually beneficial solution. Consequently, these play a critical role in determining whether conflict will escalate or be resolved quickly. Tonah (2006) and Vanderlin, (2005) claim that all conflicts share common qualities. Thus, the first is that there is some sort of contact between the parties involved; secondly, the parties in conflict perceive conflicting views; and finally, one of the parties always wants to redress existing contradictions.

It is an undeniable fact that conflict is an ever present phenomenon in any social relation especially where resources are scarce. It is indeed inevitable in any social gathering, organisation and society as a whole. Manu et al (2014) believe that conflict has both positive and negative effects on the populace. Keen (1998) contends that conflict is necessary for change in human society since they help to build relationships in groups, establish a group's identity and build internal cohesion in groups. He continues that it can lead to balance of power in society as well as create new rules and laws. In a similar fashion, Turner (1999) concedes that conflict forms an important part in human interaction. He underscores the fact that conflict stimulates new thoughts, promotes social and policy changes and helps man's sense of personal identity. Charles, (2005) concludes that communal conflicts help to bring to light the areas of discontent and suggested solutions to reach consensus and achieve equilibrium. It is clear from the above that, during conflict, the opposing groups mobilize their energies which subsequently increase the cohesion of the group. It has been suggested that successful organizations normally encourage mild forms of conflict without having situations escalate into socio-emotional conflicts.

In spite of the numerous benefits outlined above, its negative effects have dire consequences on the development of the society. These include the disruption of social cohesion and generation of inter-group tension, Manu et al (2014) and Tonah, (2002). (De Haan, 2002; Ingawa, Ega and Erhabor, 1999; Wilson and Hanna, 1979; Deutsch, 1973) suggest conflicts lead to disruption of

normal channels of cooperation and generation of bitterness which may lead to destruction of property. Internal displacement, forced migration, rape and bloodshed are other negative consequences shared by (Bello, 2013; Olugbenga, 2013; Adisa, 2012 & 2011a; Olabode and Ajibade, 2010). The effects are usually felt very much at the local level as local livelihoods disintegrate and the peoples' security becomes endangered before it transcends to the larger community.

Depending on how a conflict is handled, it can easily escalate into violence. This study is of the views that, as farmers and Fulani herders continuously compete over common resource such as land and water it will intensify the competition and escalate into violent conflicts if not properly handled. This can be resolved when the two parties cooperate or through impartial external mediation. In times of violent conflicts, farmers for example, cannot go to their farms to work for fear of being attacked. Also, farms are sometimes set ablaze leading to the destruction of farm produce. Precious lives and those of the cattle are lost. Besides, traders and businessmen cannot engage in commercial activities leaving markets deserted. Local revenue mobilizations are seriously curtailed due to the breakdown of commercial activities and security. Moreover, schools are closed down affecting the work of teachers and students since they cannot attend school. This negatively affects academic performance. Under these circumstances, many development efforts are adversely affected, because peace which is needed to ensure development is mortgaged.

2.3 Conflict Theory

Having understood what conflict is and the benefits as well as the disbenefits, it is imperative to discuss the theoretical approaches to the study of these conflicts. Researchers (such as Moritz, 2010; Benjaminsen and Ba 2009; Kriesberg 2007; Beeler 2006; Braukamper 2000; HomerDixon 1999) have over the years studied the conflict theory from different analytical perspectives. The objective is to understand the root causes of herder-farmer conflicts, their effects on livelihoods and rural development. Lastly, these studies intend to suggest ways to manage them for efficient sustainable development.

Various researchers have adopted different approach to the study of herder-farmer conflicts. This research draws from the structural and processual approaches identified by Moritz, (2010). The debate is, which of the two approaches best examines the whole issues of herder-farmer conflicts. Structuralist like Braukamper (2000) is of the view that since farmers and herders make their

livelihood within the same geographical, political, and socio-cultural conditions, causes of conflicts are factors shared by all members of the community. But Processualists such as (Moritz, 2010; Hagberg, 2005; Harshbarger, 1995; and Bassett, 1988) on the other hand assert that conflict situation under the same conditions may result in a wide variety of outcomes. While structural factors give rise to many herder-farmer conflicts, Moritz (2010) maintain that it is not the case that all disagreements occurring under the same structural conditions escalate into largescale, violent clashes that engage the whole communities. He is of the opinion that if patterns of herder-farmer conflict can only be explained by structural factors, then, the levels of engagement, violence and outcomes should be the same.

Moritz (2010) continues that the processual approach, focusing on conflict dynamics rather than structural context, leads to the identification of new variables. These variables may explain why some herder-farmer conflicts escalate and others do not. This school argues that processual analysis involves a holistic approach to an event. Thus: interpretation of events, actions, and actors within their local context; considering socio-cultural, historical, ecological, economic, political or institutional factors. Their view is that it is not sufficient to know just why conflict begins, but also why and how, as some conflicts unfold they escalate with religious, ethnic, and political dimensions. The point of departure of the processual analysis from the structural perspective is that it starts with the advent of the conflict and then examines how it articulates with the socio-cultural, political, historical, ecological, demographic, economic, and institutional factors.

Again, Thomas Homer-Dixon (1999) and Olabode and Ajibade (2010), arguing for the structural school have emphasized the role of resource scarcity and its accompanying competition for those scarce resources as the primary reason for more frequent violence. However, Basset (1988) had earlier challenged this assertion as he claimed that herder-farmer conflicts were equally intense in Cote d'Ivoire and Cameroon, where grazing areas were relatively abundant. Hagberg (1998) also argues that the age of the herder and farmer is the immediate reason for conflict escalation.

The structural variables may be necessary conditions for the escalation of herder-farmer conflicts, but not sufficient condition for the escalation itself.

Additionally, Kriesberg (2007) alleges that escalation of conflict is usually an unintended consequence. He claims that conflict may escalate inadvertently, step wisely or without the actors

having carefully considered the implications of their actions. Besides, not all conflict escalation events are alike. Rather, there are different patterns in how conflicts transform into widespread violent engagements. Mitchell (1981) indicates that the transformation is determined by the people involved, the actions they take, and the goals they pursue during the conflict. Pruitt and Kim (2004) have identified five general transformations that occur during conflict escalation:

- (1) shift from small to large (that is, increasing investment in the conflict);
- (2) shift from light to heavy tactics (example from persuasion to violence);
- (3) shift from specific to general (example from crop damage to ethnic conflict);
- (4) shift from few to many (thus, increase in the number of people involved in the conflict) and;
- (5) shift in goals from doing well to hurting the other party (example from finding solution to the problem to killing all opponents).

In furtherance to the above Moritz, (2010) outlined four processual variables which he claimed could explain conflict escalation better. These are: crowd formation, direct confrontations, initial casualties, and the role of intermediaries. Within this contest, different tactics are employed by the conflicting parties. The processual approach thus, explains the variability in outcomes across the many conflicts that may occur within the same context.

In spite of this, the structuralists believe that the main theoretical approach in the study of herderfarmer conflicts in West Africa is structural. This encompasses environmental security and political ecology. For example, (Braukamper, 2000; Homer-Dixon, 1999 and Zuppan, 1994) emphasized the role of resource scarcity and increasing competition for these scarce resources as the primary cause of conflicts. Although, they admit that these are not the only reasons for more frequently violent conflicts over natural resources. Other structural reasons include the demise of the symbiotic relations between herders and farmers across West Africa (Barrot, 1992 and Tonah 2000, 2006), institutional failure to resolve conflicts (Benjamin et al 2009; Beeler 2006; Noorduynd 2005), the larger political context (Beeler 2006; Gausset 2005; and Tonah 2000), historical context (Davidheiser and Luna 2008 and Dafinger and Pelican 2006), or cultural differences between herders and farmers (Adebayo 1997 and Blench 1984). But the fact remains that multiple, varied as well as complex factors account for farmer-Fulani herder conflicts in West Africa (Adano et al, 2012).

It is true that not all the disagreements occurring under the same structural conditions escalate into large-scale violent clashes that engage whole communities. But, the herders and farmers in Asante Akim North District make their livelihood within the same geographical, political, and socio-cultural conditions. This is characterized by competition over resources (example Bello, 2013; Olugbenga, 2013; Adisa, 2012 & 2011a; Tonah, 2002; Braukamper 2000; Homer-Dixon 1999) or political inequality (example Beeler, 2006; Gausset, 2005; Hurault 1998; Tonah 2000; Homer-Dixon 1999; Bassett, 1988). For example, Tonah (2002) opines that damages to crops are the frequent reasons cited by farmers as a trigger of conflicts between them and the Fulani pastoralists in Africa nowadays.

The structuralists are of the opinion that regardless of the variability in the scale and contexts of conflicts that make up their data, they can still discern universal patterns in how conflicts unfold. They describe conflict explicitly as a sequence of interactions and it is this sequence, rather than background conditions that they study. Mitchell (1981), for example, distinguishes between four developmental stages of conflict:

- (a) no conflict (where no incompatible goals exist);
- (b) incipient conflict (existence of incompatible goals);
- (c) latent conflict (parties' recognition of goal incompatibility) and;
- (d) manifest conflict (parties engage in conflict behavior to achieve goals).

In sum, the structural scholars believe their approaches have offered fruitful explanations of why herder-farmer conflicts occur in Africa.

From the discussion so far it is clear that both have inherent advantages in the study of herderfarmer conflict. A general theory of herder-farmer conflicts must therefore include both structural and processual variables. Structural variables are necessary to explain the causes of conflicts, while processual variables can explain the outcomes of conflicts. Noorduyn (2005) believes that herder-farmer conflicts are complex and as such both structure and process approaches are required to explain the causes and outcomes of these conflicts.

In spite of this, this study employs the structural approach in unraveling why farmers and Fulani herdsmen in Asante Akim North District engage in violent conflicts year in year out and the implications for development. This is due to the fact that both make their livelihoods within the same environment and therefore causes of such conflicts are shared by them.

2.4 The Fulani pastoralists

To understand the real causes and effects of the conflicts between Fulani herdsmen and crop farmers, it is pertinent to know who the Fulanis really are. Emphasis would be on their interest and the problems they go through in order to achieve their interest as a minority group. Their activities which are inimical to peaceful coexistence and how these can be minimised to enhance the development of all are also delved into. This section therefore precedes with the origin of the Fulani herdsmen.

2.4.1 The origin of the Fulani herdsmen

According to Okeke (2014), the Fulani is an ethnic group found in the savannah belt of West Africa. Generally, they are present in Mauritania, Senegal, Guinea, The Gambia, Mali, Nigeria, Sierra Leone and Benin. Other areas include Burkina Faso, Guinea Bissau, Cameroon, Côte d'Ivoire, Niger, Togo, the Central African Republic, Ghana, Liberia, and Sudan. According to Iro (1994), they form minority in every country they live, except in Guinea. Nonetheless, the Fulani form the largest pastoral nomadic group in the world. Some of them live in towns and cities, and engage in farming and trading.

They speak French, Arabic, English, Hausa and other local languages depending on where they find themselves and the number of years they have spent there. Their ability to interact with the local residents goes a long way to determine how well they are integrated into the community. For instance, the spokesperson for the Fulanis in the Agogo Traditional Area is married to an indigene due to his ability to speak the local language and integrate well with the local residents.

2.4.2 The Fulani herdsmen and their nomadic lifestyles

The Fulanis are primarily nomadic herders and traders. They move with their cattle from one geographical area to the other in response to changing environmental and climatic factors. As part of their seasonal transhumance journey, they move from the Sahel to the savannah or forest zone. Some have found the savannah and forest ecological zones very attractive in what Olaniyan, Michael and Okeke-Uzodike (2015) describe as “veterinary revolution” of the late 1950s and the “precipitation plunge” of the 1960s and have therefore settled there permanently. According to them, the veterinary revolution brought about the preparation of vaccines to deal with threats of tsetse fly to the survival of cattle in the forest zone. This enabled cattle to be kept in this zone. On the other hand, the precipitation plunge defines rainfall shortage that brought about

drought in the Sahel region. This created intense and long term environmental difficulties that forced the herders to look for alternative sources in the south. Part of this group engages in Agro-pastoralism. Oppong, (2002) confirmed that their settlement is influenced by the availability of pasture and water. According to Tonah (2002), the Fulani and their families usually reside on the outskirts of stable communities, but take their cattle to pasture and water sources daily. Consequently, they are regarded as aliens and are excluded in the decision making process of the community.

2.4.3 The use of weapons as a professional requirement

In the works of Abdulai and Yakubu (2014) on 'Pastoralism and Violence in Northern Ghana: Socialization and Professional Requirement', it was necessary for every herdsman to carry weapons such as cutlass and stick. They contended that these were a necessary part of his working tools which were used to control the animals. They opined that the sticks were required to direct the cattle and separate those that were fighting. Abdulai and Yakubu (2014) further alleged that the machetes were used to slaughter any dying cow as demanded by the Islamic custom. This was to avert any double loss of the animal and its meat to the owner. It was considered impossibility for a herdsman to send his cattle to the field without any of these weapons.

Besides, the cutlass could be used to cut down tall trees for the cattle to gaze on especially during the dry season when the grasses became dry and inedible to the cattle. On such occasions, the cattle were found resting under shades of trees without grazing during the day time. To prevent the death, loss of weight and market value of the cattle, the herdsman climbed the tree and cut the leaves for the cattle. The spokesperson for the Fulani community in Agogo confirmed that assertion that the herders sparingly used guns. To him, it was to defend themselves and their cattle from rustlers and wild animals like lions, hyenas and wolves. They concluded that the carrying of weapons by the Fulani to control their cattle and protect themselves was a requirement in their cultural practice.

In short, there is no denying the fact that cattle herding cannot be conducted without the use of weapons, most especially machetes. It is therefore not surprising that as rational as the herders are, whenever a scuffle ensued between them and the crop farmers, they naturally used these weapons. Unfortunately, the herders in the Agogo Traditional Area are accused of abusing the use of these weapons. With the least provocation, they take advantage of the weapons they wield to attack

unsuspecting farmers. They are also accused of using the cutlass to cut watermelon into pieces as well as plantain leaves and other economic trees to feed their cattle.

2.4.4 The History of the Fulani herdsmen in the Agogo Traditional Area

A written account of the history of the Fulani in Agogo was not readily available and so this section relied mainly on an anecdotal account of the Kontihene of the Agogo Paramountcy. The history of Fulani to the Agogo Traditional Area is a relatively recent occurrence. According to him, the first Fulani herdsman (called, Samoa) migrated from Niger to Abrewapong in November, 1996. He came through the Northern and Volta Regions, Atebubu in Brong Ahafo Region and finally to Agogo. The intention was to settle and graze his cattle due to the “veterinary revolution” and the “precipitation plunge” which made the place favourable for cattle herding. The Fulani also claimed to be fleeing conflicts in the Northern Region. The chief of Abrewapong then led him to the Paramount chief who is the overlord of the Agogo Traditional Council for permission.

The Paramount Chief immediately welcomed him as he saw him as useful client whose activity would supplement the nutritional value of the inhabitants. Additionally, the coming in company of the chief of Abrewapong aided his request. In addition to the above, the coming of the herders had the blessings and support of the traditional council who held custody of the land. Additionally, they had a symbiotic relationship with some of the chiefs as they tended their cattle for them. This agrees with the head of Kofi Annan Peace-keeping Training Centre position that “for every 50 cattle you see, at least 20 of them belong to the local elite.”

Moreover, the request was granted based on the presence of vast grassland and water for the cattle in the Afram Plains portion of the area as well as the absence of farming activities on that stretch of land. Closely related to this was the vast nature of the area which was enough to accommodate them easily and the minimal contact they had with crop farmers brought relative peace to the area. Lastly, the hospitality of the people coupled with his willingness to offer a cow each year to the traditional council was also going to benefit the local economy.

By the late 1990s however, the population had witnessed tremendous increase due to the migration of other herders and farmers coming to join the initial settlers. Again, there was corresponding increase in farm and herd sizes in the area. Over time they made a huge presence in Nyamebekyere, Bebuoso, Brahabehome, Mankala, Abrawapong, Koowireso and other adjoining communities.

The increase in population now forced a gradual movement of farmers towards the Fulani dominated areas which resulted in two things. Firstly, it was observed that the crops were cultivated close to the residence of the Fulani. These were found to be at the nutritious value of the cattle and this; in most cases served as an alternative feeding that attracted the cattle especially in dry season. This is consistent with Tenuche and Ifatimehin's (2009) finding which suggested that the natural and physical endowment in terms of vegetal and water resources is most responsible for the choice of the areas for grazing. Later, the crops were eaten by the cattle, thereby leading to low yield and low income for the farmers. This development thus caused a lot of anger and frustration among the farmers. In reaction, the farmers sometimes killed the cattle found on their farms. The Fulani then retaliated by either driving the farmers away or attacking them in return.

Secondly, female farmers as well as the farmers' wives were brought close to the Fulani, which led to cases of harassment. This even contributed to accusations of rape against Fulani herders as well as further claims of armed robbery. However, this was considered isolated cases and not much of a problem by the traditional council and the residents of the district until tensions started developing. According to the Kontihene, the rise in tension caused them to go into agreement with the herders in 1997. They were expected to:

- a) Keep their cattle very deep in the forest, far away from the farmlands;
- b) Fence the cattle to prevent them from going astray;
- c) Dig wells which will provide water for the animals to prevent the animals from destroying water bodies;
- d) Pay for any destruction to property and farm produce caused by their animals and;
- e) Donate a cow each to the Agogo traditional council every year.

With this agreement in place, the impact of the activities of Fulani herdsmen and their cattle was to be contained, but this was not to be. The Kontihene claimed none of the agreements was respected by the Fulani herdsmen. It was later discovered that the cattle grazed at night, leading to mass destruction of food crops. He also alleged that the herders paraded themselves with AK 47 assault rifles and started destroying everything in their path with the cattle. They resorted to stealing food crops belonging to the natives, killing, maiming and raping the local women. As observed by (Ayih, 2003; Ofuoku and Isife 2009 and; Olugbenga, 2013) attempts by the herders

to flout or disregard the rules and norms by which their host communities operate is source of conflict in parts of Africa.

This development threatened the security of the area as the female farmers also abandoned their farms. In view of this, the cattle were driven away from the traditional area in 1999/2000 by a joint police/military taskforce in what was referred to as ‘operation cowleg’. But they were accepted by the Akwamuhene, Nana Akuamoah Boateng at a community called Simpoa in the Eastern region. The proximity of Simpoa to the Agogo traditional area made the herders sneak to Agogo to graze their cattle.

In 2005, the herdsman returned to the Agogo Traditional Area with the same onslaught exhibited in the late 90s. They incurred the displeasure of the local residents and were driven again. However, Alhaji Grunsah, a local businessman and a cattle owner went to see the traditional authority with a promise to fence his cattle and supply them with water. Subsequently, a portion of land was allegedly leased to him for 50 years to keep his cattle. This served as a conduit for other herders to graze their cattle within this ecological zone again. The herders’ population has progressively increased till present day. Neither numerous demonstrations of the residents, the efforts of joint police/military taskforce nor the high court ruling in 2012 have deterred the herdsman from occupying the area. Report obtained from the Agogo district police indicate that there are more than sixteen (16) cattle owners with about 10,000 cattle on the Agogo stool lands. Table 2 shows the names of cattle owners and the estimated number of cattle they have. This clearly indicates the sort of competition farmers are likely to face from these cattle.

Notwithstanding the fact that some have stayed in the area for quite some time now, they are not only considered as migrants, but are also regarded as strangers and foreigners by the indigenes. The indigenes believe there is no tribe in Ghana called Fulani. Some of them are sedentary while others are purely nomadic, moving in and out seasonally. Just as Tonah (2002) indicated, the sedentary ones found in Agogo live on the outskirts of the villages but the nomadic Fulani move with their family on daily basis and live in temporary structures (thus, tents). They keep cattle of the indigenous people in addition to their own.

Table 2 Cattle owners and their estimated cattle

NO.	NAME	ESTIMATED NO. OF CATTLE
1	Alhaji Fusseni Hassan	700

2	Alhaji Innusah	1,200
3	Ahaji Buba	500
4	Alhaji Dramani	1000
5	Alhaji Wantou	300
6	Alhaji Addi	400
7	Alhaji Jofo	600
8	Alhaji Dauda	200
9	Kassim Dauda	700
10	Alhaji Karimu Grunsah	180
11	Alhaji Adam Ahmed (Burger)	200
12	Alhaji Abu	200
13	Alhaji Sambo Dangogo	500
14	Alhaji Bube	400
15	Alhaji Bugor	1,000
16	Alhaji Gariba Dansofo	100
17	Alhaji Issaka and others	400
18	Dousseh Imoro	700
	TOTAL	9,280

Sources: Agogo District Police Command; April, 2015 and REGSEC report, 2012.

2.4.5 Threats of Expulsion, Protests and Reactions

The struggle by the local residents for the evacuation of Fulani herdsmen and their cattle has assumed different forms. This includes personal confrontations and attacks, demonstrations, press conferences, and recourse to the high court. Initially, the approach of the residents to the Fulani was physical attacks. The residents failed to prevail over the Fulanis because they were able to defend themselves effectively with reprisal attacks. As a result, they resorted to press conferences and street protests.

According to Olaniyan, Michael and Okeke-Uzodike (2015), the first major demonstration demanding the evacuation of Fulani was staged on 29th of April, 2010 when hundreds of protesters were organized by the “Agogomanmmakuo” (Agogo Township Association) and the Agogo Youth Association to stage a violent protest in the Agogo Township. In January 2011, another protest was staged, this time around, against the Paramount Chief of Agogo Traditional Area. They demanded his immediate vacation of the throne. His charge was that, he was responsible for the atrocities in the area by allowing the Fulani herdsmen to occupy their lands for so many years. In August 2011, there was a ban on the observance of funeral until the

Fulanis were expelled. This affected the final funeral rites of the chief's uncle. Similar demonstrations took place on 16th September and 8th November that same year.

When it became clear that street protests would not work, they resorted to court action to compel the Attorney General and the Traditional Council to evacuate the Fulanis. On January 20, 2012, the Kumasi High Court ordered the Ashanti Regional Security Council (REGSEC) to expel all alien Fulanis and their cattle from the Afram plains portion of Agogo with immediate effect. Following this, on 7th February 2012, the Council inaugurated an eleven-member committee to come up with evacuation plans. At the end of its work, the committee recommended that the council employ the use of both persuasion and coercion to expel the herders from the area within two weeks. To carry out the order, the National Security Coordinator, deployed a team of soldiers to carry out the court order. Despite the eviction there are still some Fulani herdsmen in the area, raising expectations of continued violence.

What emerged from the foregoing is that, there were some exaggerations in the claims by the residents. The initial attacks also resulted in several deaths (see appendix I). Another issue had to do with nationality and identity as literature reveals that some of the herders were born in Ghana and as such are Ghanaians. Indeed, some possess the Ghanaian voter card. A typical example is the spokesperson of the Fulanis whose spouse and children are natives of Agogo. Olaniyan, Michael and Okeke-Uzodike (2015) claim the politics of ethnicity and nationality hinges on supremacy of indigenous population over those considered migrants. The joint Police-Military task force was accused by the Kontihene of staying in towns while the herders were in the bush. Finally, the involvement of the traditional institution and the ownership of the cattle militate against the expulsion of the cattle.

2.4.6 Contractual agreement and conditions of service

Just as other professions, the working conditions and terms of reference are spelt out to the hired Fulani herdsmen by their cattle owners. However, these conditions did not apply to the nomads who had come to Agogo traditional area to graze their own animals. The spokesperson for the Fulanis as well as those surveyed confirmed that they were contracted verbally in the presence of a guarantor (thus the spokesperson). They were provided with all the necessary cudgels including

the tents they live in by the cattle owners and the weapons they use. Abdulai and Yakubu (2014) opined that in the northern region, the herders were supplied with foodstuffs until the herdsmen harvest their own crops. In contrast, the Fulanis in the Agogo traditional area did not engage in crop farming so they continuously bought food items from the local people through some 'agents' or are supplied with by their owners. The herdsmen also depended on the milk for food and money. The Kontihene and the local farmers accused the herders of stealing food crops. Within the Agogo traditional area some of the herders even sold out some of the cattle without the knowledge of their owners. Because of the rift between them and the local residence, the Fulanis did not have access to essential services like health and educational facility. As a result, they were sent to hospitals in Konongo, Nkawkaw or Kumasi for treatment by their spokesperson or their cattle owners anytime they fell sick.

Concerning the Fulanis contractual agreements, Abdulai and Yakubu (2014) stressed that in the Northern Region the terms differed from young herd boys who are mostly sub-contracted from other Fulani herdsmen. They claimed the herders were either paid in cash of GH¢ 40 to GH¢ 50 per month or cow. However, Musah indicated that in Agogo, the herders were given a cow after every 4 months of tendering the cattle. Just as in the northern parts of Ghana, a herdsman could be engaged for life if he put up a good behaviour. Thus:

- a) they were expected to be hardworking and trustworthy;
- b) they were expected to protect the cattle from causing damages to food crops frequently;
- c) they were expected to establish a rapport between themselves and their cattle owners and the traditional council, and;
- d) if the local residents or crop farmers were not hostile to them.

Additionally, as part of their duty the herdsmen were to ensure that the cattle were taken to the field for grazing and drinking daily. The cow boys were taught to be courageous in order to be able to take very good care of the cattle and protect them in the bush against wild animals. They were expected to be brave in separating fighting cattle. They were also taken through the rubrics of taking care of the cattle that go astray or attack people. The herdsmen were supposed to be on their guards at all times. What this meant was that they needed to equip themselves with sticks, cutlasses and guns to be able to perform these onerous tasks.

2.4.7 The Fulani Herdsmen and Brutalities: a stereotype or reality?

The causes and effects of farmer-herdsmen conflict have attracted considerable theoretical and empirical analyses but the perspectives of the Fulani have not received sufficient attention in the literature. Meanwhile, there seem to be no consensus between the farmers and herdsmen as to the causes of their conflicts. There have always been accusations and counter accusations from both parties. The local residents often accuse the herdsmen of crop destruction and highway robbery while the Fulanis blame residents of harassment.

Unfortunately, their contributions to food security, environmental sustenance, economic stability and security monitoring are hardly recognized in literature. El Hadary and Samat (2012) blame this negative image on the influence of ‘‘inappropriate theories’’ such as the theory of the ‘‘cattle complex’’ (*viewed pastoralists as irrational in their livestock accumulation and seeking prestige rather than for the sustenance they provide*) and ‘‘the tragedy of the commons’’ (*showed that herders would seek to intensify the exploitation of resources, because the benefits of increasing production are for the individual, but the costs of degradation are borne by everyone*) which always accuse the Fulani herdsmen of destroying the environment.

Again, Bello Tukur (2013) expressed that the greatest challenges pastoralists in West Africa face have to do with issues of land tenure, access to pasture and access to water. He further stated that, marginalization even by government official and encroachment on traditional livestock migratory routes affected herding. Lastly, it was observed that cultivation of traditionally reserved grazing areas and dry season farming around riverine areas included the challenges faced by the herders. These are in addition to land grabs by the rich people in the locality which have generated conflicts between the indigenes and the Fulani pastoralists.

In addition to the above, Tonah (2002) had earlier suggested that the unwillingness on the part of pastoralists to confine their animals and the farmers’ quest to take advantage of the lucrative opportunities during the dry season is the reason for conflicts during this period. But (Madu, 2011 and Bello Tukur, 2013) argue that the pastoralists’ movements are not only restricted to the search of pasture but could be motivated by other factors such as changes in climate, epidemics, conflicts, bush fires. They claim demand for the dairy products sometimes determine the direction of their movements in order to supplement the nutritional needs of people.

El Hadary and Samat (2012) decry the misconception among many academicians and policy makers who often blame pastoralists for destruction of the resources they very much rely upon. In the words of Thebaud and Batterburry (2001):

“The Fulani herdsmen have borne a large proportion of the blame for most conflicts and environmental degradation in policy statements in the Guinea Savannah region of West African states”.

On his part, Bello Tukur (2013) contends that Fulani pastoralists are among the most vulnerable, misunderstood and marginalised groups across Africa. He claims that their closed knit family systems, their resilience in the face of daunting odds, migratory patterns and at times rare display of courage had made pastoralists to be greatly misconstrued. He continues that policy makers and the media often consider them as people who kill at will. Fulanis are in the news for all the wrong reasons. In fact the news is always about Fulani pastoralist involved in violent attacks, murder, armed robbery, rape, crop damage, cattle rustling and theft. Hence, they are regarded as violent, unruly and murderous marauding bandits who are prone to attacking people for no apparent reason. But without viewing what are the underlying causes of conflict between them and crop farmers.

Closely related to the above point is the assertion by Bello Tukur, (2013) that the pastoralists have no protection under the law and are mostly victimised by the law enforcement agencies. Consequently, they are compelled to embark on revenge missions with its attendant devastations. He again argues that unlike the farmer, the pastoralists have no attachment to land; all they care for is pasture availability. Blench and Dendo, (1994) also reports that pastoralists consider uncultivated bush as common resource. Land, just like air and water cannot be owned by any individual and so will move their cattle to where they can find pasture regardless of local or international border.

In contrast to crop farmers who receive attention in addressing food insecurity, Bello Tukur believes the problems of herders seldom receive public attention. El Hadary and Samat (2012) concluded that in spite of their contribution as source of livelihood, pastoralism continues to be downgraded in the process of development. In a position paper titled *“Pastoralism and Food Security: The Hunger of the Forgotten”* on 16th January, 2014 at ICC Berlin Hall 3, it was alleged

that development strategies aim at improving the situation of pastoralist are rare, untested and have failed to improve their living conditions.

In Ghana, there have been series of government interventions in the herder-farmer conflicts such as the ‘operation cow leg’ to expel herdsmen from various parts including Agogo. This modus operandi by government has been described mostly as reactionary and as such exacerbated the already precarious situation rather than resolving them amicably. Tonah (2002) disclosed that as far back as 1988/89 and 1999/2000 the government of Ghana embarked on expulsion of pastoralists, their family and cattle. But he argued that this policy of expulsion only affected a small portion of the pastoralists especially those who were not working as hired pastoralist for the Ghanaian stockowners. The frequent media reports of reappearance of Fulani herdsmen in Ghana attest to the failure of government policies to address this issue once and for all.

From the foregoing, it can be concluded that, indeed, these stereotypes have beclouded the fact that the problems between farmers and herders are development challenges that ought to be tackled holistically.

2.5 ECOWAS Protocol on Transhumance

Following the exposition that the Fulani migrants are marginalized in terms of access to resources and other essential services, it was important to look at what the ECOWAS protocol on transhumance say. According Adepoju (2005a), free movement of persons and goods is one of the fundamental areas the Economic Community of West African States (ECOWAS) has paid great attention to in its integration agenda. In line with this, the ECOWAS Protocol provides for free movement of its citizens and the right to live and settle and do business in any part of its territory for up to 90 days. Doing so only requires presentation of valid travel documents and a health certificate.

Adepoju (2009) asserted that at the regional level, ECOWAS had recognised transhumance as mode of livestock production to attain self sufficiency. That is in terms of food production, food security, economic and political stability in the region. The ECOWAS Protocol ‘relating to the regulation on transhumance between ECOWAS member states 1998’ seek to regulate transhumance by ensuring that herd movements are regulated. Again, the aim is to ensure that it takes place along defined corridors allowed by member states. SWAC-OECD and ECOWAS,

(2008) reports that since 2000, pastoralists have been issued sets of livestock passports, International Transhumant Certificates (ITC) among other things. The ITC is essentially a pass which is issued to transhumant pastoralists and their herds to manage the departure of herds, ensure hygienic protection of local herds, and provide inhabitants of reception zones with advance information on the arrival of transhumant herds. The ITC also contains essential information on herds' composition (thus identification of animals by species, sex, age, and so on), the vaccinations administered to the livestock, the route that the livestock will take and their final destination.

The challenge to this regulation is that, the herders refuse to travel along the defined corridor due to the porous nature of the country's borders. In fact, some herders are aided by farmers along the borders to enter into the country. The implementation of this policy is a challenge to the herders and member countries. Even when these herders have obtained the necessary certificates, they fail to renew it or fail to go back after the expiration of their mandate due the favourable conditions the place offers.

In addition to this, Sosuh, (2011) claims they are often subject to extortion or corruption by border agents, who refuse the right of entry if bribes are not forthcoming. Different official languages at various border crossings impede the movement of people due either to outright problems in communicating intentions or the inability to comprehend authorizing documents. Conditions in member states also impose their own limits: if the receiving state suffers from poor socio-economic-political conditions, migrants are often evicted in order to free up limited resources.

2.6 Review of Causes of Farmer-Herder Conflict

The conflict situation between cattle herders and farmers across Africa has been examined by several scholars and researchers from different analytical perspectives. The exegesis of some of their contributions is germane so as to situate the subject matter of this study on a sound analytical frame. From the view point of the vast literature, the herder-farmer conflicts in Africa have been propagated by the interaction of eclectic factors. The nexus among these factors are examined in this section.

2.6.1 Destructions of crops and other properties

To begin with, destruction of crops by cattle has been identified as one of the major causes of conflicts in the sub-saharan Africa (Adebayo and Olayini, 2008; Ofuoku and Isife, 2009; Tenuche

and Ifatimehin, 2009; Olabode and Ajibade, 2010 and; Okoli and Atelhe, 2014). According to Turner, et al (2004) damage to crops was the first reported cause of conflict between farmers and herders in their study of Agro-pastoral zone in Niger. This is consistent with Olabode and Ajibade's (2010) study that the most frequent cause of herder-farmer conflict in Oke-Ero Local Government Area of Kwara State was the destruction of crops by cattle. In line with this, Okeke (2014), asserted that when Fulani herders move with their cattle to non-Fulani communities, conflicts occur. Crop damage is not limited to damages to growing crops on the field but also included unauthorized grazing of crop residues after harvest. Okoli and Atelhe (2014) explain that a farmer whose farm is damaged by cattle is likely to harbour bad feelings about the herder. It is contended that crop farmers are placed in a difficult situation because as they till the soil and plant crops, the cattle graze on the pasture and their crops without any compensation.

Tonah (2006) and Abdulai and Yakubu (2014) attribute the destruction of food crops and other properties (such as irrigation equipment, reservoirs and infrastructure) by the Fulanis as the main direct causes for conflicts in the Volta basin and the northern region of Ghana. This is often the result of fragmented nature of farms and herders leaving cattle unattended to. This makes the cattle wander unto cultivated fields thereby destroying crops or consuming food items stored in barns. Tonah (2002) also claims that the herders allow the herds to destroy in order to prevent the spread of farms.

2.6.2 Access to productive resources

Closely related to the above is access to resources. (Moyo, 2008 and; Okoli and Atelhe, 2014) opine that herders and farmers' ability to gain access and control of productive resources required to pursue a livelihood plays a major role in conflicts. Farmers always have to compete with grazers for the same fertile lands which also abound in pastures. This is consistent with

(Ingawa, Ega, and Erhabor, 1999; Adisa, 2011, 2012; Oyama 2012 and Sone's, n. d.) studies which indicate that landownership is mostly the primary cause. They believe that land tenure systems tend to allocate land unequally on the basis of class, gender, race or other social forms. For instance, Sone (n.d.) alleges that given that the survival of most Cameroonians depends on land, the struggle for its control engages all persons on the social hierarchy. According to Okoli and Atelhe (2014), if a herder loses access to pastures due to encroachment on cattle route-way, the animals will not only have a difficulty in moving without causing crop damage but the herder may

be less inclined to avoid causing crop damage. Hoffmann (2004) concludes that access to land and water are therefore inseparable pastoral resources.

However, the position of scarcity of resource as the main cause of herder-farmer conflict has been challenged. Indeed, it has been argued that the abundance of resources can equally trigger conflict. Example, Benjamin et al. (2012) argued that conflicts increase between farmers and herders during the rainy season where water and pasture are available. Basset (1988) states that farmer herder-conflicts in Cote d'Ivoire and Cameroon are intense even in places where grazing areas are relatively abundant. Turner, 2002 (as cited in Moritz, 2006) sums up that conflict should be expected in an environment of resource availabilities on unfenced land.

2.6.3 Climate change

The interconnection between climate change and resource-use conflict have been recognized by (Homer-Dixon, 1999; Onuoha, 2007; Abbass, 2012; Nchi, 2013 and Okoli and Atelhe, 2014). A number of studies have emerged linking climate change with conflict. Proponents of this perspective have argued that substantial variation in climatic condition is a major trigger of violent conflict. Hsiang, Burke, and Miguel, (2013) as cited in Olaniyan, Michael and OkekeUzodike (2015) argued that a strong nexus did exist between changes in climatic condition and propensity for violent conflict. The assertion regarding this connection is that, changes in climate of an area give rise to certain unfavourable ecological changes and outcomes, which often trigger conflict. Some of these climatic conditions include: erratic and inadequate rainfall (drought); desertification; loss of wetlands and; environmental degradation.

Climate change actually puts pressure on the herders to move into more favourable regions with lush grass resulting in conflicts and tensions. According to (Niamir-Fuller 1999 and; Okoli and Atelhe, 2014), whenever the sources of farmer's livelihood are threatened due to environmental variability, especially periods of drought and shortage of water desperate approaches are adopted to ensure survival. This is because it leads to the reduction in quality and quantity of the resources.

Using the migration of Fulani cattle herders to Ghana as a case study, Tonah (2006) locates the violent conflicts between local farmers and Fulani herdsmen as a result of dwindling grasses in the Sahelian region. Dosu (2011) also blame the recent conflicts between farmers and Fulani herders in Ghana on the unpredictable climate patterns and unsustainable practices by both parties.

According to her, Fulani herdsmen from neighbouring Burkina Faso, Mali and Niger who depend on the wet season of the north to sustain their herds are losing their cattle to starvation and dehydration due to droughts and degraded resources. When faced with such negative environmental conditions, they migrate to Ghana where better environmental conditions exist. But recently, Ghana has also experienced an erratic and stunted rainfall which has increased the competition for the diminishing resources.

Climate change clearly puts pressure on the herders to move into other regions leading to localized conflicts and tensions. The aggressive behavior of contemporary herders and farmers in the wetland areas are due to high level of frustration. Here, the frustration is two-way: the herders are fleeing their traditional arid zones towards wetter places and are frustrated by dwindling pastures that sustain their means of livelihood. Upon reaching the wetter regions, their cattle consume the crops of farmers, who in frustration, respond by attempting to kill the destructive animals or drive out the newcomers. Revenge missions of grazers result in circles of violence. In other words, the basic source of frustration experienced by both parties is traceable to climate change which is caused by both human and natural factors.

2.6.3 Population increase

Other scholars have attributed the struggle between herders and farmers to the rapid rate of population growth in many parts of Africa resulting in pressure on the resource. Milligan and Binns (2007) see conflict as an inevitable consequence of steady population growth. Ayih (2003) attributed the herder-farmer conflicts in the Middle Belt of Nigeria, characterized by sparse population density, to what he called “population explosion”. This he claims is attributable to high birth rate and immigration from Northern and Southern parts of Nigeria. Abbass, (2012) and Okoli and Atelhe, (2014) believe that as the population increases, there would surely be a corresponding increase in demand for land, water, forest products and grazing land in areas inhabited by farmers and herders. The consequent rapid population growth has caused scarcity of farm and grazing lands which hitherto were abundant. More land is cultivated, dominated by small scattered farms but less is available for grazing, making it difficult in these areas.

Abbass (2012) believe it is usual for the farmers to encroach into marginal lands that had been the traditional pasture routes for the cattle. According to Nyong (2010), this has resulted in conflicting relationship between herders and resident communities who want to assert their usufructuary

rights. The dwindling resource base caused by population growth mitigates the possibility of further exchanges. These contributions are acceptable because it captures the necessary conditions that create the situation of land scarcity, which in turn, triggers herderfarmer conflicts. This position agrees with literature on resource-related conflict (Tonah, 2002; Onuoha, 2007; Adogi, 2013 and Oyama, 2014). In short, this situation has been occasioned by the rising migration and settlement of the Fulani herdsmen in this ecological zone in search of pastures.

2.6.4 Internal discipline and social cohesion

Another cause of herder-farmer conflicts is the decline in internal discipline and social cohesion. Adisa (2012), argued that adherence to the traditional rules regarding grazing periods, and the authority of the traditional rulers had broken down. On their part, (Ayih, 2003; Ofuoku and Isife 2009 and; Olugbenga, 2013) maintain that attempts by the herders to flout or disregard the rules and norms by which their host communities operate is source of conflict in parts of Africa. This is because when migrants flout the norms or rules by which their host community functions, the hosts see them as threats to their survival and security. However, Tonah, (2006) believe this is due to the different values, customs, physical and cultural characteristics the parties possess. To this end, some even describe it as ethnic conflict.

2.6.5 Crime

The outbreak of herder-farmer conflicts has also been blamed on crimes allegedly committed by herdsmen. Ayih, (2003) and Olugbenga, (2013) attribute the increase of highway robberies, killing, maiming and sexual harassment in Ekiti State, Nigeria to cattle herders. This is in line with the work done by Abdulai and Yakubu (2014) in the Northern Region of Ghana where the local people frequently alleged that cattle rustling and some highway robbery are committed by Fulani herdsmen.

Dendo and Blench (2003) further associated the herder-farmer conflicts to the rampant unregulated increase and easy access to small and light weapons. But they explained that the reason why herders often become militaristic is because they see themselves as comparatively vulnerable. Their herds are susceptible to theft which is often accompanied by violence. On their own part too, Abdulai and Yakubu (2014) also believe that the tendency of herdsmen to attack could be due to their cultural life as pastoralists. The fact that they are conscious that criminals can also attack

them and carry away their cattle makes them approach any unsuspected person with caution. This they claimed could be a mechanism use for self-defence.

Additionally, (Ofuoku and Isife, 2009 and Oyama 2012) blame this situation on farmers. The farmers sometimes kill the cattle belonging to herders while some harass the young and lonely herders who graze cattle near their farmland. Some farmers even throw stones at the herders while others have to endure insults from the local residents. This particular disdain for herdsman results in reprisal attacks by the herders.

2.6.6 State's inability to resolve herder-farmer conflict

The escalation of conflict between herders and farmers has been blamed on the inability of state institutions to deal decisively with these conflicts, (Tenuche and Ifatimehin, 2009 and Oyama, 2012). In a separate research, (Olugbenga, 2013 and Tonah, 2006) maintain that many of these cases that are handled by government are often inconclusive due to the problem of corruption. Abass, (2012) indicates that these challenges are due to policy implications of the political economy with the formulated policies designed ostensibly to reduce and manage the conflicts. Ironically, these policies turned to escalate them the more.

Adogi (2013) further believes that the politicization of this conflict has added a dangerous twist to its dynamics. He claims this is achieved through a subtle mobilization of one group against the other. In this regard, the politicization of the herder-farmer struggle only complicates the relationship. On his part, Abbass (2014) opine that when the state pays lip service to the security of its citizens and there is no sufficient assurance for their means of livelihood and safety, fear and suspicions emerge. The citizens then exercise no restraints in protecting the security and safety of their resources and lives. Since the state cannot regulate the mutual coexistence of these land-users the parties may have to resolve to struggle between themselves with a no retreat, no surrender and for the survival of the fittest attitude.

In conclusion, the factor of ecological variability interfaces with that of population increase (which stem from of influx of migrant farmers) to create a situation of land scarcity which engenders competition. The whole variables interact to produce a wave of rising dialectic between the farmers and herders. It can then be concluded that the exacerbation of vulnerability and conflicts can be implicated on a combination of multiple factors including the aforementioned which has a link

with climate change. These problems have been compounded by failing institutions to find a lasting solution. It is within this complicated mix of policies, laws, environmental change, social norms, and population pressures that conflict erupted, but more importantly it is within that mix solutions must arise.

2.7 Consequences of Communal Conflict

Alimba (2014) bemoans the destructive tendencies of farmer-pastoralist conflicts that have largely affected the developmental prospects of West Africa. According to him, the consequences range from mere envy, suspicion and jealousy to large scale destruction of lives and properties. Consequently, these engender hatred for the entire Fulani tribe, mistrust for some traditional leaders and create a culture of violence within society. This constitutes serious obstacle to local development, especially agricultural activities. This is due to the resultant effects of the causes of conflicts between the host farming communities and the Fulani pastoralists. The repercussions can be categorised into humanitarian tragedies, social, economic and, health and environmental impacts.

2.7.1 Humanitarian consequences

The eruption of violent conflicts between farmers and herders has dire humanitarian consequences which manifests, in many forms and dimensions (Abbass, 2014). According to (Zezeza, 2008; Ofuoku and Isife 2009; Manu et al, 2014 and Okoli and Atelhe, 2014) herderfarmer conflicts involves physical fight which usually results in loss of lives and maiming of people. Others include population displacements, forced migration, refugeeism and school dropout. For instance, conflict between Fulani herders and farmers in Zamashegu, a farming community in the Gushegu District of Ghana claimed 30 lives³. Again in Nasarawa state in Nigeria, Okoli and Atelhe (2014) reported that the herder-farmer conflict led to the killing of not fewer than 130 persons between 2011 and 2013. This is in addition to the number that were maimed and rendered homeless.

Additionally, there is loss of properties, food insecurity and increased violence as people's livelihoods are dissipated and their security become endangered. This situation constitutes serious

³ Parliament to investigate reports of criminal activities of Fulani herdsmen. www.myjoyonline.com
Retrieved on 14th July, 2014.

obstacle to local development, particularly agricultural activities. The above indicates how endangered people's lives become during conflict.

2.7.2 Social effects

According to (Tonah, 2006 and Okoli and Atelhi, 2014) resource-use conflicts create tense and volatile relationship between herders and farmers which affect the level of cooperation between them. Tonah (2006) in his study of herder-farmer conflict in the volta basin of Ghana, stipulated that efforts by armed youth and commercial farmers to eject the herders forcibly further worsened the tensed relationship that existed between them and herder. The herders see the farmers as enemies of their survival and progress and vice versa. This situation breaks social cohesion which is manifested by mistrust and animosity between the two groups. It therefore creates an atmosphere of mutual suspicion and tension which is a threat to peace, security and progress of any society.

2.7.3 Economic consequences

When herder-farmer conflicts occur during the farming season, there is the tendency that most farmers, especially women, would not go to farm for fear of being attacked by herders. The economic impact of the conflicts have been well documented in (Tonah, 2006; Tenuche and Ifatimehin, 2009; Ofuoku and Isife 2009; Bello, 2013; Okoli and Atelhe, 2014; Abdulai and Yakubu, 2014 and; Manu et al 2014). This could be seen in terms of losses that are associated with destruction of houses and properties and community assets. Additionally, there is a reduction in output and income of farmers emanating from destruction of food crops, destruction of farmlands, low crop yield. Besides, conflicts results in damages to irrigational facilities, destruction of reservoirs, loss of fish resource, burning of rangelands and farmlands.

On the other hand, herders also suffer from material damage. This happens when the farmers inflict physical injuries on the cattle by using cutlasses or guns or by poisoning the cattle. All these damages translate into real and quantifiable material losses leading to high dependency ratio. Herders also find it difficult to participate in the local market. Their inability to contribute to the local economy has negative implication on the local economic development. This development therefore increases impoverishment and destitution particularly in rural areas.

2.7.4 Health and Environmental

Lastly, the internecine violence associated with the herder-farmer conflicts leads to malnutrition and pollution of drinkable water which causes disease outbreak like cholera and guinea worm. The environmental consequences include bush burning, soil erosion, compacting of soil, loss of soil fertility and loss of biodiversity (Ofuoku and Isife, 2009). According to Nchi (2013), these situations engender untoward outcomes which do not augur well for socio-economic sustainability and livelihood wellbeing of the people.

2.8 Conflict management

According to Thomas (1976) as cited by Gultekin et al (2011), conflict management is the purposeful intervention of managers to stimulate and encourage beneficial conflict and to resolve, suppress, or prevent harmful conflict. This means that conflict management involves strategies to limit the negative aspects of conflict and highlight the positive effects but not necessarily to eliminate all conflicts. Oyama (2014) has observed that issues of conflict management strategies are growing and increasingly becoming sophisticated both theoretically and practically. He goes further to identify five stages of conflict. These are conflict formation, conflict escalation, conflict endurance, conflict improvement, and conflict transformation. What this means is that different strategies with different procedures need to be adopted to deal with different situations. To this end, scholars agree that there is no single best approach to manage conflict. Castro and Nielson (2003) have identified five conflict management strategies which are avoidance, negotiation, mediation, arbitration and coercion.

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

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

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

Arbitration: relying on the judiciary to make a binding decision.

Coercion: threatening or using force to impose one's will, including violence, protests, extortion. They conclude that avoidance and mediation are common at the early stage of conflict where people try to prevent conflict out rightly from escaping into violent attack.

Rahim (2000) has also identified five specific conflict handling styles:

- The first style is *Integration*; which indicates high concern for oneself and others with a focus on collaboration, openness and exchange of information. It also includes looking for alternatives and examining differences to reach a solution in a manner which is acceptable

to both parties. This is appropriate when the issues are complex and there is availability of time.

- The second strategy is *Obligation*; this involves minimising the concern for oneself and highlighting the concern for others. Whoever uses this style to resolve conflict plays down on the differences and focuses on the similarities so as to satisfy the concerns of the other party.
- The next strategy is *Domination*; which is characterized by high and low concerns for oneself and the other party respectively. One goes all out to achieve his objectives thereby ignoring the needs and aspirations of the other party. This style creates a win-lose situation.
- Besides, there is also *Avoidance*; this strategy involves minimising the concerns for oneself and other parties. It is associated with withdrawal, setting aside, or ignoring the issues.
- The last strategy that can be adopted is *Compromise*; this reflects moderate concern oneself as well as the other party. This style emphasizes on give-and-take position or sharing whereby parties give up something to make a mutually satisfied decision.

This study explores the strategies used by the various parties in resolution to conflict. According to Tonah (2006), herder-farmer conflict begins as a quarrel between a farmer and a herder but if not managed well could then escalate into a whole communal or ethnic conflict. He further indicated that these hitherto were minor in nature and were resolved with the assistance of landowners, livestock and farmers associations. It also included the traditional leaders through mediation and negotiations. With the frequent occurrence of armed conflicts, more sophisticated strategies need to be adopted to help resolve them.

2.9 Conceptual Framework

According to Miles and Huberman (1994), a conceptual framework explains, either graphically or in a narrative form, the main things to be studied, namely: the key factors, constructs or variables and the relationship among them. The conceptual framework for herder-farmer conflict looks at the key issues of cause-effect relationship and their implications for development.

From figure 1, it can be seen that farmer-herder conflicts result from environmental, socioeconomic and political factors. These manifest in lack of access to resources (land, water and pasture) or abundance of it and degradation of these resources. Again, climate change, crop destruction, murder, armed robbery, rape and non-adherence to traditional rules are found to

contribute to conflict escalation. Lastly, policy contradiction, ethnic marginalization, encroachment on migratory routes and many others also cause conflict between herders and farmers. These factors are magnified by intense and continuous competition for resources between farmers and herders which can eventually result in violent confrontations. As no part of the bush is exclusively reserved for grazing, pastures are made up of any uncultivated land and will therefore change as farmlands evolve. In an unfenced environment with abundant resources conflict should be expected.

When such violent clashes occur, they lead to reprisal attacks thereby generating more violent conflicts. In effect, violent conflict culminates into loss of human lives and properties. Violent conflict is one of the major threats to human security because it is a threat to people and limits their opportunities for development. There is also decreasing agricultural activities, low incomes for individuals and families, high dependency ratio. Besides, closure of schools which affect the work of teachers and students and invariably affect academic performance are to be expected. The end result of all these, is decreasing levels of livelihoods or low standard of living.

However, if peace prevails and there is no violent conflict, peoples' security is assured and the atmosphere becomes conducive for engaging in economic and agricultural activities and therefore their livelihoods can be guaranteed. A lot of people can then move about freely without restrictions due to the fact that their security is a surety. Again, local investments and businesses would be attracted to such peaceful areas where people would be able to partake in the process of development.

CAUSES OF CONFLICT S

ENVIRONMENTAL FACTORS

- Climate variability
- Resource degradation
- Abundance of resource
- Increase competition for resource
- Bush burning by pastoralists

DEVELOPMENT IMPLICATIONS

IMPLICATIONS

SOCIO-ECONOMIC FACTORS

- Crop destruction
- Murder
- Pollution of water bodies
- Armed robbery
- Sexual harassments of women
- Harassment of the Fulani
- Encroachment on migratory route
- Cattle rustling

POLITICAL FACTORS

- Non-adherence to traditional rules
- Policy contradiction
- Land tenure system
- State institution's inability to resolve herder-farmer conflicts
- Injuries
- Food shortages
- School dropout

HUMANITARIAN TRAGEDIES

- Increased violence
- Restricted movements
- Loss of lives
- Pollution of water sources
- production leading to
- Displacement of people

SOCIO-ECONOMIC CONSEQUENCES

- Breaks social cohesion
- Tension and suspicion
- Destruction of food crops
- Destruction of farmlands
- Low agricultural/Pastoral production
- Destruction of irrigation facilities
- Increased poverty
- Low income for individual and family

HEALTH AND ENVIRONMENT

- Outbreak of water-borne diseases e.g. Cholera
- Malnutrition
- Malnourishment
- Soil erosion
- Compacting of soil
- Loss of soil fertility
- Bush burning

EFFECTS OF CONFLICTS

EFFECTS

1. Low Agricultural production
- Forced migration
2. Low Income
3. Increased Poverty
4. Abandonment of Settlements Resulting in Rural Underdevelopment
5. Low Standard of Living

Figure 1. Cause-effect relationship of Herder-Farmer conflicts
Source: Author's Construct.

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In summary, this chapter built on the background of herder-farmer conflicts as presented in chapter one. The first part of the chapter presented the contextual reviews of resource-use conflicts while the second section presented the theoretical debates about herder-farmer conflicts. It situated it into the realm of structural approach. Since the farmers and herders made their livelihood within the same geographical, political, and socio-cultural conditions, causes of conflicts were factors shared by all members of the community. The possible causes, effects and management strategies were discussed in the subsequent section. These therefore were conceptualized diagrammatically to end the chapter. The next chapter presents the profile of the study area and research methodology.

CHAPTER THREE: THE RESEARCH METHODOLOGY

3.1 Introduction

The preceding chapter presented the theoretical and conceptual frameworks on the herder-farmer conflicts in Asante-Akim North District. The review explained conflict and the theory underpinning resource-use conflicts. The history of the Fulanis in Agogo and their nomadic

lifestyles were also outlined. The review again highlighted the causes, effects and management strategies of herder-farmer conflicts in many parts of Africa. It emerged that conflicts that arose out of crop destruction retarded agricultural production leading to reduction in income.

It was therefore important to collect primary data to ascertain the real issues in the study area. The chapter offers the opportunity to appreciate the theoretical basis for the collection of data. Again, it helped in the choice of the respondents in addition to the design of the questionnaires and interview guide. This chapter therefore followed it up with the design and techniques of data collection as well as methods of analyzing the data for the realization of the research objectives.

This research was a diagnostic type and an ex post facto for that matter. The aim was to discover what had engendered conflicts between the farmers and herders. It also aims to understand why it happened and what could be done to avert future clash. Therefore, the methodology sought to identify the specific causes of the conflicts, the effects on the people and the measures to address this problem. The study used eclectic approaches of personal observation, questionnaire survey and key informant interviews to obtain data.

3.2 Research Design

A research design involves the decisions made in planning the study. This includes sampling, data sources and the procedures for collecting the data, in addition to methods of data analysis. According to Ditsa (2004), the research design helps to answer the research questions as objectively, validly, accurately and economically as possible.

This study implemented cross sectional and descriptive research design because of the nature of the topic. The study required some detailed description of the conflict between the farmers and herders and their implications towards development. The cross sectional approach was necessary because the study covered six communities within the district. Responses from both males and females were obtained to illustrate how these conflicts affect their livelihoods. Besides, information obtained helped in drawing meaningful conclusions and which facilitated the recommendations made. According to Babbie (1983), the advantage with this design is that it allows statistical inferences to a larger population so that results can be extrapolated.

The study also employed descriptive survey because a number of issues such as the causes and effects had to be observed and described. Fraenkel and Wallen (2009) claim that the main purpose

of descriptive type of research is to observe, document and describe the occurrence of phenomenon. In support of this proposition, Neuman (2000) also asserts that descriptive research helps to provide accurate information about a group of persons, give new information about issues and also provide facts that either supports or counteracts previously held knowledge about a particular issue. Sarantakos (2005) is of the view that descriptive research affords researchers the opportunity to describe fundamental social and economic issues confronting society, relationships or events, background information about the phenomenon being considered as well as simulating explanations. The research described the various concepts and subjects that came up in the course of the work. This gave a detailed description of the historical background of the herder-farmer conflicts in Asante-Akim North, what happened during and after the conflicts. According to Kothari (2004), the main characteristic of this method is the fact that the researcher has no influence over the variables; and that can only report what has already happened or is happening. This therefore limited the biases that arose. A combination of both qualitative and quantitative methods was used to address the research objectives.

The study started with the identification and definition of the problem. After the objectives for the study were developed, a comprehensive desk study was done. This involved the review of relevant literature to understand the various perceptions and theories of resource-use conflicts. The studies by Tonah (2000, 2001, 20002, 2003, and 2006) and Abdulai and Yakubu (2014) in addition to several other works in Nigeria and elsewhere were very useful. These served as useful guide in the study process. With this in mind, the study was planned to ensure that the research questions were answered.

Following the desk study to identify the problem, steps were taken to realise the objectives. This was done in five phases. The first of this encompassed the selection of the six communities and seeking permission from the Traditional council and the Police Service. Since the chiefs are the custodians of the land, it was prudent to seek their consent. Added to this, the security of the district lies in the hands of the police and hence their permission. In the second phase, a reconnaissance visit to the selected communities were undertaken to assist the selection of the respondents. The section ended with a visit to the spokesperson of the Fulanis to the background of the Fulanis and the perceived problems they caused. The third phase involved the design of the questionnaires and a pre-test of the questionnaires to ensure reliability and validity. This was followed by actual administration of the questionnaires and a subsequent design and conduct of the interview guide

in the fourth phase. The final phase involved editing and coding of the responses, including how the data was to be analysed.

3.2.1 Selection of the communities

The selection of the six communities was based on a review of existing literature, including media reports. Again, the report of the Agogo Fulani cattle evacuation plan submitted to (REGSEC) in 2012 was taken into consideration. This followed a Kumasi High Court ruling delivered on 20th January, 2012. The petition was filed by eight farmers namely: Opanin Kwadwo Oduro, Opanin Kwaku Tweneboah, Opanin Kwabena Obeng and Madam Mary Akyaamah. Others included Kwadwo Boamah, Kwadwo Anokye, Kofi Nyame and Pese

Danquah. In a suit number LMISC 11/2012, the petitioners sought to compel the Attorney General and Agogo Traditional Council to remove the Fulanis from area. The specific communities were, Abrewapong, Mankala, Nyamebikyere, Koowereso, Bebuso and Brahabehome. It was therefore prudent to look at the state of affairs after the court ruling.

The above revelations informed the need to use the non-probability sampling techniques in the selection of the units of enquiry. And so, the Purposive sampling technique was used. This was because, introducing randomization (probability approach) as a sampling technique could bias the results of the study. As a result, there was the need to select the right communities and the right respondents. Besides, these communities had similar environmental condition in terms topography, soil, vegetation and climate. The orientation of the farmers and the type of crops cultivated were also similar. Lastly, the proximity of the communities in relation to time and financial resources informed the choice. Due to time and financial constraints, six communities were selected for study.

These respondents were people who were deemed capable of answering the questions. The key people chosen to respond had the necessary information, adequate knowledge and experience on issues concerning herder-farmer conflicts in the study area. The heads of the selected farming households were surveyed based on the unitary household economic model that endorses one person as representing the entire household. Where the heads of households were unavailable, their spouses or an elderly person were surveyed. In absence of these persons, the next household was surveyed.

3.2.2. Preliminary Survey

After the selection of the communities, a reconnaissance visit was undertaken to glean firsthand information about the herder-farmer conflicts in the sampled communities. It was embarked on in November, 2014 and lasted for six days. The rationale was to seek permission from the community leaders and agree on a convenient date for the survey. Discussions were also held with the leaders aimed at collecting general information about the communities. These included history of the communities, ethnic composition, access to land and water, and a brief information on the activities of the Fulani herdsman. The total population and the identification of total households were also obtained. The rapport established with the community leaders made the data collection easier.

Following the identification of the farmers, a visit was paid to the spokesperson of the Fulanis. The intention was to introduce the topic to him and seek his assistance. It was also to get a brief history of the Fulani. The estimated population of the herders, the identification of their camps was obtained as well as how to approach the Fulanis for their responses.

These reconnaissance visits began with self-introduction, the name of the school, display of an Identity card and the purpose of the survey. The pieces of information gathered were recorded in a field note book and a voice recorder. This information was vital in the design of the questionnaires and the interview guide that was used in the third phase. Part of the information gathered was also used to buttress the quantitative analysis.

3.2.3 Sampling Procedure

Sampling is vital in any research because it is rarely the case that a researcher has sufficient time and resources to conduct a research which will include all members of the population (Bryman and Cramer, 1994). Different techniques were used to select the respondents. The study made use of purposive sampling, systematic sampling and convenience sampling in the choice of respondents.

The intention was to survey all the households in the six communities but upon surveying 35 household heads in Nyamebekyere, it was realised that the respondents were giving repetitive answers. As a result, the systematic sampling technique was therefore used to select the household heads from the remaining five communities. According to Kothari (2004), this technique is a special kind of random sampling in which the selection of the first unit of the sample from the population is based on randomization. The remaining units of the sample are selected from the population at a fixed interval. Thus, the houses were given numbers to aid the selection. All the houses in a community were arranged serially and then a random number was selected to begin

with. In all, thirty-three (33) farming households each were selected from the remaining five study communities for data collection as indicated in table 3. Three (3) key informants were purposively selected at the institutional level for interview on the causes and effects of herder-farmer conflicts.

On the part of the herders, a convenience sampling technique was used to select them. Convenience sampling is a non-probability sampling technique where subjects are selected because of their convenient accessibility and proximity to the researcher. Since the District Assembly did not have a record of their exact number, their spokesperson helped in estimating their total. Their sample frame was estimated to be above 70 herders, out of which 25 were surveyed. According to Olabode and Ajibade (2010), the difficulty to have a precise population figure of the Fulani herdsmen is attributable to their lack of social organization which characterizes their settlement lifestyle. The inability to survey more was therefore based on their nomadic lifestyles. Again, due to the volatile nature of the atmosphere coming out of an alleged killing of a farmer by some herdsmen tension had been created between them and the farmers. This made it difficult to visit their camps, so they were met on the field for survey. More importantly, the respondents were giving repetitive answers to the questions. With the help of the resident communities, their grazing routes, drinking sources in were identified for easy selection. In essence, their selection was on the basis of their accessibility and willingness to cooperate. The advantage of this technique was the availability and the quickness with which the data was gathered.

A purposive sampling was used to select the representative of the Agogo Traditional Council and the District Coordinating Director of Administration (DCD). The Agogo District Police Command and the spokesperson of the Fulanis were also purposively selected. These were people deemed to have adequate knowledge and the necessary information on issues of herderfarmer conflicts to augment the responses from the primary respondents. Their responses were obtained with the aid of an interview guide.

3.2.4. Sample Size Determination

According to Kothari (2010), if the sample size (' n ') is too small, it may not serve to achieve the objectives and if it is too large, we may incur huge cost and waste resources. Therefore, the sample size should be large enough to give a confidence interval of desired width. The sample size was chosen at 95% confidence interval. The sampling population for the study included all the 388

farming households found in the six communities as well as the over 70 estimated Fulani herdsmen. From the sampling population, a sample size of 225 was selected for the study.

1.) The number of farming households in the six communities was 388

Number of farmers to be sampled

$$n = \frac{N}{1+N(e)^2}$$

Where n = sample

size N = sample

frame e = margin of

error At 5% margin of

error

$$n = \frac{388}{1+388(0.05)^2}$$

n = 197 farmers (approximately, 200)

Table 3 Determination of sample size for the study

Villages	Number of huts	Sample size
Nyamebekyere	42	35
Bebuso	68	33
Brahabebome	71	33
Koowereso	69	33
Abrewapong	65	33
Mankala	73	33
TOTAL	388	200

Source: Field Survey; March, 2015.

2). On the part of the herders, 25 of them were conveniently surveyed. These were surveyed because of the repetitive nature of the responses and the heightened tension and suspicion coming out of an alleged killing of a farmer by herders two weeks back. The herders were therefore surveyed on the field while their animals were grazing.

3.3 Pretesting of Data Collection Instruments

Subsequent to the preliminary survey, the questionnaires and interview guides were designed. A pilot survey on the questionnaire was conducted on five household each from the six selected

communities and two Fulani herdsmen in December. This lasted for one week. The objective was to determine adequacy of the sample frame, non-response rate to be expected and how the respondents understood the questions. Again, the suitability of the data collection methods and efficacy of the questions were pretested from the perspective of farmers and herders.

Reliability as defined by Black (1999) is the extent to which a scale produces consistent results if the same measurement is reproduced. This was carried out to ascertain the internal consistency. Regarding validity, Kothari (2004), opines that validity measures the extent to which the instrument provides adequate coverage of the problem under study. It was to ensure that the scale captures all aspects of the construct. The assessment of the questionnaire by the supervisor was also a measure to ensure validity and reliability. Additional information relevant to the achievement of the objectives was added.

3.4 Data Collection Exercise

The data to address the objectives of the research was obtained from both primary and secondary sources. The actual collection of data from the stakeholders was undertaken following the pretest and subsequent correction. This involved the administration of questionnaires and the interview guide. Other activities included personal observation of the environmental conditions and taking of relevant photographs. It was in the form of structured non-participant observation.

To start with, the secondary data was collected from the District Assembly, the police command and the spokesperson of the Fulanis, in addition to what was obtained from the desk study. This was followed by the primary data from the field. The aim was to verify the secondary data obtained. The primary data sources included the farmers, Fulani herdsmen, the Kontihene, the DCD, the Crime Officer and spokesperson of the Fulanis. In all, the field work was carried out in two months.

The process of the primary data collection first involved the administration of questionnaires. This contained both closed and open-ended questions. The questionnaire was divided into four parts. The first part contained the socio-economic characteristics of the respondents. Part two covered the identification of sources of conflict while part three was concerned with the effects of conflict. The final part focused on conflict management strategies and the way forward. The questionnaires were administered personally with an assistant.

The questionnaires were first administered to the farmers to solicit their views on the subject. This strategy was to offer the herders an opportunity to respond to some of the allegations leveled against them. Afterwards, a personal observation was undertaken to some of the affected farms and water sources. This was intended to verify the authenticity of some of the claims and ascertain the extent of damage to crops and other resources. Relevant photographs were then taken to back those claims. This process continued until all the six communities were covered. The final part involved interaction with the community leader for show of appreciation and closing remarks. After the responses from the farmers had been obtained, the Fulanis were surveyed. This took place of the field where their cattle grazed.

Following the questionnaire survey, interviews were conducted. The intention was to seek further clarification or validation of the responses from farmers and herders. It was also to offer them the chance to outline the measures put in place to deal with this problem. The interview started with the Fulani herdsman and then proceeded to the Kontihene. It continued with the crime officer of the police command before finally moving on to the DCD. Each interview lasted for a maximum of 60 minutes. Table 4 presents a summary of the data obtained from various respondents. This includes the source, the variable, the sampling technique and the tool of data analysis.

Table 4 Summary of required data and sources

No	Source	Variable	Sampling Technique	Tools Required
1	Community leaders	<ul style="list-style-type: none"> ✓ Identification of farmers ✓ Identification of huts ✓ History of the community ✓ Land tenure system ✓ Causes of conflicts ✓ Effects of conflicts ✓ Mitigation measures 	Purposive	Interview guide

2	Spokesperson for the Fulanis	<ul style="list-style-type: none"> ✓ Identification of herders ✓ History of the Fulanis ✓ Access to resources ✓ Causes of conflicts ✓ Effects of conflicts ✓ Recommendations 	Purposive	Interview guide
3	District Coordinating Director	<ul style="list-style-type: none"> ✓ Causes of conflicts ✓ Effects of conflicts ✓ Role played to mitigate the effects ✓ Recommendations 	purposive	Interview guide
4	Traditional council	<ul style="list-style-type: none"> ✓ History of cattle herding ✓ Land tenure system ✓ Causes of conflicts ✓ Effects of conflicts ✓ Role played to mitigate the effects ✓ Recommendations 	Purposive	Interview guide
5	Police Command	<ul style="list-style-type: none"> ✓ Causes of conflicts ✓ Effects of conflicts ✓ Role played to mitigate the effects ✓ Recommendations 	Purposive	Interview guide
6	Farmer	<ul style="list-style-type: none"> ✓ Access to land and water ✓ Causes of conflicts ✓ Effects of conflicts ✓ Management strategies ✓ Recommendations 	Systematic	Questionnaire survey
7	Herdsmen	<ul style="list-style-type: none"> ✓ Access to land and water ✓ Causes of conflicts ✓ Effects of conflicts ✓ Management strategies ✓ Recommendations 	Convenience	Questionnaire survey
8	Eyewitness	<ul style="list-style-type: none"> ✓ Causes of conflicts ✓ Effects of conflicts 	-	Personal Observation

Source: Author's construct

3. 5 Processing and Analysis of Data

Subsequent to the data collection was the analysis of data. The analysis of data required a number of closely related operations such as establishment of categories and the application of these categories to raw data. This was done through editing, coding, transcription, tabulation and construction of tables and charts, and then drawing statistical inferences. The completed questionnaires were first edited to check completeness, accuracy and consistency each day. Furthermore, the questionnaires were coded and entered into a Statistical Package for Social

Sciences (SPSS) version 16 and Excel spreadsheet templates for analysis. The analysis was done using simple descriptive statistical tools such as frequencies, percentages, bar and pie. Cross tabulation was also employed to establish the relationships between the variables.

In order to rank the causes of conflicts to establish the underlying or major ones, the preference ranking and scoring methodology was used. This is the technique of placing the problems in order of priority. The questionnaire contained 13 possible causes of these conflicts and the farmers were as to rank them in order of importance. Therefore a highest score of 13 was assigned to the first major cause identified by each respondent while a score of 12 was assigned to the second factor identified. This process was repeated in that descending till the 13th rank factor. A zero score was assigned to any factor that a respondent did not consider as a cause of conflict. The frequencies obtained were summed up and their means were calculated. In the end, the means obtained by the farmers and herders were ranked separately to obtained the underlying causes of conflicts from the perspective of both land-users. For example, the total frequency ($\sum FX$) obtained by the 200 farmers (on crop destruction was 2578.F)

$$\text{Thus, the mean score } (\bar{X}) = \frac{\sum FX}{\sum F} = \frac{2,578}{200}$$

This brings the mean score of crop destruction to be 12.9. The process was repeated until all the mean scores were calculated from the perspectives of farmers and herders. The cut off scores of 50% or mean score (\bar{X}) of 6.5 was used to determine the major and minor causes of conflicts. This indicates a 50:50 probability of qualifying to be classified as major or minor cause. This allowed for easier categorisation of the triggers of conflict since all the factors had a 50:50 probability of qualifying to be classified as major or minor cause.

The qualitative data generated from the interviews were transcribed and interpreted according to the set objectives. Since most of the interviews were conducted in a local language, they were translated into the English language. This was used to complement the quantitative data. The processed data were then discussed with views supporting or conflicting literature determined.

In spite of the enormous data gathered, some challenges were encountered. A major problem faced was how to identify and contact the Fulanis. The recent killing of a farmer allegedly by some Fulanis had heightened tension in the area. It therefore made it difficult to be readily welcomed by

the herders. To overcome this challenge, the survey had to be done with the assistance of their spokesperson.

Again, the estimation of the total number of Fulanis was also a problem. Again, their nomadic lifestyles made it difficult to get their physical locations and reach them. Fortunately enough, the 25 herders surveyed gave recurring responses which then did not require the survey of all of them. The last challenge was the difficulty in acquiring map from such a newly created district. But the district map was finally adapted from an atlas by the Ministry of Local Government and Rural Development (MLGRD).



CHAPTER FOUR: ANALYSIS OF FIELD DATA

4.1 Introduction

Following the collection, editing and coding of data in the preceding chapter comes the presentation, analysis and discussion of the field data. Data from the respondents were retrieved with 100% response rate. This was mainly due to the fact the data were collected personally. The chapter is divided into two sections. The first section deals with the profile of the study areas with

emphasis on the available resources that have attracted herders and farmers. Notable among them are location, relief, drainage, climate and vegetation.

The second section presents the analysis of the results from the field data. The section basically deals with the major causes of herder-farmer conflicts in Asante-Akim North District. The effects of the conflicts and management strategies as well as recommended solutions from the perspectives of both parties are also presented. The results are discussed with relevant literature from the theoretical framework of the study. In presenting the results, the data gathered were subjected to descriptive statistical analysis. Additionally, relevant pictures gathered from the field were used to support the discussions to give readers a better appreciation of the issues.

4.2 Situating Asante-Akim North District for study

4.2.1 Geographic Characteristic of the study area

The Asante-Akim North District is located in the eastern part of Ashanti Region. It lies between latitudes 6° 30' North and 7° 30' North and also longitudes 0° 15' West and 1° 20' West. The district covers a land area of 1,125 square kilometres (Asante-Akim North District Assembly, 2014). The district shares boundaries with Sekyere Afram Plains in the north, Kwahu East in the east, Asante Akim South in the South and Sekyere Kumawu in the West. Figure 2 presents the map of the study area. The location of the district in the forest belt favours the cultivation of varied food and vegetables crops in addition to the rearing of animals.

Topographically, the study area is undulating ranging between 305 metres and 610 metres and it is interrupted by a stretch of the Akwapim-Mampong Ridge. The Akwapim-Mampong Range serves as a watershed for the numerous rivers and streams in the district. This characteristic is relevant for crop and animal production. There is an opportunity of using direct stream flow for irrigation farming during the dry season. It also makes water available for the inhabitants and the numerous cattle in the district. However, only a few streams sustain permanent water flow in the dry season thereby causing serious competition between farmers and herders over the use of water. The undulating nature of the slope also makes it conducive for large scale crop farming and animal rearing.

In addition to the above, temperature is found to be uniformly high all year round with a mean annual temperature of 26°C. The district experiences wet semi-equatorial climate characterised by

double maxima of rainfall. The rainfall ranges between 125cm and 175cm. The first rainy season starts from May to July while the second from September to November. The dry harmattan occurs between December and April. There is abundance of rain interspersed with dry period. The varied climate is also favorable for animal rearing and cultivation of tree crops, root tubers, suckers, cereals and vegetables which are nutritious to the cattle. In response to the changing climatic conditions in the traditional home of the Fulani herdsmen, they have migrated to this zone where the grass is lusher than the Sahel region.

Again, the District lies within the moist semi-deciduous forest belt. The major vegetation types are the Open Forest over the highland areas, the Closed Forest on the range and the Wooded Savannah. Specifically, the dominant vegetation in the study area is wooded savannah. The original forest has degenerated into secondary forest and grasses due to the activities of chainsaw operators, shifting cultivation and perennial bush fires by herdsmen for fresh grass to feed cattle. The absence of dense vegetation coupled with the presence of grasses make it conducive for cattle rearing. More so, the lack of tsetse fly in this vegetation zone presents favourable atmosphere for cattle rearing.

Last but not least, the two predominant soil types are the Forest Ochrosol and Savannah Ochrosol. The Forest Ochrosol is fertile and supports the cultivation of cereals, cassava, plantain, cocoa and vegetables. The Savannah Ochrosol is well leached, richly endowed with organic matter and supports the cultivation of yam, maize, cassava, groundnut and vegetables. The presence of well leached soil has attracted several farmers to this area while the crops attract herbivores like cattle. The availability of well leached soil favours animal rearing due to the absence of foot rot diseases. The figure below represents the map of the study area.



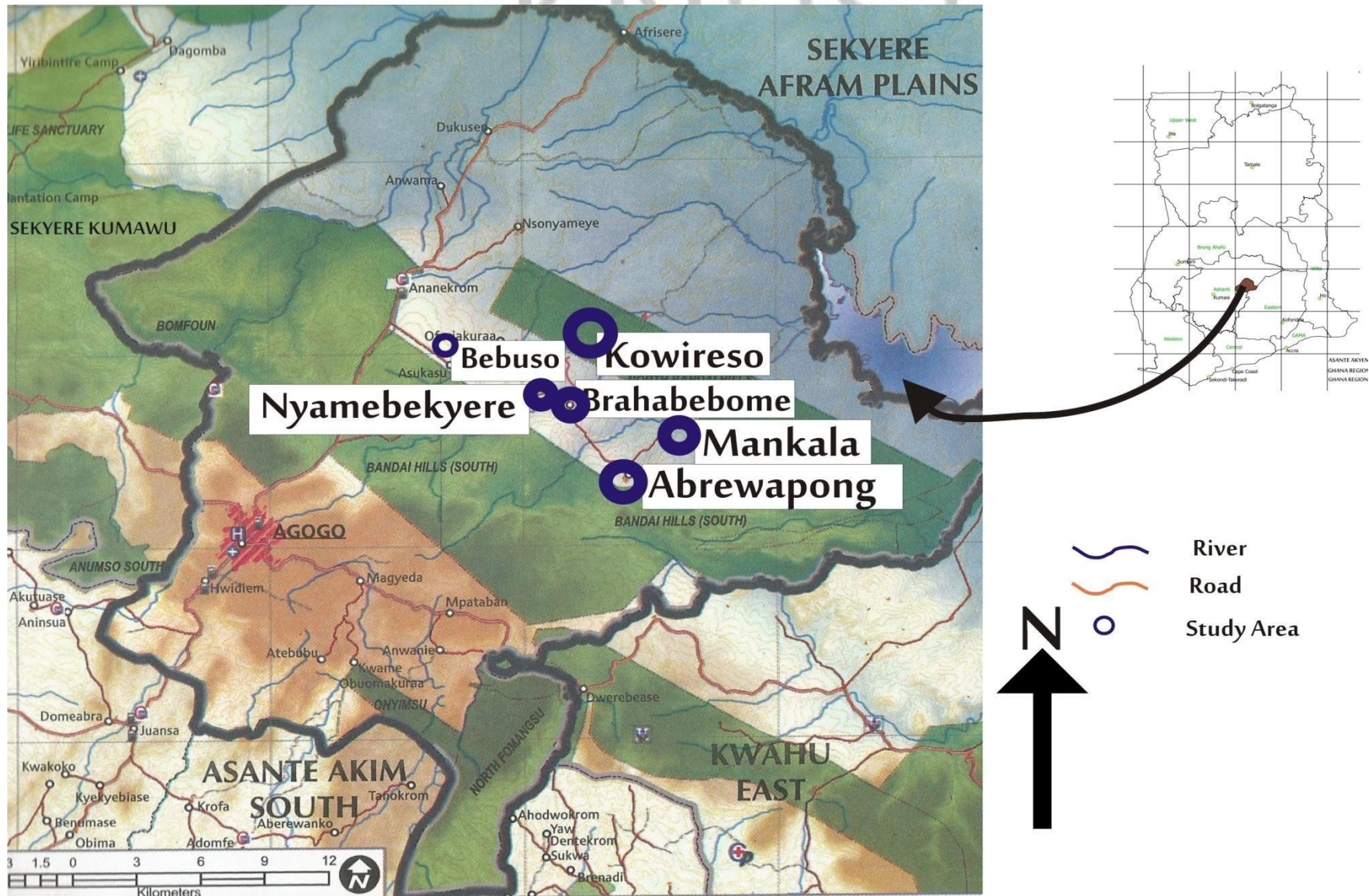


Figure 2 Map of Asante-Akim North District

Source: Adapted from the Ministry of Local Government and Rural Development, 2014.

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4.2.2 Demographic Analysis

According to the Ghana Statistical Service (GSS) 2012 report, per the 2010 population census, the population of the district is 69,186. The males constitute 33,731 (48.8%) while the female population is 35,455 (51.2%). The rural areas share of the population is 36,990 (53.5%) and the urban share is 32,196 (46.5%) which indicates how rural the population is. The age dependency ratio of the district stands at 82.5 which are high compared to the regional value of 72.4. This means that for every 100 persons in the working age group (15- 65 years) there are 82 persons dependent on them.

The District's population density for 2010 is 61.46 persons per square kilometer. This is lower than the regional density of 196.0 persons per square kilometer. The district therefore lies in a geographical zone which is characterized by sparse population. This makes the ecological zone favourable for large scale farming and animal grazing. According to Ayih (2003), a vast arable land couple with relatively sparse population in an area the makes struggle for farmland virtually unknown.

However, Adogi (2013) contests that this benefit is unsustainable when there is massive migration of farmers and herders into such areas. This is because it results in severe competition for scarce resources, which leads to struggles and violent confrontations. This is consistent with the conditions that existed until the late 1990s in the study area. The farmers acknowledged that there was no competition between them and the herders at the initial stages until their numbers began to swell.

4.2.3 Migration flow

The 2010 population and housing census put the total number of migrants in the District at 15,004. Out of this, 39.2 % constitute intra-regional migrants while 60.8 % migrated from outside the region. The Upper East region recorded the largest (2,076) number of migrants, followed by the Northern (1,977) and Eastern (1,270) Regions while migrants from Western Region recorded the least number (397). Migrants born outside Ghana recorded the least (301) number in the District, majority of whom are Fulanis. Most of these migrants engage in farming.

The Fulanis occupy unique place among all the migrants in the district. This is because their physical appearance and way of dressing makes the local residents consider them non Ghanaians. Furthermore, the difference between the farmers and the Fulanis is accentuated by the fact that

these two parties do not live within the same locality. Perhaps the heightened prejudice between the farmers and the Fulanis in Agogo could be due to the spatial separation of their places of residence. As a result, there is very little social interaction between them, as they have few friends among the farming community. Besides, the farmers do not have much interest in getting to know the Fulanis. In terms of duration of residence, migrants born outside Ghana have majority (34.6%) of their population staying in the District from 1-5 years. The least (12.6%) proportion of their population has stayed in the District less than a year (GSS, 2014).

4.2.4 Economic Characteristics

Asante Akim North District is generally an agrarian community with about 72.7% of the labour force engaged in one agricultural activity or the other. The number of rural households engaged in agriculture stands at 79.7%. The types of agricultural activities in the District shows that crop farming is the highest type of farming activity practiced in the District (98.4%). Livestock rearing is the second highest (21.7%).

The orientation of the farmers is commercial in character. As already noted, the main crops cultivated are plantain, maize, rice, cassava and cocoyam. In addition tomatoes, watermelon and other assorted fruits and vegetables are also cultivated. This is an indication that the district serves and the food basket of the region in particular and the country as a whole. Agriculture is predominantly rain-fed but the fruit and vegetables are irrigated in the dry season. The use of modern technology in farming is quite low as farmers rely on the use of traditional implements. However, the commercial farmers use plough to till the land and apply weedicides to clear the weeds. External labour is hired in all aspects of the farming process, starting from clearance to transportation of the harvested crops. There are cattle rearing on a large scale mostly practiced by Fulani herdsmen. This phenomenon creates potential for conflicts arising out of competition between the two land-users.

The vast Afram plains portion of the district (where the study is conducted) contains about 55% of the district's total communities. The inhabitants dominated by migrants from the Volta and the three Northern Regions. Also, it is this portion that majority of the Fulanis located. The zone is also characterised by poor road network. Basic infrastructure such as health, education, portable water and sanitation are in short supply.

4.2.5 The Political Structure of the District

The Asante Akim North District is one of the newly created districts in Ghana in the year 2012. It was carved out of the then Asante Akim North Municipal and established by Legislative Instrument 2057 (Republic of Ghana, 2012). The District was inaugurated on 28th June, 2012 with Agogo as its capital. The Asante Akim North District Assembly is the highest political and administrative body in the District. The district is divided into 22 electoral areas headed with the District Chief Executive (DCE) as the political head.

The traditional set up in the district is divided into three paramountcies with their sub-chiefs. These are Agogo, Juansa and Domeabra Traditional Areas. This study was conducted on Agogo Traditional Area where the commercial farming and large scale animal production are concentrated. The paramount chief of Agogo is the overlord of the traditional area while the subchiefs are the leaders of the smaller communities. Custom demands that any investor is required to seek permission from the traditional council.

4.3 Socio-economic characteristics of respondents

4.3.1 Sex Distribution of Respondents

Table 5 presents a summary of the sex distribution of the crop farmers and Fulani herdsmen. The analyses of the results indicate that out of 200 crop farmers surveyed, 128 representing 64% were males. The remaining 72 constituting 36% were females, implying additional responsibilities. The implication of this is that, farming households as far as this study is concerned, were predominantly male-headed with supports from their spouses and children. This respectively agrees with the findings of the Ghana Statistical Service (2013) that male headed households largely dominate household headship in Ghana.

Table 5 Gender of Respondents

SEX	FARMERS		HERDERS	
	No.	%	No.	%
Males	128	64	25	100
Females	72	36	0	0
TOTAL	200	100	25	100

Source: Field Survey; March, 2015.

On the part of the Fulani, it is discernible from the table 8 that all the 25 respondents were males. This result is supported by the findings of (Manu et al, 2014 and Adisa, 2012). They indicated that cattle herding is a male dominated enterprise. For instance, Manu et al, (2014) attributed this mainly to the rigorous nature in tending cattle especially by protecting them against rustlers and other dangerous animals in the bush. Again, for socio-cultural factors, most Fulani women might not take cattle herding as an occupation. Tonah (2002) opined that the women are mostly involved in milking the cow and selling their products. In addition to these, the nomadic lifestyle of the Fulani herders meant spending lots of days in the bush with their cattle, hence the dominance of men. Lastly, since men are the heads of the households, even when the couples were met on the field the males were purposively surveyed. This revelation is consistent with (Olugbenga, 2013 and Ofuoku and Isife, 2009) claim that due to the possibility that farming is easier to practice as compared to herding; a lot more women may be engaged in it than herding.

The preponderance of males in crop farming and herding was a contributory factor to the occurrence of conflicts. To ascertain the veracity of this claim, the question of their reaction to a disturbance by their opponent was put to the respondents. Results from the cross tabulation showed that majority of males preferred to confront their opponents or retaliate to seek redress. For instance, 53.9% of the male farmers resorted to direct confrontation when their crops or properties were destroyed by the herdsman while 46.1% reported the incident or relocated from those communities. Their choice of this strategy stemmed from the mistrust they claimed to have in the police to deal with such reported cases. On the contrary, only 18% of the female farmers approached the herders for crop destruction. 76.4% of the women reported to their spouses, community heads or the police while 5.6% turned to relocation. This exposition agrees with Manu et al (2014) report that, in reality even when females dominate crop farming, whenever there is a conflict it is the males who carry out the attack.

Table 6 Sex of farmer's reaction to disturbance

		REACTION TO THE DISTURBANCE			Total
		RETALIATE	REPORT	RELOCATE	
SEX OF RESPONDENT	MALE	69 (53.9%)	56 (43.8%)	3 (2.3%)	128
	FEMALE	13 (18.0%)	55 (76.4%)	4 (5.6%)	72
Total		82	111	7	200

Source: Field Survey; March, 2015.

In like manner, 72% of the herdsmen retaliated while 24% of them reported to their cattle owners or the police. Only 4% relocated to the Eastern Region, temporary. The implication was that the herders resisted any attempt to deny them their source of livelihood as a sign of their resilience in the face of threats and also display of courage as posited by Bello Tukur (2013).

4.3.2. Age structure of respondents

The analysis of the age structure in table 7 revealed that the highest percentage of the crop farmers were those within the age range of 35-44 years (32%). The results also showed that just 3.5% of them fell below 24 years. Surprisingly, 13% of the crop farmers were beyond 65 years. This meant that more than 13% of farmers were above the compulsory retirement age in Ghana, indicating that farming accommodates elderly people in spite of its energy sapling. It also indicates the youths' attitude towards farming, with their concentration always on formal education or jobs with quick returns. It affirms Turner et al. (2004), position that once the youth get educated, they do not see the need to engage in farming but rather look for formal jobs. They believed that farming was meant for the old and those who did not receive formal education.

Table 7 Age of respondents

AGE	FARMERS		HERDERS	
	No.	%	No.	%
15-24	7	3.5	9	36
25-34	35	17.5	11	44
35-44	64	32	5	20
45-54	53	26.5	0	0
55-64	28	14	0	0
65+	13	6.5	0	0
TOTAL	200	100	25	100

Source: Field Survey; March, 2015.

Data from table 10 also show that majority (44%) of the herders were between the ages of 25-34 years while the least (20%) of them fell within the age range of 35-44 years. Furthermore, the results indicated that all the Fulani herdsmen were below 45 years. This is contrary to the crop farmers' situation where as many as 47% were beyond 44 years. The implication was that, cattle herding attracted more youths than farming because herding involves continuous movement that requires a lot of energy. In spite of this revelation, it could still be inferred that farming and herding are predominated by the youth who are energetic and productive in the economic sector.

The significance of age in this analysis is the fact that age was a determinant of respondent's attitude towards conflict. This agrees with Hagberg (2000), argument that the age of the herder and farmer is the immediate reason for conflict escalation. Table 11 below is a cross tabulation of farmer's age and reaction to disturbance from the Fulanis. It is discernible from the table that majority of the youth (15-44 years) preferred retaliation to reporting or relocation. For instance, 85.7% within the age bracket of 15-24 retaliated when they got offended by the herdsmen. In a similar vein, 74.3% of farmers in the age range of 25-34 years also confronted the herders for redress. This trend of negative correlation between age and tactics continued with a gradual shift from retaliation to reporting as the ages increased. The demeanour of the youth indicated that they were always willing to reprise whenever various calls on government to intervene failed. As succinctly reported by Olugbenga (2013), the citizens then exercise no restraints in protecting the security and safety of their resources and lives.

Table 8 A Cross tabulation representing the age of farmer and reaction to the disturbance

		REACTION TO THE DISTURBANCE			Total
		RETALIATE	REPORT	RELOCATE	
AGE OF RESPONDENT	15-24	6 (85.7%)	1 (14.3%)	0 (.0%)	7
	25-34	26 (74.3%)	5 (14.3%)	4 (11.4%)	35
	35-44				
	45-54	43 (67.2%)	21 (32.8%)	0 (.0%)	64
	55-64	24 (45.3%)	28 (52.8%)	1 (1.9%)	53
	66+	3 (10.7%)	24 (85.7%)	1 (3.6%)	28
		2 (15.4%)	10 (76.9%)	1 (7.7%)	13
Total		104	89	7	200

Source: Field Survey; March, 2015.

Similar situation arose from the Fulanis. 77.7% of those within the category of 15-24 years chose the option of retaliation while 60% of herders between the ages of 35 and 44 confronted their opponents. The youthful exuberance of the respondents drove them to adopt strategies that triggered conflicts. By inferring from the influence on gender on conflicts, it can be concluded that conflict between herders and farmers is driven by the age and sex to the parties, as confirmed by Hagberg (2000).

4.3.3 Marital status of respondents

With respect to marital status, the number of farmers who were married constituted 71.5%. On the other hand, 21% of the farmers surveyed were unmarried, while 7.5% together were either divorced or widowed as indicated by table 9. Two of the 10 widowed farmers claimed to have their spouses killed by the Fulani herdsmen. The large size of the married couples was due to the fact that commercial farming required the use of modern implements or several hands. In absence of modern implements therefore, their spouses and children served as additional hands.

With regards to the Fulani herdsmen, 16 of them representing 64% were married while the remaining 36% were single. None of the herdsmen was divorced or widowed. The unmarried status might have been due to the age of the respondent as this corresponded with the category below 25 years, even though, there is no literature backing this claim. However, just like farming that required additional hands, the milking of the cow and the sale of the milk products was mostly undertaken by women.

Table 94 Marital status of Respondents

MARITAL STATUS	FARMERS		HERDERS	
	No.	%	No.	%
Single	42	21	9	36
Married	143	71.5	16	64
Widowed	10	5	0	0
Divorced	5	2.5	0	0
TOTAL	200	100	25	100

Source: Field Survey; March, 2015.

The implication of this status is that, the unmarried lacked the commitment to their family which drove them to attack. For example 59.5% of the single farmers opted for reprisal attack while only 23.5% of the married had preference for retaliation. The married expressed the difficulty in relocating their families in times of conflicts, hence the option for reporting.

On the part of the Fulani, all the single herders chose to revenge than to report or relocate but 52.2% of the married Fulani picked reporting ahead of retaliation. It is obvious that these Fulanis took the welfare of their families into account. This is because they always moved with their families on the field and so any attempt of conflict could put their families in danger. The single Fulanis were mostly accused of causing damage since it was easy for them to run away when they

are alone in the bush. The tendency to cause conflict could therefore be attributed to the marital status of the parties.

4.3.4 Educational attainment of respondents

In respect of education, the farmers who had no formal education constituted 65%. Table 10 further shows that 32% of the farmers together had Islamic or basic education while 3% had secondary education. No farmer surveyed had received tertiary education. Manu et al (2014) had likewise found low level of educational attainment among farmers of north-western region of Cameroon. These findings agree with Olugbenga (2013) assertion that high illiteracy rate was still a common feature among rural farmers. The low level of education among the farmers appeared suitable with Manu (2014) exposition that this was attributable to the fact that these categories lived in remote areas where higher educational facilities were unavailable.

Among the Fulani herdsmen, 88% had Islamic education while the remaining (22%) had no formal education. In contrast to the farmers whose highest education qualification was secondary, the highest educational attainment of the Fulani was Arabic education. According to Manu et al (2014) education among the herders is not considered a priority because of their nomadic life styles. This makes them migrate constantly from place to place. More so, the low level of education among the herdsmen was attributable to the unavailability of schools in the remote enclaves where they live. In addition to the above, the situation in Agogo could be ascribed to the rift between them and the local residents leading to constant fear for seeking formal education.

Table 50 Educational Level of Respondents

EDUCATIONAL STATUS	FARMERS		HERDERS	
	No.	%	No.	%
No Formal Education	130	65	3	12
Qur'anic/Arabic	4	2	22	88
Basic	60	30	0	0
Secondary	6	3	0	0
TOTAL	200	100	25	100

Source: Field Survey; March, 2015.

An educated population is more likely to have better access to information regarding their existence. The low educational levels among respondents indicated the rural nature of the communities and their inadequate skills, hence, inadequate opportunities for formal jobs. This contributed to the determination of farmers and herders to remain in these communities in spite of the insecurity. The reason cited was that land was considered as the main source of livelihood.

However, a cross tabulation of respondents' educational attainment and how that affected their reaction to disturbance showed negative relationship. From table 11, only 34.6% of farmers with no educational background chose to retaliate while 62.3% decided to report. Conversely, 66.7% of farmers with secondary education opted for retaliation. This means that educational attainment had no direct effect on the choices they made.



Table**11 cross tabulation representing educational status of farmers' reaction to the disturbance**

		REACTION TO THE DISTURBANCE			
		RETALIATE	REPORT	RELOCATE	Total
EDUCATIONAL STATUS OF RESPONDENT	No Formal Education	34.6%	62.3%	3.1%	100.0%
	Basic School	50.0%	46.7%	3.3%	100.0%
	Secondary	66.7%	33.3%	.0%	100.0%
	Qur'anic/Arabic	75.0%	.0%	25.0%	100.0%
Total		41.0%	55.5%	3.5%	100.0%

Source: Field Survey; March, 2015.

4.3.5 Household size of Respondents

As discernible from table 12, farmers' family sizes ranged from one (single) to 15 (married) people. In fact the modal range of household size was 1-5 members accounting for 66%, while the least size of household (3%) ranges between 11 and 15 people. The seemingly large household sizes of 34% of the farmers were mainly as a result of the extended family system common in the country. For Manu et al (2014), a large household size of farmers is symptomatic of rural areas where majority of the population is illiterate. The implication of relatively large sizes of household may mean more mouths to feed and, perhaps also more hands to work on the farm other than hiring external labour.

Among the herders, all of them had a family size of between one and five people. This contrasts the farmers' size which extended to about 15 members. The reason can be attributed to the nomadic lifestyles of the Fulanis which make migration with a large family cumbersome. The same cannot be said of the sedentary farmers. Findings from Manu et al (2014) found a positive correlation between household size and conflicts. The repercussion of this agrees with Abbass, (2012) and Okoli and Atelhe, (2014) believe that as the population increases, there would surely be a corresponding increase in demand for land, water, and grazing land in areas inhabited by farmers and herders. This mostly occurs when the resources are scarce and there are no alternatives as in the study area. The pressure emanating from these demands stimulated conflicts.

Table**12 Household Size of Respondents**

	FAR MERS		HERDERS	
HOUSEHOLD SIZE	No.	%	No.	%
1-5	132	66	25	100
6-10	62	31	0	0
11-15	6	3	0	0
16+	0	0	0	0
TOTAL	200	100	25	100

Source: Field Survey; March, 2015.

4.3.6 Farm size or Herd size of respondents

Closely related to the above is the size of farm of the farmers and the size of cattle kept by the herders. The categorization was based on the estimates obtained from the reconnaissance survey. Data contained in table 13 reveals that, 31.5% of the farmers had farm sizes ranging between 16 and 30 acres while 7% had more than 75 acres of farm sizes. Indeed, the modal range of farm size of the respondents showed the preponderance of large scale farming among farmers in the Afram Plains portion of the district. This contrasts Olugbenga (2013) view that land holdings in the rural areas are usually small which is commonly obtained through inheritance.

Table 13 Farm Size of Respondents

	FARMER	
FARM SIZE (in acres)	No.	%
1-15	50	25
16-30	63	31.5
31-45	29	14.5
46-60	24	12
61-75	20	10
76+	14	7
TOTAL	200	100

Source: Field Survey; March, 2015.

On the other hand, 48% of the herders sampled kept more than 200 cattle while 8% kept a maximum of 100 cattle. Indeed, results from the study showed that none of the Fulani herdsman

Table

kept less than 50 cattle. This affirms Adogi's (2013) claim that the number of cattle a man has is considered as a sign of wealth. The more cattle the herders kept, the more income they had. This was the case because for every 50 cattle tended, the herders was entitled to a young cow per every 4 months or its cedi equivalent, hence their decision to keep more. However, if a herder failed to take good care of it, he suffered a penalty of forfeiture of a cow. The herders sold part of the milk for their daily up keep while others secretly sold some of the cattle to butchers from the neighbouring towns.

64 Herd size of Fulani pastoralists

NUMBER OF CATTLE	HERDERS	
	No.	%
1-50	0	0
51-100	2	8
101-150	4	16
151-200	7	28
201-250	9	36
251+	3	12
TOTAL	25	100

Source: Field Survey; March, 2015.

The desire by the two land-users to enhance their income was the driving force for conflict. This was due to competition over access to land and other resources. It emerged that some farmers have had their lands completely taken over by the Fulanis and their cattle. As earlier noted, the rapid expansion of farm sizes coupled with the increase in herds of cattle was a recipe for a clash, especially when the crops produced happened to be at the nutritious value of the cattle. A destruction of crops or loss of cattle deprived the parties their main source of income.

Conclusively, it is discernible from table 14 that farmers and herders exhibited differing socioeconomic characteristics. Most of these characteristics portended conflicts between the farmers and herders. However, the educational status of respondents had no effect on the approaches they adopted. In all these cases, the increase in demand for land, water, forest products and grazing land in areas these areas created competition which drove them to fight. Besides, the

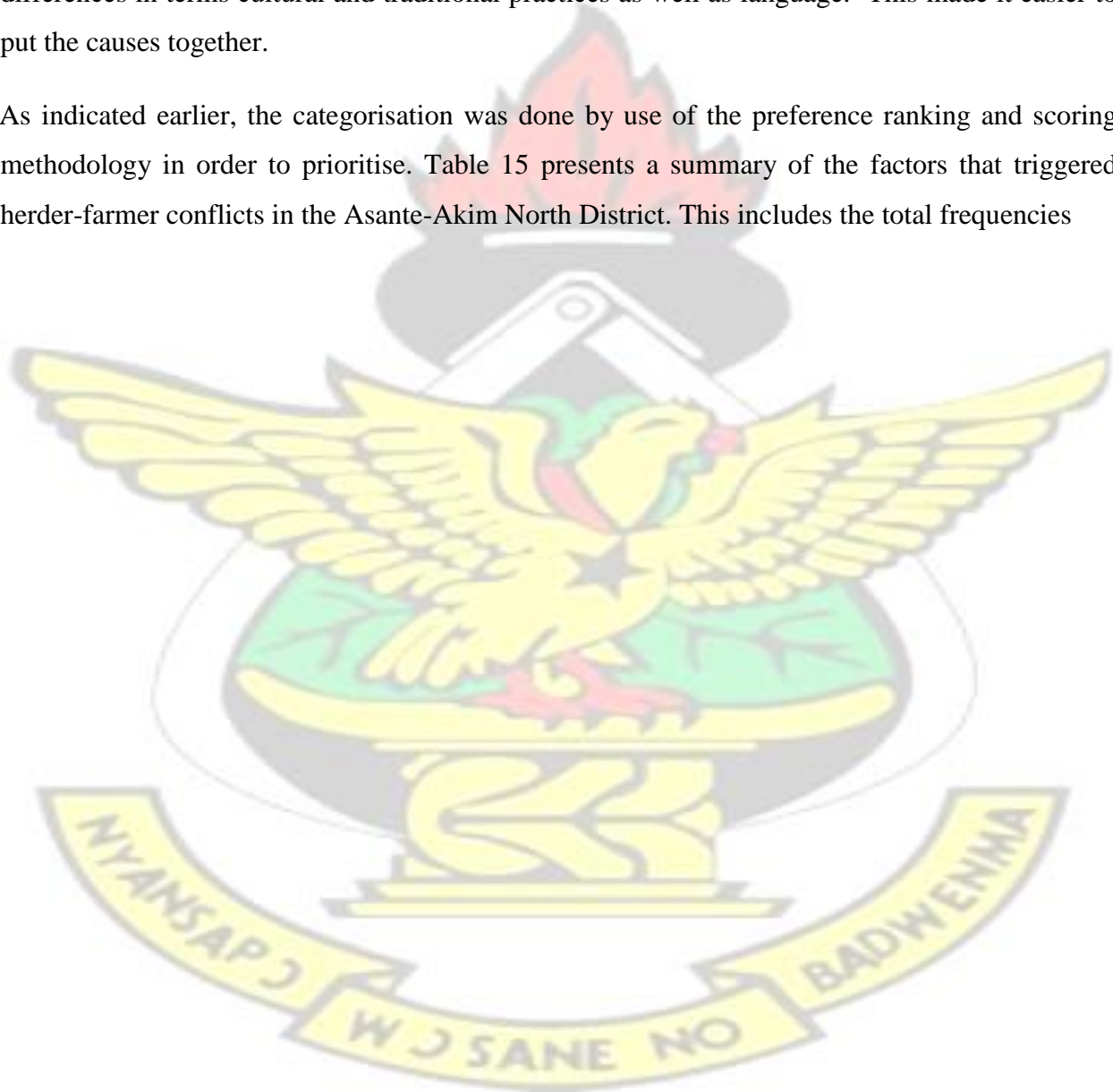
Table

inability of the government to handle reported cases conclusively, the people exercised no restraints in protecting the security and safety of their major sources of livelihoods.

4.4 Triggers of Herder-Farmer Conflicts in Asante-Akim North

The second objective of this study sought to analyse the major factors that caused conflicts between farmers and Fulanis herdsmen in the study area. It was observed that the farmers and herders shared a common cause. This is both parties depended on a limited pool of resources and assumed differences in terms cultural and traditional practices as well as language. This made it easier to put the causes together.

As indicated earlier, the categorisation was done by use of the preference ranking and scoring methodology in order to prioritise. Table 15 presents a summary of the factors that triggered herder-farmer conflicts in the Asante-Akim North District. This includes the total frequencies



obtained for all the factors with their corresponding mean score in the bracket. The major factors are discussed with relevant literature to support them.

Table 75 Causes of Herder-Farmer Conflict in Asante-Akim North District

SOURCES OF CONFLICTS	FARMER			HERDER		
	\bar{X} Mean Score	Rank	Remark	\bar{X} Mean Score	Rank	Remark
Destruction of crops and farmland	2578 (12.9)	1	Major cause	273 (10.9)	4	Major cause
Encroachment of farmland/grazing land	2453 (12.3)	2	Major cause	311 (12.4)	3	Major cause
Contamination of stream by cattle	1580 (7.9)	7	Major cause	219 (8.8)	6	Major cause
Inability of institutions to resolve herder-farmer conflicts	2286 (11.4)	4	Major cause	267(10.7)	5	Major cause
Improper management of cattle	1759 (8.8)	6	Major cause	201 (8.0)	7	Major cause
Killing and maiming of residents by the herdsman	2273 (11.4)	4	Major cause	156 (6.2)	8	Minor cause
Harassment of the Fulani	305 (1.5)	10	Minor cause	318 (12.7)	2	Major cause
Theft of cattle	60 (0.3)	13	Minor cause	48 (1.9)	11	Minor cause
Burning of farmland by the Fulani	2305 (11.5)	3	Major cause	108 (4.3)	10	Minor cause
Killing of cattle by farmers	289 (1.4)	11	Minor cause	321 (12.8)	1	Major cause
Sexual harassment of women by the Fulani	1248 (6.2)	8	Minor cause	3 (.04)	12	Minor cause
Land tenure system	321 (1.6)	9	Minor cause	137 (5.5)	9	Minor cause
Hardening of soil	80 (0.4)	12	Minor cause	-	13	Minor cause

Cut off Score: 50% (≥ 6.5 =Major cause); (< 6.5 =Minor cause).

Source: Field Survey. March, 2015.

4.4.1 Destruction of crops and farmland

Data from table 18 show that, destruction of crops and farmland in all the communities was the first reported cause of conflict by the farmers with a mean (\bar{x}) score of 12.9 out of a possible 13. The major issue any respondent cited was the destruction of their crops by cattle. This finding is in line with the REGSEC report (MLGRD, 2012) which identified crop destruction as the major factor that set off conflicts between the herders and farmers. In addition to this, the secondary stakeholders interviewed all corroborated this claim. For instance, the Kontihene intimated that:

“.....my grandson, it is true! The most frequent complain we receive is the destruction of people’s crops by the Fulani cattle. When they first came, it wasn’t like that. They took them to graze in the day time and sent them back to sleep in the evening....later we saw they weren’t sleeping at all....they grazed at night....then they started putting up foolish behavior....They destroyed people’s belongings just like that..... In fact, crop destruction is a bane over here....it is a very, very big issue that we have to talk about.....”

The DCD on his part also acknowledged destruction of crops by cattle as the major issue they have had to grapple with. He said: *“Obviously, crop destruction is the main cause of this problem. If you conduct your activity without interfering in my, will there be any problem?.....Yeah!.... and so when you trespass, won’t I react?”*. In addition to the above, a 26 year old farmer at Abrewapong recounted what he went through last year:

I cultivated tomatoes...and so I went with labourers to harvest...when we got there, we saw a large herd of cattle right in the farm.....and the Fulani man was standing at a distance....I asked.. haven’t you seen the cattle destroying my tomatoes?why have you allowed them to graze on the few grasses in the farm?.....when we got there, the cattle had destroyed everything!

Undoubtedly, the farmers accused the Fulani herdsman of deliberately driving their cattle into peoples’ farms and leaving them unattended to. They alleged that there were times the gun wielding herders drove the farmers away from their farms to allow the cattle to graze. As an illustration, the Assembly member of Brahabehome electoral area in an interview on 7/3/15 first asked:

‘Owura’, if the animals see pasture mixed with food crops what do you think will happen?

He continued that, the animals can graze up to about 15 miles and would be trampling on

people's crops....Just consider about 20,000 cattle crisscrossing every day..... Here, the land belongs to individuals and every plot is put under cultivation so imagine the quantity of crops they destroy if they graze to that distance every day if they get into about 150 acres of farm..... The Fulanis are interested in how their cattle can grow healthy... I mean they said.... if their cattle feed on our crops they become attractive and produce at shorter interval that is why they intentionally bring them to our farms. He later asked, Owura, have you seen cattle being reared in the bush before? Are they bush animals?

The movement of cattle in a nomadic fashion was found to be the reason for the crop destruction. This agrees with Okeke (2014) assertion that crops destruction happens when the cattle move about in a nomadic fashion without proper supervision by their herders. As a consequence, crop destruction becomes inevitable.

Furthermore, it was detected that the cattle grazed at night since they were not kept in kraals as earlier noted by the Kontihene. The Assembly member, in addition to other respondents all cited the night grazing as the major cause of the crop destruction. The farmers insisted that this was the time most of the destructions occurred since the herders and farmers themselves were asleep and so there was nobody to control them. The cattle therefore moved about and grazed indiscriminately. The end result was massive destruction of food crops.

Another observation was the fact that the harvested crops were also destroyed. This confirms Turner et al (2004) position that crop destruction was not only restricted to damage to growing crops on the field but also included harvested crops. Indeed, about 45 crop farmers surveyed lamented how their harvested crops were consumed by cattle at different times in the presence of the herdsmen. As a consequence, the male farmers had therefore resorted to constantly watching over their stock, even at night to forestall any damage by the cattle. It was on one such occasion that tragically, a 30 year old farmer, Samuel Agboni on 4th February, 2015 met his untimely death (see appendix I) on his farm. The police investigation revealed that he was shot dead by a Fulani assailant for preventing the cattle from destroying his harvested maize in his barn.

In addition to the above, pictorial evidence was obtained from the Imam of Mankala during the survey. He recounted how this menace has been ongoing for the past five years without a pesewa as compensation. Figure two presents a picture of the aftermath of the Imam's 30 acre plantain farm destroyed by on the 29th of January, 2015. He claimed that the Fulani herdsman cut down the

plantain for his cattle to feed on. He went on to say that the cattle owner went with him to observe but no compensation had been paid yet.



Figure 3 Inspection of a destroyed farm by the farmer and the cattle owner Source: Field survey. March, 2015.

Furtherance to the claims by farmers, a personal observation was undertaken to some farms, in a company of a farmer to ascertain the veracity some of these allegations. It was observed that greater portions of the land had been cultivated. This made it almost impossible for the cattle to pass without causing damage, confirming the Assembly man's initial lamentations. Additionally, the plantain, cassava and watermelon attracted the animals. They were therefore eaten by the animals. Whiles on the field a herd of cattle suddenly appeared without the herder. This was exactly what the farmers claimed to go through daily in the farm. The farmer indicated that:

'Bra', you see? This is what I'm talking about oo... do you see any Fulani man following them? Perhaps he is hiding somewhere looking at how we will react to the animals and if we try to drive them away, he'll shoot us. He went further to described how Fulanis had been harvesting her matured plantain and cutting down the immature ones for the animals to feed on. Figure 4 provides a scene on the field observation when cattle suddenly invaded the farm.



Figure 4 Invasion of a plantain farm by cattle at Koowireso Source:

Field survey. March, 2015.

When the crime officer of the Agogo District police was asked about what normally cause conflicts between the farmers and Fulani herders, he simply said:

Hmm master, regarding the Fulani issues.....you just wait for me... [He goes to print a document]... You take it and read. [As I skim through the document, he says] These are the complaints we always receive here. It's all about Fulanis having destroyed my crops, Fulanis having destroyed my crops, Fulanis having killed someone. So as you can see from this document, the key issue has been the destruction of crops by cattle.

Table 16 presents the list submitted to me by the crime officer on reported cases regarding the herder-farmer conflicts between July, 2014 and January, 2015. It is obvious that crop destruction was the most significant cause of these conflicts in Asante-Akim North District (AAND). This development is in stark contrast to International Fund for Agricultural Development (IFAD, 2009) claim that herders inhabit areas where the potential for crop production is limited. The reason cited by the report was because of low and highly variable rainfall conditions, steep gradients or extreme temperatures. The situation was different from (AAND) because, pastoralism was undertaken where crop production was also intensive and rainfall values are also high. Under this current circumstance, crop destruction by cattle was inevitable which led to these communal conflicts.

This agrees with Okeke's (2014) position that when Fulani herdsmen move to non-Fulani territory, conflicts ensue.

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Table 86 Statistics of cases against the Fulani herdsmen for damages to farm produce

No.	Name of complainants	Place of incidents	Date of incident	Acres of farmland	Remarks
1	Ndombe Barte and seven others	Mankala	7/1/15	109	Reported damages to their plantain farms by Fulani cattle
2	John Mohammed	Oyemso	6/1/15	20	Reported damages to his plantain and maize farm by cattle
3	Tabi Dumfour	Mankala	5/1/15	6	Reported damages to his water melon and cabbage farm by cattle
4	Lawrence Adu Kwasi and Charity Asiedu	Abrewapong	3/1/15	7	Reported damages to their farm by cattle
5	Ampong Omar and Abena Bruwaa	Koowireso	30/12/14	16	Reported damages to their plantain farm by cattle
6	Kwadwo Obeng	Koowireso	29/12/14	1.5	Reported damages to his tomato farm by cattle
7	Kwaku Amoako and two others	Abrewapong	23/12/14	34	Reported that their plantain and maize farm has been destroyed by the Fulani cattle
8	Dei Amoako Samuel	Brahabebome	21/12/14	30	Reported damages to his plantain, water melon, tomato farm by the cattle. The herder also set his cottage ablaze
9	Kwadwo Paul	Brahabebome	18/8/14	4	Reported damages to his water melon farm by the cattle
0	Yakubu Alhassan and four others	Bebuoso	12/8/14	30	Reported damages to their tomato, groundnut, green pepper, yam and beans by the cattle but the case has been amicably settled
11	Dr. Ellias Amakye	Nyamebekyere	11/8/14	100	Reported that cattle have destroyed his 100 acre plantain, maize and yam farm
12	Joseph Dede	Bebome	7/8/14	8	Reported that his 8 acres of water melon farm have been destroyed by cattle
13	Kwame Amoah	Pataban	26/7/14	3	Reported that his 3 acres of plantain have been destroyed by cattle
14	Ceelah Pewdam	Abrewapong	7/7/14	3	Reported that 3 acres of water melon and groundnuts have been destroyed by cattle

Source: Agogo district police command; April, 201

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It is easy to see that this exposition clearly indicates the extent to which destruction of crops in the area has been a major talk of the town. As has been noted by Okoli and Atelhe (2014), a farmer whose farm is damaged by cattle is more likely to harbour bad feelings about that herder. Failure on the part of the state to deal with this matter caused the residents to protect their resources. They therefore had to resolve the issue with struggle between the herders and themselves with a no retreat, no surrender attitude for their survival. The story of a 26 year old farmer at Abrewapong was a demonstration of such attitude, as he mobilized some male friends to go back the next day to harvest his tomatoes in spite of the previous attack by the herders. This is what Olugbenga, (2013) rightly posited.

However, the herders' view of this as the most significant cause was different. With an average (\bar{X}) score of 10.9, the herders ranked this 4th major cause of conflicts. The herdsmen, in accepting this as a trigger of conflicts maintained that these actions are unintentional. The spokesperson of the Fulani in an interview on 10/3/15 pointed to the fact that:

“Farms don't walk but cattle do,.....farms don't have feet....cattle do and so as cattle walk about they will surely trample on crops at times”....one of my problems is that,...excuse me....Cattle feed on pasture.....there's no way cattle should destroy crops because farming is tedious....there is no way you should destroy your neighbour's products”.

They attributed this to the fact that a few cattle sometimes went on rampage or strayed into people's farms. They also blamed the farmers of encroaching on grazing lands. One observation made was that the size of cattle handled by a herder was large which made their control quite difficult. Additionally, the increase in population and farm sizes had forced a gradual movement of farmers towards the Fulani dominated areas. The spokesperson continued:

“.....let us ask ourselves again....have the cattle stopped destroying crops?.... if they haven't stopped,....where do the farmers farm?.....what can we do?.....what should we do? Some time ago national security drove the behind the kyenkenku mountain.....go and see that plantains have been cultivated there....where should the go....eh..”

Without a doubt, the identification of crop destruction as a major cause of herder-farmer conflict is consistent with (Olabode and Ajibade 2010; Adebayo and Olaniyi, 2008; Turner et al, 2004; Tonah, 2000, 2003, and 2006; and Gefu and Gills, 1990) who have all acknowledged crop

destruction as the main cause of herder-farmer conflicts. In fact, Turner et al (2004) posited that crop destruction was not only restricted to damage to growing crops on the field but also included harvested crops.

Kessler and de Boer (as cited in Hussein, 1998) had a dissenting view. Citing the case in southern Burkina Faso, they argued that a mere destruction of crops by Fulani herdsman did not necessarily lead to conflict when appropriate compensations were paid. The chief of Koowireso also supported this claim. He said:

“oh... if they pay compensation on whatever they destroy, we wouldn't have any problem with them.....if they want to stay with us here peacefully, then they should pay compensation on what their cattle destroy”.

In theory, this argument is plausible but its practicability is highly contentious. First, the identification of the cattle that destroyed the crops is problematic, especially when the destruction takes place at night. Secondly, the nomadic lifestyles of the Fulanis make it difficult to trace the actual perpetrators. Again, the determination and payments of appropriate compensation equivalent to the value of crops destroyed could be a source of conflict in itself. Farmers are always accused of demanding unrealistic compensations while the herders were also accused of paying agreed price. This was the situation found in the study area. The Assembly member of Brahabehome lamented on the issue of compensation as he said: *“He further complained that once part of the compensation was paid, the herdsman claimed ownership of the remainder and therefore served as a grazing field for his cattle until everything was consumed.”* But herder in reaction asked whether farmers also pay compensation on the cattle they kill.

The destruction of crops as the most significant cause of conflict is rather challenged by the assertion that herder-farmer conflicts result mainly from the implications of ecological and demographic factors (Ayih, 2003; Nchi, 2013 and Adogi's, 2013). For example, in Adogi's (20103) study of herder-farmer conflicts Nasarawa state in Nigeria, he argued that the underlying cause of these conflicts is population explosion. He stated that as the population keeps on increasing, surely there will as well be a corresponding increase in demand for land, water, grazing land and other resources in zones where farmers and Fulanis inhabit. Much as this argument holds in areas where population density is high, the mere scarcity of these resources would not necessarily lead to conflict if the

rights of each other are respected. What will rather trigger such conflict is the destruction of each other's source of livelihood. Besides, in sparsely populated area, such as the Afram Plains portion of Agogo, large scale farming and animal husbandry were found to have caused scarcity resources.

In a similar fashion (Blench, 2004; Onuoha, 2007; Olorunfemi, 2009; Abbass et al, 2012 and Nchi, 2013), also established the nexus between ecological factors and conflict and concluded that climate change was the most important cause of herder-farmer conflict in Nigeria. They identified: environmental degradation; desertification; loss of wetlands; inadequacy of rainfall and extreme climate variability and volatility as the triggers of conflict. While this assertion may be the case in the savannah zones, same cannot be replicated in the middle belt such as Asante-Akim North District. This is because herder-farmer conflicts occurred in spite of the double maxima of rainfall. Several factors other than climate variability were the main triggers of conflicts. The herders stressed how the cow dung had served as fertilizer for the soil. They mentioned the case of Alhaji Grunsah as an example. They alleged that due to the presence of the cattle around Grunsah's farm, his plantain were greener than the rest.

4.4.2 Encroachment of farm/grazing land

Closely related to the crop destruction is the encroachment of farmland or grazing land. This was a major factor identified by the two land-users. The farmers ranked this as the 2nd ($\bar{X} = 12.3$) major cause while the Fulani herdsmen identified it as the 3rd ($\bar{X} = 12.4$) most important cause of conflicts. The farmers claimed that farm encroachment was one of the frequent issues they had to contend with. They alleged that the Fulanis had taken over their lands, leading to abandonment of farms by some farmers over the years. A 64 year old Maame Yaa of Nyamebekyere recounted that how she abandoned her farm and left the village for the northern region after her husband was shot dead by Fulani herdsmen in 2012. A personal observation en route to Koowireso saw how large tracts of farmland had been taken over by cattle and turned into grassland due to grazing. Figure 5 presents scenes of abandoned lands turned into grassland as a result of overgrazing.



Figure 5 An abandoned farmland turned into grassland

Source: Field Survey. March, 2015

The farmers indicated that they could go to farm in the morning only to meet a large herd of cattle. Any attempt to drive them away would incur the wrath of the herdsman. According to the farmers the only option available to them was to leave the farm for the cattle or engage them in a fight. The chief's linguist of Mankala, in an interview on 10/3/15 said:

“Oh bra, they’ve taken over our lands. If I take you to the bush, you’ll see their tents in the middle of people’s farms. [Angrily] did they come with lands?..... or has anybody sold any land to them?...the land that you have hired to farm, you’ll there in the morning and see large herd of cattle or you’ll be there and they’ll [Fulanis] come and order you to leave for the cattle to graze. Sometimes, they tell you not to set foot there again”

The farmers went further allege that some of the herders had even construct mud houses while others had their tents right in the middle of their farms. They accused the paramount chief of leasing lands to the herders. Consequently, they wanted the herders to go back to where they came from. The Kontihene however denied these allegations of leasing land to any herder. The farmers also stated that the herders lived in the bush, far away from their farms but the rapid increase in

their population and overgrazing experience over there had forced them to invade their farmlands. The claim was that the Fulanis only came to town during market days to sell cattle or milk products.

On their own part too, they accused the farmers of trying to push them away from the land given to them by paramount chief to graze their cattle. Eight Fulani herdsmen surveyed around Abrewapong vowed to resist any attempts by the farmers to push the further during the upcoming farming season. A similar opinion was shared by three Fulanis at Mankala, who were hell-bent on resisting any attempt by the surveyors to apportion any piece of land they graze their cattle on to the farmers. The Fulanis contended that they had no encounter with the farmers when they were first brought to that portion of land. But the expansion of farms had gradually pushed them deep into the Afram River. This was the earlier position expressed by their spokesperson.

From the above, it can be concluded that the rapid expansion of farms and the increase in herd sizes especially around Mankala and Koowireso has led to these conflicts. This has obviously led to competition for land thereby making conflicts inevitable. As expressed in Abbass (2013), a pastoralist, Hame Saidu, retorted that:

“our herd is our life because to every nomad life is worthless without his cattle. What do you expect from us when our source of existence is threatened? The encroachment of grazing fields and routes by farmers is a call to war”.

This goes to confirm their determination to enhance the safety of their cattle even at the peril of their lives.

It is obvious from the above that increase in the population of farmers and herders with a corresponding increase in the sizes of farm and herds triggered conflict. This is because the two groups had land use practice that competed with each other. As a result, crops cultivated close to Fulani places of abode were eaten by their cattle, thereby leading to anger and frustration. While the nomadic lifestyles of the herders pushed them to farm plots. The farmers killed animals found on their farms which called for reprisal from the herders. It is plausible to state that if the cattle are grazed in an environment devoid of vast stretches of crops, this problem can be solved.

4.4.3 Pollution of water bodies

Contamination of rivers and streams by cattle was another major cause shared by the two parties. With an average score of 7.9, the farmers ranked this as the 7th major cause while the herders saw this as the 6th major cause of conflicts in the area. This is in consonance with findings of (Tonah, 2006; Ofuoku and Isife, 2009; Abdulai and Yakubu, 2014 and Manu et al, 2014). For instance, in the work of Ofuoku and Isife (2009) in delta state Nigeria, both farmers and herders considered pollution of water major cause of herder-farmer conflict within that locality. The low mean score by the farmers was attributable to the fact the in some communities like Bebuoso, the World Vision International (a Non-Governmental Organisation) had constructed boreholes for them. This served the domestic needs for the inhabitants of those communities. Therefore, water pollution was not a major concern for them. They only competed with the herdsmen on streams only for irrigation purpose. Farmers went further to accuse the herders of deliberately leading their cattle to drink from water stored in the farm meant for irrigation.

However, in Koowireso, Mankala and Oseikrom where the rivers served both domestic and agricultural purposes there was fierce competition between the natives and cattle. The herders always took their cattle to the riverside three times each day. The residents' only available strategy was to fetch water at dawn so they could get some relatively clean water for domestic use. Even with this strategy, they still had to contend with the cow dung. The residents complained that when they went to the riverside during the time the cattle had come to drink, they had to wait for the animals to finish before they could fetch the water else they would incur the wrath of the herdsmen.

Following this revelation by the farmers, personal observation was necessary to check the extent of the pollution. Figure 6 presents a collection of some scene captured during the field observation. These pictures were taken amid protest from the herdsman. The gun wielding herdsman threatened to shoot if captured on camera. Therefore the shots had to be taken from afar when the animals were about to leave the riverside. The scenes at rivers Koowire and Bontre were horrendous, the river had turned brownish and cattle were seen wallowing in River Koowire as figure 6 depicts. Not only were the natives losing their crops and farmlands, their sources of water had also been badly destroyed or heavily polluted by these cattle. It was not surprising that some residents suffered cholera, guinea worm and other water-borne diseases. This development therefore informed the reaction of the affected communities to confront the herdsmen. But they claimed that

anybody who attempted to drive the cattle away from the riverside incurred the displeasure of the herders. The pictures portray the claims by the residents as the children stood to allow the cattle to drink.



Figure 6 Contamination of River Koowire by cattle

Source: Field survey, 2015

On the other hand, while the Fulani herdsmen accepted water pollution as a source of conflict, they saw it as a common resource, to which they laid claim. Again, herders considered this as the only source for their cattle. To this end, they refused to be restrained. This reaction by the herders resulted in conflicts. Their action was in contravention with the initial agreement they had with the Agogo Traditional Council to dig wells for their cattle. They explained that the large size of the cattle made it difficult keep them in kraals and provide them with water and fodder. This could be the case as all the herders surveyed had more than 60 cattle into their care. The significance of water to these parties and the inadequacy of it was the source of conflicts in the study area.

4.4.4 Institutional failures

Another major cause of conflicts identified by the respondents was the inability on the part of established institutions to deal with this issue. Farmers ranked this as the 4th major trigger of conflicts. Generally, the farmers were not satisfied with the manner in which cases involving Fulani herdsmen had been handled by these officials. The general belief by the crop farmers was that the herders sold their cattle to bribe the police especially. They alleged that the police refused

to act on reports lodged with them against the Fulanis. Again, they claimed the police always asked them to arrest the offenders and bring them to the police station or had hire a car to in order to carry out those arrests at their own expense. In the end, these cases resulted inconclusively as the police were allegedly uninterested. The chief of Koowireso, stated that:

“they killed someone last two weeks. The Fulanis are there and they haven’t arrested anybody...when they know the Fulanis who did that.” He continued that *“foreigners are here wielding AK47.....guns that even the police do not have. Meanwhile, they come here to disarm us of our single-barrelled guns we use to kill grass cutters.....they’ll arrest you but the foreigners...hmm.”*

The Kontihene asked what the police were doing about these illegal weapons. He also mentioned that the government lacked commitment; *he said Boko Haram started this way.* A respondent surveyed also recounted how he nearly lost his life after causing the arrest of a Fulani. According to him, before he got to his village, the accused person had been released on bail. He alleged that in an attempt to reprise, the accused with his colleagues went to his village to kill him but in his absence, they gang raped his wife and set his stored rice ablaze. The farmers questioned the result of the many eviction plans and court orders. This inaction by the police made the people to take the law into their own hands. To Tonah, (2006) many of these cases that are handled by government officials are often inconclusive due to the problem of corruption.

The crime officer in a sharp rebuttal refuted these allegations. He referred to the documents he earlier gave me as a response to the complaints the received. He said the police were committed to maintaining peace and tranquillity in the area. He continued that the police were prepared to protect lives and properties from any attack by anyone. The officer also complained about the lack of logistics for their operations. Besides, he indicated that the herders lived in the bush and was therefore very difficult to locate them. Lastly, the lack of judicial will to take legal action against some miscreants who indulged in illegality was the cause of this menace.

The farmers also accused the Traditional Council of being owners of some of these cattle and therefore being behind some of these crimes. Chairman of the Agogo Residents Association, had earlier accused some chiefs of selling lands close to their farms to the Fulani men contrary to earlier agreements reached between them and the herders. In view of this judgments went in favour

of the Fulanis. Meanwhile, it emerged from the REGSEC report that some farmers sold out lands to the Fulanis. The report established that madam Abena Gyekyawaa of Nyamebekyere had in 2008 transferred a parcel of land to Alhaji Dansofo for cattle rearing at a fee. Abbass, (2014) and Tonah, (2006) in separate studies had earlier stated that farmers were particularly unhappy about what they regarded as the ungodly alliance between the Fulanis on one hand and some chiefs and policemen.

Following this, the perception of farmers about the roles of the Police, the Local Government and the Traditional Council in the conflict situation within the study area was sought. Figure 7 is the summary of how farmers perceived roles of the above institutions in conflict management.

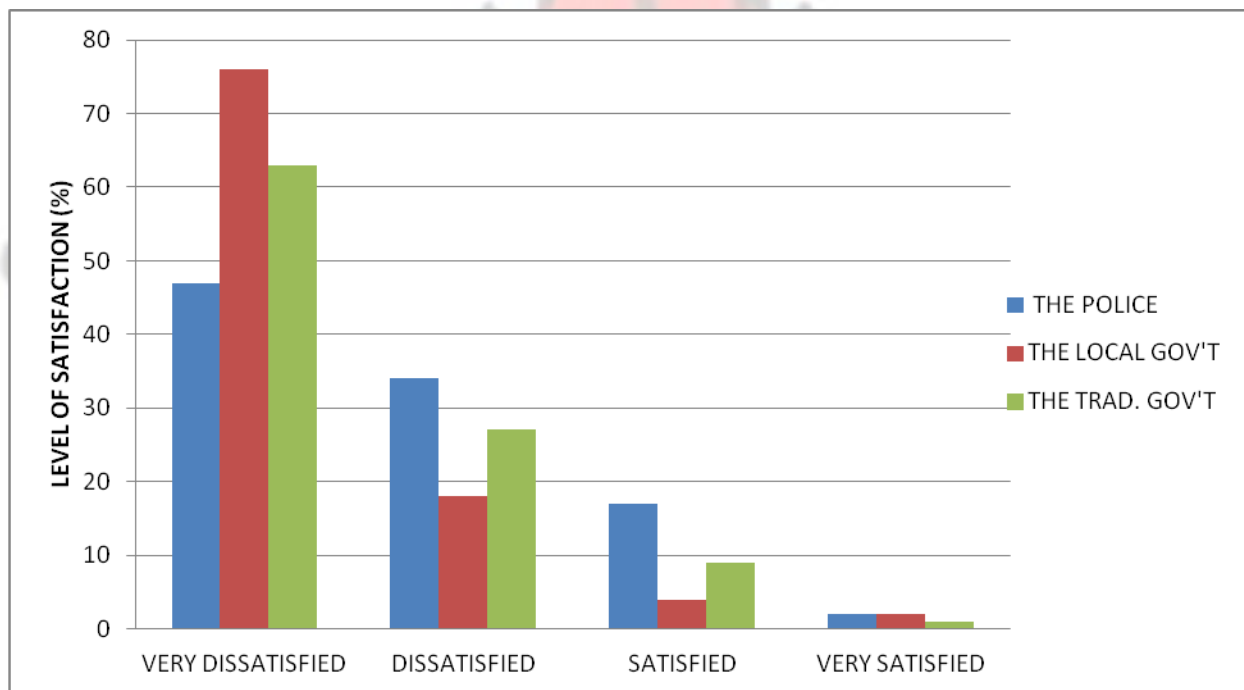


Figure 7 Perception of farmers on the roles of the Police, Local Gov't and the Trad. Authority Source: Field survey. March, 2015.

The figure above indicates that 81%, 94% and 90% of the farmers were either dissatisfied or very dissatisfied with the roles played by the Police, the Local Government and the Traditional Council respectively. In spite of this mass dissatisfaction the police were ranked higher than the other institutions. In fact, this includes farmers who had never seen the role play by any of these institutions. Some believed that these institutions did not have the capacity to deal with this matter. They believed that only the government (thus the president) could do something about it.

On the other hand, 19%, 6% and 10% were satisfied with the Police, the Local Government and the Traditional Council respectively. This category believed that these institutions acted well whenever they were called to duty. On the part of the police and the District Assembly, they claimed that any attempt to deal with this issue dispassionately could cause their transfer or dismissal. The Assemblyman for the Brahabehome cited the case of the former DCE, Mr. Osei Bonsu whom they attributed his sacking to his determination to resolve the age old herder-farmer conflicts once and for all. He also alleged that he had heard about the impending transfer of the Regional police Commander, DCOP Kofi Boakye upon his visit to the area in an attempt to resolve the conflict.

The point often overlooked was that the dissatisfaction of the farmers in the manner in which these institutions handle cases involving Fulani herdsman pushes them to carry their destiny in their own hands. This appears suitable with Olugbenga, (2013) and Tonah, (2006) position that when the state pays lip service to the security of its citizens and there is no sufficient assurance for their means of livelihood and safety, fear and suspicions emerge. The citizens then exercise no restraints in protecting the security and safety of their resources and lives. Since the state cannot regulate the mutual coexistence of these land-users the parties may have to resolve to struggle between themselves with a no retreat, no surrender and for survival. This again confirms the earlier positions of (Benjamin et al 2009; Beeler 2006; Noorduyn 2005) that institutional failure to resolve conflicts are among the major triggers of conflicts.

The herder on the other hand shared a different opinion. Results from figure 8 show that 69% of them were at least satisfied with the Police and the Traditional Council while only 6% were satisfied with the function of the Local Government. However, 94% were not satisfied with the District Assembly whereas 31% were dissatisfied with the Police and the Traditional Council. They attributed their satisfaction to the fact that the traditional council had provided them land to graze on while the police deals with cases they report to them. In addition to this, they claimed that these institutions had not been worrying them as the farmers had been doing. In spite of this, some still saw their roles as detrimental to their course. On the part of the Assembly, many of these respondents did not know anything about their roles. But, the spokesperson questioned the leadership skills of the DCE. He said, *the Assembly doesn't have a good leader. Have you heard*

the DCE invite the fulanis and the farmers for talks before? The inability of the state to protect the rights of the Fulanis who saw themselves drove them to clash with the residents.

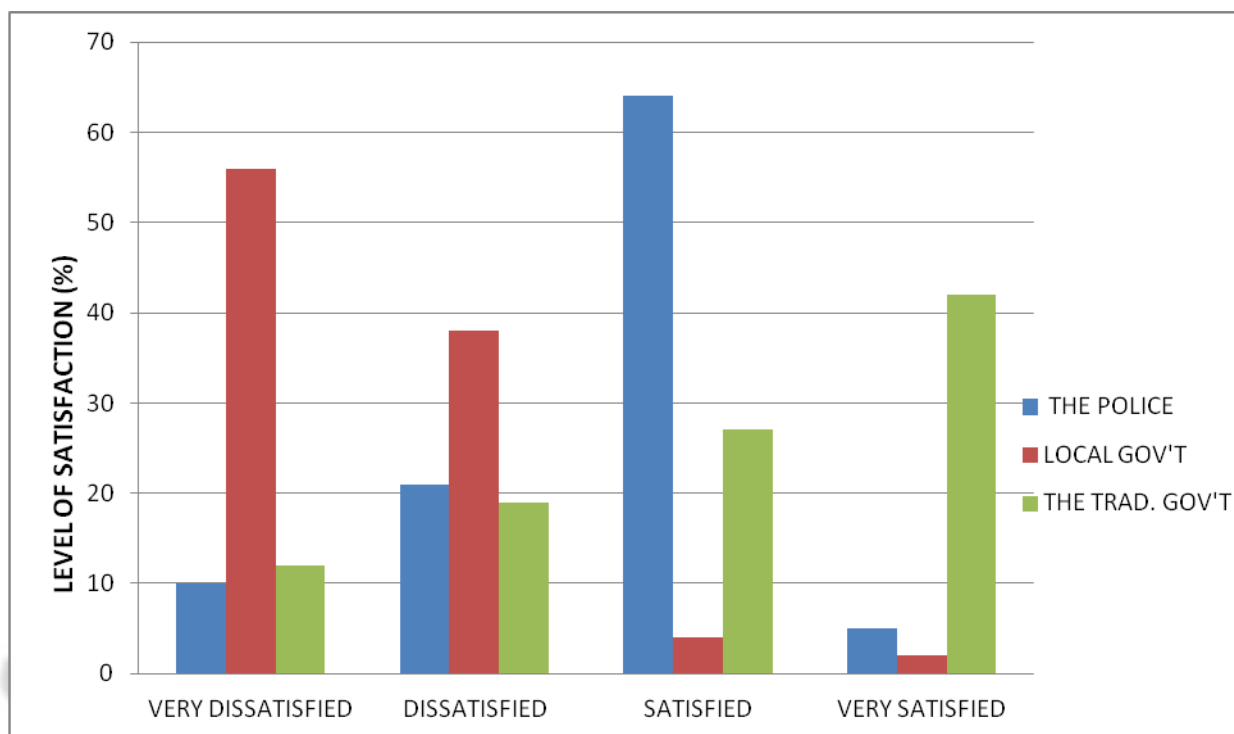


Figure 8 Perception of herders on the roles of the Police, Local Gov't and the Trad. Authority

Source: Field survey; March, 2015.

If the allegations by farmers were true, then one could say that the harvest of conflicts between the farmers and herders might have been planted and watered by their leaders. The study agrees with (Olugbenga, 2013; Oyama, 2012; Tenuche and Ifatimehin 2009 and Tonah, 2006) position that the inability of government agencies to deal decisively with perpetrators of crimes is the reason for the occurrence of conflicts in such communities.

4.4.5 Harassments of Fulanis and their cattle

Maltreatments of the herders and their cattle Harassment of Fulani by the crop farmers were identified by the Fulanis as the biggest problem existing in the area. These were ranked 1st

($\bar{X} = 12.8$) and 2nd ($\bar{X} = 12.7$) major source of conflicts with the farmers. However, the farmers' opinions on these were entirely different as they ranked these very low. Harassment of Fulanis was considered as the 10th source of conflict followed by the killing of the cattle.

The herders claimed such crimes had been reoccurring in the communities several times over the years because definite solutions had not been adopted. The herders alleged that the farmers had particular disrespected for them especially, whenever they saw them with their cattle near their farmlands. They continued that farmers some farmers rained insults at them or threw stones at them. Others threatened to kill or poison their cattle while some carried on with their threats. In fact, 80% of them alleged personally being involved in the burial of seven of their colleagues between 2010 and 2014. They went further to allege that when the farmers killed those people, the normally hid their remains in the bush. Again, 12% of them claimed to have been received cutlass wounds from the farmers. Out of the 25 respondents surveyed, seven of them insisted that they had personally lost cattle from poison by farmers. In all these cases, they indicated that no compensation was ever paid to them. Ten of them also recounted how they have had to endure insults from the farmers daily. For them, they could not sit back to watch their cattle and colleagues being killed for no wrong doing. An interview with the spokesperson confirmed the frustrations his people had been going through. He showed pictures of 38 herders allegedly killed by the farmers. As I went through the pictures with him he said:

“when they were sent to Kansasu village, the people said they won’t leave them. The unscrupulous persons took advantage and killed them...this one was slashed at the throat....this one was slashed here...he died at the hospital...this one was shot and killed...they first shot this cattle....see how the hid his body.....this one too we went and picked him... check if you can identify me.....so you see, what we say is not a lie. I’ve provided you with evidence.... You can go to the police and verify”.

Regarding their, cattle the spokesperson reported how 24 cattle belonging to his uncle had been poisoned three days ago at Pataban. He claimed chemicals were put in the stream to poison the animal. It emerged that the cattle were taken there by children of this man so he questioned what would have happened if the children had drank from the stream.

With respect to the farmers, they refuted the claims by the herders and described it as mere exaggeration. The farmers insisted they could not have done so in the presence of AK 47 gun wielding herdsmen. They rather accused the herders of shooting at them when they saw the applying chemicals on to their farm, misconstruing that as an attempt to poison the cattle. About

48% of the farmers however admitted ever driving the cattle away from destroying their crops or rebuking herders for watching their cattle cause damages. A herder responded that:

“the farmers often attack us and our cattle. When they attack us, we are left with no other choice than to defend ourselves, else, they’ll kill us and take our cattle. Is it not natural that we defend ourselves?...ahaa and when we do that they say we are murderers...if I destroy my cattle destroy your crops do you have to kill me?”

Information from the showed that crime in the district was not limited to the to the Fulani herdsmen alone. The police confirmed reported cases of murder of Fulani and poisoning of cattle. The police also confirmed heightened tension emerging out of these claims. What was clear was that some of these crimes were committed by Fulani themselves (see appendix I). Attacks on the Fulani and their cattle had resulted in several deaths in the area. The nexus between harassment of herders and conflicts is incontrovertible.

4.4.6 Killing of residents and Sexual harassment by herdsmen

In a related development, the lives of the local residents were also in danger. They suffered death, various degrees of injuries and sexual harassment on the part of the women. These assaults were blamed on the Fulani herdsmen. These killings were the 4th major source of conflicts between them and the Fulanis. According to the farmers, the most significant cause of these deaths or injuries had to do with the application of chemicals onto their farms. Due to the large sizes of their farms, it was prudent to apply weedicides or other chemicals to ease farming. Unfortunately, the herders saw this as an attempt to poison their animals. As a consequence, they received gun shots from the Fulanis causing deaths or injuries. The farmers asserted that visiting the farm was a risky venture, as they were not guaranteed a safe working environment. The strategy was to walk in groups to their adjoining farms or practised “nnoboa”. Appendix I is a representation of recorded deaths between 2007 and 2015.

Aside these killings, the women also suffered sexual harassment from the unscrupulous herders without any provocation. These accusations were as common as the killing of people. This issue started when the Fulanis came into direct contact with the farmers. This brought the females and wives of the farmers closer to the herders, leading to several cases of sexual harassment and armed robberies against the Fulanis.

In such instances the option available to them was to mobilise themselves and attack the Fulanis. A woman respondent at Abrewapong narrated how a woman was raped right in front of her husband in 2011.

“All the cases of rape that you have heard are true.....I have seen and heard several cases before....in this instance he raped a woman at Kwame Addo [a community in the area]....eh...hmm... she was with her husband from the farm and they met the Fulani. There and then, he asked the man to take the baby and then she raped the woman at gun point, right in front of her husband. Hmmm.... these things have been happening but whom are you going to complain to? Owura, because of this we the women don't farm at farther distance oo...if you want to go to farther distance, you have to go in company of a man”.

When asked whether such cases are reported to the police, her response clearly indicated lack of confidence in the police. She said numerous reports to the police had hardly yielded any response. But the police denied these allegations. They indicated that they did not receive reports of rape. They only heard of unsubstantiated allegations without formal complaint.

The herders' opinions of these as causes of conflicts were low. They admitted to the shooting of farmers by the unscrupulous herders among them, especially the transhumant pastoralists. The Fulanis were quick to add that they had also been at the receiving end of some of these killings. They however attributed this to the natives and cattle rustlers. A *Fulani respondent mentioned that: “This is what is happening. What happens is that it is the farmers who kill, when you resist the attack on you or your cattle, they will then turn round and accuse you of attack.”* They justified some of these happenings as self defense. The respondents admitted how insecure they felt, even in the midst of their own colleagues. The spokesperson accepted that *“there is Mensah in every house.”* This means there are bad nuts in every society. Regarding the allegations of rape, all of them admitted hearing such speculations but were quick to deny ever engaging in such sacrilegious act.

As a follow up to growing feelings of frustration over alleged acts of violence among the Fulani herdsmen, the farmers attacked the Fulanis. These attacks were similar to the frustrations by the herders over the killing of their cattle. These led to reprisal attacks from the Fulanis. The observation was that robberies and rapes were not limited to the Fulanis; the local residents also committed some of these atrocities. The crimes were sometimes committed as reprisals from mere

rumours or suspicion. Any news of attack on the other party created tension and suspicion. In such circumstance, each party was at risk of being killed or maimed. However, the study found that most of these allegations were exaggerations on the part of the two groups.

4.4.7 Burning of farm products

Not only had the farmers suffered destruction of crops by the cattle, they have also had their farms and stored products burnt. The farmers identified burning of farmlands and products as the 3rd major cause of conflicts with an average score of 11.5. However, the herders regarded this as a minor (4.3) source of conflicts. The farmers claimed this mostly happened during the dry season. They explained that the herders deliberately set fire into the bush to burn the withered grass in order to get green grasses sooner to feed their cattle. In course of that, the fire extended to their cultivated fields to destroy their crops. They blamed the degradation of the hitherto evergreen forest on the rampant bush fires perpetrated by Fulani herdsmen. The farmers alleged this act by the herders had constantly reduced the fertility of the soil, hence the application of fertilizer regularly. Additionally, the farmers accused the herders of setting fire into their granaries to burn the harvested crops. It was observed that farmers usually stored their crops in farms or their villages. The farmers indicated that due to the inadequacy of fodder after harvest, the herders took their animal to feed on the stored crops. However, in order to conceal this bad deed, they set fire into the rest so as to blame the cause on accidental fires. The figure 9 portrays the leftover of burnt maize of a 28 year old farmer at Koowireso. He explained that this situation had been a seasonal affair over the past three years. Farmers in their determination to repay loans and survive confront the herders to demand compensation. This development bred conflicts between the two parties. To avert this, the young male farmers opted to spend the nights in the bush.



Figure 9 Sample of burnt maize that was stored in a granary

Source: Field survey. March, 2015

Results from the table indicate the low premium the herders placed on this factor as a spark of conflict. While admitting the exigency of green grass for the growth of cattle, the herders denied knowledge of intentionally setting fire into the bush. They claimed these fires had the capacity of putting themselves and their animals in danger because the fires did not know any boundary. As a result it did not make sense to set fire into the bush that could harm their animals. They challenged the essence in burning crops that could serve their animals the next time. Rather, they accused the farmers of deliberately setting fire into a harvested farmland or empty barns just to win the sympathy of the police or demand unacceptable compensations. In addition, they accused the farmers of instigating these fires to make the area uncomfortable for their cattle. Even though feeding the cattle during the dry season was a major problem to the herders, burning of barns was the last option for them. They admitted having to climb trees to cut the leaves for the animal.

The REGSEC report had earlier identify this as one of the causes of conflicts. In reality, much of this bush fires could also be attributed to the activities of charcoal burners and hunters. In spite of this, the research found that most of the crop destructions coincided with the dry season. The attacks on the Fulani for crop burns resulted in reprisal attacks. From the discussion so far, there is no denying the fact that, burning of farmland or harvested crop was a recipe for chaos between farmers and herders.

In summary, the groups identified that destruction of crops and farmlands, followed by encroachment of farm/grazing land and contamination of rivers as the major sources of herderfarmer conflicts in Asante-Akim North District. Others include assault on both parties and cattle and the state's inability to deal with this menace in. The cattle owners had not provided the requisite confinements and water sources as ordered by the high court in Kumasi. What became clear was that, in conflict situation, there was likely to be an exaggeration of the facts and denial of guilt by the parties involved. Again, different parties had different perceptions about issues surrounding the occurrence of conflicts. The point is that, the farmers regard every bit of disagreement between them and Fulanis as a conflict while the Fulani herdsman overlook some minor cases and considered them as pattern of life but not conflict.

As rightly posited by Olaiyan, Michael and Okeke-Uzodike, (2015) and Hussein (2005), the increase in the occurrence of herder-farmer conflict may be undoubtedly pointed in the direction of the consequence policy of expulsion within the political economy. This includes the 'operation cowleg' which was formulated ostensibly to put an end to the conflict in Ghana. Nonetheless, Tonah, (2006) argued that they rather deteriorated the already worsening condition. The farmers concluded that, the herder-farmer conflict could seize only if there was a restriction to the movement of the cattle. The study found that the issues were far more complex than a mere foreigner invading a farming community.

4.5 Effects of herder-farmer conflicts

Introduction

According to Ndambi *et al*, (2008) conflicts usually have far reaching consequences including loss of lives and properties and displacement of people. It also creates tension and suspicion and causes outbreak of diseases. These can be categorized into humanitarian, socio-economic, health and environmental. As noted already, the eruption of violent conflict between farmers and herders in the study area emanated from different sources. It manifested itself in many forms ranging from subtle verbal arguments to open confrontations. However, the frequency and intensity differed across space and time. This tenacity by the parties to uphold the "no retreat, no surrender" attitude had a serious implication on the resolution of these conflicts leading to dire consequences.

4.5.1 Humanitarian Effects

To begin with, the eruption of violent conflicts between herders and farmers has resulted in lots of humanitarian crises including loss of lives (see appendix I), rape and maiming of people. About 95% of the farmers surveyed indicated that they had witnessed physical harm meted to people by the Fulanis. Moreover, 58.5% of the farmers had personally had open confrontation with a Fulani at one time or the other. Indeed, 9% of these farmers confirmed that they had personally experienced physical injury as a result of these confrontations. These damages range from physical injury to death. The death of Samuel Agboni in February this year was a clear manifestation of the outcome of such conflicts. The linguist of Mankala reported of several killings in the area. When asked whether he had seen some before. He had this to say:

“oh yes...several of them.... my phone battery has run down otherwise iwould have shown you shocking pictures...even quite recently, they killed a man called Kwadwo Drah... they beheaded him in his house at Kwadwo Drah village off Mantukwa road. I have personally been maimed by the Fulanis before. He continued that they killed a man by name Agya Seidu at Mankala so the chief sent us to go and drive them away.... not knowing they were hiding in the bush so the hit me with a stickhmm I bled profusely...take a look at my occiput. Can you see the mark?....this is what I'm talking about”

Other witnesses included the 26 year old farmer at Abrewapong who sustained cutlass wounds from the Fulani. He stated that he went to his tomato farm to harvest when he saw cattle on the farm with the herder at a distance. When he drove the animals from the farm, the herder complained of having scattered his animals. Conflict then ensued and the herder hit him with a cutlass. These and many others are the effects cited by the farmers.

As a result of the conflicts, some women had been reduced to the status of widows. The woman at Nyamebikyere whose husband was shot and killed was an attestation to this claim. The residents' claim is supported by the High Court suit number LMISC 11/2012 where pictures of the remains of Kofi Obeng and Kwame Awuah Solomon were tended in evidence. Again, the REGSEC report (2012) acknowledges cases of murder and rape. In fact, the report stated that the effects of these conflicts were more pronounced among the crop farmers than the herders.

Aside from the murder and rape, it emerged that the conflicts had led to restrictions in the movement of some farmers, especially the women. In such situations, they could not walk alone

to their farms. Some of the women indicated that they were now forced to farm just around the communities to avoid any possible death. The men on the other hand could not stop going to farm but always went to farm in groups. Not only were the farmers afraid to go to farm, the health of the people had been compromised as health workers also fled the area from the trepidation posed by the fulanis. The activities of market women were not spared, as they could not go to the market.

Additionally, the conflicts had led to high rates of attrition as only two and four teachers each were handling classes one to six in Mankala and Abrewapong respectively instead of a minimum of six for each school. Students had also dropped out of schools within the communities due to the activities of the herdsman. The schools were virtually closed down as children from the surrounding villages had dropped out of school. In Nyamebekyere for instance, it was observed that the children over there had abandoned school or had relocated to Agogo and Ananekrom. This was due to the fact that, the children had to attend school at Brahabebe but the recurrence of conflict put the lives of the school children in danger. Children did not want to go to school for fear of being attacked. It was alleged that, if the little grown up females, could be raped. In addition to this, the teachers had abandoned the schools for fear of their lives. In Abrewapong, it emerged, the teachers from the district refused posting to that community due to the volatility of the community. This was the situation in all the communities. The Linguist stated that the two teachers handling the primary one to six came from the Kwahu East district. The option left for the parents was to take them out from the school or find a caretaker elsewhere to continue their education there. It was obvious that the children's education had been mortgaged. The utmost effect of this menace was the increase in illiteracy level witnessed among the respondents. Such situation has effect on productivity in the country. It was not surprising that these developments were high on the agenda of the meeting held by representatives of 21 identifiable groups and association on 13th February, 2011 (REGSEC, 2012).

One more effect of herder-farmer conflict is its consequent impact on children's education. It was observed that children from Nyamebekyere who had to walk to Brahabebe for school were frequently restricted due to the presence of the Fulanis in the area. This led to the closure of the school and clinic in 2011. Even schools in the other communities faced imminent closure because most of the parents had taken their children to the major towns because both pupil and teachers had abandoned the school for fear of being attacked. The respondents alleged that the few teachers

who report to school did so mostly twice a week. It was further observed that in Abrewapong for example, there were only two teachers who handled all the students from Kindergarten to primary six. Furthermore, these teachers came all from Kwahu south district to teach these pupils. Teachers posted by the Asante-Akim north district education directorate refused posting to these areas for fear of their lives. Besides, farmers found it difficult to cater for their children's education especially the purchase of textbooks and other materials.

On their own part too, the herders admitted losses of lives they had witnessed and injuries they had sustained themselves. Three of the Fulanis showed bodily injuries they claimed to have sustained from the farmers. They argued that their situation was more precarious because they hardly received medical attention from the Agogo hospital. In confirming these assertions, their spokesperson retorted in an angry fashion that:

“Masa,.. what do the pictures I showed you depict?....eh..what do they depict?....why, are they asleep?.....who killed them? I’ve provided you with evidence...you can go to the police station and check. If anybody has evidence let him bring it. That’s why I inspected your ID card. If anybody comes to challenge me then I pull out my evidence so we put them side-by-side”.

The herders also acknowledged some restrictions to their movements due to the rising tension that emerged from these conflicts. The assertion was that at the peak of these conflicts, found it difficult to graze their animals where fodder was abundant, which also happened to be within the neighbourhood. Fifteen (15) of them chose to relocate for sometime before they came back when the tension subsided. They also cited their inability to access health care from the neighbouring health facilities. Moreover, they were restricted from accessing the local market. More importantly, the Fulanis admitted the difficulty in attending the Juma prayers at Agogo on Fridays due to increased tension.

This finding confirms the position of researchers such as (Abbass, 2014; Okoli and Atelhe, 2014; Ofuoku and Isife, 2009; Tonah, 2006 and Nweze, 2005) whose findings concluded the conflict between farmers and herdsmen result in avoidable deaths. Similar expositions also appeared in the media headlines afore listed. In addition to these, the official report obtained from the police (see appendix I) added to these claims. This report indicated that the humanitarian consequences of these

conflicts spread across space and time. What was revealing was the fact that the conflict had led to the deaths of both parties especially the economically active population. This surely had affected the productivity of the inhabitants. This calls for urgent attention by the security agencies and the Agogo Traditional Council.

4.5.2 Socio-Economic Effects

Conflicts between herders and farmers have brought about several socio-economic effects including. Notable among them are tensed social interrelationship, restrictions to resources and destruction of properties. Other effects include low agricultural production, reduction in income and increased poverty.

Break in social cohesion

The conflicts have created tense and volatile relationship between the herders and farmers which have affected the level of cooperation between them. Attempts by the local residents to forcibly send away the herders had further worsened the tensed relationship that existed between them. The spatial distance between the two parties earlier brought little social interaction between them. As time went on, the two parties shared common market, health facilities and mosques with the moslem residents. Some even inter-married with indigenes of Agogo. The hospitality of the local people created an ambience of peace which the herders took advantage and invited their compatriot. They increase in the number of cattle couple with the increase in herders population has resulted in animosity between the two parties. The farmers saw the herders as a bunch of barbarians ready to commit crimes without any provocation. On the other hand, the herders also considered the farmers as enemies to their survival and progress. This situation manifested itself by mistrust and animosity between the two groups. It therefore created an ambience of mutual suspicion and tension which threatened the peace, security and progress of the district. This situation is supported by the findings of Tonah, (2006) and Okoli and Atelhi, (2014) which identified breaks in social cohesion as an outcome of communal conflicts. However, the initial co-existence and a symbiotic economic relationship between the groups as identified by Abdulai and Yakubu, (2014) had been badly damaged.

Destruction of farm products

Conflicts within the study area have resulted in damages to several farm products. Among these are the losses incurred on crops, irrigational facilities and animal products. All the farmers surveyed indicated the losses they suffered from the destruction of their products. The destruction by cattle and fire has led to losses of farm products. About 20% of the farmers who used to harvest more than 10 Kia truck loads of plantain every four months could hardly load 2 trucks as results of the activities of cattle. For the watermelon and cabbage farms a visit by the cattle meant a lost of the entire investment. The chief of Bebuoso recounted his losses in an interview:

“Even me when I got some small money to cultivate 20 acres of plantains...oh the animals have consumed everything. I hired a Kia truck to convey my 10000 suckers at 20 million, with labourers.....hmm a debt of more than 50 something million..... go and see what the cattle have done to it.....two women just left here.... They came to complain about the destruction of their crops”

These revelations showed the losses people incurred. But the farmers were not the only victims of these losses. The herders also suffered from material damages. This happened in the form of death to their cattle. As earlier noted, when the farmers inflicted physical injuries on the cattle by using cutlasses or guns or by poisoning the cattle, the herders lost a number of these animals. All these damages translated into real and quantifiable material losses leading to high dependency ratio and therefore increased impoverishment and destitution particularly in rural areas. As rightly observed by Tenuche and Ifatimehin (2009), the destruction of crops or cattle had a direct impact on the livelihood of the people because their economic activities were inextricably linked to these products.

Reduction of output and income of farmers

The field survey also detected that the conflict has brought poverty to the farmers, due to low crop yield and reduction in income. Large farms were often victims of cattle invasion and destruction which resulted in low agricultural production. By extension, this had a direct impact on the people's income levels. Again, the inability of the farmers to go to farm during conflicts, inability to spray their crops and the destruction of crops all led to reduction in the quantity produced. Even though low crop yield can lead to loss of income, what emerged in the study area was the result of crop destruction by fulani herdsmen. Much as the quantum of lost income could not be properly determined due to the fluctuating prices of the products and the inability of the farmers to state

their precise income, the farmers confirmed that the quantum they produced reduced by more than half whenever cattle destroyed their farm. The case of the 28 year old maize farmer at Koowireso, whose maize barn was burnt, provides evidence to this effect. According to him, he could not have even a cup of maize to sell because of the quality of the product. It was evident that the farmers who always borrowed money to finance their activity could not pay back the loan. These frustrations were articulated by farmers through the chief of Bebuoso and other communities. Besides, their standard of living based on the mud type of house houses they lived in, the food they ate and the resources available signified the level of poverty in those communities.

The loss of cattle by the herders also meant loss of huge sums of money. As earlier stated, the lives of the herders depended on their cattle. As such, any loss meant loss of livelihood. Though most of the cattle did not belong to them, they were given a cow each after every four months of tendering. The spokesperson cited the losses his uncle had incurred upon the poisoning of his 24 cattle. He asked how much the uncle could have gained if he sold each of them for 15 million old Ghana cedis. It is well established that the losses of income to the farmers was very severe. Besides, the loss of these products meant food insecurity in the local environment in particular and the nation as a whole.

Restriction to resources

Another significant effect of these conflicts was restriction to valuable resources by both parties. These were farmland, water and shelter. Figure 10 presents claims by farmers over restriction to resources. It is discernible from the figure that land was the most important resource farmers were frequently restrained from during conflict situation. Out of the 200 farmers interviewed, 70% contended that restriction to land was frequent during conflict situation while 6.5% never experienced any restriction to land. This was the situation whenever conflict ensued between herders and farmers. Farmers were mostly restricted from using the main source of their livelihood. The frequent restriction to land was claimed by the farmers who live on their farm plots alone. They mostly came under attacks by the fulanis at night. The respondents from Makala also recalled how in 2011, the entire community had to flee into the bush at night when they came under attack by some fulani herdsmen. What this meant was that much as conflicts kept recurring, farmers were denied the opportunity of going to farm. This situation had dire consequence on the food security of the area and the nation at large.

On access to water, 49% of the farmers were confronted with frequent restrictions. This was because four out of the six communities surveyed had access to boreholes provided them by the world vision international and therefore did not consider access to water as a problem. However, residents of Koovereso and Mankala who lacked this resource had to walk some distance to fetch water and so conflicts outbreak created fear among women and children which created some restriction. What they did in such situations was to walk in groups or in the company of men.

It emerged that shelter was the least restricted resource. About 77.5% of the respondents never experienced any restriction even in time of conflict. This could be explained by the fact that the communal living made it possible to present a formidable force to withstand any attacks from the Fulanis. Therefore, restriction to shelter was not an effect suffered by the farmers.

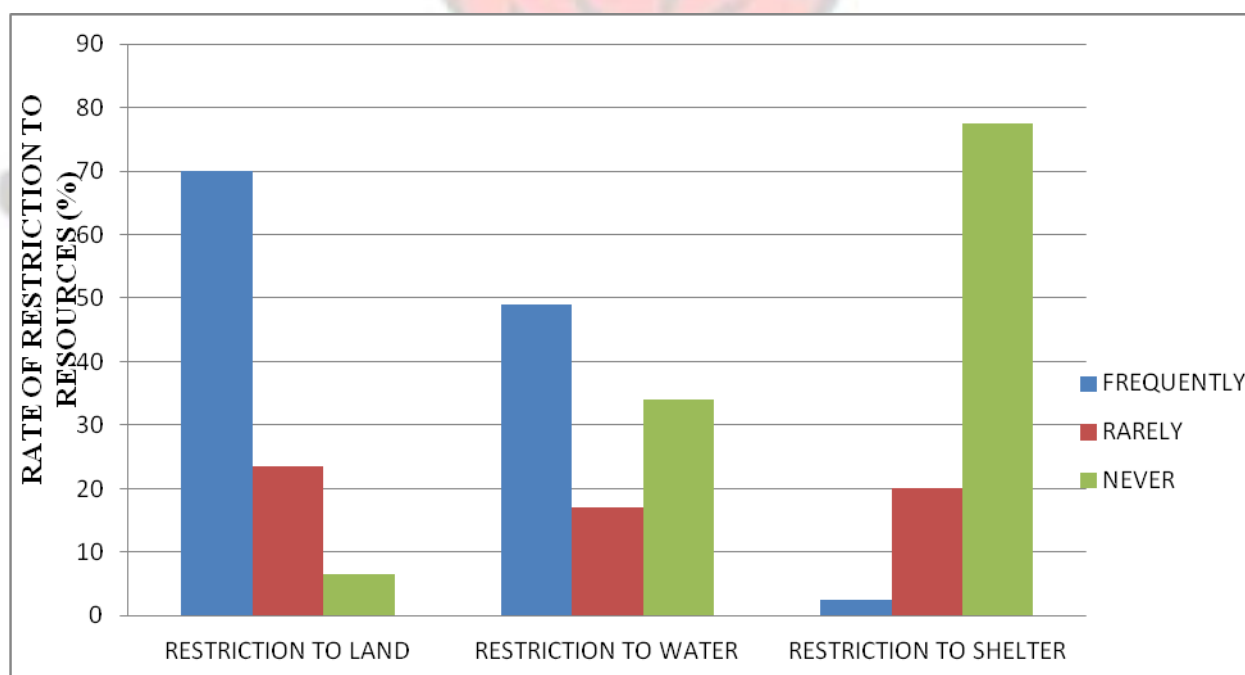


Figure 10 Restriction of farmers to resources during conflict Source:

Field survey. March, 2015.

A similar question was posed to the fulani herdsman. results from figure 11 indicates that majority of the respondents never experienced any restriction to any of the resources. However, pasture was the resource the frequently got restricted to. 14% of the herders frequently suffered restriction. They asserted that for fear of their lives, they sometimes relocated to the Kwahu portion of the Afram plains to graze their cattle when tension rose up in the area. The response from the herders is a manifestation of their determination to survive in this favourable environment irrespective of

the opposition they meet in the area. It however contrasts Olabode and Ajibade's, (2010) work in Kwara State where the conflict resulted in 60.7% of the crop farmers being displaced.

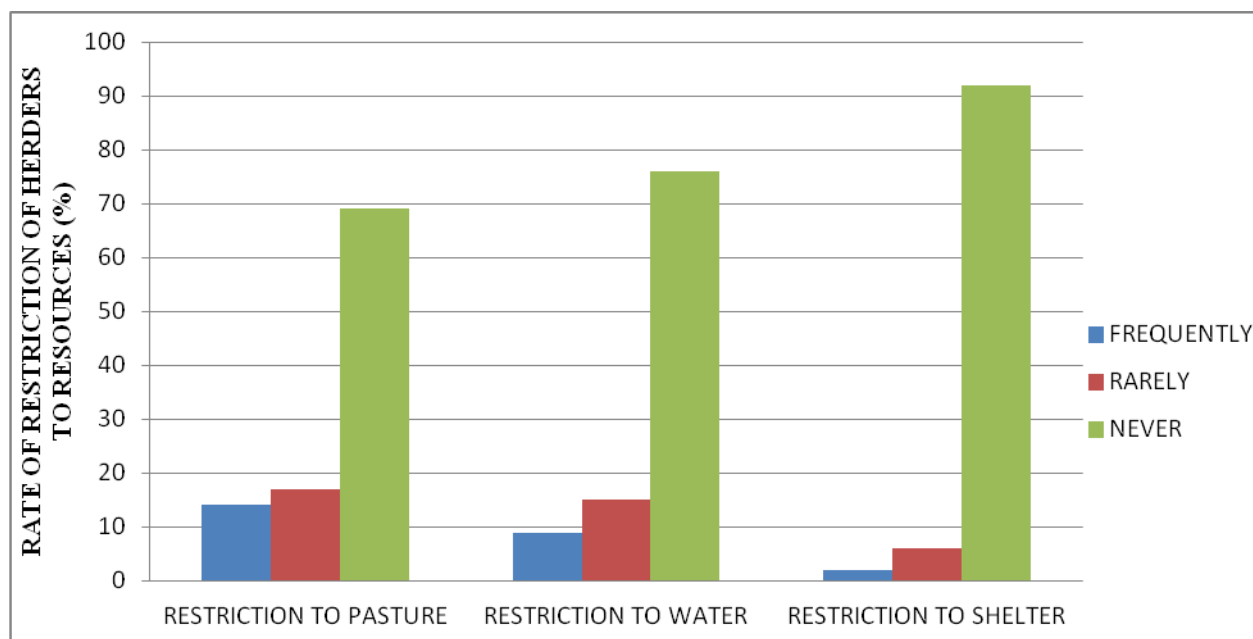


Figure 11 Restriction of herders to resources during conflict Source:

Field survey, 2015.

In spite of the attacks on each group, the respondents from both parties had not abandoned their occupations since their only means of survival depended on the farming work. As a result of the low educational status for both parties, the only opportunity left was to engage in agriculture. As such, the only adoptive strategy for both parties was to walk in groups either to their farms or for grazing.

Following this, the general effects of the respondents were surveyed and the results presented in figure 13. Although, there was general consensus among the respondents that the conflict had tremendously reduced their income status, the biggest challenge was how to repay the loans they obtained from the financial institutions or lenders (52%) which culminated into financial effects. The explanation given was that these lenders had very little sympathy for them even when their crops were destroyed. It was therefore not surprising that loan repayment was the major problem. It was realised that some of the farmers resorted to fleeing the area from their creditors. The residents of Mankala alleged that a farmer committed suicide after his harvested maize was allegedly burnt by a fulani herdsman in 2008. As observed by Okoli and Atelhe (2014), results of conflict psychologically create an atmosphere of mental siege and panic among the citizens such

that it threatens the peace and security of the area. In agreement with Ofuoku and Isife (2009), these developments had a negative effects on their savings, loan repayment and food security especially to the urban settlers whose food supply depended on the rural folks.

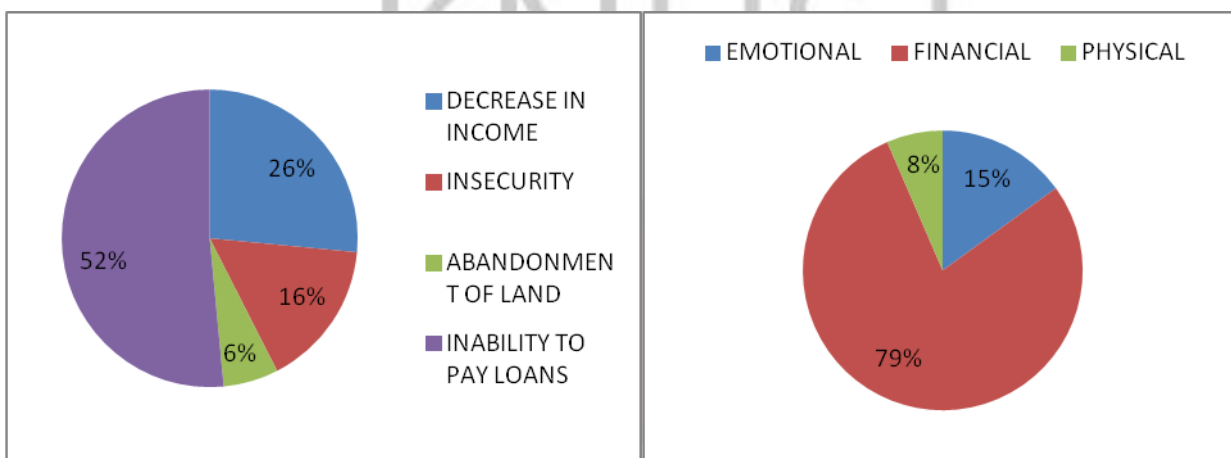


Figure 12 General effects of herder-farmer conflict

Source: field survey, 2015.

In the nutshell, the socio-economic impacts of the conflicts have had far reaching consequences on the level of poverty and hardship in the rural communities of Asante-Akim north district. The impacts have been well documented in (Tonah, 2006; Tenuche and Ifatimehin, 2009; Ofuoku and Isife 2009; Bello, 2013; Okoli and Atelhe, 2014; Abdulai and Yakubu, 2014 and; Manu et al 2014). This could be seen in terms of losses that were associated with destruction of houses and properties, community assets and break in the symbiotic relationships that existed earlier on. For the farmers, teachers, school children, health workers and market women, apart from being restricted also fear to carry their normal duties. Additionally, there is a reduction in output and income of farmers emanating from destruction of food crops, destruction of farmlands, low crop yield. The effects were the inability to repay loan and take care of their children's school fees.

For the farmers, teachers, school children, health workers and market women, apart from being restricted also fear to carry their normal duties.

4.5.3 Health and Environmental effects of herder-farmer conflicts

The continuous grazing of vegetal resources by more than 10,000 cattle on a piece of land for at least 15 years definitely had a negative implication on the quality of the soil. The overgrazing by cattle had exposed the soil to the vagaries of the weather. This had degraded the land and has

rendered the soil susceptible to erosion which was accelerated by the high rainfall in the study area. Other effects included compacting of soil, loss of soil fertility and loss of biodiversity as rightly identified by Ofuoku and Isife (2009). The elderly farmers recalled how the land used to be forest but had now been turned into almost desert as a result of the presence of large herd of cattle.

The pollution of the water bodies in the study area by the cattle had also led to the outbreak of waterborne diseases like cholera. The major health implication was the closure of the Koowireso clinic. This had been brought about by the fear in the area. The health workers there refused to go to work for fear of being attacked. The authorities had to close down the clinic. The consequence was the inability of all these communities to access health care. In summary, the implication of the continuous conflict between herders and farmers in Asante-Akim North District is the illusion of developments. This is the case because the basic necessities of life such as food, shelter, cloth, basic health care, security and right to life are mortgaged.

4.6 Conflict Resolution Mechanisms

4.6.1 Adoptive strategies

According to Olaniyan, Michael and Okeke-Uzodike (2015), several management strategies have been adopted by different governments across Africa to deal with the occurrences of herder- farmer conflicts. One main strategy adopted by Ghana is the policy of ejection of alien Fulani herdsmen. This policy of expulsion has been used in several parts of the country to expel Fulani herdsmen. A typical example is the attempted expulsion in the Atebubu District of Ghana between 1999 and 2000 to drive away Fulani herdsmen. But according to Tonah (2006), it ended up aggravating the problem rather than solving it. Similar policy has been used in Asante-Akim North District but once again, has been unsuccessful despite the court orders, personnel and resources pumped into it. This has been due to the ownership of the cattle and the involvement of traditional council. As a response to the inability of the state to resolve this matter completely, the groups had to develop their own coping mechanisms to manage the situation. This section is devoted to the strategies adopted to resolve conflict. This would go a long way to design appropriate policy to solve this problem. A table is provided to outline the adoptive strategies of both groups.

In line with the positions of Gefu and Gills (1990) and Hussein's (1998), the strategies used in conflict resolution depended on the nature and magnitude of the conflict. Again, the age and sex of the victim, the extent of damage, identification of the herdsman and the willingness on the part of the herder to accept his guilt and compromise determined the adoptive strategy. Generally, when the conflict was occasioned by crop destruction and the offending herdsman was identified, he was approached and interpersonal agreement was reached. This was usually in the form of compensation. This depended on the admission of guilt and the extent of damage. The herder was sometimes pardoned if he showed signs of remorse.

In instances where the herder-farmer relationship was hostile, conflicts that arose in such situation were not usually resolved by personal intervention. The community leaders and the head of the herdsmen or cattle owners were usually involved in settling these disputes. This was the most common form of disputes resolution. This was because the farmer usually asked for outrageous compensation while the herdsman was also not prepared to give in. The combined efforts of third parties mostly reached a reasonable compromise.

The last approach was recourse to the police or court which tended to be the most hated mode of conflict resolution and most sparingly used. The farmers saw the police as being in bed with the herders while the herders also considered the police as exploitative. The herders did not always like to be dragged to court because they alleged they ended up paying more including courts expenses. They held the view that the citizens saw them as very rich people and so expected them to pay whatever fine imposed on them, whether they were guilty or not. Though the farmers saw the court as the best option, they considered the court proceedings as too bureaucratic and therefore demanded lots of time and other resources.

The various strategies adopted by the groups in Asante-Akim North District as presented in table 17 is line with Castro and Nielson's (2003) conflict management strategies. The strategies also integrate some of the management styles of Rahim (2000) such as domination, avoidance and compromise. These strategies agree with (Gefu and Gills, 1990 and Hussein, 1998).

Table 17 Conflict management strategies

Management strategy	Farmers (%)	Herders (%)
Avoidance	3.5	4

Open confrontation	41	72
Negotiation	21	8
Mediation	30	16
Arbitration	4.5	0

Source: Field survey; March, 2015.

Data from the study indicate that majority of farmers (41%) preferred the use of open confrontation or retaliation to seek redress. On the other hand 21% of them preferred a peaceful settlement while 34.5% fancied the involvement of a third party. This is consistent with the approaches they adopted when they got frustrated by their opponent. The adoption of these strategies was informed by the trust they had in those strategies. In fact the choice of open confrontation was due to the mistrust the farmers had in the herders to abide by the agreement reached. The Assemblyman for Bebuoso said: *“....even if you sympathize with him and ask him to pay small compensation, he won't pay! Because they are wielding guns if he doesn't what can you do to him.....oh if you report to the police it'll be a waste of time.* According to the assemblyman, the use of diplomatic means where you approached the herder for peaceful resolution was interpreted as a weakness on their part. The Imam at Koowireso, whose plantain farm was destroyed by cattle, also added his voice. According to him ever since the cattle owner came to inspect two months ago, he had not seen or heard anything from him. These frustrations shared by the Assemblyman and the Imam were what informed the farmers especially the young male ones to adopt this strategy. They believed that once the herder was confronted with force, it deterred them from causing further damages. Besides, the involvement of a third party rather delayed the process which sometimes yielded no results.

On the few occasions where the farmers decided to go for arbitration, their preferred destination was the court. The loss of confidence they had in the police abhorred them to go to the police. The farmers alleged that the police on many occasions failed to act on the reports they lodged with them. Others said that the police conspired with a different person to pose as the victim and so whatever compensation paid was shared between the police and his accomplice. These allegations were however denied blatantly by the police. They admitted the bureaucracy involved in court issues and how it affected their work but the loss of confidence in the police left them with no other choice.

On the basis of the above, a few (3.5%) opted to avoid everything and leave it to go. The explanation given was the fact no matter the approach; the herders were never going to yield. They therefore saw this as a waste of precious time. They claimed they were tired of any approach since none of them had yielded any positive results. This informed their decision to avoid the herders. The farmers also accused the herders that as soon as a small token was paid, the herders took their cattle to graze the left over. A farmer recounted that, *“for this people, as soon as they pay something small they assume that they’ve bought the entire farm. That is where they graze their cattle.”*

In a similar fashion, 72% of the herders had preference for retaliation in seeking justice. Only 24% chose to go for negotiation or mediation, while none of them wanted arbitration. This revelation agrees with Hussein (1998) position that when the relationship between the aggrieved parties is hostile they resort to open confrontations to settle their scores. He was however quick to acknowledge the use of mediators as the best way forward. The herders accused the farmers of their refusal to pay any compensation on any damage caused to their animals. A herder asked angrily that, *“Which farmer has ever paid compensation?”* The refusal of farmers to equally compensate the herders was the cause of direct confrontation with them. Although the cattle did not belong to the herders themselves, they acknowledge the fact that they suffered the penalty for not taking good care of the cattle entrusted to them. The herders intimated that it behoved on them to take every action to save the situation. However, 16% trusted a mediator, especially their leaders to address their concerns for them.

In addition to the above, the herders believed farmers made unrealistic demands one of them asked, *‘Masa’ how can you ask me to pay 40 million cedis for less than 5 bags of maize?’* Similarly, they believed that the court charged so much the therefore did not want to be sent to court. Aside that drags to court meant leaving your animals in the bush everyday and attend court proceedings. The main reason why the feared the court was the possibility of being imprisoned. The herders also accused the police of bias when cases were reported to them. In spite of the hostile relationship between them and the farmers, 8% still believed the best way to resolve conflict was a direct negotiation.

This is contrary to Milligan's (2002) assertion that the emergence of the police and local governments, as alternative institutions for conflict management, is probably a more significant change to rural communities than the weakening customary institutions. Even though several strategies were adopted to resolve conflict, 82% of the farmers in the study area claimed the conflicts were not resolved while 16.5% claimed they were partially resolved. In a similar vein, 88% of the herders remarked that the conflicts had not been resolved. This is contrary to Turner et al (2004) study which found that at least 75% of the conflicts between 2002 and 2004 in agropastoral zone of Niger were resolved.

4.6.2 Institutions involved in conflict resolution

In furtherance to this, the social networks that the parties used or the institutions they relied on to manage these conflicts was analysed. Hussein, (1998) believes that conflicts can be resolved at three levels. He asserts that the first level is mostly concealed from outsiders since the individual farmers and herders are engaged in direct negotiations. This could be operationalised since most of the conflicts in the study area were inter-personal in character. He continues that the second level involves the community leaders, traditional institutions or formal institutions of the state in the resolution of inter-group conflict. The final level involves the state against the group of farmers or herders. Thus, where the conflict is beyond the competence of these institutions the state is often brought in. This is when the conflict constitutes serious threat to law and order. The table below shows the social networks used by the parties in the resolution of conflict.

Table 189 Institutions involved in conflict resolution in Asante-Akim Agogo District

Institutions	Farmers (%)	Herders (%)
Community leaders	65.5	56
Traditional council	4	32
Police service	21.5	12
Local government	0.5	0
Magistrate court	8.5	0

Source: Field survey, 2015.

The results from table 18 show that 65.5 percent of the farmers prefer the intervention of their community leaders (made up of committee members) in conflict resolution. The farmers attributed

this to the proximity of their leaders to them and hence can have easy access to them for a swift resolution of conflict. Again, 21.5% and 8.5% liked the involvement of the police and the court respectively. This was contrary to the mistrust they had in the police. However, they believed that if the police would be up and doing, they would have been the best institution they would have consulted. Only 4% and 0.5% were prepared to send their complaints to the traditional council and the district assembly respectively. The reason behind this was that, the chiefs were behind these crimes because they had leased lands to the herders while some also owned cattle being tended by the Fulani herdsmen. Those chiefs therefore had a good rapport with some of the herdsmen. The accusations against the chiefs and the local assembly explained the small percentages of the choice of these institutions.

On the part of the herders, 56% also preferred to use the community leaders (thus their owners or leaders). In contrast to the farmers, 32% of them had faith in the traditional council to resolve disputes between them and the farmers. This may be due to the allegation that the herders were tending cattle belonging to some of the chiefs. None of the herders was prepared to go to court or consult the local assembly because of the bureaucracy involved.

4.6.3 Recommended actions by respondents

As rightly posited by Abbass (2014), in order to develop an effective, efficient and acceptable system for managing these conflicts, an identification and appreciation of the culture of the respondents was vital. The appreciation of the culture of the vulnerable group would help adopt proper measures to solve this situation. Again, there was the need to understand how the farmers and Fulani viewed such conflicting issues. Following the expression of the respondents' opinion about the conflict situation in the locality, it was prudent to solicit their views on what they thought should be done to resolve these conflicts. Figure 13 represents the suggestions by the respondents. Results from the figure indicate the contrasting responses by the two groups. This is a manifestation of their needs and aspirations.

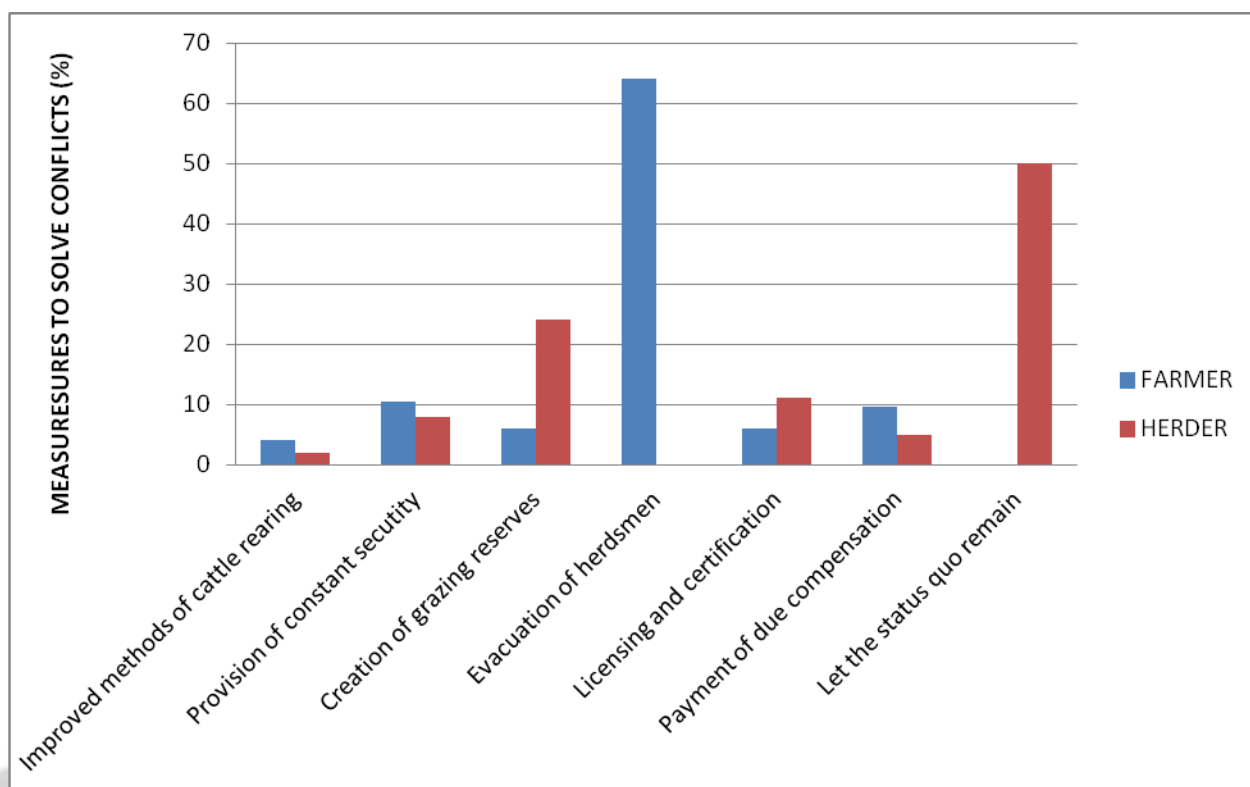


Figure 14 Solution to herder-farmer conflict

Source: Field survey, 2015

Improvement in methods of herding

The data shows that very few respondents called for improvement in the methods of herding. Indeed 4% and 2% of farmers and herders made such recommendation. The farmers interviewed mentioned that it was almost impossible to expel the Fulanis and therefore if they could improve their methods they could co-exist with them. The suggestion was to fence the cattle so as to avoid the night grazing. Again, they suggested the provision of water for the cattle in order not to struggle with them. The herders in this category were of the opinion that improvement should come in the form provision of better equipment that would enhance their operations. The difficulty with this suggestion is the fact that due to the large sizes of herds, provision of kraals and water was going to be problematic. Again, the herders are noted for their nomadic lifestyle.

Any attempt to tame them was going to be fiercely opposed.

Provision of security

One other suggestion by the respondents had to do with the provision of security in the communities. 10.5% of the farmers believed that with the presence of security in each community,

the herders would be deterred from perpetrating crime. On the premise that outright evacuation would not help solve this problem, they were of the opinion that police presence would also ensure quick resolution of disputes and prevent the escalation of conflicts. In a similar vein, 8% of the herders also thought the provision of security would protect them from the harassments they faced from the herders. The provision of constant security was also going to face logistical challenges as claimed by the police commander. On his part, the DCD asserted that this would be a huge financial burden on the assembly. He mentioned that the cost of the last operation (operation cowleg) in 2012 was borne by the assembly and therefore a young assembly such as the Asante-Akim north district cannot continue to bear that cost.

The Fulani spokesperson questioned the financial viability of this approach. He said *“when they said the military persons will come and drive them away....let us ask ourselves, how much do we have at the assembly?.....I can tell you the assembly cannot bear this cost.”* The logistical challenges make this suggestion impracticable.

Evacuation of all herders and their cattle

It is discernible from figure 14 that majority of the farmers wanted the Fulani herdsmen to be evacuated from the district. A total of 64% of the farmers believe that the outright evacuation of the Fulani and their cattle would be the best solution to the age old conflict. They believed that any other effort would only suspend the clash and as result the only solution was the outright ejection of the herders. The farmers contended that the herders came from somewhere and therefore should be forced to go back to where they came from. The Kontihene for instance cited the evacuation of Ghanaians from Nigeria in 1982 as a clear case.

In contrast, none of the Fulanis want to leave this favourable environment. Their penchant was due to the state of this environmental which offers the herders and their cattle conditions necessary for their survival. 10 of the Fulanis claimed to have been born here so they considered themselves as Ghanaians. The spokesperson indicated that the cattle belonged to were Ghanaians and so if you drove them away it meant denying Ghanaians of their rights. The spokesperson raised a lot of questions:

“I’m asking...Ntiamoah farms has cattle...who is he?...he is an Ashanti...who takes care of his cattle?...Alhaji Issaka is a Bussanga, he is NPP...who takes care of his cattle?....Alhaji

Adramani is a Gonja.....are his herders Gonjans?.....so if you don't say cattle owners and you say Fulanis ...what do you mean? ...I'm a Fulani but I farm.....you want to drive the cattle away whom do the cattle belong to? ...all these questions mean that the cattle belong to Ghanaians so there is no need to drive them away.....nobody will accept them anywhere."

From the above, it is clear that the cattle are 'Ghanaians' but the herders are considered strangers. Therefore the option of evacuating those belonging to Ghanaians should not be considered. Otherwise this problem will resurface.

Licensing and certification

Additionally, 6% and 11% of farmers and herders respectively proposed licensing and certification of the herdsmen as a measure to solve the frequent conflict between the two parties. The ECOWAS protocol on transhumance that sought to regulate transhumant pastoralists with International Transhumant Certificate (ITC) would help. Again, the certificates issued by the MOFA in 2003 were a good approach. The farmers believe was that, the herders would be properly screened before they are issued a license to operate and this would help separate the good ones from the bad ones who always foment trouble.

Payment of compensation

Finally, the payment of compensation was by 9% of farmers and 5% of herders to be the best way of solving herder-farmer conflict in the study area. This recommendation is consistent with Hussein (1998) position that when due compensation is paid; it will not only calm nerves but lead to conflict resolution. However, the issue raised by some farmers was how to identify whose cattle destroyed the farm since most of these incidents do happen at night; and also the equivalent compensation to be paid. The farmers went further to allege that when a token is paid, the herders consider that they have bought the entire farm and so becomes the grazing ground for their cattle. The herdsmen on their part accused the farmers of deliberately inflating the value of items destroyed. What is clear from the two parties is how to determine the actual cost of the items damaged.

Allow the status quo remain

About 50% of the Fulanis were happy with what the situation was at the moment and therefore want the situation to remain as it is. However, none of the farmers suggested this action. This solution contrast the farmers call for total evacuation. Nchi (2013) observed that conflicts can be effectively and efficiently managed when there is a sound and clear policy to respect the feelings of each party. The mismanagement of these conflicts is a clear manifestation of a weak institutional capacity in Ghana to manage these conflicts right from the traditional council to formal institutions. One major policy intervention that has not succeeded is the “operation cowleg” launched in 1997 to flush out all alien cattle. Lack of identification and understanding of the sources of conflict means the conflict would rear its ugly head with least provocation. Pursuant to the recommendations proposed by the respondents, and with reference to appropriate literature, the following recommendations are made.

4.7 Conclusion

The above chapter presented what triggers conflict between farmers and herders in the AsanteAkim north district of Ashanti, their consequences on general livelihoods and the strategies the parties adopt in the resolution of such disputes. It was observed that destruction of crops by cattle was the main cause of these disputes. Others included pollution of water bodies, burning of harvested crops, raping of women and reprisal attacks from the herdsmen.

These have led to humanitarian effects, socio-economic health and environmental consequences. The parties have used different strategies and institutions to try and resolve these conflicts but to no avail. The impartial involvement of both state and non-state actors will go a long way to end these upheavals. The strengths and weaknesses of these strategies would inform the recommendations to be made for policy makers.

CHAPTER FIVE: SUMMARY OF FINDINGS, RECOMMENDATIONS AND CONCLUSION

5.1 Introduction

The preceding chapter presented the analysis of the data obtained in the study of conflicts between farmers and Fulani herdsmen in the Asante-Akim North District of Ghana. It identified crop destruction by cattle as the major cause of these conflicts. This chapter summarizes the key findings, makes recommendations and provides conclusion on the study.

The findings are drawn from the results obtained from the field survey and in respect of the objectives of this study. The linkage between the set objectives of the study and the outcomes of the analysis is established. Base on these findings, recommendations for policy makers and implementers are made to address the conflicts that always come about when crop farmers and cattle herders interact. A conclusion is then made on the discussion so far to end this chapter.

5.2 Summary of findings

5.2.1 Causes of conflicts in Asante-Akim North District

The immediate reason for the escalation of herder-farmer conflicts was crop destruction. It was observed that there were more than 10,000 cattle found within the Agogo portion of the Afram plains. The study observed that 92% of the herdsman were handling at least 120 cattle each. This made their control difficult and therefore easily strayed to destroy food crops. Additionally, the cattle owners had failed to provide the needed confinements as opposed to their earlier agreement with the Traditional Council. They moved about in a nomadic fashion to graze anywhere they found feed pasture. Further observation was the fact that the cattle grazed at night. This was the time a lot of the damages occurred since the herders were not present to control them, neither were farmers present to guard their farms. This is contrary to their contractual agreement with the owners that they will protect the cattle from causing damages to crops.

Again, contamination of drinkable water was found to be a major cause of conflicts. In contravention with the initial agreement with the Agogo Traditional Council, the herders had failed to dig wells to provide water for the cattle. As a consequence, the animals drank from the nearby rivers and streams. The animals ended up polluting the available water bodies which also served as critical sources of water for some of the communities.

Additionally, the continuous expansion of crop farms impacted negatively on animal production. A careful study showed that the herders first settle deep in the forest as directed by the Traditional council. However, the increase in population and desire to expand farm sizes continuously pushed the herders deep in the forest. The resistance by the herders to remain in the area had increased the competition between them and the farmers resulting in conflicts.

More so, the inability to identify the cattle that caused damages leads to non payment of compensation. Besides, the inability to determine the right compensation brought about non

payment. It was also detected farmers blatantly refused to compensate pay any compensation for damages caused to the animals. These developments triggered conflicts between herders and farmers in the study area.

Another observation was the harassment of the Fulani. It became clear from the study that the Fulanis also suffer at the hands of the indigenes. Some farmers attacked the herders for their inability to control their cattle. Others insulted the Fulanis or threw stones at their cattle which resulted in reprisal attacks. The perception that the Fulanis were a violent people also contributed to the emergence of conflicts.

It was further observed that the socio-economic characteristics of herders and farmers had an impact on the outbreak of conflicts in the Asante-Akim North District. For instance, the age of the herder and farmer as noted by Hagberg (1998) was a determinant of conflict escalation. The young male farmers were always prepared to confront the herders while the elderly preferred avoidance. Other major causes include burning of crop and farmland killing of residents and sexual harassment of women in addition to the state's inability to resolve conflicts.

5.2.2 Consequences of conflicts

The conflicts have had negative effects on livelihood of farmers and rural development. These range from humanitarian to environmental. The outcomes of these conflicts have led to number deaths (see appendix I), bodily injuries. The movements of the people, including the herders were restricted especially during the peak of the conflicts. Some farmers had abandoned their occupation while others have forcibly migrated. School children have had to drop out of school due to the tension in the area.

Besides the humanitarian tragedies, there were several economic consequences coming out of these conflicts including destruction of food crops and other properties. These devastations have caused lots of financial problems including reduction in income, farmers' inability to repay loans and take care of their children's educational needs. There has also been a tremendous reduction in productivity which has impacted on income for the individual and food security in general.

The implications on the health of the people and the environment were evidently clear. The pollution of the water bodies resulted in frequent outbreak of water-borne diseases. Destruction of

assorted food items could lead to malnutrition and malnourishment. The environmental consequence of these conflicts was soil erosion which could affect the fertility of the soil. This resulted from the rampant bush burning especially in the dry season. The outcome was that fact that the plains were left bare and whenever the rains set in, the rich topsoil was washed away.

5.2.3 How have the conflicts been managed?

As indicated by Tonah (2006), the herder-farmer conflict usually begins as a quarrel between a farmer and a herder but the inability of the parties to manage it well it escalates into communal conflict. Several strategies were employed by the actors in the resolution of conflicts. Notable among them included mediation between the two parties by a third party (preferably their own leaders) and negotiation by the parties themselves. This was the strategy commonly adopted by 68.5% and 58.5% of farmers and herders respectively. But unfortunately, the agreements reached were not carried through. This came about due to the fact that each party tries to dominate the other in the process of negotiation other than seeking compromise.

Other strategies included open confrontation and avoidance. 7% of the farmers, mostly the male young farmers, usually resorted to open confrontation to settle the scores. Their reason was due to the mistrust in the security agencies. However, 9.5% of farmers, notably, the elderly and female farmers preferred to ignore the damage and move on. On the part of the Fulanis, 23.5% also confronted the farmers for any damage to their animals while 6.5% let it go.

In addition to these, 15% of farmers employed arbitration by state actors, particularly the court, as the last resort to compel the herders to be expelled. The bureaucracy involved in this process made it sparingly used. One of such endeavours was the case filed at the Kumasi High Court by the eight petitioners. There had also been attempts by the security agencies to forcibly evict the Fulanis. Notable among such was the 'operation cowleg.' Regarding the Fulanis, 11.5% of them reported to the district police whenever they suffered from the indigenes. In conclusion, the adoptions of these strategies have failed to yield the needed results.

Finally, 64% of the farmers suggested outright evacuation of the Fulanis and their cattle from the area. 14.5% proposed provision of constant security by the Ghana Armed Forces in the various communities. Other farmers also recommended prompt payment of compensation and improvement in the methods of animal rearing.

On the contrary, none of the Fulanis proposed any evacuation plan. A large majority of 70% suggested a demarcation of sizeable portion of the plains for animal rearing. Additional 9% believed in regularization of their activities by giving them tags so that the bad once can be identified and dealt with.

It also emerged that on occasions where crops or farms were destroyed by cattle and reports were lodged at the police station, the cattle owners paid some compensation. This happened when the cattle owner was identified and subsequently invited by the police.

5.3 Recommendations

Drawing from the summary of findings, especially with regards to the management strategies and the proposals by the parties, the following recommendations are made. First and foremost, a demarcation of grazing reserves for the Fulani herdsman on a portion of the vast Afram plains by the government through the Ministry of Lands and Forestry would help. The Town and Country planning Department should help in the rezoning of this parcel of land. In line with Gefu and Gills (1990) about 20% of the Afram Plains could be set aside by the Forestry Commission specifically for grazing. Additionally, herders should be given land-use rights by the Lands Commission to enable them to manage such land to practice livestock farming. The farmers and herders must learn to respect each other's rights in their interactions as Audu (2013) advised. The practice in Mauritania can be replicated in the Agogo Traditional Area. In Mauritania, 'a Code Pastorale' has been established. This code aims at regulating the traditional way of open access rangeland while individual and group-specific land rights are protected. This is done through negotiation among farmers, herders and local government bodies. The Ministry of Food and Agriculture (MoFA) in collaboration with the cattle owners should provide water through either boreholes or wells on this field. In this way, they could be made to pay taxes to the Local Government.

Likewise, a befitting compensation which should be determined by a committee of experts should be paid to the affected party. This committee should comprise a representative of the crop farmers, cattle owners, herders, Assembly members, the Police, Traditional Authority, the District assembly and independent members. The cattle owner should pay for any destroyed crops by his cattle. In default, a cow should be sold by the committee to defray the cost. In a similar fashion, any crop farmer who is found to have killed any cattle should be made to pay.

This will forestall any possible clash that could ensue between the parties.

Another recommendation is that, the traditional way of rearing cattle should be transformed. Thus, practice of letting cattle graze indiscriminately should be changed. This infringes on the human rights and activities of food crop farmers who constitute the majority in the country. The human rights of a person end where someone's freedom begins. Therefore, the cattle owners who have their cattle in the Agogo Traditional Area should construct kraals to confine their animals and feed them in a reserved graze field. Lessons can be learnt from the approaches in Denmark. In Denmark, special zones have been created for animal rearing. Electric fence with minimal shock has been provided to prevent the animals from going astray. Any cattle owner who cannot confine his cattle and provide them with food and water is not ready for that business and therefore should not enter such business.

Closely related to the above is improvement in technology in cattle rearing. Example is Agropastoralism which integrates crop production and animal rearing. This could be done on rotational basis and the cattle feed on the stubbles of the grain crops. Their dung could then be used to enrich the fertility of the soil. In this regard, (MoFA) should foster such policy and the Agricultural Extension Officers could provide the needed education.

The practice of leaving more than 100 cattle in the hands of only one herder should stop. The cattle owners should therefore employ more herders or entrust a maximum of 30 cattle to the care of the herders. This will make their control much easier to prevent them from going astray. The owners should therefore carry through the contractual agreement with the herders where they are supposed to protect the animals from destroying crops. In case of any destruction, the owners should hold the herders accountable.

Although Ghana has ratified the ECOWAS protocol on transhumance, her obligation of facilitating the integration of incoming migrants has yet to be operationalised. The government has not created the corridors for the Fulani herdsmen to pass through. The Fulanis therefore take it upon themselves to search for pasture. The government has also failed to designate grazing reserves, installed boreholes and set up veterinary outposts. The government, through (MoFA) and its agencies should spearhead the operationalisation of this protocol

Additionally, as recommended by the high court, a joint police-military taskforce should immediately take a decisive and effective action to drive all the alien herders and their cattle away. They should be made to go back to where they came from. The first option is a voluntary exit by the herders themselves through dialogue and persuasion by the security. This would make the exercise less costly. Should the voluntary exit fail, the security agencies could then apply force. This could be done by first confining the animals in a wooden structure or barbed wire. In collaboration with the Ghana Private Road Transport Union (GPRTU), cargo cars could be mobilized at the cost of the cattle owners or some of the animals could be sold for this purpose. They should then be transported beyond the borders of the country. If the herders fail to cooperate, youth with cattle handling skills from Yeji, Atebubu and Ejura could be recruited by the District Assembly to assist. In the worst case scenario, they could be confiscated by the state. The cost of this activity should be borne by the cattle owners themselves by selling a cow to finance this.

Again, after the exit of the illegal herders, a community vigilante group could be set up by the District Security Council (DISEC). This should include representatives of the chiefs, youth groups, assembly and unit committee members, cattle owners or their herders and the police service. The (DISEC) should perform an oversight responsibility to regularly monitor the activities of the Fulani herdsmen to make sure no alien herdsmen infiltrate the area. A portion of the Internally Generated Fund (IGF) obtained from the taxes paid by the cattle owners and their herders should be set aside for this all important assignment. Life is more precious than money. Besides, whenever the security in the district is threatened, revenue collection is adversely affected.

Also, much as herding requires the use of some weapons to control the cattle, sharp cutlasses and guns were rather been used to perpetrate crimes or threaten farmers. Cattle rustlers and predatory animals were rare in this ecological zone as confirmed both parties. To this end, it is recommended that all Fulani herdsmen should be immediately disarmed by close collaboration between the police and the military and the unit committee members as well as the cattle owners who were alleged to supply them with these weapons. Additionally, their owners who supply them with these weapons should be arrested to deter others.

Eventhough, the Agogo Traditional Council plays a vital role the development of the area, their role was seen as detrimental in dealing with the herder-farmer conflicts. Their role in managing

these conflicts was not substantial. The farmers had lost confidence in them due to their alleged involvement in shielding the Fulani herdsmen. Their lack of commitment had reduced the capacity of the communities themselves to manage these conflicts. This contributed to the retaliation and self defence adopted by the farmers. The chief and his elders should stop giving out land in their custody to the herders without the knowledge or consent of their subjects or farmers who are in possession of this land. They should also be fair in their dealings with the parties, especially the farmers.

Lastly, since the Fulani issue in Agogo is not an isolated case in the country as reported in the media, the solution should be holistic. That is, a close collaboration among the affected local assemblies, MoFA, the National Security, Ghana Immigration Service, Ghana police service, and the legislative armed of government to ensure they pass through the created corridors. The judiciary should be fair and firm when such cases come before them.

5.4 Conclusion

It has emerged from the study that farming is the major contributor of household income in the study area. However, the movement of Fulani herders to Agogo portions of the Afram plains has led to destruction of farmers' crops and loss of lives. The herders provoke the farmers to acts such as poisoning of cattle and insult the herders. In response, the herders wage deadly attacks on the farmers. This situation has affected food production and income of the people. Again, the pollution of available drinking water sources has serious implications for the health of the people. This unresolved crisis has serious implications on the policy of government in providing development for these communities. If these conflicts are not resolved in good time, sustainability of both the economy and environment would become problematic. Agriculture, which is the mainstay of the economy of the people is being disrupted by these conflicts, making livelihood difficult at both the immediate locality as well as the larger communities that are dependent on the produce from these communities.

In short, there is no easy solution to the violent conflict the Agogo area. The state is seeking a solution that excludes the herders in contrasts to efforts to sedentarize them. Excluding these people is probably an easier act of policy than trying to regulate and settle them. However, the elites themselves are part of the problem by keeping their own cattle, which constitute symbols of

their wealth and status. The conflict will be extremely difficult to solve if any of the groups will be deprived of the resources that serve as means of his livelihood.

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APPENDIX I: NAME OF PEOPLE ALLEGEDLY KILLED BY FULANI, 2007-2015

No.	Name of Deceased	Community	Date	Alleged Killer(s)
1	Samuel Agboni	Koowereso	04-02-2015	Herdsmen
2	Yaw Bawumballa	Nyamebekyere	12-06-2014	Herdsmen
3	Briamah Manga	Brahabebome	18-03-2014	Herdsman
4	Samedu	Brahabebome	11-03-2014	Herdsman
5	Ayetem Bamadi	Bebuoso	11-12-2013	Herdsman
6	Abubakar Umaru	Bebuoso	25-10-2013	Herdsman
7	Osmanu Birago	Koowereso	26-08-2012	Herdsman
8	Ali Jamal	Koowereso	05-08-2012	Herdsman
9	Yahaya Iddrisu	Abrewapong	30-07-2012	Herdsman
10	Kwame Zakari	Abrewapong	24-07-2012	Herdsmen

11	Ali Bingiwa	Abrewapong	10-12-2011	Own Herdsmen
12	Samuel Agboni	Brahabebome	13-10-2011	Herdsman
13	Yaw Bawumballa	Omaru Faruk	30-07-2011	Own Herdsmen
14	Briamah Manga	Koowereso	16-04-2011	
15	Samedu	Mankala	27-01-2011	Herdsman
16	Abudu Issaka	Bebuoso	13-09-2010	Herdsman
17	Raphael Apabili	Dawiaso	17-06-2010	Herdsman
18	Usmanu	Mankala	19-01-2009	Own Herdsman
19	Kofi Obeng	Bebuoso	24-11-2008	Herdmen
20	Seidu Busanga	Mankala	19-08-2008	Herdsman
21	Kwame Awuah Solomon	Brahabebome	03-07-2008	Herdsman
22	Kumeh Fiape	Mankala	07-08-2007	Herdsman
23	Sissala Issifu	Koowereso	11-03-2007	Herdsman
24	Sodzi Akpobli	Bontre	20-02-2007	Herdsman
25	Baba Yaw	Mankala	14-01-2007	Herdsman

Source: Agogo District Police Command; April, 2015

APPENDIX II: QUESTIONNAIRE FOR CROP FARMERS AND FULANI HERDSMEN

KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY
COLLEGE OF ARCHITECTURE AND PLANNING
DEPARTMENT OF PLANNING

M.Sc. DEVELOPMENT POLICY AND PLANNING

This research/questionnaire is in partial fulfilment for the award of a Master of Science Degree in Development policy and planning on the topic “Assessing the development implications of the

activities of Fulani herdsmen, the case of Asante-Akim North District of Ghana’’. This is purely for academic purpose and your confidentiality is greatly assured.

Please respond where applicable.

PART I PERSONAL CHARACTERISTICS OF RESPONDENTS

1. Sex of respondent (a) Male ☐ (b) Female ☐
2. Age respondent: a.15-24 ☐ b.25-34 ☐ c. 35-44 ☐ d. 45-54 ☐ e. 55-64 ☐ f.65+ ☐
3. Marital status (a) Married ☐ (b) single ☐ (c) Widowed ☐ (d) Divorced ☐
4. Educational status (a) No formal education ☐ (b) Qur’anic/Arabic ☐ (c) Basic ☐ (d) Secondary ☐ (e) tertiary ☐
5. Size of household (a) 1-5 ☐ (b). 6-10 ☐ (c). 11-15 ☐ (d). 16+ ☐
6. Years of residence (a) 1-5 ☐ b. 6-10 ☐ c. 11-15 ☐ d.16-20 ☐ e. 21-25 ☐ f. 26+ ☐
7. How often do you visit home?.....
8. Occupation:
Secondary occupation.....
9. Number of years in occupation
Primary Occupation..... Secondary Occupation.....
10. Farm size (acres) (a) 1-15 ☐ b.16-30 ☐ c. 31-45 ☐ d.46-60 ☐ e. 61-75 ☐ f. 76+ ☐
11. Herd size (a) 1-60 ☐ (b) 61-120 ☐ (c) 121-180 ☐
(d) 181-240 ☐ (e) 241-300 ☐ (f) 300+ ☐
12. What type of farming system do you practice? (a). Subsistence ☐ (b). Commercial ☐
13. What type of crop(s) do you cultivate? (a). Plantain ☐ (b). Cassava ☐ (c). Cocoyam ☐
(d). Maize ☐ (e) Tomato ☐ (f). Water melon ☐ (g). Cocoa ☐ (h). Other (s) specify.....
14. How did you acquire the land? (a) Bequeath to me ☐ (b) Bought it ☐ (c) Long term leasehold ☐
(d) Hired it ☐ (e) Other (specify).....

PART II CAUSES OF HERDER-FARMER CONFLICT

15. When did you first come into contact with the Fulani/residents?
16. What was your relationship with them? (a) Cordial ☐ (b) Hostile ☐
17. How did the relationship affect your livelihood?.....
18. Why did you come to Agogo but not any other place?.....
19. Has there been any conflict between residents and Fulani herdsmen? (a). Yes ☐ (b). No ☐

20. If yes, when did the conflict start?
21. How regular is the conflict between you and the other party? (a) Frequent [] (b) Occasional []
22. Were you personally involved? (a). Yes [] (b). No []
23. How do you feed the cattle especially during the dry season?.....
.....
24. What is the source of water for the cattle?.....
25. Which of these are/were the major causes of the conflict? Number in order of importance.
- (a). Destruction of food crops and farmland []
 - (b). Contamination of stream by cattle []
 - (c). Killing of residents by herdsmen []
 - (d). Killing of cattle by farmers []
 - (e). Sexual harassment of women by the Fulani []
 - (f). Harassment of the Fulani []
 - (g). Encroachment of farmland/grazing land []
 - (h). Hardening of soil rendering them infertile []
 - (i). Land tenure system []
 - (j). Improper management of cattle []
 - (k). Poor application of statutory laws []
 - (l). Theft of cattle []
 - (l). State institutions' inability to resolve herder-farmer conflicts []
26. How would you react to disturbance by the Fulani/farmers?
- (a) Retaliate [] (b) Report [] (c) Relocate []
27. How do you protect yourself in the bush?.....
28. How would you typify the intensity of the conflict (a) Non-violent [] (b) Low intensity []
(c) High intensity [] (d) Other []
29. Are there weapons involve the conflict? (a) No [] (b) Yes [] specify.....

PART III EFFECTS OF CONFLICT

30. Quantity of crops produced

Crop	Quantity when disturbed	Quantity when not disturbed

31. Number of cattle you have lost
32. What is the source of your financial capital?
33. How does the conflict affect your capital?
34. What are/were the other economic effects of the conflict on your livelihood?
- (a) Decrease income [] (b) Insecurity [] (c) Inability to pay loans []
- (d) Inability to participate in local market [] (e) Others []
35. Does the conflict affect children's education? (a) Yes [] (b) No []
36. If yes, to what extent?
37. Have you experienced damage as a result of the conflict? (a) Emotional [] (b) Financial []
- (c) Physical (to your health) [] (d) Social (to social relations?) [] (e) Other.....
38. Have you witnessed any physical harm as a result of the conflict? (a) Yes [] (b) No []
39. Who was/ were involved?
40. What form was it? (a) Death [] (b) Injury [] (c) Rape []
41. Number of victims involved

Damage	Farmer	Fulani
No. of Deaths		
No. of Injuries		
No. Of Rape victims		

42. Do you feel insecure to go to farm/bush? (a) No [] (b) Yes []
43. Have you ever abandoned your farm/cattle due to the conflicts? (a) Yes [] (b) No []
44. How do you feed yourself and family.....
45. Have you benefited from the farmers/Fulanis and their activities ever since your contact with them?
- (a) No [] (b) Yes []
46. If yes, what sort of benefit is that?
47. How do you access health care?.....
48. Restriction to resources after conflict

Restriction to resources after conflict	Frequently	Rarely	Never
Restriction to land/grazing field			
Restriction to water			
Restriction to shelter			

PART IV CONFLICT MANAGEMENT

49. What conflict management strategy do you use? (a) Avoidance [] (b) Arbitration []
(c) Mediation [] (d) Open confrontation [] (e) Peaceful settlement [] (f) Others []
50. Where do you report the conflicts when they occur? (a) Police station [] (b) District Assembly [] (c) The traditional ruler [] (d) The community leader [] (e) Others []
51. Which institutions are involved in the conflict resolution? (a) The community leaders [] (b) The traditional council [] (c) Local government [] (d) Law enforcement agency []
(e) Others [] specify.....
52. Do you receive compensation for the damages caused to your products? (a) Yes [] (b) No []
53. If yes, what form does it take? (a) Financial [] (b) Cattle [] (c) Other [] specify.....
54. What normally is the outcome of the resolution?.....
55. Are you satisfied with the outcome of the resolution process? (a) Very satisfied []
(b) Partially satisfied [] (c) Dissatisfied [] (d) Very satisfied []
56. Explain.....
57. Has the conflict completely been resolved? (a) Yes [] (b) No []
58. If no what measures should be put in place to ensure that the conflict does not occur again?
(a) Provision of security [] (b) Improved methods [] (c) Drive away all herdsmen []
(d) Licensing and certification [] (e) Creation of grazing reserve [] (f) Other.....
59. How would you assess the roles played by the following institutions
(a) The traditional council.....
(b) The local police service.....
(c) The local government.....
60. Any other comments?

APPENDIX III: INTERVIEW GUIDE FOR THE SECONDARY STAKEHOLDERS

1. Who are the Fulani?
2. When did they come here?
3. How did they find their way here?
4. What really attracts the Fulanis into this environment?
5. What is the policy regarding access to land and other resources?
6. Who are the cattle owners?

7. What is the estimated number of cattle in the district?
8. Is there any agreement between them and the traditional council?
9. How far has the agreement been carried through?
10. How far has the court order been carried through?
11. What is the relationship between your outfit and the Fulani?
12. What is the relationship between them and the local residents, especially the farmers?
13. What complains do you receive from both parties?
14. How do you react to such complains?
15. What is the intensity of the conflict?
16. How does the community get involved in the conflict?
17. How valuable is the cattle to the Fulani and the local economy?
18. What are the effects of these conflicts
 - On the people
 - On agricultural production
 - On your institution
 - On development of the district
19. What management strategy do the people employ?
20. What is being done by your outfit?
21. How do you rate the role of the following institution?
 - The Traditional Council
 - The District Assembly
 - The Police/Security
22. What do you think should be done to solve this problem?
23. Any other comments?