

**Contestations and Conflicts over Land Access between Smallholder Settler
Farmers and Nomadic Fulani Cattle Herdsmen in the Kwahu**

Afram Plains South District, Ghana



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ABSTRACT

The study examines the contestations and conflicts over land access between smallholder settler farmers and nomadic cattle herders in the Kwahu Afram Plains South District. Current studies on the farmer-herder conflict in Ghana have emphasised the conflict between indigenous farmers and nomadic herders. This study has contributed to existing knowledge by highlighting the conflict between two migrant groups. As migrants, both settler farmers and nomadic herders are renting land and, in the process, come into conflict. The tension in the area is that both migrant groups have no ownership of land, which exposes their vulnerability to the landowners in the sense that they have no firm land rights. The study's main objective is to examine the root causes of the conflict between crop farmers and nomadic herders in the case study area of the Afram Plains. The environmental scarcity and political ecology theories were utilised to analyse the conflict in the study area. The study adopted the qualitative approach with the purposive and snowball sampling methods used to select participants for the research. The study's findings reveal that increasing land scarcity due to population growth, climate-induced migration, and large-scale land acquisition is a major cause of the land conflict. The study further reveals that, aside from the core issues leading to land scarcity, what instantly ignites conflict between farmers and herders includes crop destruction, burning of grasses, and alleged vices perpetrated by the herders. The findings of the study also reveal that the mitigation measures put in place to address the conflict have been ineffective because of corruption, poor land governance, and greedy chiefs. The study concludes that the farmer-herder conflict is complex and needs to be examined from diverse perspectives to appreciate the nuances of the conflict.

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ABBREVIATIONS

ACLED	Armed Conflict Location and Event Data
ADR	Alternative Dispute Resolution
AU	African Union
CLS	Customary Land Secretariat
DACF	District Assembly Common Fund
DCE	District Chief Executive
DISEC	District Security Council
DPO	District Planning Office
DRC	Democratic Republic of Congo
ECA	Economic Commission of Africa
ECOWAS	Economic Community of West African States
GCA	Ghana Census for Agriculture
GCAP	Ghana Commercial Agriculture Project
GDP	Gross Domestic Product
GIPC	Ghana Investment Promotion Council
GSS	Ghana Statistical Service

ICJ	International Court of Justice
IPCC	Intergovernmental Panel on Climate Change
ITFC	Integrated Tamale Fruit Company
ITLOS	International Tribunal of the Laws of the Sea
KAPSD	Kwahu Afram Plains South District
LAP	Land Administration Project
LAPSSET	Lamu Port Southern Sudan-Ethiopia Transport Corridor Project
LGAF	Land Governance and Accountability Framework
MLNR	Ministry of Lands and Natural Resources
MMDAs	Metropolitan, Municipal and District Assemblies
MoFA	Ministry of Food and Agriculture
MPLA	Popular Movement for the Liberation of Angola
NCCE	National Commission on Civic Education
NFH	Nomadic Fulani Herdsmen
NLP	National Land Policy
OASL	Office of the Administrator of Stool Lands
OCL	Operation Cow Leg

PFJs	Planting for Food and Jobs
PRSP	Poverty Reduction Strategy Papers
SALW	Small Arms and Light Weapons
SAP	Structural Adjustment Programme
SDGs	Sustainable Development Goals
SHSF	Smallholder Settler Farmers
SODEPRA	<i>Societe Pour le Developpement de la Production Animale</i>
SPLA	Sudan People’s Liberation Army
SS	Security Services
TA	Traditional Authorities
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNDESA	United Nations Department of Economic and Social Affairs
UNESCO	United Nations Education Social and Cultural Organisation
UNFCC	United Nations Framework Convention on Climate Change
UNITA	National Union for the Total Independence of Angola
WANEP	West Africa Network for Peacebuilding

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CHAPTER ONE

Introduction

1.1 Focus of the Study

The conflict between crop farmers and migrant herdsman is a common occurrence in most rural parts of Africa (Bujra 2000). Between the two, a conflict could emanate from cultural differences, power struggles, livelihood changes, and/or the struggle for recognition. This study, however, focuses on conflict arising as smallholder settler¹ crop farmers and nomadic Fulani cattle herdsman struggle over access to customary land² in the case study area of the Afram Plains. As migrants, their access to land is precarious, thereby exposing their vulnerability to landowners because they don't have a firm right to land in the area. Although both groups are migrants, the Fulani herders are given preference over land access from the traditional leaders because of their ability to influence the landowners both in cash and in kind. The lucrativeness of renting land to the Fulani herders has led to the herders being favoured over the settler farmers, thereby creating animosity between the two migrant groups leading to conflict at the least provocation. Most research undertaken on conflicts between crop producers and cattle herdsman in the country has focused on the conflict between indigenous crop producers and nomadic cattle herders, regarded as strangers in Ghana. The emphasis in these scholarly works has been on crop destruction, ethnicity, historical migration of herders, and climate change, with very little attention to land conflicts between smallholder settler crop farmers and nomadic cattle herders,

¹ "Settler farmers" is used in this context to connote migrant crop producers, not as used for European settlers in Africa.

² The term "customary" is not used in reference to an image of the unchanging or immutable normative system but that of a landholding type that is governed by local institutions in accordance with traditional conventions and practices (Chitonge et al. 2017:83).

who are both migrants competing for the customary land of the Kwahu people (Olaniyan, Francis and Okeke-Uzodike 2015; Yembilah Barre 2012; Dosu 2011; Tonah 2006, 2005, 2002).

The phenomenon of classifying groups into indigenes and migrants is not only peculiar to Ghana but is also evident in the West Africa sub-region, precisely among the indigenous Karaboro farmers and Fulani strangers in western Burkina Faso; indigenous Senufo farmers and Fulani herders in northern Ivory Coast; indigenous Hausa farmers and Fulbe/Tuareg herders in Niger; Hausa Fulani herders and the Oro Cult in the Ogun State of Nigeria; and the Soninke farmers and Fulani herders in north-western Mali (Akov 2017; Oyama 2014; Beeler 2006; Hagberg 2000; Bassett 1988). According to Moyo (1993), this notion of categorisation is a major error imposed and perpetuated by the colonial authorities, by which people, who did not relate to a specific tribe, were viewed as outsiders with no customary land rights. The broader implication of this is that it influences struggles over the land resources leading to conflicts involving different users who are residential users, smallholder farmers, large-scale agriculture investors, and cattle herders on the land in urban, peri-urban, and rural agrarian societies.

The dispute³ between crop farmers⁴ and cattle herdsman is a subject of considerable debate in expert literature. These debates are highly contested, with opinions and arguments on the phenomenon varying in their nuances. While some scholars have argued on the environment, population, and conflict dynamics in accordance with the persuasive environmental scarcity thesis (Homer-Dixon 1999; Baechler 1998), others have criticised the scarcity narrative by arguing, among others, that essential factors like economic and political concerns, which have a

³ 'Conflicts', 'disputes' and 'clashes' are used interchangeably in the thesis.

⁴ 'Smallholder crop farmers', 'crop producers' and 'crop cultivators' are used interchangeably in the thesis.

strong impact on conflict and minimise the effects of resources and environmental factors, have been overlooked (Benjaminsen et al. 2009; Turner 2004; Gleditsch 1998; Bassett 1988).

The debates are often placed in context and discussed around the growing insecurity in sub-Saharan Africa, particularly the Boko Haram insurgency in Nigeria and the emerging violent extremist groups in Mali and Burkina Faso. The interactions of various variables within these contested debates have escalated goal incompatibility and occurrences of confrontations between crop farmers and cattle herders in Africa. It is within these debates that the thesis is located to understand the contestations and conflicts over land access between smallholder settler crop farmers and nomadic Fulani cattle herders. This is done using a qualitative approach to understand context-specific conflict involving smallholder settler crop farmers and nomadic Fulani cattle herders over land access in the under-researched area of the Kwahu Afram Plains South District in Ghana. The case study area of the Afram Plains is predominantly a settler district with residents from both northern and southern Ghana. The conducive climatic and vegetation conditions as well as policies, such as the decentralisation and structural adjustment programme, served to open the area, and several migrants have been attracted to undertake agricultural activities in the district. The study is conducted in Ekye Amafrom, Kwasi Fante, Tease, Odumansua, and Forifori. (Refer to Chapter Five for details of the case study area and methodology used). The interface of the environmental scarcity and political ecology theories are used as an analytical framework. The justification for the use of the two theories is that environmental scarcity helps us to see nature in itself and the dynamics that lead to supply constraints, and the political ecology theory help us to understand the interaction between people and nature and the institutions they develop.

1.2 Problem Statement

A conducive ecological environment is suitable for both crop and animal production. The presence of these conducive ecological resources - fertile land, water resources, and extensive grazing land - makes the Kwahu Afram Plains South District an appropriate location that has attracted a large influx of farmers and nomadic cattle herdsman from adjoining West African countries as well as areas such as Agogo in the Ashanti Region, Atebubu in the Brong Ahafo Region (currently in Bono East) and other areas in the Volta and in parts of the Northern Regions in pursuit of their various means of livelihood. This scenario has led to violent and bloody conflicts involving smallholder crop farmers and newcomers in the area, who are predominantly nomadic Fulani cattle herdsman. Conflicts between farmers and herders have awakened security concerns over the past years, especially considering how the two have coexisted with long-established relations not just in the country but also in many other sub-Saharan African countries. Indeed, this is not to say there was no dispute between crop farmers and livestock herders in the past. Crop farmers have had a conflictual relationship with herdsman who rear livestock: sheep, goats, and cattle. However, until recently, the issue of conflict between crop producers and migrant herders in Ghana had not assumed an endemic proportion to such an extent as to attract national interest. The print and electronic media are replete with stories of violent clashes between nomadic pastoralists and smallholder crop producers in Ghana and, more precisely, in the Kwahu Afram Plains.

What is it that may cause these two groups of farmers and herders to become violently antagonistic? The apparent answer is the struggle over access to land, which had plunged both farmers and herdsman into violent conflicts. In the quest to access land, who uses the fertile land at the expense of the other? In other words, who should have which part of the land in pursuit of

their productive processes? The complexity of the conflict is embedded in the struggle between the smallholder crop producers and nomadic cattle herders, neither of whom are indigenes of the area but tenants on the customary land of the Kwahu people. Whereas settler farmers feel that they are Ghanaians and have been on the land for so long and, therefore, should be given priority over nomadic herders, whom they regard as strangers, regarding access to land to expand their farming activities. The nomads also require more land for grazing their cattle and make a case for having a legitimate agreement with the traditional landowners. In all these competitions and contestations for space between the two migrant groups, the Kwahu landowners regard both farmers and herders as occupants alike and only look at optimising the value of their land. This has made chiefs exploit the situation by granting land to the higher bidder irrespective of how long one has cultivated or stayed on the land. The land factor has, therefore, placed both settler farmers and nomadic herders in conflictual relations, with both groups seeing the other as an obstacle in achieving their means of sustenance. The obvious outcome of these struggles is violent clashes between the two migrant groups in the case study area of the Afram Plains. Most research on farmer-herder conflicts has focused on the land conflict between the locals or between the indigenes and migrants, but in this study, the focus is on a land conflict between two migrant groups, which has received little attention in the literature. It is on this basis that the study examines the underlying contestations and conflicts between smallholder crop farmers, who are settlers, and nomadic Fulani cattle herders over land access in the case study area of the Afram Plains.

1.3 Background of the Study

Land is a critical resource that often generates contestations and conflicts around it mainly due to its socio-economic and political significance. Conflict arising over land could be between

pastoralists and farmers, who are classified as non-state actors, and between a government and community members, who are also non-state actors. The former involves disagreement regarding alternate land use, while the latter is the result of territorial and resource control. Of the two categories, the most discussed and examined land-related conflicts in Africa involve crop farmers and cattle herders (George et al. 2021; ECA 2012; Lund, Odgaard, and Sjaastad 2006). It is often the case that crop farmers and Fulani herdsmen are in a contest to secure land in pursuit of their means of production (Oyama 2014; Opiyo et al. 2012; Tonah 2005; Bassett 1988). Whereas farmers need land to cultivate their crops, herdsmen also require land to feed their herds, particularly land that is closer to water bodies. In both cases, crop farmers and herdsmen perceive each other as an obstacle to achieving their expected goal of higher yield. The nuances with regard to contestations to access land become even more complex when the indigenous narrative is introduced. Akumey (2017 citing, Waters-Bayer and Bayer 1994) states succinctly that the 'foreign' factor that asserts indigenous access and power over land has been a destructive factor in agricultural societies in the sub-region of West Africa. This is because the cultivation of crops has remained largely in the hands of indigenes, while cattle rearing has been dominated by foreigners for many years. In most rural areas, the land is at the centre of their livelihoods, so it often easily breeds conflict between individuals and groups. Land, therefore, becomes a guidepost for an individual or group identity and power articulation, especially when perceived through the ethnic lens. To this effect, Zwan (2010) avers that it is not only power in the wider sense of economic wealth presentation but, more significantly, the power to grant access to land that individuals and groups compete for to secure their survival. This viewpoint is shared by Lastarria-Cornhiel and Fraix (2009), who argue that land is an essential cultural resource, a productive factor, and a capital asset and that people who possess land rights have a certain level

of influence over those who do not, particularly in rural farming communities. The land question in Africa is, therefore, a subject of both peace and conflict, as it could lead to issues of unequal access, marginalisation, ownership, and use in Africa (Chitonge and Mfunne 2015; Cotula et al. 2004).

The nomadic cattle herders are often called Fulani in West Africa but are referred to by different names across sub-Saharan Africa.⁵ They are predominantly nomadic and semi-sedentary herders who undertake cattle rearing. In Ghana, the Fulani are of two categories: permanently settled and seasonal nomadic herdsmen. The settled Fulani herdsmen engage in available economic activities, such as farming and as hired herdsmen, whereas the nomadic Fulani herdsmen are seasonal migrants who arrive in the country for purposes of grazing their herds in the dry season and return to their home origins, Burkina Faso, Nigeria, Togo, Niger, and other surrounding countries, at the onset of the rainy season. The ability of the nomadic Fulani herdsmen to secure land for pastoral activities even though regarded as non-indigenes is because of the network of alliances they have established between some traditional authorities, landowning families, and some influential members in society. Amutabi (2000) considers such wider social networks by pastoralists essential for their survival. The activities of Fulani herdsmen could be viewed from two perspectives. The farmers mostly see the activities of Fulani herders as destructive to the land, while some traditional authorities see the presence of the nomadic herdsmen as an opportunity to optimise the value of their land. The latter has opened an avenue for chiefs who have discovered a 'portal to affluence' by granting lands to migrant pastoralists in exchange for

⁵ Different names are given to the nomadic herders across the African continent. In francophone countries, the Wolof term 'Puel' is used, the Mande use 'Fula', while the English-speaking areas refer to the herders as the 'Fulani' (Otu et al. 2020).

large sums of money. The situation has intensified the existing struggle over access to land between crop farmers and nomadic cattle herders (Tonah 2002).

In the past years, the Kwahu Afram Plains area has witnessed destructive and widespread activities of nomadic cattle herders. The nature of the conflict between the two migrant groups in the area is episodic, seasonal, and recurs at different times of the year. The widespread nature of the conflict and the high casualty levels are because of several reasons, including population growth, a large migration of nomadic herders into the area, large-scale land acquisitions, arbitrary land rental increases, and disputes over land ownership between chiefs in the area. Aside from these core issues, crop destruction, the killing of cattle by farmers, burning of grasses and farmlands, and social vices by nomadic herders in host communities instantaneously escalate into conflict between smallholder settler crop farmers and nomadic cattle herders. For detailed discussions on these factors, see Chapter Six.

The escalating tensions have resulted in the introduction of small arms and light weapons (SALWs) in the conflict process. Both crop farmers and cattle herders are armed when going about their farming and herding activities, which increases the tension between the two feuding parties, thereby eroding the incentive to coexist. The situation in the Kwahu Afram Plains is a microcosm of a broader and alarming situation in various parts of Ghana. The West Africa Network for Peace Building (WANEP) estimated that between January and June 2018, nine people were killed due to disputes between crop farmers and nomadic herders in the Eastern Region of Ghana. According to Bukari (2017), some six hundred Fulani herders and their families fled Yorikor and Zaabire settlements in Burkina Faso and sought asylum in Sapeliga, in the Upper East Region of the country. This was because of violent clashes between the Fulani and the Busanga ethnic group in January 2013. In Agogo in the Ashanti Region and other parts

of the country, the situation is no different. The research, therefore, studies the conflict from a unique perspective by examining contestations and conflicts over land access between two migrant groups whose access to land is tenuous because they are non-indigenes, and which is often disregarded as the emphasis of the conflict has always been on indigenous crop farmers and nomadic cattle herders in the country.

1.4 Objectives of the Study

The main objective of this study is to examine conflicts arising in the research area as smallholder settler crop farmers and nomadic Fulani cattle herders struggle over access to land and its effect on livelihoods in the Kwahu Afram Plains South District. Specifically, the research seeks to examine the following:

- Investigate factors influencing conflicts over access to land in the research study area.
- Examine how the challenges around land access contribute to conflict between crop farmers and cattle herders in the research study area.
- Examine the effects of the conflict on the livelihoods of farmers and herders in the case study area.
- Examine mechanisms used to alleviate the effects of the conflict on farmers and herders in the research study area.

1.5 Research Questions

The main research question guiding the study is: What are the root causes of conflicts between crop farmers and migrant cattle herders in the case study area? The following specific questions were also examined:

- What are the factors influencing conflicts over access to land in the research study area?
- How does challenges around land access contribute to conflict between farmers and herders in the case study area?
- What are the consequences of the conflict on the livelihoods of both farmers and herders in the research study area?
- How effective are the mechanisms put in place to alleviate the effects of the conflict in the case study area have been?

1.6 Significance of the Study

Several studies across Africa have investigated the phenomenon of farmer-herder conflict. The current study adds to the body of knowledge by examining farmer-herder conflict through the lens of environmental scarcity and political ecology theories. The interface of the two theories aided in unraveling the diverse competing interests that underpin land conflict between settler crop farmers and nomadic cattle herders. By not looking at the conflict between farmers and herders through a single lens, the framework explains how various factors interact and manifest into violent conflict. This significantly broadens and contributes to the literature in the understanding of the land conflict between smallholder settler farmers and nomadic cattle herders, thereby shaping the debate on farmer-herder conflict.

The existing literature on farmer-herder conflict concentrates on conflicts between autochthones and nomadic herders. The focus of this study on settler farmer-herder conflict has introduced another dimension to the literature on farmer-herder conflict, thereby filling a gap in the existing literature. As migrants, both groups have no land ownership right in the area, thereby exposing

their vulnerability, leading to exploitation by landowners. This brings to light how migrant groups are excluded from resource access, particularly where granting access to land strengthens traditional landowners' economic and political dominance at the expense of migrants with less economic power. With this understanding, policymakers are better informed about the need to address migrants' weak land rights to improve their land access and security of tenure.

The study is also uniquely located in an under-researched area of the Kwahu Afram Plains South District, where farmer-herder conflict is prevalent. As a major food basket of the country, highlighting the conflict could help shape policy toward ensuring both stable crop and animal production.

1.7 Limitations of the Study

The research was confronted with two main challenges. The first had to do with the outbreak of the Covid 19 pandemic. Even though data collection had started before this event, it stalled the process for some time. However, since the research area was not an epicentre of the pandemic, it was not under lockdown. Data collection was then resumed after a break of a few weeks. The resumption of the data-gathering process was done under strict observation of the Covid 19 protocols. Up until the start of the interviews or focus group discussions, the researcher shared disposable face masks for the participants, with adherence to the social distancing protocol. Where focus group discussion was conducted, it was done in an open space precisely under trees in the village compounds. The strict observation of the Covid 19 protocols was to protect both the researcher and the respondents who participated in the study.

The second limitation of the study was the bureaucratic nature of the government administrative setup on both the local and national levels. It was extremely difficult to get appointments with

key stakeholders purposively identified as part of the research respondents. Even when an appointment was scheduled, it was canceled, and a later date was rescheduled at the last minute. In other instances, the bureaucratic process was extremely cumbersome, as it took many days and, sometimes, months to be able to book an appointment with a government official who could assist in providing the relevant information needed in the conduct of the research. The cumbersome bureaucracy delayed the data collection in the field. However, with the necessary tolerance and determination, these limitations did not in any way impact negatively on the research output.

1.8 Thesis Outline

The thesis is structured into eight chapters. These are the introductory section, a review of related literature, a conceptual chapter, methodology and study area, the two empirical chapters, and a concluding chapter.

Chapter One is the introduction. It provides the focus and problem statement where the perspective and research problem of the study are defined. The chapter further presents the background information, objectives, and research questions of the study. The significance and the limitations of the study are also highlighted.

Chapter Two discusses conflict in general, as well as land conflict, particularly in crop farmers and cattle herders' disputes on the African continent. The contribution of land in the socioeconomic, historical, spiritual, and political context of the broader land question was also examined. The section also gave an overview of the distorted view of landownership through Western property concepts on African land practices and thoughts, which has generally led to confusion, tensions, and conflicts. In this section also, different types of land conflicts were

highlighted, and the current study premised on the access and use type of land dispute. This is illustrated through the struggle and competition for resources involving farmers and herders. Finally, under this section, the role of actors in farmer-herder conflicts was brought to the fore. These actors position themselves as rational players who take advantage of opportunities for their interests. As rational actors, their actions have frequently resulted in corrupt practices for their personal interest and the politicisation of the conflicts between migrant farmers and nomadic herders.

Chapter Three examines the factors that contribute to land access conflict between crop producers and nomadic pastoralists. These factors are classified as remote causes of the conflict. While they might not be apparent in the conflict, they are a powerful force that fuels conflicts. The chapter's final section highlights the effects and mechanisms for resolving disputes between crop farmers and cattle herders. These mechanisms, as the research highlighted, include the use of either the modern or traditional approaches or both to conflict resolution. Aside from these two dominant approaches, the study outlines how most governments in the West Africa sub-region have, over the years, utilised eviction as a tool in managing the recurring and rising conflicts. This measure has, however, proven to be less effective in managing the conflict involving crop farmers and nomadic herders on the African continent.

Chapter Four presents the conceptual schema on which the thesis is anchored. The environmental scarcity and political ecology theories were used to enable a multidimensional conceptual prism of the theories focusing on the ecological, demographic, economic, and political factors underpinning the conflict between smallholder settler farmers and nomadic Fulani herders in the case study area. The use of the two theories draws mainly from the position of Turner (2004), who argues convincingly that crop farmer and cattle herder conflict should be

viewed as more than just resource disputes but that other aspects, such as economic and political issues, should be considered for a better appreciation of the conflict dynamics in any geographical setting.

Chapter Five provides an overview of the study area and methodological approach. The chapter highlights the spatial background by providing information on the environmental, social, and political structure of the case study area. The research strategy and design, selection of the case study area and communities, sampling methods, data collection instruments, data analysis, ethical appraisal, and security considerations are all covered in this chapter.

Chapter Six is the first empirical chapter of the thesis. It discusses empirical data on the role of land in the dispute between the two migrant groups in the case study area of the Afram Plains in Ghana. The land factor addresses the specific research question: What factors influence conflict over access to land? And do challenges around land access contribute to farmer-herder conflicts? The study argues that the land factor is an intricate cause of the conflict and is principally influenced by the growing human and herd population as well as the large-scale land acquisition for agriculture development. However, underneath the land factor are the immediate causes of the conflict, which include crop destruction, burning of grasses, and the alleged engagement of nomadic Fulani herders in social vices. The chapter also identifies the increasing land rental charges and disputes over land ownership between traditional landowners as challenges around land access that influence conflict between smallholder crop farmers, who are settlers, and migrant Fulani cattle herdsman. The environmental scarcity and political ecology theories are central to the discourse around the land factor and farmer-herder conflicts in the research study district.

Chapter Seven is the second empirical chapter and discusses the effects and mechanisms of alleviating crop farmers' and nomadic pastoralists' conflict in the research study area. The chapter is in two parts. The first section discusses the detailed effects of the conflict on the feuding parties. The section identifies the effects of the conflict involving settler crop producers and nomadic herdsman, including the effects on livelihoods, food security, the effect of debt repayment, community safety, development, social effects, and effects on lives and property and on land management and governance at the local level. The interpretations of the effects of the conflict are made through the environmental scarcity and political ecology theories. The chapter points out that these outcomes of the conflict between the two migrant groups in the case study area have manifested because of the interactions of three sources of conflict identified as population growth, unequal distribution of resources, and degradation. The study argues that when more people demand a resource in limited supply, for example, land, competition over that resource ensues and sometimes leads to conflict. This could result in the destruction of properties, and investments, thereby affecting incomes, productivity, and livelihoods. On the other hand, the effect on land governance at the local level is explained through the political ecology theory, where the personal interest of some traditional authorities and government officials has led to corrupt practices, which influences their decisions in land allocations and the dispensing of justice. This has, therefore, weakened their powers in the adjudication of issues and the enforcement of rules and norms around the land.

The second part of this empirical chapter deals with the various mechanisms deployed to alleviate farmer-herder disputes in the research study district. The section contends that previous methods used in alleviating farmer-herder conflicts have been tentative, ad hoc and knee-jerk and have, therefore, failed to address the challenge holistically. The section points to the fact that

traditional means of resolving conflict between farmers and herders have failed and weakened because some traditional authorities are implicated and have been accused of benefiting from the presence of the nomadic Fulani herders and are, therefore, biased in favour of the cattle herders during resolution of conflicts. Similarly, the state has not been effective with its policy of eviction mainly because of the presence of many interested parties and the ratification of Economic Committee of West African State (ECOWAS) protocols on free movement for fear of retaliation from member states. Even though efforts, such as the establishment of a cattle ranch, the passage of a livestock bye-law, and stakeholder engagements, are instituted in the case study area to address the menace, the conflict continues to reoccur. This is because these measures do not tackle the core causes of the conflict, the reason for the occasional outbreaks of violent conflict between the feuding parties in the area. For this reason, the study argues that to stop the recurring conflicts, strategies that involve decisions about land rights, tenure, and administration should be implemented. In addition, measures aimed at conserving land and reducing migration should be explored, while efforts to address the violent conflict through public education and advocacy are undertaken.

Chapter Eight outlines the study's main findings, conclusion, and recommendations. The main results of the research are identified around the research objective and questions of the study. There are five key findings that emerged from the study. First is the growing land scarcity in the area. This has been occasioned because of population growth due to natural factors and climate-induced migration. The growing human and herd population has, therefore, led to an increase in the demand for land. Additionally, the emerging phenomenon of large-scale agriculture development has led to reducing the land resource base of both migrant farmers and nomadic herders. Second, aside from the core issues of land, there are immediate factors, such as crop

destruction, killing of cattle, burning of grasses, and alleged vices of the herders in host communities, that instantly ignite clashes between crop farmers and nomadic herders. Third is the negative impact of the conflict on the livelihoods of both settler farmers and cattle herders. Both migrant groups have suffered considerably in terms of loss of crop yield and animal production. While farmers have lost through lower crop yields because of the conflict, herders have lost several of their cattle through shooting by farmers and the security personnel. Four, the mechanisms put in place as a mitigation strategy in resolving the conflict have been ineffective because of corruption, poor land governance structure, and the activities of some greedy chiefs. Finally, due to the nature of land ownership in the area, the state has been hesitant to interfere in the conflict. With the chiefs controlling 80 percent of the land in the research study area, the state is hesitant to intervene because they view customary land as private. The study draws on three overarching conclusions that land access is central to the conflict, population growth and climate change have affected land use and access dynamics in the land, and that addressing the conflict will require addressing issues around land access in the research study district. The study concludes that farmer-herder conflict is complex and needs to be examined from diverse perspectives to appreciate its nuances.

1.9 Conclusion

The chapter introduced the study, identifying the struggle over land access as the key source of dispute between the two migrant groups in the area. As a result, the research sought to investigate the factors and challenges underlying land conflict, the consequences of the disputes on the livelihoods of the feuding parties, and the mechanism for alleviating the effects of the conflict. By studying the land conflict between the two migrant groups in the Afram Plains, the study contributes to the unique form of resource conflict where some migrants are excluded from

the use of natural resources, particularly land. These conflict dynamics involving migrant groups contribute to deepening the discussion on land conflict as it relates to smallholder settler crop farmers and nomadic Fulani cattle herders.

CHAPTER TWO

Land and Conflict in Africa: A Review of Relevant Literature

2.1 Introduction

Africa is blessed with natural resource reserves that contribute to the continent's economic sustainability. However, amid these resources and wealth, the continent is bedeviled with the paradox of poverty and social conflicts or violence. 'Natural resource' is a term used to refer to minerals, forests, fertile land, and water that occur naturally and can be accessed for financial benefits (United Nations Environment Programme [UNEP] 2015). It could also be said to be all-natural resources found on or below the earth's surface, which can be extracted or harvested, and from which income could be generated or other purposes of benefiting humankind served. Such natural resource includes solid and non-solid minerals, land, water resources, animal stock and grazing pastures which are often competed for and exploited by various interest groups, leading to conflicts (Maphosa 2012; Alao 2007). This chapter discusses the literature review around the discourse of contestations and conflicts between smallholder crop farmers and migrant cattle herders over land access. The section discusses the literature pertinent to the study around the objectives and research questions. Specifically, the literature examines scholarly works broadly on conflicts, land conflicts, and types of land conflicts. The chapter also discusses land and farmer-herder conflicts, actors, corruption, and the politics revolving around farmer-herder disputes.

2.2 Conflicts

Conflict arises between people in a variety of relationships and social contexts. Because people have such a wide range of potential differences, the absence of conflict is an indication of the

absence of any meaningful interactions (Fisher 2000). Conflict is, therefore, ubiquitous in any human endeavour and is, arguably, inevitable. They are widespread across the African continent, with some resolved amicably among the feuding parties while others erupt into extensive violence. Conflict is a fight between contending parties over values and claims of status, power, and limited resources, with the primary goal of neutralising, injuring, or eliminating their opponents (Hagberg 1998, citing Coser 1956). Nnoli (1998) conceives conflict as contradictions arising from differences in ideas, interests, ideologies, tendencies, orientations, and perceptions. Conflict is also the state of relations experienced when two or more parties have mutually exclusive goals (Pumphrey 2003). Hussein (1998), on the other hand, used the word broadly to cover tensions between resource users. This includes simple arguments or disputes between individuals or groups, legal proceedings between resource users, political action to evict certain resource users, theft, and killings. A more encompassing view of conflict is expressed by Mayer (2000), who explains conflict through a multi-lens: that is, conflict as perception, conflict as feelings, and conflict as action. As a perception, conflict is the understanding that one's own needs, interests, desires, or values are irreconcilable with those of another. This cognitive dimension contains both objective and subjective dimensions. Conflict as a feeling refers to an emotional reaction to a situation or interaction that indicates some sort of disagreement. Fear, anger, bitterness, sadness, hopelessness, or a combination of these emotions can be used to express these feelings, and finally, as action, conflict entails actions to show emotions, express perceptions, and meet one's own needs in a way that may interfere with someone else's ability to meet his or her own need. Such actions may be violent or destructive. Simply put, conflict could be expressed as a struggle arising between people whose ideas, beliefs, and values contradict each other and where the aspirations of the feuding parties could not be achieved simultaneously.

Nevertheless, a conflict, which is mostly seen to connote destruction, is rather 'value neutral' as it might have both positive and negative repercussions. Whereas the negative consequences of conflict will result in suspicion and damage to relationships, obstruct cooperative actions, and even lead to violent confrontations, conflict, on a positive side, can help explain issues for analysis, resulting in greater clarity and improving the quality of problem-solving, stimulating new ideas, promoting social change, and defining group relationships (Turner et al. 2011; Bretherton and Sanson 2001).

Fisher (2000, citing Katz 1965) postulates a typology that distinguishes three sources of conflicts in any human society: economic, power, and value conflicts. In this typology, economic conflicts arise due to competition over limited or scarce resources. Individuals or groups struggle over limited resources. Each party is looking to make the most out of the circumstance, and so the behaviour and emotions towards each other are geared towards such goals. Value conflict, on the other hand, is driven by differences in principles and ideology. Examples of this type of conflict include ethnic and religious conflicts. Lastly, power conflict arises when a group seeks to increase or preserve its level of control in a relationship or a social situation. Power conflicts frequently end in a victory and defeat or a stalemate with a high level of tension. This could occur between individuals, groups, or nations whenever one or both parties choose to approach the relationship from a position of power. When farmer-herder conflict is placed in this typology, it could be deduced that farmer-herder conflicts could be triggered by both economic, power, and differences in value or cultural practices. Both farmers and herders will fight to maintain dominance and control over arable land for crop cultivation and grazing purposes, respectively. In other words, both farmers and herders want to safeguard their means of livelihood; whereas

herders are motivated to survive in a very conducive ecological zone, farmers seek to protect their means of sustenance within the same environment.

Schweithelm, Kanaan, and Yonzon (2006), exploring the relationship between natural resources and armed conflict in Nepal, classified natural resource conflict into type one and typed two. In the first type, conflict involves a situation where armed conflict is sponsored and sustained through the sale or extra-legal taxation of natural resources. This view represents the findings of Maphosa (2012), who states that the main rebel groups in Angola (MPLA and UNITA) used oil resources and alluvial diamonds to engage in long-term warfare. In countries such as Liberia, Sierra Leone, Sudan, the Democratic Republic of Congo (DRC), and other parts of Africa, the diversity of resources - diamonds, iron ore, oil, timber, and rubber - led to the phenomenon of warlords, where many militia groups, such as the Revolutionary United Front and the National Patriotic Front of Liberia, controlled and strived on these natural resources. The second type of natural resource conflict occurs due to competition over resources between individuals and groups in society. Such conflicts include farmer-herder and pastoralist conflicts which transpire because of competition for land and water resources as is experienced mostly in West, East, and Central Africa. In both categories of natural resource conflicts, the outcome is a threat, hostility, loss of livelihood resources, and weakening governance institutions. The relationship or link between natural resources and conflicts dates back as history shows, with several examples of kingdoms and states forging alliances and friendships to protect access to and control indispensable natural resources. Maphosa (2012) and Alao (2007) posit that these natural resources are imperative in triggering as well as entrenching conflicts in Africa. Natural resource conflicts occur when there is disagreement about who has access to, who controls, and who uses natural resources. The sole proposition of this is that natural resources are vital and influence the

livelihoods of millions of people in Africa. Therefore, when these resources are not managed well or are unevenly shared, they contribute to tensions resulting in violent consequences.

Many factors have been identified as causes of conflict in Africa. Broadly, two schools of thought have emerged to explain the increasingly widespread conflicts on the African continent. The first point of view sees the continent's problem as largely 'homegrown'. The other school of thought attributes Africa's insecurity to external forces, particularly the developed world (Pumphrey 2003). Diverse explanatory factors emerge from this broad categorisation of the causes of conflict in Africa, which are linked by common themes and experiences. Among these many causes of the conflict that are widely discussed in the literature are those with historical, political, economic, and cultural roots. In his discussions of the causes of conflicts in Africa, Mazrui (2003) traces it back to the ruminates of the colonial legacy. Ali Mazrui stated unequivocally that the sociological and political mess that white colonialism created in Africa was the source of post-colonial wars. Placing the statement in context, he contends that colonial powers not only destroyed traditional African institutions and the mechanisms of conflict resolution but failed to establish effective substitutes in their place. In furthering his argument, Mazrui avers that the newly established African states by the Europeans were ineffective because the foundations upon which they built these states were weak and that the African leaders who inherited these states from the Europeans had little experience with self-government. The resultant effect was that post-independence states were unable to effectively administer the continent. The post-colonial rule in Africa has been riddled with difficulties. Among these are the problems of corruption and bad governance. Most African regimes mismanaged their state's resources and weakened government institutions, resulting in economic stagnation, political uncertainty, and the deterioration of peace and stability (Annan 2014). Clientelism and

patrimonialism, which embolden political elites to entrench themselves in power, are examples of the manifestations of the corrupt activities of the political elites. Resources in this situation are doled out to party faithful or loyalists of the political elites at the expense of the public. This has largely deepened the inequality gap and created resentment among ordinary citizens. Poverty is also a major contributor to Africa's escalating conflicts. With nearly half of sub-Saharan Africa's population estimated to be impoverished (United Nations Development Programme [UNDP] 2012), civil unrest, disgruntlement, and agitations have become common tools in the struggle for improved livelihood opportunities. These agitations are widely spread across the continent, with some becoming violent (Annan 2014). In such an economic mess, 'the ballot cannot replace the bullet'. In the coup in Guinea Conakry on September 5, 2021, led by the military junta of Colonel Mamady Doumbouya, it was stated that the coup was necessitated by the mismanagement of the country, which has resulted in endemic poverty and human rights violations. Similarly, poverty was noted as being one of the reasons for the tensions and conflicts in a study conducted by Voz di Paz and Interpeace (2010) in Guinea Bissau. Some of the country's poverty indicators included food insecurity and a lack of infrastructure and access to necessities. The link between food insecurity and conflict in Guinea Bissau is illustrated by the following proverb, 'in homes where there is no bread, everyone fights, and no one is right' (Voz di Paz and Interpeace 2010). Deprivation, poverty, and a lack of economic progress in Africa create an environment conducive to conflict.

Religion and ethnicity are other causes of conflict. These two are viewed as the bane of the African continent. This is due to the significant impact these factors have on conflict. Others, however, believe that both religion and ethnicity provide the foundation for moral uprightness in society and that inherent in these cultural institutions are the principles of openness and

accountability that enable a just society to be established. The foregoing is instructive of the fact that religion and ethnicity can be many things, both good and bad. With the diverse and complex ethnic and religious groupings, the ability to exploit these cultural institutions has had a significant impact on African conflicts. According to Lemarchand (2003), ethnicity has the potential to be manipulated for the pursuit of heinously immoral goals, thereby profoundly altering collective perceptions of the other. As a result, ethnic antagonism has resulted in widespread ethnic conflict across the African continent. The ethnic conflict in Rwanda in 1994 exemplifies how ethnicity can be a powerful driving force in African conflict: the Rwandan genocide resulted in indiscriminate killings, with over eight hundred thousand Tutsi killed in less than a hundred days (Mazrui 2003). In relation to religious wars, there are numerous examples in Africa. The Arabs of Sudan's Muslim north have long been at odds with the Christians and Animist black Africans in the country's south. The height of this tension was the attempt to impose strict Islamic Law (Shari'a) on the entire country of Sudan, including the non-Muslim south. According to Malwal (2003), this attempted imposition of the Shari'a was significant in Sudan's second civil war, which continues to this day. Similarly, in Nigeria, tensions between Christians and Moslems flare from time to time, resulting in intense violence in the northern cities of Kaduna and Kano (Lloyd 2010). While these conflicts are often politicised, Mazrui (2003) emphatically states that religion is clearly at its roots. Another reason for the conflict in Africa is the lack of economic opportunities for the continents' growing population. This has fueled anger, discontent, and frustration with African states' inability to deliver proper economic growth that translates into improved citizen living standards. Conflict entrepreneurs take advantage of the youth bulge and exploit it to their advantage. In Algeria, for example, unemployment and poor economic prospects fueled the growth of militant Islamic groups (Lloyd

2010). The lack of economic opportunities has further led to people migrating from rural to urban spaces or from developing to developed countries. This migratory pattern has undermined social cohesion in the destination countries, which has sparked conflicts in Africa. The lack of economic opportunities is widespread on the continent, the reason for which is a major cause of the conflicts in Africa. Lastly, on the African continent, poor governance has resulted in extensive conflict. Poor governance translates, among others, into a limited territorial extension of state authority and security. The inability of some African states to extend control over their territories has created a void. Rebel groups, such as Boko Haram, have benefited from the state of Nigeria's failure to secure its territories. These are not exhaustive causes of the widespread conflicts on the African continent but an attempt to highlight and explain a few of such factors in the thesis.

2.3 Land and Conflicts

Land plays a very important role in society. Land as a resource is more than just a factor of production or a resource for economical purposes; it has a cultural, political, identity, religious, and environmental significance. The African Union 'Framework and guidelines on land policy in Africa' (2010) emphasises the importance of land by stating that farming, livestock production, and related activities provide a living for approximately 60 percent of the African population. Significantly, the agricultural sector's contribution to the gross domestic product (GDP) in most sub-Saharan African countries exceeds 25 percent, with figures as high as 40 percent in the Democratic Republic of Congo (DRC), Ethiopia, Rwanda, Tanzania, Guinea Bissau, and Togo (African Union, African Development Bank and United Nations Economic Commission for Africa 2010). In rural communities in Africa, the land is the final resort of most individuals for survival because of their dependence on agriculture. Thus, at the household level, the land is

critical for improving food supply and financial stability and the only considerable household asset to be passed down to the next generation. Another importance of land in Africa stems from its connection to identity. The link between land and identities is captured succinctly as follows:

land rights are intimately tied to membership in specific communities, ranging from a nuclear or extended family, clan, or ethnic family, clan, or ethnic groups to the nation-state. At these levels of social identities and organisations, people seek land as collective right not just as material satisfaction but also as a source of power, wealth, and meaning. Therefore, control over land has been used and is still used as a meaning of defining and constructing/deconstructing identities and belongings (Komey 2009:2).

Therefore, a community or society that has no land loses its distinct identity. Again, land under the customary system is highly valued, as it is a significant source of wealth and power (Moyo et al. 2000). The greatness of kingdoms and chiefdoms is expressed in the extensive boundaries they control. Such control legitimises the authority of the chief to govern the area. The more territories a kingdom possesses, the greater and wealthier is that kingdom. It is on this basis that most traditional rulers grant access to land to immigrants on the condition that they acknowledge the authority of the traditional authority (Berry 2017). Finally, in addition to economic, political, and social identity construction, land has religious or spiritual significance. It is revered as the abode of the ancestors, with ritual ceremonies accompanying the use of the land. According to Agbosu (2000), land is an inherited heritage to which no single person should be allowed to have an exclusive claim. To do otherwise is to deny future generations access to land. The consequences are severe, as it is believed that the offenders will face the wrath of their ancestors. The high value that Africans place on land makes it an indispensable factor of production, which breeds conflict. This is due to its unique status as a valuable immovable resource with a limited

supply (Zwan 2010). This makes land not merely a source of conflict but a resource for its perpetuation (Department for International Development [DFID] 2001). Therefore, an appreciation of the intricate role that land plays in society is essential to understanding its role in a conflict.

The land question confronting Africa today stems from a distorted conception of land ownership caused by the imposition of Western (Roman-Dutch/civil law and Anglo-American) property concepts and terminologies on traditional African land practices and thoughts and is exacerbated by global and strategic imperatives (African Union, African Development Bank, and the United Nations Economic Commission for Africa 2010; Akuffo 2009). Land ownership in the African context served as a bond that defined collective rights and duties and provided a matrix within which all could obtain a living (Okoth-Ogendo 1989). A clear separation was made in this respect between the *solum* (soil) and the things that grow on it. According to Okoth-Ogendo (1989), in African thought and law, there is a clear separation between the soil and any manifestations, such as crops, trees, and buildings. Thus, these manifestations represent human interactions with the *solum*. This understanding differs from the Western (Roman-Dutch/civil law and Anglo-American) concept of property, in which the *solum* is linked together with air and water, thereby recognising the claims of the individual rather than the social labour upon it. Chitonge (2018) contends that when the social relations on land in African societies and the European systems are disaggregated, the conception of land ownership in the two systems will mean different things. Whereas it was common in the European scheme for individuals to have sole ownership of land, ownership of the *solum* was reserved for the collective in the African system. This meant that only things attached to the soil could be possessed by individuals. The African context, the 'collective', was acknowledged to also include the past (ancestors), the

living (present), and the future generations (Chitonge 2018). It is for this reason that Agbosu (2000) argues that society could own land, rather than any single individual or traditional leader having ownership right over the *solum*. When these concepts of ownership are transferred from the European to the African situations, they cause not only confusion but also tensions and strife. This confusion is well articulated by Akuffo (2009:62) as follows:

The transposition of Western (Roman-Dutch/civil law and Anglo American) property concepts and terminology in the analysis of African processes is a veritable source of confusion. The characterisation of property concepts and legal relationships using Western analogies and paradigms is perhaps understandable but has nevertheless led to an unnecessary degree of confusion with wholly negative practical consequences such as destructive litigation over titles and land alienation.

The implication of this distorted view of land ownership, which has resulted from the transposition of Western property concepts and terminologies, is why land has become a commodity that can be bought and sold (Chitonge 2018). This has resulted in disputes on the continent, both within and across borders, making the land question one of the most pressing issues confronting Africa today.

Over the last fifty years, land conflicts have become a dominant issue worldwide, particularly in sub-Saharan African countries. Since the year 2000, Africa has accounted for 48 percent of all civil conflicts where access to rural land is critical to the majority's survival (Alden Wily 2009). The distorted colonial conception of land and the incomplete social transformation embarked upon by the African states is a fundamental factor in the nature of contemporary conflicts (Alden Wily 2009). According to Wehrmann (2008), land conflict occurs when at least two people have

competing interests in land ownership. This stems from the right to use, manage, and generate income from the land. In the view of Richards (2013), land conflict refers to all aspects of human contestation over landed resources. This makes land a critical resource for which access to it increases security and reduces the vulnerability of individuals or groups. There are varied interpretations of the causes of land conflicts by researchers. Scholars have attributed the causes of land conflict to diverse factors. Quan et al. (2004), for example, posit that market development and population increase are major factors in the rise of land conflict on the African continent. Tsikata and Yaro (2011) and Ubink and Quan (2008) attributed the phenomenon to the lowering enthusiasm of traditional authorities for transparency and accountability due to the noninterference posture of the state towards chiefs in carrying out their mandates. Lund and Boone (2013) and Geschire and Nyamnjoh (2000) linked the cause of land conflict to the politics of belonging and citizenship. Thus, competition over land has given rise to the struggle over the meaning of belonging and citizenship, leading to exclusion in resource access and use. Boone (2013), on the other hand, contends that conflict over land is driven by regimes of governance that differ in their impacts depending on whether power over land is held by local or national authorities. Among these contenders for authority over land, according to Peters (2013), are the state as a public entity, different sections of national and sub-national government offices, and state representatives acting in their self-interest. By investigating how land conflict reflected, intensified, or reshaped struggles for authority within and between families, local communities, institutions, and states in post-colonial Africa, Berry (2017) asked Who was entitled to sell, mortgage, or bequeath land or land rights, and who could decide? The pervasive competition for land has, therefore, deepened social differentiation, which takes many forms, including youth against elders, men against women, and ethnic and religious clashes (Peters 2004). The foregoing

gives credence to the position of Peluso and Lund's (2011) argument that land conflict is about power and property rights rather than land usage. Land conflict is fueled by the desire for control over land and its rights to it. As a result, there is fierce competition, which leads to conflict.

In Ghana, multiple land sales, indeterminate boundaries of customary-owned land resulting from the lack of reliable maps and plans, and conflicts of interest between and within land-owning groups have been highlighted by Ghana's National Land Policy as some of the underlying causes of land conflict (Government of Ghana 1999). The above position is consistent with Ayee et al. (2011), who found that lack of transparency and accountability in land acquisition within the same community or family, inter-boundary trespassing or encroachment on adjoining lands, and multiple sales of lands are the leading causes of land conflicts in the Greater Accra and the Eastern Regions of Ghana. As a result of these challenges, the most vulnerable individuals are denied access to land that might allow them to improve their lives. The lack of access to land not only deprives rural people of their source of livelihood but puts their survival as human beings in jeopardy. This circumstance enhances the possibility of a confrontation between groups vying for the land. As a result, violence arises in rural agrarian areas as people compete for land. In Latin America, for example, the land was central to Emiliano Zapata's call during the Mexican Revolution. A catchphrase of the revolution was: 'The land belongs to those who work it.' The same resource culminated in the internal armed conflict in Columbia and the birth of the Landless Workers Movement in Brazil in 1970 (Oxfam International 2016).

Land conflict in Africa varies in dimension and process as well as the group involved. Conflicts happen between comparable sources, which include pastoral and farming communities across Africa. For example, in East Africa, there are conflicts over land between Pokot and Turkana, Maasai and Kikuyu, and Maasai and Kalenjin (Kioko 2016). The situation is not different from

West Africa, which has seen migrants engaging in conflict with indigenes over land in Nigeria, Ghana, Burkina Faso, and Ivory Coast. In Ghana, land has remained a key driver of ethnic conflict between the Konkomba and Nanumba, Konkomba and Bimboba, Gonja and Nwuri ethnic groups, and among the Nkoya and Alavanyo people in the Volta Region of Ghana (Tonah 2006; Tsikata and Seini 2004; Hagberg 1998; Waters-Bayer and Bayer 1994; Bassett 1988).

Apart from conflict between indigenous people and pastoralists or migrant farmers, there are also conflicts between states and indigenous people, as well as between companies and rural people over the right to extract minerals and other resources on the land (Chitonge 2018; ECA 2012; Lund, Odgaard and Sjaastad 2006). According to Richards (2013), in West Africa, three forms of land disputes result in violence and insecurity. These include agro-pastoral conflicts, which have to do with the clash of livelihood systems; agrarian conflicts, that is, the struggle for land ownership or control of labour required to work the land; and forest frontier conflicts which have to do with the struggle over forest resources; hunting, logging, and mining. Bruce and Holt (2011) also succinctly established the relation between land and conflict by stating that land is a valuable resource having economic, strategic, political, and cultural implications. The land is, therefore, used by people, communities, commercial sector entities, the state, and others, often for opposing purposes. Each of the groups seeks to benefit from the land, sometimes at the expense of others, whether actual or perceived. While the need for land grows, land resources remain mostly a fixed asset, resulting in competition and conflicts. This makes land a critical resource that is often contested among interested parties. These land conflicts in Africa take different dimensions as some tend to be non-volatile while others become volatile.

2.4 Types of Land Conflict

According to the United Nations Human Settlements Programme [UN-Habitat] (2009), land conflict comes in many forms but can be broadly classified by factors such as the type of land involved, whether it is privately or publicly owned, or common property, the scale of the conflict, whether it is a localised dispute or a large-scale conflict between ethnic groups or even countries, and the nature of the conflict. Different types of land conflict emerge because of this land conflict classification. These are discussed below.

2.4.1 Boundary Land Conflict

Boundary disputes are disagreements over where the property of an individual, community, or administrative unit ends, and another begins. They are, broadly, fought on the local, provincial, and national scales. In recent years, the bulk of the devastation from such conflicts has been felt primarily at the local level, where a lack of clarity over land boundaries has caused conflict among families, clans, villages, and ethnic groups. It is linked to the customary system of land administration, in which land is mostly undocumented, and boundaries are delineated by natural or non-permanent markers, such as large trees, rocks, water bodies, and footpaths. Where these physical markers are altered, destroyed, or overgrown with weeds, tensions are likely to erupt, leading to conflict. Boundary disputes also manifest between the state and communities where protected or reserved lands are encroached upon because of the absence of clear boundaries (Adam et al. 2020). These incidences are widespread across Africa. Alao (2007) cited two examples in Nigeria to typify boundary disputes in the country. These were the conflicts between the Umuleri and Agulari communities in eastern Nigeria in 1995 and 2000 and those which occurred between the Kuteb and Cham communities in the northern part of Nigeria. There is also

that between the Tiv and the Jukuns in Nigeria. The conflict between these communities has ensued over the control of a parcel of land along their shared border. The Alavanyo and Nkonya conflict in the Volta Region of Ghana is an example of this type of land conflict. The motivation behind this kind of land dispute is not about the type of boundary marker or the location of the marker. The significance of the dispute is linked to what the accepted boundary marker would mean for the use of the land as a resource. As a result, this type of conflict has become more complicated because, depending on what is accepted as the actual boundary marker, it may have implications for how either side accesses and uses the land as an economic resource (Penu and Essaw 2019).

2.4.2 Territorial or Border Land Conflict

This type of conflict is similar to land boundary disputes, but on a larger scale, and it involves two or more countries. Such territorial disputes could occur either on land or in the sea. When states are not able to secure or take control of their territories both on land and the sea, the void serves as a good basis for external intrusion, especially when the area is endowed with significant natural resources or the area under dispute serves strategic importance. Africa as a continent has a history of inter-state border disputes dating back to the colonial period. This is not to say there are no border disputes in other parts of the world. Territorial or border disputes are evident in Europe, Asia, and the Americas. According to Kornprobst (2002), a territorial or border dispute is a conflict between two recognisable groups that arises from at least one of the groups' claims to a portion of the territory or, in extreme cases, the entire territory that is administered by the other state. Largely, the literature attributes territorial or border disputes to the colonial factor, where European colonial forces partitioned and created unclear and porous borders, which have today become a source of disputes among many African states. However,

Sone (2017) contends that the majority of these territorial land disputes are also about states securing economic interest, expansionist policies, political rivalry, and the population bulge. These disputes are widespread across the African continent. In North Africa, some of these disputes include Algeria and Morocco over the Atlas Mountains area (1963-1970), Tunisia and Libya over the continental shelf (1978-1982), Sudan and South Sudan over the Abyei and Heglig zones (1979 and ongoing), and the ongoing Western Sahara conflict Morocco and the Polisario Front (Sone 2017). Border disputes have also occurred in West Africa and include Cameroon and Nigeria over the Bakasi Peninsula (1994-2002), Mali and Burkina Faso over the 160 km long Agacher Strip (1960-1987), Mali and Mauritania over the Hodh region (1960-1963) and Ghana and Ivory Coast over the maritime boundary in the Atlantic Ocean (2007-2014) (Sone 2017; Kornprobst 2000). In East Africa, we have Somalia and Ethiopia over the Ogaden desert region (1964-1978), Eritrea and Ethiopia over Badme (1998-2000), Malawi and Tanzania over Lake Nyasa (1964-1968), Malawi and Zambia over the 600km frontier (1981-1986), and Kenya and Uganda over Migingo Island in Lake Victoria (2004-2009). A number of these disputes are also ongoing in Central Africa. These include Cameroon and Equatorial Guinea over the River Ntem (2000 and ongoing) and Gabon and Equatorial Guinea over the islands of Mbanie, Cocotiers, and Congas (2003 and ongoing). Finally, in southern Africa, we have Botswana, Zimbabwe (Rhodesia), and South Africa's bush war or border war (1966-1989) and Lesotho and South Africa over the boundary of Basutholand, which is present-day Lesotho (1966-1990) (Sone 2017; Kornprobst 2000).

There have been a variety of approaches to resolving these territorial or border disputes in Africa. While some of these disputes on the continent have been resolved through regional mediation, such as that between Malawi and Tanzania, others are settled through bilateral

negotiations involving third parties such as the International Court of Justice (ICJ) and the International Tribunal of the Law of the Sea (ITLOS). Border disputes between Libya and Chad, Eritrea and Ethiopia, Cameroon and Nigeria, and Ghana and the Ivory Coast are examples. Despite the use of various conflict resolution methods, peace remains elusive in many areas, as citizens of the disputing states continue to face human rights violations from their contenders (Sone 2017).

2.4.3 Access and Use Disputes

Disputes over land resource access and use are common in Africa's rural agrarian, peri-urban, and urban areas. This often involves conflicting claims over land rights and land resources. Access and use disputes occur when there is disagreement in overlapping rights to the use of a specific resource or when various groups are assigned different rights to the same parcel of land. This disagreement regarding overlapping rights and interests to access and use of resources may relate to access to water, minerals, grazing, and/or transit rights (UN Habitat 2009) and may arise between farmers, pastoralists, farmers and pastoralists, farmers and miners, and urban developers. For example, a piece of land could be used for crop production, and after the harvest of crops, herds could graze on the harvested stubble of that piece of land. However, when one party obstructs the other from exercising their right to the use of that piece of land, conflict is triggered between the two groups. Farmers in Mali, for example, become enraged when livestock herders violate post-harvest grazing rules, such as the traditional practice of *sammande* (Jones-Casey and Knox 2011). In this environment, following the harvest of grains, herders are granted two days to graze their cattle on the millet and sorghum stalks before they get drier on the harvested crop field. The delay in harvesting or allowing herders to graze on the harvested stubbles presents access and use challenges. This has led the herders to violate post-harvest

grazing rules, which have resulted in intense conflicts between farmers and herders (Jones-Casey and Knox 2011). Additionally, access and use disputes have arisen from intense competition over dwindling ecological resources. Users of these resources had to struggle and compete with others through other means so as to survive. This situation has arisen because of degradation, large agricultural investment, and population growth. The interactions of these factors have reduced the availability of suitable ecological resources (Homer-Dixon 1991). To survive in such environments, farmers have resorted to cultivating and expanding their crop fields into traditional transhumant herder pathways, thereby blocking access to forage and water sources, such as wells and the banks of rivers. The inability of the herders to secure access to and use of these conducive ecological resources has affected their livelihood, a basis for which they struggle and, in extreme instances, engage in conflict to secure access to resources. The findings of Beck (2012) in the Masisi and Rutshuru areas of the eastern Democratic Republic of Congo, for example, point to a conflict between different resource users who are farmers, mainly Hutu, Hunde, and Nande, and cattle ranchers, mainly Tutsi. It constitutes the most visible and one of the most common conflicts resulting from disputed access to and control over land and water resources. This is explained by the intense struggle and competition over land resources in the area. While farmers struggle for adequate space for subsistence agriculture, cattle ranchers struggle to capture and extend grazing grounds for their increasing cattle population. The struggle and competition, therefore, to access and use adequate, conducive ecological spaces engender disputes among crop farmers, cattle herders and other users of the land and landed resources.

The current study falls under this conflict type. Both crop farmers, who are settlers, and nomadic cattle herders struggle to obtain their livelihood in the same environment and from the same

resource. This has, therefore, resulted in intense competition between the two land users. In the face of these competitions, settler farmers and nomadic cattle herders perceive each other as an obstacle to achieving their means of livelihood, hence contestations and conflicts between smallholder settler farmers and nomadic cattle herders in the case study area.

2.4.4 Multiple Sale of Land

The land sector faces several challenges. One notable example is the multiple sales of land, which has manifested into tenure insecurity for users of the land in rural, peri-urban, and urban centres. Conflict over who is the custodian of the land is largely to be blamed for this endemic phenomenon. Multiple sales of land could include a private individual selling private property multiple times, the land registration office allocating the same land parcels due to technical shortcomings or corruption, or public officials selling state lands multiple times (Wehrmann 2008).

This problem is so serious that it has an impact on the land acquisition process. Multiple land sales, according to Amanor (2009), occur in three situations. First, multiple land sales could arise as a result of disputed land ownership or rights to sell land between rival factions of chiefly lineages selling the same land to different people. Boni (2008) argues in support of the above claim that it is not uncommon for different chiefs or the same chief to either willfully or unwittingly alienate the same parcel of land to different users. Second, multiple land sale happens when land buyers fail to develop their plots on time. Chiefs are enticed to capture price differentials by reselling undeveloped plots as infrastructure in the area develops and property values rise. Lastly, the land is intentionally sold multiple times by dishonest chiefs with the sole intent of making more financial gains. Although unjustifiable, Danso (2013) argues that

intentional multiple sale of land is sometimes undertaken to cast doubt about the rightful owners of the land, creating a space for the disputing claimant to prove their case of rightful ownership and seek justice either from the community elders or through the formal courts. Non-intentional multiple land sales, on the other hand, occur when a community leader or chief resells previously sold land to a new buyer. This is usually due to a lack of current records on lands alienated by previous leaders. The effect of the phenomenon of multiple land sales is what Boafo-Arthur (2003) describes as active volcanoes scattered across the continents that have been dormant for years, and no one knows when an eruption will occur. The outcome of these incessant multiple land sales is one of the reasons for the frequent land disputes that culminate in violent conflict on the continent. Two examples of multiple land sales in Ghana's urban and peri-urban areas of Accra are depicted below.

In the first case, Ayee et al. (2011) describe how the late chief of Pokuase gave out the land for people to develop, but the chief's opponents, who were calling for his destoolment, also sold the same area to different people for the same reason of developing the land. What is clear in this case is that different authorities sold land to different people within the same area, resulting in multiple land sales. The outcome was a conflict between those who bought these lands from the different community leaders. In the second case, the Katamanso chief temporarily gave some of his lands to the Anwahia chief and his people for farming. Over time, the Anwahia chief sold some of the lands to an estate developer, who recently discovered that some of his acquired lands had been sold to another person. This was explained by the fact that the Anwahia chief, who had sold the land to the estate developer, died, and his son sold the same land again. Both father and son sold the same parcel of land, which belonged to a neighbouring clan (Wehrmann 2008, citing

Wehrmann 2002). The phenomenon of land guards⁶ has emerged because of multiple land sales. These land guards are hired to protect disputed lands. The activities of these land guards are destructive, as they could pull down an already built structure, and caretakers who are supposed to protect the other person's property are even assaulted.

2.4.5 Conflict Over Power to Allocate Land

The evolution of egalitarian means of land access into increasing commercialisation of land in Africa has increased competition over who has the authority to undertake the transfer of land and resolve issues around the land. When multiple authorities arrogate to themselves the power to allocate land within a given geographical area, the situation becomes even more precarious. Chiefs within the Upper West and East Regions of Ghana have jurisdictional authority over their people and are, therefore, limited in their control over land allocations. The earth priests, due to their privileged position as intermediaries with the ancestors, act as trustees of ancestral property on behalf of the community. These different roles played by the two respected institutions in the area have currently turned to be competitive rather than complementary relative to the control of land in the area. The struggle between the chieftaincy institution and that of the earth priest over who has the right to allocate and control land can be interpreted as competition for land, jurisdiction, and space (Lund 2013). Some chiefs are now asserting land-holding rights, a position that is contrary to their role of exercising jurisdiction over their people. According to Kasanga and Kotey (2001), this role is relatively new and has no basis in the customary law and practice of the area. Despite this, some chiefs claim to be the allodial title holders in the area rather than the earth priests. The usurpation of the traditional roles of the earth priests or

⁶ The recruitment of young people from both within and outside the community to patrol and protect contested land (Ayee et al. 2011:9).

tendanas over the power to allocate lands has resulted in tensions and conflicts in the area. Similarly, in areas with protracted chieftaincy disputes, there are disagreements over who has the authority to allocate and control land. Disagreeing parties in such situations undermine the chief's legitimacy. Each of the contending parties, therefore, arrogates to themselves the power to dispose of land arbitrarily. Ayee et al. (2011) demonstrate with an example of a dispute between the La Stool and some families over land ownership and the power to allocate lands in the area to illustrate this occurrence. They assert that the La Stool has leased some of the area's land to private estate developers but that this action has been challenged in court by the contending families.

2.4.6 Inheritance Disputes

This occurs when there is disagreement within a family about the allocation of rights to land or the division of plots after the death of a recognised owner. Such disagreements turn to challenges who has the right to take over the estate or lands of the deceased person. Who benefits and who is excluded? To solve this becomes a subject of contention. According to research, most women are left impoverished when their husbands die because the land they cultivate with their husbands automatically becomes the property of the deceased husband's family. In a polygamist family, a man may marry multiple women and have many children. In the event of such a man dying, the first son inherits all the father's wealth, to the exclusion of the wives and other children, particularly those born out of wedlock, in accordance with customary law and practice of a specific geographical area in Africa. It is the basis for which Whitehead and Tsikata (2003) argue that customary law provides limited access to land for women. Ezeilo (2020) uses Yoruba customary law to demonstrate this, focusing on the deceased's children, who are eligible to inherit his property, particularly the eldest surviving son. Similarly, Takeuchi and Marara (2011)

described another form of inheritance dispute in Rwanda. They stated that inherited land, known as *umunani*, is regarded as familial property that cannot be disposed of for personal reasons in a customary context. However, when land is scarce, and everyone wants to inherit a larger parcel of the land, disputes can arise. The challenge arises when other siblings raise concerns about an absence of transparency and openness in the sale of an inherited parcel of land or where there are restrictions on the use of specific plots of land within the family land space. In these situations, conflict is bound to occur (UN-Habitat 2009).

2.4.7 Land and Property Disputes

This involves government institutions and subjects of a particular stool. The dispute could emanate from competing claims between the state and indigenous communities over land in their traditional domain. The state, through such policies as land reform, nationalisation, and privatisation, may deprive the poor of the land, leading to conflict. These policies are widespread in Africa under the eminent domain of the state to compulsory acquisition. The challenge with these acquisitions is that the state does not always fully utilise these lands but does not return such lands to the traditional owners, causing tensions between the state and the traditional landowners. In other instances, these compulsorily acquired areas are not compensated for expeditiously, or such compensations are not paid for a greater length of time, sometimes decades. The reason for this occurrence could be attributed to a fundamental flaw in the acquisition processes that does not make compensation payment a condition of the acquisition or a lack of funds to effect payments. Various reforms across the continent are geared toward addressing this kind of injustice, which is a source of subtle tension between the state and traditional authorities who are trustees of customary land. The new Land Act (Act 1036) in Ghana, section 238(1) provides that the Lands Commission shall not undertake or facilitate the

compulsory acquisition of land unless the intended user of the acquired land proves in writing to the satisfaction of the Commission that funds for compensation and other costs associated with the acquisition have been paid into an interest-yielding escrow account. This, therefore, rectifies previous arrangements where the state acquires the land before looking for money to pay compensations, which nevertheless do not get paid.

2.5 Land and Farmer-Herder Conflicts

Land, as a resource, features significantly in the study of farmer-herder disputes. Generally, there are large volumes of work on conflicts involving crop farmers and cattle herders across the African continent. In this section, literature is reviewed on some selected works around land and farmer-herder conflicts in Africa. This section highlights some of the key studies and the gap in the literature on farmer-herder conflict, specifically between migrant groups, where little attention has been given in literature. Sone (2012) in Cameroon, Mwamfupe (2015) in Tanzania, Adeoye (2017) and Folami and Folami (2013) in Nigeria, Agyemang (2019), Kuusaana and Bukari (2015) and Tonah (2002) in Ghana, and Dafinger and Pelican in Burkina Faso and Cameroon are some of these key studies.

Sone (2012) investigated the general underlying principles of land ownership in Cameroon, with a focus on the northwest region. The study focused on land ownership conflict between farmers and migrant cattle graziers. According to the study, the recurring conflict between farmers and cattle graziers over land ownership is rooted in land scarcity, climate change, and poor application of statutory laws guaranteeing ownership. The study concluded that resolving the conflict will necessitate land reforms as well as some proactive measures to address the regions land-related conflict.

Mawumfupe (2015) highlighted the persistence of farmer-herder conflict in Tanzania's districts of Kilombero, Kiteto, Rufiji and Kilosa. The study identified the major causes of the conflict to include policy deficiencies and contradictions, insecurity of land tenure, inadequate capacity of local institutions, corrupt practices, poor coordination in resettling migrants, inadequate capacity of village land use planning, and heavy-handed approaches used to resolve the conflict. The study concluded that unless the government reviews its land policy to ensure the security of land tenure, land grabbing and corrupt practices will escalate and lead to further conflicts.

Adeoye (2017) examined land use conflict between farmers and herders in Nigeria's Kano, Yobe and Borno states. This was done specifically from the perspectives of the nomads. According to the study, farmers' actions that resulted in skirmishes included intrusion on grazing reserves and the encroachment on cattle holes, while deliberate grazing of cattle on crops and herder's indiscriminate bush burning frequently infuriated farmers. The study further revealed that the intervention of local chiefs and religious leaders was more effective than that of law enforcement agents. The author concluded that there is a need for proper resource control, which is the source of the conflict. Folami and Folami (2013), on the other hand, investigated the conflict through the lens of climate change, which has caused Fulani pastoralists to migrate into Yoruba-dominated areas in the southwest geographical zone of Nigeria. The situation, the study demonstrated, has resulted in a wave of inter-ethnic, inter-religious, and retaliatory attacks. These occurrences, they argued, are linked to indigenous farmers and nomadic herders who are forced to co-exist due to unfavourable conditions in the northern parts of Nigeria.

Agyemang (2019) evaluates the government's expulsion policy as a means of resolving farmer-herder conflicts in the Agogo traditional area. According to the study, expulsion has been the local community and national level response to dealing with the conflict in the area involving

migrant pastoralists and indigenous crop farmers. According to the study, the expulsion policy is unsustainable for two reasons; the majority of the cattle are owned by powerful Ghanaians with competing interests in the cattle business, and the Ecowas protocol on free movement weakens the approach for fear of retaliation by member states. Similarly, Kuusaana and Bukari (2015) focused on land conflict in Ghana, specifically in the Asante Akim North District, between indigenous smallholder farmers and nomadic Fulani pastoralists. The research focused on how the land tenure system in the research area affects land access and conflict between Fulani pastoralists and the indigenous crop farmers. The study demonstrated that because pastoralists are not indigenes, the conflict between farmers and herders, to some extent, is rooted in ethnicity. This is due to the farmers' construction of Fulani identity as non-Ghanaians. Tonah (2002), on his part, studied the conflict between Fulani pastoralists and indigenous farmers in northern Ghana driven by the contest for land. The study looked at the social and economic settings of Fulani pastoralists, as well as the changing conditions under which they obtain land for farming and herding in the savanna areas of northern and middle Ghana. The study also focused on the rising land-use conflict caused by intense competition for the most fertile land, as well as attempts by the state to usurp traditional landowners' land allocation powers. The author of the study revealed that although the local administration views the pastoralists as 'illegal alien herders'; they continue to tolerate the Fulani cattle herders for fear of displeasing the chiefs. Contrary to these key studies in Ghana on the conflict between indigenous farmers and migrant herders, Akumey's (2017) work is one of the few studies that investigated land conflicts between migrant groups in the Kwahu North District.

Dafinger and Pelican (2006), on their part, investigated land rights and farmer-herder relations in Burkina Faso and northwest Cameroon. To understand why some relationships between farmers

and herders become conflictual, the authors argue that it is necessary to focus on land and landed resources, particularly property rights, which define relations between the two groups. The authors' comparison of the two areas revealed that social integration is closely related to integrated land use, whereas social divisions are reflected in land divisions. According to the authors, the historical context helps to explain the various legal systems that facilitate sharing and division of land between crop farmers and cattle herders. While Fulbe herders and Bisa farmers migrated together to the central-south area of Burkina Faso around four hundred years ago and are both considered autochthones, Mbororo herders arrived relatively recently and thus are considered 'strangers' in the northwest region of Cameroon. The study further showed that land is not only an economic resource but also has social and political relationships between crop farmers and cattle herders. The overlapping rights to land are, thus, critical to Fulbe social and political integration in Burkina Faso's Bisa society. The opposite is the situation in northwest Cameroon, where land rights are exclusive, and the division of land creates social and political divisions between the Fulbe and the people of the grass fields.

These key studies highlighted above on farmer-herder conflicts have focused on the land conflict either between the locals or indigenes and migrants. This study, however, focuses on land conflict between two migrant groups in an area that is not theirs. The focus on this phenomenon is because fewer studies have investigated farmer-herder conflicts involving two migrant groups across the literature.

2.5.1 Actors in Farmer-Herder Conflicts

Pastoral conflict or conflict between farmers and herdsmen is characterised by a diverse set of actors and influences drawn from both domestic and external sources. These actors include

pastoralists, farmers, traditional leaders, businessmen - who are arms dealers - security persons, politicians, local administrators, civil society organisations, age sets (including elders and youth groups), and the state (Kratli and Swift 1999; Le Meur and Hochet 2010). These stakeholders play a variety of roles, and their actions covertly or overtly fuel or de-escalate such conflicts in any geographic location. Buchanan-Smith and Lind (2005) assert that, in the Turkana district of northern Kenya, influential and well-connected businessmen and politicians are involved in commercialised raiding. These highly powerful persons supply the illegal firearms used in the raids from conflict-prone bordering countries such as Somalia, Ethiopia, and Southern Sudan. The authors further contend that these actors could be local political elites, retired military officers, and/or other wealthy individuals whose intention is to procure cattle in large quantities either to feed warring armies or to sell on the market for profit in order to organise and equip the large gang of young men who will do the raiding. In other areas in West Africa, some traditional authorities pitch crop farmers and cattle herders against each other by granting illegal land rights to migrant Fulani herders on the blind side of indigenous farming communities. Also, government officials, such as security agencies and judicial officers, are implicated in the conflict since they benefit from the continuation of the conflict and not from its settlement. Political actors, on their part, incite the conflict with the view of making political gains from the indigenous farming population, amongst whom they whip up violent rhetoric against herders during electioneering periods.

Bagu and Smith (2017) refer to these actors in farmer-herder conflict as conflict entrepreneurs. They assert that, in Nigeria, for example, these individuals exploit the Boko Haram turmoil in the northwest and the general insecurity to engage in widespread rural banditry. These criminal groups instil fear and terror at night by shooting and torching homes to cause people to flee their

homes to manage the effective manoeuvring of cattle out of the villages. Similarly, Ajala (2020), in the description of actors in the farmer-herder conflict, introduced the term 'neo-pastoralism' to explain the new form of cattle ownership characterised by large cattle-owning by non-pastoralists, kept by salaried herdsmen, often involving the use of sophisticated arms and ammunition. This phenomenon has arisen from the need to hide stolen wealth, proceeds from trafficking, or income derived from terrorism, with the underlying aim of deriving profit for investors. These actors are, therefore, rational actors whose activities are at the core of the conflict between crop producers and cattle herdsmen in sub-Saharan Africa.

2.5.2 Corruption and Politics in Farmer-Herder Conflicts

Land is essential to the existence of most African rural farmers, making claims to the resource a probable avenue for conflict. Land access, thus, involves not only productive use of the environment but also power and symbiotic correlation (Le Meur et al. 2006). The power to grant access to land by local or national authorities to either smallholder farmers or Fulani herdsmen creates an unbalanced hierarchical relation between the two groups, fueling contestation and the eventual outbreak of conflict. Therefore, the study has used political ecology to understand the conflict more broadly.

The stakeholders involved in farmer-herder disputes position themselves as rational tactical players who take advantage of opportunities to pursue their interests. Moritz (2006) demonstrated how authorities in northern Cameroon used the struggle for public lands to start and continue conflict between Tupuri farmers and migrant Fulbe herders. The traditional and regional administrative structures, he argued, decisively avoided the resolution of the conflict between the two groups, as the authorities gained through the persistence of the conflict rather

than by its settlement. Similarly, the persistent conflict between crop farmers and cattle herders in Tanzania is attributed to corruption. This challenge is viewed through two lenses: at the local level involving local authorities and, at the national level, involving those of the higher echelon of government, which includes high-ranking politicians and government officials. At the local level, leadership is expected to promote peace and security through actionable means of fair resource allocation, including land, to different users who may be farmers or herders. However, this is not the situation, as local authorities or leaders receive bribes from the herdsmen and allow large herds of cattle into villages far beyond that which the village resources can support (Mwamfupe 2015). At the national level, government officials or politicians have exploited the conflicts to meet their gains. For instance, politicians, both at the local and national levels looking to exploit electoral capital, often promise indigenous farmers that they will evict or deport nomadic herders or foreigners from their land. The conflict between the indigenous Senufo farmers and the migrant Fulani herdsmen in Ivory Coast illustrates the above narrative about politicians promising to evict strangers in their bid to garner votes during election periods (Bassett 1988). Researching in the Inland Niger Delta of Mali, Benjaminsen and Boubacar (2009) concluded that corruption is a major impediment to resolving the conflict between farmers and herders. Through their exploitation of the conflict for their rent-seeking, local government officials have become winners, while especially pastoralists, but also farmers have lost out. This informs the argument that power and influence underline conflict between crop farmers and cattle herders (Peluso and Lund 2011; Wehrmann 2008). The situation is portrayed in the saying ‘Goats eat where they are tethered’, which refers to a situation in which politicians frequently misuse political authority and divert public funds for personal gain (Massay 2017, citing Bayart 1993). Politicians, traditional authorities, security personnel, and other public

officials use this system to negotiate institutional ambiguity and complexity in order to advance their personal interests (Moritz 2012). This creates anger, as it leads to discriminatory practices resulting in resentment and conflict between smallholder crop farmers and nomadic cattle herders in many countries on the African continent.

2.6 Conclusion

This chapter of the study focused primarily on the background of the issues of land in Africa. It looked at conflicts from a general perspective and land conflicts in particular. The study further provided a broader context of the land question, situating it in the African historical, social, spiritual, economic, and political contexts. The distorted understanding of land ownership in the African system that has resulted from the transposition of Western property concepts was also highlighted. The chapter further discussed the various actor constellations around crop farmers' and cattle herders' disputes in Africa. The roles of these actors, whether covert or overt, fuel or de-escalate any such conflict within any given geographical area. Most of these actors portray themselves as rational players who seize opportunities to further their interests, which has resulted in the corruption and politicisation of crop farmers' and cattle herders' disputes across sub-Saharan Africa. The next chapter of this thesis discusses factors underlying conflict over land access and the various mechanisms for resolving these conflicts when they occur.

CHAPTER THREE

Factors Underlying Conflict over Land Access

3.1 Introduction

Land conflicts in Africa are underpinned by a myriad of factors, including population and climate changes, conservation and land alienation, agricultural and pastoral encroachment, large-scale land acquisition for investment, and government developmental policies (Bugri and Yeboah 2017; Le Meur et al. 2006; Tonah 2005). These underlying factors of land conflicts have repercussions on people's accessibility to and usage of the land, especially among the poor rural population. These factors are categorised as remote causes (Bassett 1988). Remote causes of conflicts may not be apparent in a farmer-herder relationship yet are a potent force that fuels conflicts in any given geographical area.

3.1.1 Population Growth

After the Cold War, global debates concerning new scarcity issues have focused heavily on demographic and environmental factors (Urdal 2011). Therefore, population growth, environmental change, and other interactive factors, such as religion and ethnicity, have become common themes in the analyses of researchers who study conflict. Each of these factors can be dangerous on its own, but working together, these factors present the potential to create problems that may be unprecedented in their scope and magnitude. According to the Intergovernmental Panel on Climate Change (IPCC) report cited by Mwiturubani and Van Wyk (2010), the vulnerability of African countries arises from a high rate of population increase, recurrent natural disasters, such as flood and droughts, as well as agricultural systems that depend heavily on rainfall.

Rapid population increase is a foremost underlying factor of land conflict globally. In areas with exponential growth in population, demand for limited resources, such as food, water, and shelter, increases, placing pressure on environmental resources, which eventually leads to depleting finite stores of natural resources. In this research, rapid population increases in rural agrarian communities augment the pressure on land and the erosion of migrants' rights, resulting in increasing conflicts between smallholder farmers and nomadic herders.

In the context of Africa, there has been a shift from a low population in the nineteenth century to an increasing population in recent decades. The population increased from 257 million in 1960 to 682 million in 1993 and 1.3 billion in 2019. The population is expected to reach 1.7 billion in 2030 and 2.5 billion in 2050 (United Nations Department of Economic and Social Affairs, 2019). Africa's growing population will make land scarcer, leading to more conflict. According to Green (2013), this is an essential factor behind the contemporary civil war in Africa, citing Darfur and the Eastern Democratic Republic of Congo (DRC) to support his research. The above view is shared by Blench (2005), who illustrates the impact of changing demographic conditions on farmer-herder conflicts in Nigeria. Blench (2005) opines that the population of Nigeria, which stood at one hundred and forty million as of 2006, if projected back to the pre-colonial era in the nineteenth century, would be as low as ten million, which would not result in competing in the struggle over land access and use. However, the exponential increase in Nigeria's population today has resulted in considerable demand for land, thus limiting the area for farmers and herders, resulting in contestations and conflict. Gefu and Kolawole (2002), in their research in Kogi, Plateau, and the Taraba States, concluded from their findings that conflicts between indigenous crop farmers and nomadic Fulani cattle herders in Nigeria are becoming fierce and increasingly widespread because of the intensification of agricultural production, which is

mainly driven by human and animal population growth. Breuser et al. (1998), researching the Mossi and Fulbe in the Central Plateau of Burkina Faso, argued that the occurrence of the struggle between indigenous crop farmers and nomadic Fulani cattle herders in the area is attributable to the budding pressure on natural resources caused by population growth, the increase of herds and the extension of cultivated crops by farmers. Braukamper (2000) shares the same viewpoint, citing population growth as a source of conflict between crop farmers and cattle herders. His studies among the Sudanese Bagara Arabs revealed that rising population density and declining ecological resources were important in the conflict over pastures and cultivated fields. Braukamper's finding is supported by Oyama's (2014) conclusions, which explicitly state that farmer-herder conflict in southern Niger is attributable to an increase in human population, leading to great consequences in the Sahelian countries and conflict over land and natural resources.

The population of the Gold Coast and, later, Ghana has grown over time. The British Colonial Administration administered the Gold Coast during the colonial period, and five censuses were conducted between 1891 to 1931. In 1921, the Gold Coast had slightly more than 2 million people. The census in 1948 on the Gold Coast also recorded a population of 4.1 million people. Ghana's first official census after independence was organised in 1960, with 6.7 million people. Since then, the country has held a census every ten years. The population was 8.6 million in 1970, 12.3 million in 1984, and 18.9 million in 2000. By 2010, the population had risen to 24.7 million and 30.8 million in 2021 (Ghana Statistical Service [GSS] 2021; 2012; 2005). Similarly, the Fulani population in Ghana, has been growing steadily since their presence was recorded in the Gold Coast. From a few hundred, the Fulani population had grown to an estimated figure of nearly three hundred thousand persons (Tonah 2005:19).

Over the past decades, the population in the case study area, Kwahu Afram Plains South District, has also grown tremendously. Between 1970 and 2000, the area's population increased from 31,486 and 135,928. The population of the area further rose to 218,235 by 2010. However, in 2012, the area was divided into two districts, namely Kwahu Afram Plains South and North Districts. The case study area of the Afram Plains had a population of 115,812, which is higher than the counterpart district, Kwahu Afram Plains North. In addition to the increased human population in the area, the herds' population also increased. See Chapter Five for details of the population dynamics in the research study district. The increase in human and herd populations has resulted in the struggle and competition for available land resources, especially along the banks of the Volta River and fertile inland areas in the district. The farmers are expanding their crop fields in areas they did not previously cultivate, thereby bringing the crop fields closer to where the cattle graze and vice versa. This has created undue stress on ecological resources, more precisely in areas in the research study district where the settler farmers and nomadic herders continue to compete for the available limited spaces. The contest between the two migrant groupings over land in the pursuit of their means of livelihood has placed them in a conflictual relationship resulting in the potential outbreak of conflict.

3.1.2 Climate Change

The effort to minimise the tide of the effects of climate change on humans and the environment has led to increasing attention to the phenomena in policy and academic circles in recent years. Climate change is defined by the Intergovernmental Panel on Climate Change (IPCC 2007) as any change in climate over time, whether caused by natural variability or human activity. Similarly, the phenomenon is viewed by the United Nations Framework Convention on Climate Change (UNFCCC 1992) as a change in climate caused by human activity that modifies the

composition of the global atmosphere, in addition to natural climate variability observed over comparable periods. It is a truism that climate change has a diverse impact and far-reaching consequences beyond global frontiers and, therefore, requires a concerted global effort and response (United Nations Education Scientific and Cultural Organisation [UNESCO] 2009). It is the reason that climate change is one of the sustainable development goals (SDGs), precisely goal thirteen, where global action is directed at reducing the impact of the phenomenon.

The nature, scope, and impact of climate change must be understood as varying across geographical spaces. While the effect is harshly felt in some countries, others are moderately impacted. This is because the issue of climate change is caused by numerous socio-contextual and ecological characteristics in each geographical space. However, climate change is felt mainly in Africa and other developing countries because of their limited capacity to adapt, mainly due to the lack of the necessary infrastructure (IPCC 2007).

With this realisation of the effects of climate change on the continent, the continental body, the African Union (AU), has undertaken a series of actions and policy directions intended to address the continent of climate change challenges. For example, the African Union Commission, in partnership with the United Nations Economic Commission for Africa and the African Development Bank, is supporting a major initiative, the Global Climate Change Observing System-Africa Climate for Development Programme. This initiative aims to integrate climate information and services into development to support the progressive development of Africa. There is also the establishment of the African Centre for Climate Policy, and the adoption of the Addis Ababa Declaration on climate change and development in Africa (Tadesse 2010). These actions and policies show the awareness of African leaders of the threats posed by climate change, which necessitates concerted efforts toward adaptation and mitigation.

According to Quan and Dyer (2008), climate change can have a variety of direct effects on land use systems, with both direct and indirect implications for land access and tenure. This debilitating effect of climate change on land scarcity and access is not only induced by natural climate-driven phenomena but also interference caused by humans (Froese and Schilling 2019). These interferences could further be broadly categorised into two, namely primary and secondary interference. Primary interference has to do with the degradation of the forest for agriculture development and the contest for urban space usage. In contrast, secondary interference revolves around the provision of substantial renewable power plants to mitigate climate change or relocation efforts as a climate change adaptation strategy. The mitigation and adaptation actions or mechanisms require land, which indirectly increases existing pressure on land as a resource. The above strategy could affect the principal land users, who may be indigenous farmers or migrant pastoralists and settler farmers, whose access to land may be denied, which invariably affects their livelihood and cultural identities (Froese and Schilling 2019). Climate change and conflict are linked because climate change reduces the availability of essential resources for livelihood. This situation has two implications which are: either those impacted by increased scarcity begin fighting over the limited or left-over resources, or people are forced to leave the area, resulting in migrants infringing on the land of others who may also be resource-constrained, potentially resulting in conflict (Dosu 2011; Reuveny 2007).

Opiyo et al. (2012), researching in north-western Kenya among the Turkana and Pokot pastoralists, concluded that the contest for limited natural resources and regular droughts are core to the fierce confrontations among pastoral groups. Olaniyan et al. (2015) and Dosu (2011) also posit that migrant cattle herders from Niger, Burkina Faso, Nigeria, and Mali are losing their cattle because of hunger and thirst caused by drought and degraded resources. To overcome this

situation, the herders have often moved to northern Ghana in search of suitable ecological conditions. However, northern Ghana is also experiencing erratic rainfall patterns, diminishing the once suitable environmental condition. Dietz (2004) describes the declining climatic conditions in northern Ghana, which have accounted for the migration of nomadic herders down south. The illustration shows how rainfall patterns from 1960 to 1991 have been variable and erratic. These unpredictable rainfall patterns that have led to the diminishing resources, impacting adversely on the cattle of Fulani herders. Therefore, the situation has increased the contest for diminishing resources amongst migrant herders and indigenous farmers. The above reinforces the position of Alao (2011), who argues that increasing desertification in the Sahel contributes to the growing migration of pastoralist Fulani herders across borders into Ghana in search of grazing land, thereby raising tensions and conflicts between the indigenous Ghanaian population and the migrant pastoralist Fulani herders. Similarly, in Nigeria, climate change has caused the migration of Fulani herders into Yoruba-dominated areas in the southwest geographical zone. This has led to a series of inter-ethnic, inter-religious, and retaliatory attacks across the state. These occurrences are linked to indigenous farmers and nomadic cattle herders, who are forced to coexist due to the unfavourable condition in the northern part of Nigeria (Folami and Folami 2013).

3.1.3 Compulsory State Land Acquisition

The efforts to promote development by African governments have led to the enactment of policies and laws resulting in state acquisition of large land areas. The terms used for such acquisitions have been varied across the globe. Such terms as compulsory purchase, compulsory acquisition, expropriation, eminent domain, or resumption are used (Larbi et al. 2004). The fundamental principle underlying such acquisition is that the public benefit takes precedence

over individual interest, providing the state with an overwhelming interest in property access, control, and management, regardless of the land category (Larbi et al. 2004). Such powers are widely used by states in Africa and come with many undesirable outcomes, including massive encroachments, unpaid compensations, change of use of acquired lands against the purpose of acquisition, and the divestiture of state enterprises to private entities (Larbi 2008). In addition, these acquisitions have been used for infrastructure development, wildlife, game, and conservation reserves. The goal of such forced state land acquisition programmes, according to Akrofi and Whittal (2013), is to provide land for the public good, address economic and social inefficiencies in land usage, and achieve broader goals of social justice and equity in the land sector. However, these large-scale acquisitions have resulted in adverse socio-economic effects, including poverty, heightened tensions in state-community relationships, and landlessness or marginalisation of many groups from their land, specifically among the untitled urban poor and customary holders (Alden Wily 2018; Larbi et al. 2004).

There are various examples of such acquisitions across many countries in Africa where the state has acquired land for national parks, conservation, infrastructure development, game reserves, and environmentally sensitive areas. Nine countries in Africa, including Namibia, Tanzania, the Central African Republic, and Botswana, have nine percent or more of their land under strict protection in national parks and game reserves. For example, conservation, national parks, game and forest reserves, and environmentally sensitive areas cover 30 percent of the land area in Tanzania (Economic Commission of Africa [ECA] 2012; Neumann 2000).

In Kenya, the government, through the National Land Commission, acquired large areas as a result of the development of three major projects, namely, the Standard Gauge Railway Line, the Lamu Port Southern Sudan-Ethiopia Transport Corridor Project (LAPSSET), and the Konza

Techno City Project (Olima 2019). The eviction of the Maasai in the Ngorongoro conservation area (ECA 2012) and the removal of the Ogiek in the Mau Forest complex (Verma 2007) are both examples of state-enforced acquisitions. Similarly, the Sudan state's development imperative through mechanised rainfed farming in the Gedarif area of the eastern part of central Sudan, the Blue Nile, Darfur, and the subsequent exploration of oil in the Nuba mountains have resulted in the expropriation of land from sedentary Nuba communities, which is one of the roots causes underlying the Baqqara-Nuba conflict, on the one hand, and the government and Nuba led Sudan People's Liberation Army (SPLA), on the other (Komey 2009). Additionally, when Ghana discovered a large quantity of oil, there was an immediate need to build a refinery. As a result, the government of Ghana acquired approximately 1,200 acres of land in the Apowa, Punpune, and Egyam enclaves surrounding the Sekondi Takoradi area (Bugri and Yeboah 2017). Such acquisitions for the establishment of the refinery, according to the state, were done in the interest of the Ghanaian people. When the government of Ghana decided to upgrade the Tamale Airport in the Northern Region of Ghana, the state compulsorily acquired 8,000 acres of land around Savelugu, Nanton, Kunbungu, Sagnarigu, and the Tamale metropolitan area (Bugri and Yeboah 2017). One must be note that this pattern is not atypical in other countries in sub-Saharan Africa.

These significant acquisitions across the continent have reduced the availability of land in rural and peri-urban areas, particularly for those who utilise such lands for farming and grazing purposes. While conservationists and governments have lauded these acquisitions as an essential step towards the conservation of environmentally sensitive areas and sustainable development, others describe it as against humanity. This is due to the absence of openness and effective involvement of the locals in the processes. Most acquisitions by the state take place without

consulting or engaging the previous users of the land, nor do they pay the necessary compensations. The outcome of these acquisitions is that prior users are squeezed out of their land, leading to competition and conflict over the limited land spaces. In other instances, these acquisitions have ended in protracted legal disputes between the state and communities over non-payment of compensations, leading to projects being stalled for a considerable period.

3.1.4 Gender Discrepancies

Achieving equity in land access is critical for vulnerable groups, including women, to be sustainable in society. Women have made substantial contributions in the home and have had a favourable impact on a variety of development goals, including poverty reduction and economic growth. Despite these contributions, women are face with the challenge of accessing land in various rural communities in Africa. Nyukuri (2006) avers that, even though women in Kenya constitute over 70 percent of the productive land-based labour, land relations are based on laws, customs, and practices that marginalise and disempower women in terms of their rights and capacity to own, manage, and transfer land. Such discriminatory tendencies are ban by statutory law in most African countries, but, in practice, women are bound by customary rules that do not recognise women's capacity to own or inherit land or property in their names, except through a system of vicarious ownership through the husbands or fathers. Under the customary land system, women in many African communities enjoy secondary rights mostly from their spouses, male siblings, or children (Kameri-Mbote 2005).

Various studies have revealed the significant gap in land access between men and women. Doss et al. (2015) use estimates from a review of 17 large-scale studies of micro-level data in Africa to show that women are disadvantaged in land ownership and management compared to men.

Similarly, Yaro (2010) concluded that women mainly acquire land through their husband's lineage and only have user rights in most parts of northern Ghana. This is not always the case, as, in most situations, the husband's family also denies the woman on the premise that she does not belong to the family. Even if access to a piece of land is granted, this may be on land that other male relatives do not want, primarily because it may not be productive, may be difficult to labour on, or unsuitable for animal traction (Cotula et al. 2004). These discriminatory tendencies over land access and use have led to the absence of security of tenure, thereby affecting the livelihoods of women. The limited livelihood opportunities of women have generated several gender-based conflicts, mainly between women cultivators and herders, women and traditional rulers, and women and the larger family group. When there is a dispute over land between women and other feuding parties, such disputes are settled to the disadvantage of women, rendering them landless. The situation has led to multiple struggles against gender discrimination over land. The struggle of women has taken the form of mass resistance, boycott of all farm activities, organised protest, the legal path, as well as creating public awareness through public education and sensitisation. In Cameroon, some of these resistances have been led by organised women's militant groups like the *Ndumfugwi* (Assembly of Women) in Wum, the *Anlu* (Women's Movement) in Kom, or the *Mfumnguin* (Women's Authority Council) in Kedjom Keku (Sone 2012; Kah 2011). Essentially, gender discrepancies in land issues have led to resistance, in turn leading to conflict in rural agrarian communities in Africa.

3.1.5 Large-Scale Land Acquisition for Agriculture Investment

Large-scale land acquisitions (LSLAs) for agricultural investment have generated global attention and debate on the implications of this phenomenon on smallholder farmers and pastoralists in Africa. Within this debate, the ongoing world food crisis has raised concern that

large-scale land acquisitions would further deepen food insecurity in developing countries (Tsikata and Yaro 2011). However, land in Africa is seen as abundant, idle, vacant, and underutilized; therefore, leasing it out will not in any way affect the users of the land. This notion is echoed by statements of some political elites in Mozambique, Zambia, and Ethiopia.

According to Mozambique's Minister of Energy, 36 million hectares of arable land could be used for biofuel without jeopardising food production, with another 41 million hectares of marginal land suitable for growing jatropha. In Zambia, the Minister of Agriculture stated that the country has well over 30 million hectares of land begging to be used. In Ethiopia, Abeda Deressa suggested that pastoralists displaced by land grabbing could simply relocate elsewhere (Matondi et al. 2011:5, citing Palmer 2010). This notion is, in part, the result of the trend of a vast land rush in the global south for investment in biofuel and agricultural commodities (Cotula et al. 2009) and explains why large-scale land acquisition for agricultural production has been described and hailed as the pathway to development and as an evolutionary and modernist agenda whereby poor, underdeveloped nations with a large amount of arable land and peasant way of life are expected to transition to capitalism.

Large-scale land acquisitions have been a recurring historical event since ancient times. This historical process of large-scale land acquisition was evident in ancient Rome and was called *latifundia*; in Britain, the term 'enclosure' is used, while collectivisation is used in the former Soviet Union. In South America's Spanish and Portuguese territories, the terms used are *haciendas* and *fazendas*, respectively (Roudart and Mazoyer 2015). The striking difference between what existed in the past and large-scale land acquisitions in the current era has to do with its global scale; the facilitative role played by the modern state and international groups, and the risk of the whole-scale eviction of rural farmers from their land. There are varied views of what constitutes

large-scale land acquisition. The phenomenon has gained popularity alongside a plethora of terms, such as ‘green colonisation’, ‘new land colonisation’, ‘land grabbing’, land ‘foreignisation’, and ‘land rush’, and encompasses the exploration, negotiation, acquisition, or lease, settlement, and exploitation of land resources, with the goal of attaining energy and food security through export to investor countries and other markets (Matondi et al. 2011). One must not ignore the fact that the phenomenon of land grabbing transcends the role of foreign investors but also that government officials, politicians, and private actors are implicit in the current global land deals (Peters 2013). In the view of Cotula et al. (2009), land grabbing takes place when there is a large-scale land acquisition that exceeds a thousand hectares. D’odorico and Rulli (2019) outlined four conditions under which the process of large-scale land acquisition could be characterise as a land grab. These are violations of human rights, particularly equal rights of women; when the acquisition process is not based on the affected users’ free, prior, and informed consent; when the acquisition process is not based on a thorough assessment or disregards social, economic, and gendered impacts; and finally, when the process is not based on transparent contracts with clear and binding commitment about the activities, employment, and sharing of benefits.

It is projected that, land deals encompassing forty-five million hectares were made between 2008 and 2009, with more than 70 percent of these deals taking place in Africa (Bugri 2012). Extensive land deals acquired for agricultural investment in Africa have taken place in Sudan, Ethiopia, Kenya, Tanzania, Mozambique, Madagascar, Mali, and Ghana. For example, in Madagascar, it is estimated that about 1.3 million hectares of agricultural land have been awarded on a 99-year lease to a South Korean firm, Daewoo Ltd, for the cultivation and export of rice and palm oil (Peters 2013). With validated and scrutinised information from the land

matrix, Bugri and Yeboah (2017) estimated land deals in Ghana over the last decade to comprise around 1.5 million hectares, acquired by a wide array of investors, both local and foreign. Boamah (2011) also reinforced the fact that there are biofuel investments in almost all the ten regions (Ghana now has sixteen regions) undertaken by both foreign and local investors. Examples of some large-scale land acquisitions for agricultural purposes in Ghana include Biofuel Africa Ltd in the Northern Region, Prairie Volta Rice Ltd in the Volta Region, ScanFarm (Gh) in Agogo in the Asante Region, and the Integrated Tamale Fruit Company (ITFC) in Tamale, Northern Region of Ghana. (Kuusaana 2017; Kuusaana and Bukari 2015; Tsikata and Yaro 2011).

The phenomenon of large-scale land acquisitions for agriculture investment in Africa creates opportunities, challenges, and risks. Recent agricultural investments are a means of combating hunger; generating economic growth; providing the much-needed infrastructural development, which creates opportunities by raising the standard of living of the local populace through facilitating knowledge and technology transfers; enhancing agricultural productivity and output; and enhancing food security as well as the opportunity for employment creation (Narula 2013). Aside from creating jobs, large-scale agriculture investments create opportunities for outgrower farming programmes, promote equitable growth, improve local producers' access to credit and markets, increase local food production to supply local, national, and international consumers, and increase government revenue through taxation (Narula 2013; Deininger et al. 2011; Von Braun and Meinze-Dick 2009). However, contrary to the seeming benefits espoused by large-scale land acquisitions for agriculture investment, the phenomenon is said to present challenges to local land users through land conflicts, degradation, and the reduction in the available supply of land. This leads to land dispossession of the rural land, where existing users are often

displaced from the land they have cultivated for generations, resulting in diminished livelihood and increased tenure insecurity. Non-indigenes, such as transhumant pastoralists, also face a similar fate, as they may also lose seasonal resource access. (Borras and Franco 2012; De Shutter 2011; Cotula et al. 2009). The Land Research Action Network (2011:6) succinctly captures the impact of large-scale land acquisition for agriculture investment as follows:

Large-scale land acquisition for agriculture investment has led to the expropriation of land belonging to entire villages, with little or no monetary compensation and rarely any provision of alternative livelihood. Actual opportunities for employment tend to end up being smaller than initially promised; the offer of employment may come with unfavourable terms, low wages, or the job may be temporal in nature during the initial phase of the project. Often local people are passed over in favour of a migrant workforce who come from a challenging circumstance elsewhere. Jobs on large-scale plantations favour the young, relegating the elderly or older farmers to unemployment, thereby depreciating their knowledge and skills. Where no alternative employment exists, they are forced into long term dependence on their children.

The above quote from the Land Research Action Network corroborates the World Bank published research on agriculture land investment titled, 'Rising global interest in farmland: can it yield sustainable and equitable benefit?' The key insights from the case studies revealed that many large-scale investments failed to live up to expectations and that, instead of generating sustainable development, large-scale agricultural investment contributed to asset loss, leaving local people worse off than they would have been without the investment (Deininger et al. 2011). For example, in Mozambique, the issue of large-scale land acquisitions has forced rural farmers to adopt coping mechanisms to survive. People have now resorted to borrowing land from

relatives and friends, a local practice called ‘*xitoco*’ or ‘*rimela*’. Here, the landless work on someone else’s land and receive fixed payment (Mayers et al. 2017). In effect, the implication of such cases of large-scale acquisition for farmers, pastoralists, and other marginalised people in remote regions is the negative effect of the loss of agricultural and grazing land resulting in a debilitating impact on their livelihoods (Hufe and Heuermann 2017; Peters 2013). Large-scale land acquisitions, however, can have either a negative or positive impact on an area depending on how it is pursued and implemented. As rightly intimated by Deininger et al. (2011) and Von Braun and Meinze-Dick (2009), large-scale land acquisitions for agriculture investment can contribute to the positive development in the affected areas if properly executed.

3.1.6 Deliberate Government Policy of Increasing Crop or Animal Production

African governments, both present and past, have often undertaken policies deliberately to increase crop or pastoral production as a strategic measure in times of need. These policies usually tend to favour or discriminate against one group or another depending on the government’s policy direction at a specific time. As intimated by Benjaminsen, Maganga and Abdallah (2009), national policies in modern African states tend to favour agriculture, which leaves a visible trace in the landscape as evidence of land use, whereas pastoral use is more inconspicuous and, thus, cannot easily be used to justify prioritised access and property rights.

Analysing conflicts between crop farmers and cattle herders in the Inland Delta of Mali and the Kilosa killings in Tanzania, Benjaminsen and Boubacar (2009) and Benjaminsen et al. (2009) concluded that farmer-herder clashes in the two research areas were mainly due to policies and laws of ‘*mise en valeur*’, giving preference to agricultural expansion to the detriment of pastoral production or vice versa. The conversion of large-scale dry season pastures into rice fields and

the modernisation of agriculture in Mali and Tanzania led to reduced pastoral access to wetlands because of the extension of cultivated areas. Benjaminsen et al. (2009) demonstrate how the Office Riz Mopti (ORM), one of the several sector-oriented state development agencies, has played a role in the expansion of areas under controlled flooding for rice cultivation in parts of the Inland Niger Delta of Mali. The ORM thus purposefully converted *burgu*, that is, dry season pastures, into rice fields, resulting in massive loss of dry season pastures to cattle herders. Bassett (1988), on the other hand, argues that the influx of Fulani herders in the northern Ivory Coast was due to the Ivorian government's policy of increasing meat production, primarily to reduce reliance on fluctuating beef supplies from Mali and Burkina Faso, and to offset the rising cost of meat imports from Latin America. Therefore, the Ivorian government created an enabling environment through the Ivorian Livestock Development Corporation, known as *Societe pour le Developpement de la Production Animale* (SODEPRA), to attract pastoralists. The SODEPRA supported the integration and sedentarisation of the cattle herders into the Ivorian society and provided basic veterinary services to these incoming pastoralists. The situation is not different from Cameroon, where conflicts between farmers and herders date to the colonial period, where colonial policies favoured herding methods and cash crop development, as they were more lucrative (Sone 2012). These policies, irrespective of how laudable they were, resulted in squeezing farmers from traditional farming land or pastoralists from their grazing land. The growing pressure over land between pastoral groups and farming communities has resulted in crop damage from passing livestock, increasing disputes, or even provoking violent clashes between crop farmers and cattle herders (Knapman et al. 2017).

3.1.7 Land Reforms

Land reform has gained prominence and is being implemented in almost every country in sub-Saharan Africa (Peters 2004). Land reforms are viewed around the world from a variety of perspectives. According to Narh et al. (2016), land reform is a process and associated actions for enacting, enforcing, and evaluating land policies and pieces of legislation that restructure people's land rights. Ciparisse (2003) defined land reform as any change in the legal and institutional framework that governs land policy. According to Borras (2005), the essence of land reform is the redistribution of wealth and power from landed elites to landless poor peasants. The most common aspects of land reforms, according to Ciparisse (2003), are those relating to land reallocation and those reassigning lawful ownership rights. Land reforms are primarily undertaken to address unequal land distribution, land concentration, landlessness, urban bias, social injustice, agricultural inefficiencies, and poverty (Chitonge and Ntsebeza 2012; Urmilla 2010; Binswanger-Mkhize et al. 2009). These challenges usually result in the absence of the rights to land for the majority of the people, which has a negative impact on livelihoods. To address these negative impacts on livelihoods, various methods of land approaches have been used by most African states.

The approaches include state-led land reform, market-led land reform, and community or participatory land reform. State-led land reform is a top-down approach to land reform in which the state conceptualises and implements the reform through its agencies. The state's involvement is evident throughout the reform agenda, from design to implementation. This model of state-led reform arose when land reform was envisioned as one of the 'big pushes' in state-led development, and bureaucratic implementation was thought to be the most efficient (Sikor and Muller 2009). The market-led approach to land reform, on the other hand, entails acquiring land

from large landowners using the willing seller, willing buyer method. The acquisition of land through this approach is through the market, and its availability is at the discretion of the landowner. Variations exist in this type of land reform approach. There is the market-led and state-assisted or what some generally refer to as the market-assisted land reform approach. With this specific variation of the market-led land reform approach, the state provides money to beneficiaries in the form of loans to acquire land from large landowners. It is the considered view of the proponents of market-led land reform that the involvement of the state in the land reform processes perpetuates distortions and must therefore be minimised. Finally, the shortcomings of the state-led and market-led land reform approaches have prompted a conversation for a community-led or participatory land reform process informed by the communities' concerns about their land-related needs. In contrast to the paternalistic top-down methods of land reform, the participatory approach is thought to provide a democratic, bottom-up approach in which all citizens can participate in decision making, thereby empowering them through increased knowledge, influence, and control over livelihood and issues that have an impact on their lives (Ng'ombe et al. 2012:1787). The descriptions of the various approaches to land reform are encapsulated in Borras et al.'s (2007) analytical typology of approaches to land reforms in Table 1. These are market-led, state-led, peasant-led, and participatory-driven.

Table 1: Key features of various contending perspectives in agrarian land reform

Perspectives	Features
Market-led	Main consideration is economic efficiency/productivity gains; gives secondary/marginal role to central states; peasants/beneficiaries, who are supposed to be in the 'driver seat' of the reform, are actually

	subordinated to the dominant market actors; in reality, ‘market-led’ means ‘landlord/merchant/TNC-led in many agrarian settings today.
State-led	Main consideration is usually related to securing/maintaining political legitimacy; though development agendas are also important; strong political will necessary to carry land reform agenda; usually treats peasants/beneficiaries as necessary administrative adjuncts; subordinates market actors, or selectively deal with market actors depending on which actors are more influential within the state.
Peasant-led	The main assumption is that the ‘state is too captive to societal interest’, while market forces are basically dominated by elite interests. Thus, the only way to achieve pro-poor agrarian reform is for peasants and their organisations themselves to take the initiative to implement agrarian reforms.
State/Society-driven	Main assumption: It does not romanticise the ‘omnipotence’ of peasants/beneficiaries and their organisations; it does not assign a commanding role to the central state; it does not provide sole importance to economic productivity enhancement issues; although it recognises the relevance of each of these perspectives; analyses state, peasant movements, and market forces not as separate groups, but as actors inherently linked to each other by their association to the politics and economics of land resources. It has three key features: peasants/beneficiaries-led, state supported and economic-productivity-enhancing.

Source: Borras et al. (2007:21)

Regardless of whether the reform is state-led, or market-led or participatory-driven, it is seen as one of the most important ways of positively changing people's lives because it addresses political, social, and economic imperatives that are considered critical to tackling past injustices in land access and allocation as well as contributing to local and national security (Urmilla 2010). Similarly, Chitonge and Ntsebeza (2012), writing in the context of South Africa, viewed land reform as an attempt to confront the county's traumatic colonial and oppressive history of dispossession or forced removal from the land and overcrowding. Land reforms could take several forms, including land allocations, compensation, subsidies, laws safeguarding the land rights of previously disadvantaged groups, or combining these techniques (Urmilla 2010). The success of land reforms on beneficiaries globally has been varied. While some countries have reaped enormous gains relative to land reforms, others have had modest gains, yet land reforms have failed in other countries. Borras and Mckinley (2006) report that land reform in Japan has been highly successful. This narrative above, is consistent with the conclusion of Chitonge and Ntsebeza's (2012) research in the Chris Hani District of the Eastern Cape, which found that recipients of land reform had better living conditions than those with no land notwithstanding the unevenness of the land reform programme. Contrary to the above position on the success of land reform programmes around the globe, Borras and Mckinley (2006) state that land reforms in Bolivia were less successful and, in the Philippines, is somewhere in between success and failure.

Land reform policymakers face a huge task in balancing frequently opposing social, economic, and political land reform imperatives (Urmilla 2010). This, combined with the high demand and large numbers of potential beneficiaries, has resulted in a range of land conflicts linked to land

reform processes. The linkage between land conflict and reform processes is explored by Urmilla (2010), who argues that land reform programmes are frequently targeted with specific groups in mind, with the understanding that resources are limited and must be judiciously distributed. Giving preference to one group will almost always lead to conflict, as other groups or individuals may feel discriminated against through the land reform processes. Additionally, disputes over land reform may also arise if the land allocated through reform processes is either unsuitable or insufficient.

3.1.8 Legal Pluralism

The emergence of legal pluralism is rooted in history, where colonial regimes in Africa impacted systems of common laws and statutes for their purposes. The colonial regimes operated these laws along with an existing system of customary rules on land. This presupposes that legal pluralism is manifested where several laws and legal systems operate within the same geographical location. Ndulo (2011) argues that the national legal system of a typical African state is pluralistic and composed of the following sources: African customary laws, religious laws; particularly where there is a significant Muslim population, received law; common law or civil law depending on the colonial history and legislation, and both colonial and post-independence legislation enacted by the parliaments of various African countries.

These various sources of law have sparked intense debate about whether these sources of law have favourable or unfavourable implications for development and the rule of law. Supporters of legal pluralism argue that the phenomenon reflects the diverse African society and, as such, must be encouraged and supported by the government (Woodman 2011). Others, such as Ntsebeza (2006:16), believe that it is irreconcilable with democratic objectives, particularly human rights

and democratic values. However, beyond the debate, it is undeniable that the existence and execution of statutory, customary, and religious rules in the same social space is the basic element of legal pluralism in Africa (Woodman 2011).

Ghana's land sector is described as legally pluralistic mainly because of the existence of both customary and statutory land tenure regimes that run concurrently. The 1992 Constitution of Ghana stipulates in Article 11 that the laws in the country shall comprise the Constitution, statutes, orders, rules, and regulations, as well as the common laws, which include customary law. This provision establishes a duality among the numerous, possibly contradictory, sources of law. Aside from the ambiguity inherent in the practice, there is the issue of which law takes precedence over the other in a given situation. While statutory law frequently takes official precedence, realities on the ground give recognition to traditional principles. Since the dual tenure and management systems in the land sector run parallel to, rather than in coordination with, each other, this situation creates contradictory rules, uncertainty, insecurity, and competing authorities in the administration of land rights, thereby engendering conflict (Kasanga and Kotey 2001).

Fundamentally, legal pluralism creates tensions and confusion where many authorities are competing and claiming legitimacy in overlapping jurisdictions as there are no efficient administrative connections between traditional and government establishments. This culminates in what is term 'forum shopping', which is seeking out the system that is most likely to operate in their favour (Delville 2007). As a result, the poor are most likely to suffer as they are unaware of the terms of different systems operating in the land sector and, most probably, are often not able to travel to present their claims in major cities where the formal legal system is situated. Similarly, the existence of legal pluralism in the land sector presents a situation where the losing

parties in land disputes may appeal to alternative systems, in which case an earlier ruling may be challenged and cancelled. When this happens, a person may have a legal victory in the courts-a formal procedure but not a 'social triumph' to work on the land (Alao 2007:68). This creates fertile ground for the perpetuation of conflicts between various contesting groups over the land.

3.1.9 Ethnic Politics

Ownership by different ethnic groups and the politics around the land are key sources of land conflict in Africa. The concept of ethnicity is a manifestation of socio-historical transformation, rooted in colonialism, where power, extraction of economic potential, and administration within the colony were based on an ethnic divide. These nuances of ethnicity gave rise to tribal identity and cultural pride, which ensured a sense of belonging and social cohesion. However, these attributes inherent in ethnicity are responsible for creating hatred, resentment, and conflicts as different groups compete to gain access and control over scarce resources and political power at the expense of others when it is used as leverage by political enthusiasts. As noted by Aapengnuo (2010), ethnicity is often not a key factor in African conflicts, but rather a tool utilised by political actors to mobilise followers in the quest for power and wealth. The foregoing discourse is the basis for Tsikata and Seini's (2004:4) position that the contest for land and control is fundamental to ethnic strife and identity politics. Ethnic conflicts are mostly over grazing lands, watering points, and, importantly, ethnic superiority over land in relation to their historical past (Obioha 2013).

Ethnic politics usually involve elite sponsorship and support in order to achieve their subtle, selfish economic and political interests. Alao (2007:69-70), in his book *Natural resources and conflict in Africa: the tragedy of endowment*, argues that ethnic politics manifest into violent

conflict over land largely on the African continent. He alluded that, in Kenya, former President Moi's ethnic group, the Kalenjin, and that of his one-time deputy, George Saitoti, a Masai, used the privileges of being closer to the echelons of power to seize lands from other ethnic groups, particularly the Kikuyu and the Luo. In the 1960s and 1970s, when Jomo Kenyatta became Kenya's president, his ethnic group, the Kikuyu, used the political and economic muscle at their disposal to organise land-buying businesses, allowing thousands of Kikuyu to relocate to the Rift Valley. Similarly, the result of the conflict in eastern Nigeria between the Kuteb and Chamba communities was influenced by the latter's powerful ties to an indigene, Lieutenant General Yakubu Danjuma, a retired army chief and former Minister of Defense, who allegedly manipulated factors to his ethnic group's benefit (Alao 2007). The case of communal conflict that culminated in the 'Guinea Fowl War' is captured below:

In Ghana, the military led by General Ignatius Acheampong decided in 1979 to vest all lands in the northern region in 4 of the 17 indigenous ethnic groups that lived in the area. At the time, the military was looking for support for one-party rule. Because the proposal was subject to a national referendum, the government required a 'Yes' vote from the north to offset a 'No' vote from the south. The land arrangement was a deal some northern politicians cut with the government for their support. The issue became a defining moment in the mobilisation of ethnic groups such as the Konkomba and Vagla in the name of developing their area. The first intercommunal violence began shortly thereafter and continued for the next 15 years, culminating in the 'Guinea Fowl War' of 1994-1995. During this time, more than 26 inter-communal conflicts over land (resources) and chieftaincy (power) occurred in the northern region (Aapengnou 2010:2).

Aside from Kenya, ethnic conflict over land has been widely recorded in Tanzania between the Haya and Sukuma; Ghana, involving Konkomba, Gonja and Nawuri; Guinea, between Puel and Soussou; and in the Democratic Republic of Congo, there is an ethnic conflict between Hemas and the Lendus. These ethnic conflicts have dire consequences, often resulting in the development of vicious cycles in land conflicts with their exacerbating impact on humans, especially the vulnerable. For example, in northern Ghana, it is estimated that over one thousand people died, with over one hundred and fifty thousand people internally displaced because of conflict over land that escalated to ethnic strife in 1994-1995 (Ayee et al. 2011). Similarly, in June 2006, some twenty-three thousand people evacuated their homes in Southern Ethiopia because of hostilities sparked by land disputes between neighbouring ethnic groups when the government awarded land belonging to the Borenas to the Guhis (Wehrmann 2008). Thus, rather than ethnicity itself, the politicisation of ethnicity fosters perceptions of social unfairness, lack of appreciation, and marginalisation. People do not fight each other because they are from different ethnic groups; they fight because these differences are portrayed as a barrier to progress and opportunity. The misdiagnosis of African conflicts as ethnic thus, neglects the political nature of the contentions, in which political actors, populists, and the media used ethnic identity to gain public sympathy and eliminate political adversaries (Aapengnuo 2010).

3.1.10 Contestation between the State and Traditional Authorities

The unique variety inherent in the land as a resource serves to support people's survival and lends itself to disputes. Land conflicts, including those that manifest between the state and traditional authorities in most parts of Africa, occur between an array of groups. The efforts of rulers, both colonial and post-colonial, to project authority over territory in order to administer the rural populace have altered land control dramatically (Boone 2015). The effort to control

land manifested in the enactment of rules, statutes, and legislation, which culminated in duality in land administration in some parts of Africa, including Ghana.

This duality results in overlapping claims to customary land, which often lead to disagreements between the state and traditional authorities in Africa (Chitonge 2018). During a visit to Ghana in May 2005, the Ashantihene, Otumfuo Osei Tutu, protested to Zambian president Levy Mwanawasa about politicians misusing state power to seize lands that were appropriated by the state for the public good but never used as such (Ayee et al. 2011). As part of their findings on the land struggle in Greater Accra and the Eastern Regions of Ghana, Ayee et al. (2011) posit that the dispute between traditional authorities and state powers over Osu lands in Accra is mainly over land where the lease period has expired. Nevertheless, the state continues to hold on to the land and make allocations, contrary to the law, which provides that such land should be reverted to the traditional authorities, who hold allodial title to these lands on behalf of the people. Similarly, Chitonge (2018) concluded in his study of land governance in Africa, using Zambia as a case study, that the quest for control of customary land is at the crux of the dispute between the state and traditional authorities, with both parties aware that control of land confers power and influence.

In this case, the state argues that the current method of administering customary land lacks transparency, accountability, efficient planning, efficient use, and security, making customary land vulnerable to abuse by traditional authorities. The state is using these concerns to justify reforming customary land management. However, traditional authorities have also protested the proposed reform and have repudiated the proposed land policy, claiming that the policy aims to undermine the institution of traditional authority. The desire of the two parties to control land often results in open contestation. However, in the era of democratisation, conflictual relations

manifest in subtle forms. Traditional authorities usually navigate this struggle with what Chitonge (2021) refers to as ‘soft power’, which is the appeal to cultural beliefs, traditions, ethnic solidarity, and historical precedence. Irrespective of the arguments between the two parties that are valid, contestation between the authority of the state and traditional leadership is an underlying cause of land conflict on the continent of Africa.

3.2 Land Tenure (In)security and Conflict

There are two dominant discourses on land tenure reforms in Africa ostensibly to ensure land tenure security among landholders. The first relates to those who claim that the indigenous African land tenure system is adaptable and flexible to changing economic conditions and population growth (Berry 2009; Juul and Lund 2002; Bruce 1988). According to supporters of the system, the inherent social security and egalitarian qualities of customary tenure arrangement offer fair access to land for all members of the landholding community to the extent that there is no landlessness and promote ecological preservation. They went on to say that changes in the indigenous African land tenure system did not necessitate a fundamental rethink of previous tenure arrangements, nor did they require conscious decisions by the community instead, the changes were brought about as a result of adaptive responses to new conditions. However, the seeming viability of the indigenous African land tenure system as an institutional framework for land administration and conflict resolution has setbacks. The flexibility, fluidity, and adjustable characteristics inherent in the indigenous African land tenure system, as argued by Juul and Lund (2002), lose their explanatory appeal as it has failed to fully address land tenure insecurity in the face of agricultural intensification and commercialisation and even more so to satisfy the multiplicity of overlapping rights and interests in land (Kuusaana and Bukari 2015). Furthermore, traditional thinking has overestimated the ability of ancillary traditional land

institutions such as chieftaincies and lineages to adapt to changes in indigenous land tenure systems (Fred-Mensah 1999). This is less the case as the insecurity of land tenure among migrants persists mainly because of the penchant of traditional authorities to redefine land right in the contemporary era, which creates tensions and the eventual outbreak of conflicts.

The second viewpoint espouses land titling and registration as efficient land administration tools. The operation of the land market, according to proponents of this viewpoint, is the primary mechanism for higher land productivity. Land titling thus transforms existing land rights into individualised, tradable assets that can be circulated within a market economy, thus promoting economic growth by transferring land to those who can use it most productively (World bank 1989; De Soto 2000). In this context, Peters (2007) argues persuasively that most land reforms and policies in the 1970s and 1980s failed to achieve the predicted growth in agriculture investment and productivity, instead displacing the local land users who were intended to gain the security of tenure through titling. Similarly, Quan (1997) holds the view that although there is widespread titling in Kenya over 40years, evidence abounds that titling has undermined the position of the poor causing land insecurity for especially those with secondary or derived right such as migrants and some vulnerable groups including women. This view is shared by Amanor (2009), who argues that land registration in Ghana has been hampered by high transaction costs, large 'rents' levied by the bureaucracy, slow processing procedures, poor integration among the various land administration agencies, and land ownership disputes, as customary authorities and rival factions within chiefly lineages engage in multiple sales of land. Dorwuano-Hammond (2003) reinforces the preceding view that the slow rate of land titling in Ghana is attributable to the high cost and time-consuming processes involved in land registration. Consequently, the

situation breeds social inequality and exclusion in the context of Ghana. This is because the poor are unable to go through the registration process due to the cost involved.

Despite the weakness within each of these two viewpoints, it has been advocated for integration to ensure that the deficit of one system is offset by the other to effectively address the question of access and tenure security (Ako-Adjei 2011; Blocher 2006). It is instructive to understand that a secure tenure on land ensures investment to promote productivity, while tenure insecurity heightens social tensions and exacerbates the vulnerability of the poor. Researching in Thailand, Feder et al. (1988) concluded that tenure security promotes agricultural productivity. They suggest that more security promotes farmers' demand for land improvements and that tenure security enhances agriculture commercialisation and modernisation. A related study finding in Ghana concluded that tenure security has a positive impact on investment in the Anloga area but a less noticeable impact in Wassa and no influence in Ejura (Migot-Adholla et al. 1994). In effect, exclusive right in the land was likely to result in land improvement leading to increase productivity. Even though several studies have shown that secure tenure has the potential to stimulate agriculture investment and productivity, the opposite may also be true. Ege (2017) argues that land registration failed to improve tenure security, land dealings and agricultural productivity in Ethiopia. In terms of land tenure security, the author distinguished three different rights. This includes possession, renting and latent rights. He claims that since land registration, rights of possession have improved, but evidence remains weak and contradictory. Land rentals were expanding, but farmers faced high tenure insecurity, while latent rights have resulted in increased insecurity and conflict levels. Similarly, in the Ejusu-Juaben Municipality of Ghana, research concluded that migrants who access land on a short duration basis and cultivate annual crops such as rice explain the uncertainty over the renewal of their tenancy and continued use

right over land prevents them from investing in irrigation channels (Lambrecht and Asare 2016). This points to the fact that to promote investment in land for higher productivity, there is the need to implement policies that promote land tenure security in rural agrarian areas.

Indeed, the need to ensure tenure security has not been off the radar in terms of land policies in Ghana. Apart from the National Land Policy (NLP), which served as a purpose vehicle through which the Land Administration Project was implemented in phases, the poverty reduction strategy papers (2003-2006;2006-2009; 2010-2013[PRSP]), mentions land administration reforms to improve the security of tenure by addressing issues of land title and land security. Ghana was also one of the ten (10) African countries assessed by the World Bank and its partners utilising the land governance assessment framework (LGAF) (Lambrecht and Asare 2016). All these interventions, in essence, were to develop and build a resilient land administration reform programme through the Land Administration Project (LAP) where land tenure security will be enhanced and a system that is efficient, cost-effective, and increases fairness, transparency, and accountability will be developed and sustained.

3.2.1 Pastoralists' Insecurity

Pastoralists are primarily herder groups whose survival and herd feeding are dependent on seasonal and climatic variations. Their mobility across space in pursuit of their livelihood is confronted by many challenges, one of which is access to land. Bukari (2017) avers that pastoralist used to have unrestricted access to wide areas of land, but, due to changes in customary land tenure favouring a more private holding, such unrestricted access has greatly diminished for pastoralists. This is because of the perception regarding pastoralism as an irrational, environmentally destructive and economically inefficient mode of production. This

view stems from the tragedy of the common thesis, where people fail to rationalise their exploitation of collective resources, ignoring the wellbeing of the larger community in the quest for personal gain. This understanding of the negative activities of pastoralists on the environment translates into governments measures aimed at redistributing pastoral lands to commercial investors and ensuring the sedentarisation of the pastoralists.

These measures have led to individualisation and enclosures leading in some cases to evictions of pastoralists from the areas they previously operated and a further reduction of their grazing fields. One such example is the eviction of pastoralists from their land in the Arusha region of northern Tanzania (Mwawfupe 2015). A comprehensive study in 2007 of how higher courts in Tanzania have dealt with the rights of pastoralists concluded that the higher courts have often resorted to a conservative or strict interpretations of legislations to deny pastoralists their rights and in cases, where pastoralists do win, the judgements are generally not executed, or the state enters an appeal, and the cases are either adjourned or dismissed on technical grounds. These are some of the issues that make Mvungi (2007) argue that the courts in Tanzania have failed pastoralists, as the courts have remained timorous and unable to creatively construe laws to champion the rights of pastoralist as marginalised people. These measures and policies turn to marginalise pastoralists across the African continent as they lack clear property rights because they inhabit customary rangeland or lands owned by the state or other interested groups making their use of the land highly insecure as they can easily be evicted when such lands are expropriated by the state for a commercial investor, for a game or wildlife parks or the creation of environmentally sensitive areas. The marginalisation of pastoralists has been made possible due to the fact that they are not available all year to protect their interest and livestock corridors, that they require access to vast areas of land for a relatively short period which makes it

impossible for them to obtain exclusive rights to these lands and also, they rely on the goodwill of sedentary population for access to land resources that has become increasingly scarce. The preceding has further heightened the insecurity of the tenure of pastoralists. Therefore, the lack of access is at the core of tenure insecurity, which engender conflicts with farmers as they struggle and compete for the available land spaces in pursuit of their livelihoods.

3.2.2 Migrant Farmers' Insecurity

Accessing and controlling productive land resources are major determinants of livelihood opportunities for Africans living in rural areas. The need for a secure livelihood informs the decisions of the rural populace to either migrate or otherwise. In the event people decide to migrate, their access and control over land will be centred on the land tenure system of the area of their destination. These migrant farmers are vulnerable because they depend on the benevolence of the owners of the land for their land needs. These migrant farmers are often exploited through labour or cash prestation by the landowners. Their land needs are often not secured as land given to them to cultivate is, in most cases, taken away from them and given to the highest bidder rendering them landless. The situation plunges migrant farmers into abject poverty because they cannot access fertile land for agricultural purposes. In a study by Alhassan and Manuh (2005) in the Western Region of Ghana, they highlighted how migrants in the region face a daunting task regarding their rights to land being recognised. This even refers to migrants who have resided in the area for several generations. A critical concern at the moment has to do with land insecurity, which has taken different forms. This includes difficulty in gaining access to land or specific land, stricter access requirements, and shorter lease duration with higher tributes charged on the use of land. In Ivory Coast, the insecurity of migrant farmers is explicitly demonstrated by Chauveau and Colin (2010) involving past land transfers in relation to the

tutorat. This is a practice in which the holder of a customary right provides rights to land to a stranger outside the community. This type of land transfer has occurred in the country as the agriculture frontier expanded. However, repeated social, economic, and political crisis have undermined land rights transfer to settlers or migrants. Young men who had returned from the city put intense pressure on their family heads to reclaim portions of the land that had been transferred to migrants, with some attempting to intimidate settlers and reclaim their land by force. Even more importantly, the tensions in the autochthones' families have led to previous transfers to migrants being challenged. To make issues worse, when the initial *tuteur* or settler dies, the conditions of land transfer are renegotiated, and it often involves the demand for additional compensation by the autochthones. All these measures have rendered migrants or settler farmer's land access less secure.

3.3 Effects and Mechanisms for Resolving Farmer-Herder Conflict

The effect of any conflict type on society is debilitating. When conflicts occur, they affect not only the socio-economic livelihoods of the feuding parties but also have spillover consequences on non-combatants. For example, women and children, who are most vulnerable, suffer irreparable damage, such as injuries, abuse, and even death, especially when caught in the melee of the conflict. Afolabi (2009) broadly outlined the consequences of conflict in Africa to include destruction of lives and property, internal displacement of people, refugee crisis, poverty and disease, the proliferation of small arms and light weapons, and banditry. Moreover, violent disputes between farmers and herders are becoming more common in several parts of West and East Africa, with severe consequences for people, property, and peaceful coexistence and order (Olaniyan 2015).

Examples of the effects of such specific cases include the conflict between Mauritania herders and Senegalese farmers along the Senegal River Valley in 1989. This conflict sparked a wave of violence that spread to the two capital cities of Dakar and Nouakchott. The violence resulted in targeted killings, expulsions, and land expropriation. Over a thousand people were killed and injured, and nearly a quarter of a million people were expelled from both sides of the border (Salmone 2010; Homer-Dixon 1994:13). Similarly, Benjaminsen et al. (2009) reported that in Kilosa, Tanzania, thirty-eight people in the Rudewa Mbuyuni village were killed with many wounded on the 8th of December 2000, when Maasai warriors attacked the village. Olaniyan (2015:355) recounted that, in Ghana, the conflict between Fulani and Konkomba ethnic groups on the night of December 11, 2011, when unidentified members of the Konkomba ethnic group swooped on unsuspecting Fulani herders living in Batiga, Dambaboli, and Naboya resulted in the death of thirteen Fulani pastoralists, with several others injured, houses damaged, properties destroyed, and some young cattle stolen.

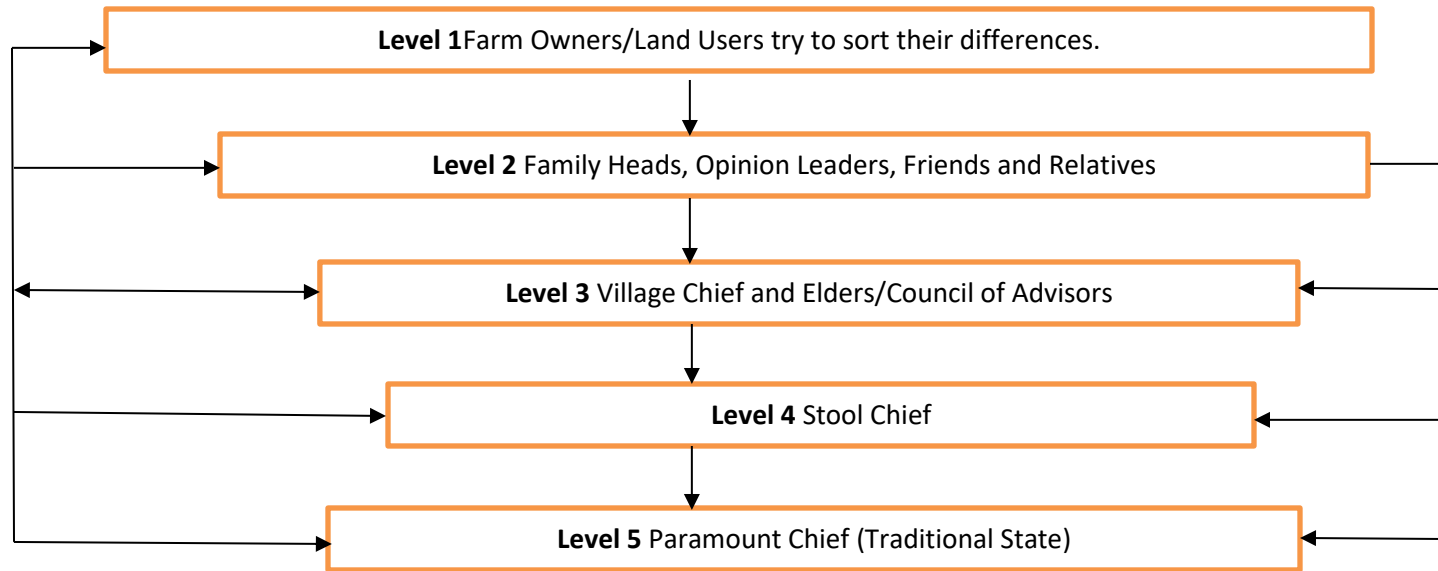
Using 2019 to 2020, Armed Conflict Location and Event Data (ACLED) project cited by Kratli and Toulmin (2020), farmer-herder clashes and fatalities were higher in Nigeria than in other countries. Out of ACLED's 5,100 recorded incidents and 13,364 fatalities, in 12 months from May 2019 to May 2020, Nigeria recorded the highest number of incidents of 1,421, with 4,168 fatalities. According to Akov (2017), hardly a day goes by without a report of several deaths and the destruction of property worth millions of naira due to clashes between farmers and pastoralists in Agatu, Anyiin, Agasha, Genyi in the State of Benue; Nyukong and Giza in the Nassarawa State; and Shonog and Dogo Nahawa in the Plateau State, all in the north-central zone or the middle belt of Nigeria. The list of farmer-herder fatalities is endless because of the intractable nature of the conflict on the continent, particularly in West, Central, and East Africa.

To mitigate the effects of farmer-herder clashes, various strategies have been used in resolving these conflicts.

These mechanisms could involve using either the traditional or modern approaches or both (Bukari 2017; Muwonge 2009; Cleaver 2001). These conflict resolution mechanisms include the reliance on institutions and external or local actors. When conflict arises between pastoralists and farmers or other resource users, the mechanisms for resolving them are typically localised or traditional in nature. Traditional methods of resolving disputes between farmers and herders rely on customs and conventions aimed at reconciling, maintaining, and improving social relationships. These processes are informal. Traditional conflict resolution methods are based on internal and external social controls (Osei-Hwedie and Rankopo 2003).

The internal social control uses deterrent methods, such as personal shame and fear of the supernatural forces. On the other hand, external social controls are based on punitive measures connected with other people's actions in response to potentially accepted or disapproved behaviours (Osei-Hwedie and Rankopo 2003). The traditional conflict resolution processes involve several actors. Within the Akan traditional system of Ghana, these actors are made up of the paramount chief (*omanhene*), the divisional chief (*ohene*), the queen mother (*ohemaa*), and the head of the village (*odikro*). The villages are made up of families and clans, and each of these families is led by a family elder (*abusuapayin*). According to Osei-Hwedie and Rankopo (2003), others are drawn from across the segments of society, which may include youth groups, women, traditional priests, religious leaders, and herbalists. Alhassan and Manuh (2005) illustrate the channels of traditional dispute resolution in Ghana in Figure 1. This illustration reinforces the case that many conflicts in most rural areas were settled by traditional authorities, family heads (*Abusuapanin*), and others, such as religious leaders and prominent herbalists.

Figure 1: Channels of traditional dispute resolution.



Source: Alhassan and Manu (2005).

Glowacki and Gonc (2013), as part of their findings in Kenya and Ethiopia, stipulated that resolving conflicts between pastoral groups involves the engagement of elders and includes the signing of peace accords and the use of education as a means of changing cultural norms and violent rhetoric. The *Ay Njanbur*, which means the wise ones, in the Ferlo region of Senegal, according to Cotula et al. (2004), is an exemplary communal structure built on customs, which has proven beneficial in settling local disputes. The *Ay Njanbur* is a committee formed at the request of the feuding parties to resolve a specific conflict. Other localised community mechanisms include Niger's Rural Code, Mali's Pastoral Charter, and the use of village land councils in Tanzania. In Sudan, *Judiyya* (customary mediation) is used to resolve traditional conflicts. *Judiyya* is a grassroots arbitration system that focuses on the reconciliation and resurrection of social relationships in the community. It is used to resolve conflicts at various levels, ranging from personal disputes between individuals to ethnic and tribal conflicts. Traditional leaders, who are respectful elders and who understand the ecology and history of tribal areas, are usually chosen as *ajaweed* or mediators (Bronkhorst 2012). This traditional

means of resolving conflicts, especially farmer-herder conflicts, is however, gradually becoming weakened because of the breakdown of internal discipline and social cohesion and the suspicion that some traditional authorities are allies and key beneficiaries of the presence of herders in farming villages, where they have been compromised in their traditional roles of fair land allocations and adjudication of disputes in their traditional areas.

In Ghana, the use of stakeholders, institutional engagements, and compensation payments all play a role in resolving conflict involving indigenous crop farmers and nomadic Fulani cattle herders. Bukari (2017) contends that a variety of actors, including traditional rulers, community leaders, influencers in the community, and government representatives, are involved in resolving disputes between smallholder indigenous crop farmers and nomadic Fulani cattle herders. The role of these actors is to engage in negotiation and mediation to resolve such disputes. Ultimately, these mediation and negotiation processes result in the payment of compensations to any of the feuding parties whose crops have been damaged, or animals killed, to assuage tensions. On the other hand, government institutions also play a crucial part in the dispute resolution processes between smallholder crop farmers and nomadic cattle herders. These institutions are made up of agencies of the central government, decentralised local authorities, and security agencies. The role played by these government agencies has been effective to some extent in ensuring that conflicts between the two feuding parties do not escalate to affect the peace of the general populace. A typical example of such a state institution is the creation of a specialised High Court to deal with the growing land cases in Ghana (Cotula et al. 2004). These courts are based on enacted legislation to effectively deal with the rising incidence of farmer-herder conflicts and other land-related cases.

Aside from these, other management strategies are also deployed in curbing farmer-herder conflict in Ghana. Olaniyan (2015) discussed five management strategies used at the localised level to curb the Fulani - Konkomba conflict in Gushiegu. The five levels of the management of the Fulani-Konkomba conflict are security, administration, diplomacy, dialogue, and resettlement. Olaniyan (2015) explained that, at the first level, when the conflict arose, security personnel were quickly deployed to the area to ensure law and order and to protect humans and property. Victims were moved to a safe area, while deceased persons were sent to the Gushiegu mortuary. While several of the attackers were apprehended and prosecuted, Fulani herders were told to report to a campground set up by the district. This was necessary for two reasons: to protect the Fulani herders from further attacks and prevent any possible retaliatory attacks by the Fulani herders. At the second management strategy level, the district security council (DISEC) established a camp and relocated the Fulani herders there, providing them with full protection and feeding. The third level of the strategy was diplomacy. Because the Fulani herders were Burkinabe nationals, their Consul-General was contacted and came to the camp to express support and encouragement. At the dialogue level, which is the fourth management strategy, the traditional rulers and opinion leaders of the Konkomba group were invited to a meeting with the Fulani herders by the DISEC. The dialogue was on effective coexistence among the groups in their respective villages and communities. Following that, community and village sensitisation took place. Lastly, after three months at the camp, the DISEC returned the Fulani herders to their former location. A combination of strategies involving the use of chiefs, elders, security agencies, and diplomacy helped resolve the Fulani-Konkomba conflict in Gushiegu (Olaniyan 2015).

The Ghanaian state and, to an extent, some states in the West Africa sub-region have resorted to the use of security agencies in evicting herders from their territories when conflict arises between farmers and herders. The issue of expulsion of foreigners is widely recorded in conflict literature. The Fulani pastoralists are not the first or only group of migrants to be expelled from Ghana and other West African countries. The 1969 Alien Compliance Order, issued by the Busia government to regularise the stay of aliens in Ghana, saw many people, particularly those without permits, ordered out of the country in fourteen days. Similarly, the Nigerian government expelled all foreigners in 1983, causing millions of West Africans to seek refuge in bordering countries. Other countries, including Ivory Coast, Sierra Leone, Guinea, Senegal, Liberia, and Mauritania, have all conducted similar evictions in the past (Salmone 2010; Tonah 2005). While some of these expulsions were general in nature, affecting all foreigners regardless of their social and professional status or occupation, those involving pastoralists were specifically targeted, affecting only herders throughout the West African sub-region.

During the early twentieth century's phase of economic boom, Fulani migrants from Guinea were welcomed to neighbouring Sierra Leone. However, the Sierra Leonean government curtailed the immigration status of the Fulani migrants and sent them back to Guinea during the period of economic depression (Kposowa 2000). Similarly, the Ghanaian government expelled Fulani herders to their respective countries in 1989 and 2000 following repeated clashes between a section of the local farming population and nomadic herders (Tonah 2005:236). In Ghana, the exercises were codename 'Operation Cow Leg' (OCL) and 'Operation Livestock Solidarity', which, according to Tonah (2005:237), were to drive out nomadic Fulani pastoralists, who were illegally inhabiting land belonging to indigenous farmers, and to control the transmission of livestock diseases. However, the expulsion exercises resulted in mixed outcomes since the

herders were always back a few months after being expelled. Nevertheless, the use of expulsion has been a significant tool deployed by most African governments during clashes between farmers and herders. These mechanisms used in resolving farmer-herder conflicts in Ghana have been tentative, adhoc, and a stopgap, which have proven to be ineffective. The above essentially reveals that the existing means of resolving land conflicts are inadequate and often fuel the conflict between indigenous crop farmers and nomadic cattle herders.

3.4 Conclusion

The factors underlying the conflict over land access were highlighted in this chapter. Among these are population growth, climate change, and politics, which are critical to understanding the conflict. These factors interact to explain the nuances of the conflicts between the two migrant groups, who are settler farmers and nomadic herders in the case study area. These factors are categorised as remote causes because they are not apparent in farmer-herder relationships but are a powerful force that fuels conflicts. The chapter further discussed the effects and mechanisms for resolving the conflicts involving farmers and herders across Africa. The consequences of the conflicts have been devastating, not only for the feuding parties but also for the broader nation. The study highlighted that the resolution of the conflict involved the use of modern or traditional approaches or both. However, most states in the West Africa sub-region have relied on the evictions of herders as a tool in managing the conflict. Nevertheless, this measure has proven less effective than anticipated. The next chapter discusses the conceptual framework of the thesis through the environmental scarcity and political ecology theories.

CHAPTER FOUR

Conceptual Framework: Environmental Scarcity and Political Ecology

4.1 Introduction

Contestations and conflicts over land have featured prominently in the discourse of land access on the African continent. The works of the World Bank and other donor agencies in Africa have been concerned about how the poor and vulnerable migrant farmers, pastoralists, and women are alienated from accessing land resources in their quest to meet their source of sustenance. To understand this situation, social scientists have used a variety of theories to conceptualise this social phenomenon. Research involving farmer-herder conflicts in Africa has explored the use of theories such as the tragedy of commons, common property resource management, livelihood security approaches, and land appropriation and property rights, among others.

This thesis discusses farmer-herder conflicts in the case study area through the lens of environmental scarcity and political ecology theories. The two conceptual perspectives are widely used in the literature on land conflict and the management of common resources between farmers and pastoralists. The focus, however, will be on the ecological, demographic, economic, and political factors to validate the nuances of land disputes between smallholder crop farmers and nomadic cattle herders in the case study area of the Afram Plains. Thus, political ecology is connected to environmental scarcity in explaining land conflict, which is the central focus of this study.

4.2 Environmental Scarcity Theory

The environmental scarcity theory is often referred to as resource scarcity. Homer-Dixon (1991) stipulates that resource scarcity refers to the dwindling availability of renewable natural resources, like fresh water, soil, forest, and fish stocks, which are inadequate to match local demand. This approach to explaining conflict holds the view that frequent conflicts across the globe are because of rising natural resource depletion, which is triggered by population increase, unequal resource distribution, and land degradation. The Malthusian premise of explaining conflict stemming from pressure on finite resources is central to the environmental scarcity approach. The limited availability of renewable natural resources required to support livelihoods may increase competition between user groups. The implication of Malthus' narrative on African land concerns is that the population will outgrow the land available, resulting in struggle or contestation amongst user groups, which will lead to migration and violent conflict. Scarcity, according to Homer-Dixon (1991), is the result of three interacting factors - population growth, degradation, and unequal resource distribution and it results in three forms of scarcity, namely:

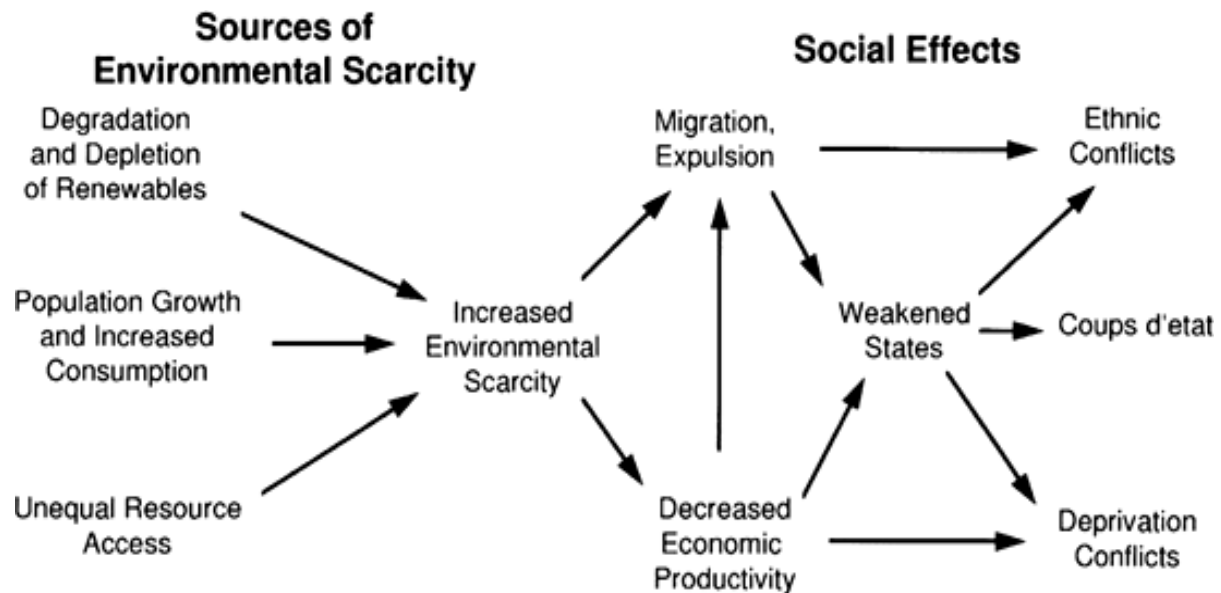
- Demand-induced scarcity. This occurs when the demand for a specific renewable resource exceeds the available supply. While a resource like water or cropland may initially meet all local needs, population growth, increases in consumption rates, and or the use of new technology can reduce the resource's per capita availability over time. This dynamic was first described in the 1800s by Thomas Malthus, who observed that societies have experienced epidemics, famines, or wars throughout history, which frequently reflect the fundamental problem of population overstressing their resource limits (United Nations Environment Programme [UNEP] 2012). The growing African population over the years has led to the shrinking of available resources to the average

person. Violent conflicts in countries such as Rwanda (1994), Mauritania and Senegal (1989), South Africa in pre-and post-apartheid as well as Zimbabwe (1960-1980) were, among other factors a result of demographic pressures caused by acute environmental scarcities (Maphosa 2012).

- Supply-induced scarcity. This describes the environmental changes caused by the depletion or degradation of natural resources at a rate quicker than natural processes can replenish them. As natural resource supplies dwindle, opportunities for pursuing productive livelihood strategies are undermined. This creates difficulties in resolving competition between livelihood groups. An example is the desertification of the Sahel. Desertification has sparked violence between local populations as they compete for dwindling resources.
- Structural-induced scarcity. This occurs when different groups in society face unequal resource access. It, thus, connotes unequal distribution and access to natural resources, in which a small number of powerful and influential groups in society deny other people access to a resource. Although poor resource management is generally blamed for structural scarcity, it can also exist under well-functioning governance frameworks due to varied land-use decisions and trade-offs. This situation can also arise due to cultural practices or socio-economic constraints, for example, the restrictions on women to land access (UNEP 2012). If resources are allocated evenly, this condition will not imply actual shortages. The period of colonial regime in Africa experienced a situation where the colonial government segregated local citizens and bestowed on themselves enormous resources. The deprivation of Africans' access to resources, such as fertile land, culminated in the violent nationalist movement on the continent.

The connection between environmental scarcity and conflict is intricate. Environmental scarcities can interrelate with political, ecological, social, and economic factors to contribute to violent conflicts (Maphosa 2012; Homer-Dixon and Percival 1995). According to Page (2000), environmental conflicts are caused by stress on the environment and the contest for limited resources. Homer-Dixon and Percival (1995) suggest that the interaction of these sources of conflicts, namely, population increase, degradation, and uneven distribution of resources, produces a social effect, such as a decrease in agricultural production, which can eventually lead to socio-economic distress, ethnic disputes, revolts, and even regime upheaval. Figure 3 depicts the interactions of population increase, degradation, and uneven resource distribution, and the outcomes.

Figure 2: Sources and consequences of environmental scarcity



Source: Homer-Dixon (1994)

The diagram Fig.3 presents more macro effects. However, at the micro-level, scarcity generates a social effect that produces stiffer competition, culminating in crop destruction, killings of herds

and humans, and the outcome is violent farmer-herder conflicts. Other reports corroborate the position of Homer-Dixon on the resource scarcity and violence thesis. The 'Coming Anarchy' by Kaplan (1994) lends credence to the scarcity thesis, claiming that the African youth bulge is particularly fueling migration, food insecurity, destitution, and joblessness, resulting in fierce conflicts. Furthermore, in its report, the United Nations Environment Programme (UNEP) (2007), argues that there is a strong link between land degradation, desertification, and conflict in Darfur: however, these environmental factors are intertwined with a range of social, political, and economic issues. For example, in northern Darfur, exponential population growth and related environmental stress have created conditions for conflicts triggered and sustained by political, tribal, or ethnic differences. The report explicitly portrays an empirical relationship connecting conflicts and environmental resource scarcity on the African continent.

The environmental scarcity theory is a useful tool for analysis when studying disputes involving crop farmers and cattle herders, specifically in the research study district of Ghana's Afram Plains. The migration of human and herd populations in the area because of the conducive ecological environment have placed the two groups in constant conflict due to their difference in land use and needs. While farmers need to have access to adequate and fertile land for the cultivation and expansion of the crop fields, herders need the same resources to graze their cattle, bringing the two groups into a competitive struggle. The struggle and competition for suitable land resources amongst smallholder settler crop farmers and nomadic Fulani cattle herders have resulted in negative consequences, such as reduced agricultural productivity and the depletion of resources, which, in turn, have caused violent conflict in the case study area.

4.2.1 Critique of the Environmental Scarcity Theory

Some authors have criticised the resource scarcity narrative for its over-simplified links between scarcity and conflict (Benjaminsen et al. 2009; Gleditsch 1998; Bassett 1988; Boserup 1965). According to Benjaminsen and Svarstad (2019), this is a Marxist critique of Malthusian environmental notions. Boserup (1965) avers that an increasing population density has strong favourable consequences for agricultural and economic development throughout the world, a sharp contrast to the Malthusian concept on which the environmental scarcity theory draws primarily. Population changes drive human ingenuity through intensification, increasing workforce, improved seedlings, and fertilizers to increase productivity to match the increasing population. Therefore, population increase will lead to change in technology promoting agricultural development rather than conflict. Benjaminsen, Maganga, and Abdallah (2009), in their study in Tanzania, argued that the Kiolsa killings were more than conflict instigated by resource scarcity. However, to comprehend farmer-herder tensions, it was necessary to consider political issues, such as policies related to land tenure and the villagisation initiative of the 1970s. Similarly, Bassett (1988:455) stated succinctly as a critique of the scarcity narrative that the weakness of human ecological analysis of peasant-herder conflicts is the failure to address sufficiently the politics of land use, and, instead, proposes the study of these conflicts ‘as responses in context’. Gleditsch (1998) underscores the point that research on the link between resources, the environment, and armed conflict suffers from the lack of clarity over what is environmental conflict and the neglect of critical variables, particularly political and economic issues, which have a strong influence on conflict and mitigate the impact of resource and environmental factors. Thus, referring to resource scarcity as a *sine qua non* for farmer-herder conflicts has been criticised as an oversimplified approach to comprehending the many

dimensions, actors, and levels of resource conflict (Paalo 2020; Forsyth 2003). Notwithstanding these critiques, the theory can be used to understand farmer-herder disputes in the research area better.

4.3 Political Ecology Theory

Political ecology dates to the 1970s as an evolving case-based approach when the term was used to refer to the diverse critical approaches to understanding the relationship between human societies and the natural environment (Tetreault 2017). The term's originality stemmed from its attempt to integrate human and physical approaches to land degradation through an explicitly theoretical approach to ecological crisis capable of addressing diverse circumstances and accommodating detailed local situations and general principles (Watts 2000). There are varied definitions of political ecology, but these definitions are not entirely consistent and have tended to become broader and somewhat more ambiguous over time. Some of these definitions stress political economy, while others emphasise more formal political institutions, with some pointing to environmental change, while others highlight chronicles about that change (Robbins 2012). According to Bassett (1988), political ecology provides a paradigm for human ecologists interested in investigating the interplay between local patterns of resource use and the larger political economy. Watts (2000:257), argues that political ecology entails a comprehensive examination of what one might call the forms of access and control over resources and their consequences for environmental health and sustainable livelihoods. Benjamisen, Maganga, and Abdallah (2009) argue that political ecology tends to stress on power relations in land and environmental management.

Robbins (2012:21-23) identifies five overriding narratives or foci of political ecology to include:

- The degradation and marginalisation thesis. This explains the environmental change from a broader economic and political perspective.
- The conservation and control thesis. This seeks an explanation of problems within conservation practice and the political and economic exclusion of environmental conservation. Control of resources and landscapes has been wrested from producers or producer groups through the implementation of efforts to preserve sustainability, community, or nature. In this process, local livelihood systems, production, and socio-political organisations have been disabled by officials and global interests seeking to preserve the environment.
- The environmental conflict and exclusion thesis. This focuses on seeking to explain environmental struggle because of growing scarcities caused by resource enclosures or expropriation by state authority, which exacerbates disputes between groups. Similarly, environmental issues become socialised when certain groups gain control of shared resources at the expense of others by leveraging management interventions by development agencies, state agents, or private businesses.
- The environmental subjects and identity thesis. Environmental management regimes that are institutionalised and power-laden have resulted in the emergence of new kinds of people, each with their self-definitions, worldview, and ecological belief and behaviour. These new environmental regimes and conditions have created opportunities or imperatives for local groups to secure and represent themselves politically.
- The political objects and the actor thesis. The goal is to show how the tangible traits of non-human nature and its components have an impact on the world of human struggle that is interwoven within them and, hence, are inextricably political. These interactions,

however, modify these features and agents as they take on new roles and importance. People, institutions, and nations congregate and engage in the networks that arise, leveraging power and influence.

There is a striking contrast between political ecology and apolitical ecology. Political ecology is the opposite of apolitical ecology, which asserts that the environment is natural and unaffected by political and economic processes or power connections. Apolitical ecology professes to be unbiased and non-political when it comes to environmental issues. Robbins (2012) views apolitical ecology as ecology without setting which usually perceives the environment as natural and objective. Nature is viewed as separate from society which makes it ahistorical. However, political ecology refutes this viewpoint. Political ecology aims to take a more contextual perspective on political, historical, and social processes to critically assess the environment. The exploration of a multilevel connection between the global and local phenomenon, not only in environmental functions but also in decision making and power hierarchies, is a critical issue in political ecology (Adger et al. 2001). Political ecology aims to describe the social and political settings surrounding the causes, experiences, and management of environmental problems (Forsyth 2003:1). Therefore, the discourse on political ecology is fundamentally concerned with the function of politics in influencing human-environment relations. Therefore, in understanding environmental disputes, the role of politics, power, governance, and social factors is critical (Watts 2000). Thus, political ecology describes how political actions affect environmental and ecological processes. In giving credence to the position espoused by Watts (2000), the works of Benjaminsen et al. (2009) in Tanzania, Turner (2004) in the Sahel, and Bassett (1988) in the northern Ivory Coast reveal that environmental conflicts are interactions of environmental,

economic, and political factors. Explaining the view of how political ecologists conceptualise environmental conflicts, Le-Billon (2001: 567) states the following:

The political ecology approach requires engagement with the two perspectives most adopted: that resource scarcity (mostly of renewable resources) causes conflicts, and that resource abundance (related to non-renewable resources) causes conflict. In both perspectives, societies confronted with specific environmental circumstances – scarcity or abundance – have a higher risk of being affected by violent conflict. Such quasi-environmental determinism is explained in the best of cases through the supposed debilitating effects of ‘too much’ or ‘too little’ resources on economics and governing institutions that result in the distributional struggle taking a violent turn.

Political ecology, nevertheless, addresses issues beyond the two perspectives to examine the role of political forces behind these conflicts. This is echoed by Batterbury (2018), who posits that how much power societies and individuals have and how they use it has a significant impact on the struggle for resources and a healthy environment. In summary, Moritz (2012) deduced that conflicts between crop farmers and cattle herders are due to the imbalance in the rights to access resources, rather than the lack of resources due to natural causes such as population and growth. The use of political ecology as one of the analytical tools in examining settler crop farmers and nomadic cattle herders’ conflict in the case study district of the Afram Plains is predicated on the premise that the established reciprocal relationship and monetary gain among the supposed ‘big men’ in society - traditional rulers, landowners, and political actors - serve to grant land access to nomadic Fulani cattle herders to the detriment of smallholder settler farmers, who, though not indigenes have cultivated the land for a long time. Furthermore, this irrational granting of access to land is done on the blind side of farming communities, thereby placing smallholder settler

crop producers and nomadic Fulani cattle herders in contestation and eventual conflicts over access to land in pursuit of their respective livelihoods.

4.3.1 Critique of Political Ecology Theory

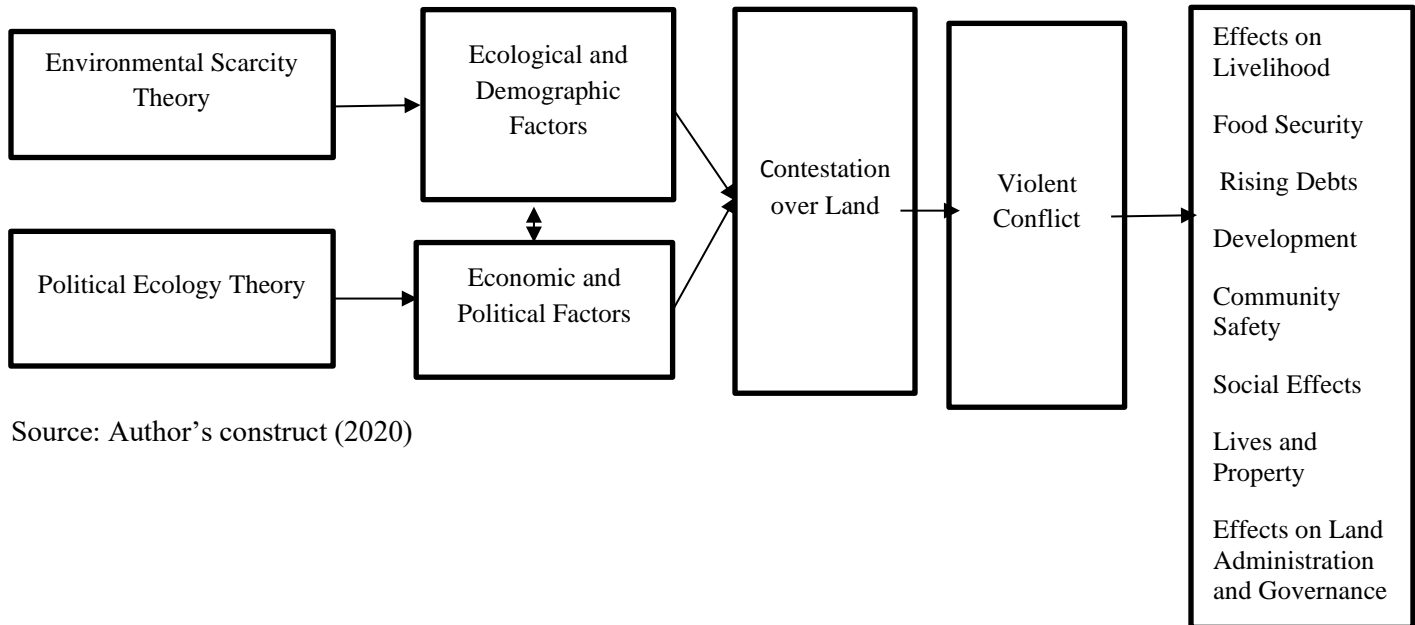
Many scholars have used the political ecology theory to explain the underlying causes of conflict between crop farmers and nomadic cattle herders in the Sahel, West, and East Africa (Benjaminsen and Boubacar 2009; Benjaminsen, Maganga and Abdallah 2009; Turner 2004; Bassett 1988). The field emerged as a Marxist critique of Malthusian ideas of environmental thinking. Just like any academic theory, political ecology cannot be without criticism. The theory has been criticised for placing emphasis on or giving priority to, political explanations and overlooking ecological dynamics, hence, ‘politics without ecology’, in contrast with what the theory of political ecology sought to challenge, ‘ecology without politics’ (Vayda and Walters 1999). Researching in Cameroon, Moritz (2006) criticises political-ecological studies in Africa for not paying ‘enough attention to politics or the right sort of politics, in his own words, ‘belly politics’. He advocated the connection of political ecology to the study of corruption.

4.4 Application of the Theories to the Study

The environmental scarcity and political ecology theories are germane to appreciating farmer-herder conflicts in the case study area. This is because evidence from field interviews and observations indicates that the conflict between the two migrant groups in the area is based on a complex interaction of various variables. Indeed, Turner (2004) argued, farmer-herder conflicts should be understood as more than resource-related conflict rather than other factors, such as economic and political issues, should be considered. For this reason, the interface of the two theories is used to explain the conflict over land access between smallholder settler crop farmers

and Fulani nomadic cattle herders in the case study area. The diagram below (Figure 3) succinctly explains the application of the two theories to the conflict situation concerning crop producers and cattle herders in the research study area of the Afram Plains in Ghana.

Figure.3: Farmer-herder conflict through the interface of environmental scarcity and political ecology theories.



Source: Author's construct (2020)

Over the years, the growing human and herd population in the case study area have resulted in the struggle between smallholder settler crop producers and nomadic cattle herders over land access. The rationale for the emergence of this phenomenon is the growing human population and the dwindling ecological resources in the northern parts of the country, forcing the herders to move southwards into the Afram Plains area. Thus, demographic and ecological factors have increased human and herd populations leading to struggles over land. The struggle for limited available land resources manifests in contestations over land precisely along the banks of the Volta Lake and in fertile bush farms. The outcome is a disagreement between smallholder crop farmers who are settlers and migrant Fulani cattle herders.

On the other hand, the growth of human and herd populations has raised land values with major implications for land tenure relations in the case study area. Pressure on land resources has led to increasing economic interest of traditional landowners in the irrational granting of lands to nomadic herders. This has engendered opportunistic tendencies for traditional landowners, who have opened a 'gateway of prosperity' to cash in on their land to the detriment of poor smallholder settler farmers (Tonah 2002). The increase in land value and the muted tensions between traditional landowners and some settler farmers have led to some traditional landowners seeking to remove existing land users so that they could conclude more advantageous arrangements with nomadic Fulani herders and large-scale agricultural investors, creating tenure insecurity for smallholder farmers. The desire for economic gain has led to corrupt practices and greed in multiple allocations and high rental for land by the traditional landowners. Not only are the traditional landowners implicit in corrupt activities, some security agencies and political elites have also been accused of undermining the rule of law by taking bribes to frustrate cases brought to the police. At the same time, politicians undertake political rhetoric inflaming violent conduct against nomadic cattle herders as a way of garnering votes from settler farmers. The resultant effect of these manifestations is the escalation of tensions, leading to clashes between smallholder settler crop producers and migrant Fulani cattle herders with repercussions locally and nationally. The preceding explains how various groups' interests, power, and shortcomings manifest in resource-related conflicts (Turner 2004). The usefulness of the interface of environmental scarcity and political ecology theories as tools for analysing the conflict in the case study area is explained by the complexities of the conflict between the smallholder settler crop farmers and nomadic Fulani cattle herders.

4.5 Relevance of the Theories to Farmer-Herder Conflict

The outcome of a conflict, when viewed from a broader perspective, reveals the manifestation of varied explanatory elements. Similarly, farmer-herder conflicts are the outcomes of the interactions of diverse factors. This is because of the complexity and the varied nature of the dynamics, actors, and causes of the conflict (Le Meur and Hochet 2010). It is, therefore, instructive for scholars studying the conflict between farmers and herders to place a broader focus on the diverse interacting factors to allow for an in-depth analysis to better grasp the intricacies of the conflict. Evidence from field interviews in the Kwahu Afram Plains South District points to the conflict between farmers and herders being underpinned by a complex interplay of factors: ecological, demographic, economic, and political. Analysis of the use of the environmental scarcity and political ecology theories is applied to the study to understand the multifaceted factors influencing farmer-herder conflict. Thus, the interface between the two theories is essential in unpacking the intricacies of these factors influencing farmer-herder conflict over land access and their effects on livelihoods in the case study area of the Afram Plains in Ghana.

4.6 Conclusion

The chapter presented the conceptual schema that served as the foundation of the thesis. The conceptual framework is comprised of environmental scarcity and political ecology theories. The political ecology theory is connected to environmental scarcity and helps us understand the factors that cause farmer-herder conflicts more broadly. The conceptualisation of the thesis around the two theories allowed for a more integrated approach to the study's analysis. This enabled a multi-dimensional conceptual prism focusing on the interface between ecological,

demographic, economic, and political undercurrents to contestations and conflicts over land access amongst smallholder settler crop producers and migrant Fulani cattle herders in the case study district. The next chapter of the thesis looks at the study location and the research methods.

CHAPTER FIVE

Study Area and Research Methodology

5.1 Introduction

The focus of this chapter is on the research study area and the methodology used. The chapter examines explicitly land tenure and administration generally in Ghana and specifically in the case study area, the location of the study area, demographic characteristics, vegetation, and climate, and the political and traditional setup of the research area, the Kwahu Afram Plains South District. In relation to the research methodology, the study examines the entire field experience, including data-gathering during the research process. The information used in writing this chapter is primarily accessed from the KAPSD's reports by the Ghana Statistical Service and other sources, as well as through interviews, focus group discussions, observations, and other documentary sources.

5.1.1 Land Tenure and Administration in Ghana

Land tenure explains the system of landholding that has emerged from people's unique political and economic circumstances, cultural norms, and religious traditions regarding land as a natural resource, its use, and development. The concept of land tenure is expanded to encompass three dimensions. These are people, time, and space. Kameri-Mbote (2005) posits that the people dimension of land tenure has to do with the relationship between different people to determine what interest an individual can have over a given parcel of land; the time dimension is concerned with the scope of one's interest or rights over land, and the spatial dimension is related to the physical limitations of the space over which one's interest or rights are exercised.

An appreciation of Ghana's land tenure system requires an explanation of its historical antecedents. Prior to establishing colonial administration in Ghana, the land was administered under various tenure structures that reflected a land-owning group's traditional customs. Chiefs, heads of clans, and selected elders oversaw land administration, which was governed by customary laws and norms that were enforced through a community's practice and governing structure (Kalabamu 2000). Colonialism ushered in a new wave of tenure arrangement promulgated through legislation, laws, and statutes. These instruments gave legal recognition and, at the same time, control of customary lands. According to Amanor (2008:57), the origins and formulation of customary tenure can be traced back to the early colonial period, from the failed attempts of the British Colonial Administration to control land and vest it in the colonial state and, ultimately, to the creation of an indirect rule system based on Native Authorities and chiefly rule. From this point forward, land management fell under the authority of chiefs, and the British colonial administration supported chiefs' privilege and control over land. A theory of African communal tenure, hence, was developed, in which chiefs were given land to manage on behalf of their communities (Amanor 2008). Customary land tenure, thus, refers to the systems that most rural African communities operate to express and order ownership, possession, and access and regulate use and transfer (Alden Wily 2011:1). In the view of Chimhowu (2019:898), it is the collectively owned land, usually under the authority of traditional leadership.

Following independence in 1957, post-colonial governments continued to exert control over land administration through the establishment of government-based land administration agencies, whose role was to regulate and, in some cases, implement policies around land administration in Ghana. The historical narrative on land administration is the product of what is referred to as the duality of Ghana's land tenure system. The duality in the system of land administration is

explicitly described by Amanor and Diderutuah (2001) as a complex structure of state machinery involving many levels and overlapping bodies, lying alongside a system managed by customary chiefs. The current tenure system in the country is described as a statutory and customary system that manages the acquisition and disposal of land rights (Kasanga and Kotey 2001). The statutory land tenure system functions under a set of written regulations and rules based on laws rooted in colonial power and which outline what is permissible and impose repercussions for non-compliance. The administration of these statutory lands is vested in the state through delegated authorities. In the statutory land tenure system, lands are allocated and confirmed by the issuance of land titles. On the other hand, the customary tenure is based on unwritten laws of customs and traditions derived from rights acquired through the first clearance of land, conquest, and settlements and accounts for about 80 percent of Ghana's total land area (Berry 2017; Agbosu et al. 2007). Ghana's 1992 Constitution recognises and guarantees both statutory and customary land tenure laws, which are derived from both Ghanaian and English common law sources. Out of these two broad land tenure systems, five specific categories of land types can be derived. These are described below.

a. State lands: These are lands that the government has acquired for the purpose of development. Land acquired for public works projects, national development projects, state economic enterprises, and government concessions granted to the corporate sector are examples of state lands (Amanor 2009). The government of Ghana typically acquires land through the power of an eminent domain, also known as compulsory acquisition, as stipulated in the country's 1992 Constitution, the State Land Act of 1962 (Act 125), and the Land Act 2020 (Act 1036). Such acquisition extinguishes the previous interest in land subject to a compensation payment.

b. Stool/Skin lands: This is a category of customary land where land is vested in local or traditional leaders within a specific geographical area in trust for the people. For example, in southern Ghana, the chief or symbolically, the ‘stool is vested with the allodial title and holds land in trust for the benefit of the community, while the *tendama* (first settlers) are bestowed with the allodial title in the Upper West and East Regions in Ghana. The symbolic authority of traditional rulers in the northern part of Ghana is the ‘skin’.

c. Family lands: This is another type of customary land owned collectively by an extended family or clan in Ghana. Members of the group or family are related by either matrilineal or patrilineal lineages and mostly share a common ancestry. Areas in Ghana where this customary type of land tenure is entrenched, and as alluded to by Kasanga and Kotey (2001), include Ajumako in the Central Region, the Adamgbe in the Greater Accra Region, and Anlo in the Volta Region.

d. Vested lands: These are traditional lands that have been acquired by, and entrusted to, the state. The arrangement establishes dual ownership, with the state holding legal title to the land and the community or original landowners having use right or retaining beneficiary interest. The state does not pay compensation for the land, nor does it alienate it to other parties, but instead assumes responsibility for its management and revenue collection (Amanor 2009). The government retains a portion of the revenue mobilised, while the remainder is distributed to local chiefs and the local authority in accordance with a revenue allocation formula. The administration of such lands is entrusted to the President and administered through the Lands Commission of Ghana.

e. Individual/Private lands: Individuals acquire and own land as personal property under this tenure arrangement. Ownership under this type of tenure could be through either inheritance or purchase.

Within the above categories are many interests in land in Ghana. The allodial title, customary law freehold, common law freehold, usufructuary interest, leasehold interest, and customary tenancies are examples of these interests. The various interests in land in Ghana are illustrated in Table 2. The highest interest in land is the allodial title entrusted to the state, stool, family, clan, or individual, depending on the specific land type (Kasanga and Kotey 2001; Land Act, 2020 Act 1036).

Table 2: Interest in Land in Ghana

Interest	Duration	Held by	Reason
Allodial Title	Infinite	Chiefs, Families, Clans, State	Acting as Custodians of Land
Customary Law Freehold	Absolute Interest: Acquisition of customary law freehold in respect of stool or skin has been proscribed since 22 nd August 1969.	Stool, Skin, Clan, Family	Acting as Custodians
Common Law Freehold	Absolute Interest: Acquisition of common law freehold has been proscribed since 22 nd August 1969.	Stool, Skin, Clan, Family, and by a grant to private individuals	Acting as Custodians
Usufructuary Interest	Infinite	Indigenes	Membership of Landowning Family, Stool, Skin
Leasehold Interest	99 years for citizens and 50 years for non-	Indigenes and non-indigenes who	Market-based agreement with chiefs

	citizens	establish an agreement with the chiefs or holders of usufructs	and holders of usufructs
Customary Tenancies (<i>Abunu, Abusa</i>)	Renewed yearly after payment of agreed proceeds to the landowner	Chiefs, Usufructs, Leasehold right holders	Market-based agreement with any of the higher interest holder

Source: Land Act 2020 (Act 1036), Kasanga and Kotey (2001).

Ghana has witnessed a series of land tenure policies and legislation over different historical epochs. The justifications for the changing policies in the land tenure systems by both successive colonial and post-colonial governments are based on correcting irregularities and ineffectiveness in the agricultural sector, ensuring impartial customary land delivery, and accelerating land development by easing land acquisition and documentation procedures primarily to satisfy the public or national interest (Kasanga and Kotey 2001).

Among these enactments are the Colonial Land Bill (1891), Land Registry Act, 1962 (Act 122), Administration of Land Act, 1962 (Act 123), Concession Act 1962 (Act 124), State Land Act, 1962 (Act 125), Mineral Act 1962 (Act 126), Survey Act, 1962 (Act 127), Compulsory Land Title Registration Law, 1986 (PNDCL 156), Land Commission Act, 1994 (Act 483) and the Office of the Administrator of Stool Lands Act, 1994 (Act 481).

5.1.1.1 Ownership of Land and Tenure System in KAPSD

Land in the case study area is vested in stools⁷, families, and the state. The chiefs of Nkwatia, Abetifi, Afram, and Pitiko are among the traditional authorities who own land in the research study area. The Kwahus has long been recognised as owners of land in the area because their

⁷ The term ‘stool’ and ‘skin’ relate to the traditional rulers’ symbolic authority in Ghana’s southern and northern regions, respectively.

ancestors were the first to settle in the area. Apart from the stools, some families also own lands, which are administered under the supervision of family heads on behalf of members of the family. Traditional authorities and families control about 80 percent of land in the area. The state, on the other hand, controls the remaining portions of the land in the area, which is used for afforestation projects (forest reserve) and is managed by the Forestry Commission on behalf of the state. The nature and size of customary land holdings by traditional authorities in the case study area align with observations made in land studies in various parts of Ghana. For example, Berry (2017) and Agbosu et al. (2007) argued that customary tenure constitutes a considerable share of the total land size in Ghana.

A significant feature of the area is its predominant settler nature. Even though the Kwahus are recognised as the owners of the land in the area, most of the people are migrants and are mainly subsistence farmers and nomadic herders. Between the two migrant groups, the farmers are settlers, and the herders are nomads. As a predominantly settler district, migrants could access land through leasehold, rentals, and sharecropping arrangements. The farmers and herders both access land owned by the traditional authorities because they neither are indigenous to the area.

As a result of population pressure, land use in the area is changing to become more intensive. In addition, the population in this area is growing, while available land remains constant. When these two factors combine, they will eventually put a strain on the land. Furthermore, the large cattle population in the area has compacted the soil and turned parts of the area into grassland, reducing the size of arable land in the research study area.

5.1.2 Location and Ethnic Composition of the Study Area

The Kwahu Afram Plains South District is in the Eastern Region of Ghana. In 2012, the district was constituted from the Kwahu North District and became part of the newly created districts under Legislative Instrument (LI) 2045. The district, with a total land area of approximately 3,095 square kilometres, is located between latitude 6°40'N and 7°10'N and longitude 0°40'E and 0°10'E in the western corner of the Eastern Region. The Kwahu Afram Plains South District shares a boundary to the north with the Kwahu Afram Plains North, to the east with the Volta River, and to the west with two districts in the Ashanti Region, namely, Sekyere East and the Ashanti-Akim Districts (Ghana Statistical Service [GSS] 2014; Westerhoff and Smit 2009). There are two main entrances through which the district can be accessed. One could travel by road from Nkawkaw to Mpraeso, then to Bepong via Kwahu Tafo to Adawso, then, finally, cross the three-kilometre wide Afram River using the Volta Lake Transport operated ferry to Ekye Amanfrom. The second route goes through Dome to Maame Krobo and then to Tease, the capital of the Kwahu Afram Plains South District.

The Kwahu Afram Plains South District is predominantly a settler area. The area is made up of settlers including Ewes, Krobo, Konkomba, Dargatis, and Kusasis ethnic groups (Northern tribes), with the Kwahu indigenes in the minority. The Ewes account for 66 percent of the district's population, while the northern tribes account for 13 percent. The Krobos make up 11 percent of the district's population, while the Akans are a minority, accounting for 10 percent of the population (KAPSD 2014). Geographically, the Twi speaking group (Akans) are located to the west of the district, the Ewes are to the east and along the banks of the Volta Lake, where they engage mainly in fishing, while the Konkomba, Dargati, Kusasi (Northern tribes), and

Krobos are mostly found in the farming communities. It is precisely in the areas occupied by the settlers that are often in contestations with the nomadic Fulani herders.

Various factors have accounted for the higher settler composition of the population in the district. In Ghana's historical trajectory, various legal and policy frameworks have informed, shaped, and directed the process of urbanisation induced by migration (GSS 2014). An area that, hitherto, was sparsely populated has attracted a large migrant population from both the south and north of Ghana. In the past, there was little migration into the area. Wallis (1953) buttresses this point by arguing that the Kwahu Afram Plains remained virtually uninhabited except for a few settlements until the last century, when immigration started. During this period, there was less migration with fewer conflicts. However, by the 1980s onwards, the deterioration of environmental conditions in the Sahelian regions and notable events, policies, and legislative enactments such as the introduction of cocoa, the structural adjustment programme, the northern conflicts, and the decentralisation of Ghana's political space saw huge migration of both crop farmers and nomadic herders into the Afram Plains area. From 2010 to 2012, the volume of herder migration increased into the Kwahu Afram Plains when the High Court in Kumasi ruled that nomadic herders be evicted from the Agogo area. Thus, the volume of migration into the Kwahu Afram Plains South District has been influenced by various policies, events, and legislative enactments.

5.1.2.1 Introduction of Cocoa

The introduction of cocoa as an export crop provided an important economic activity that necessitated the migration of labour into the Afram Plains. Wallis (1953) posits that cocoa was first brought to Kwahu in 1898, and between 1900 to 1912, experimental farms were planted in

Samanshia, Faso and *Odonkorkrom*. Hill (1959:14) alluded to the fact that most of the best cocoa land in southern Ghana was initially opened up not by native farmers, who integrated cocoa growing into their traditional pattern of food growing, but by stranger farmers, who travelled to the area for the express purpose of growing cocoa and who bought their land outright. The contribution of these migrants, mainly Krobos and Akwapim, to cocoa production led to the Gold Coast becoming the world's largest cocoa exporter by 1911 (Hill 1959). Amanor (2010) outlined how the Krobos, one of the settler groups in the Afram Plains, had been involved in the expansion of cocoa in the Akyem areas and the eastern frontiers to acquire land for the purpose of cocoa cultivation. While the Krobos started to acquire land for cocoa expansion, other autochthonous farming areas in the south of the country also began to implement sharecropping agreements to mobilise land and labour for cocoa production (Gyapong 2021). By 1928, the Krobos had already bought land near *Odonkorkrom* at *Faso* in the Afram Plains (Wallis 1953). This led to several farmers being attracted to the Afram Plains to engage in the cultivation of cocoa.

5.1.2.2 Structural Adjustment Programme

The implementation of the Structural Adjustment Programme (SAP) is another factor that explains the high settler population in the case study area. Despite the broad, laudable objectives of the programme, it came with unintended consequences that spurred the migration of people mainly from both the northern and southern parts of the country. The introduction of the Structural Adjustment Programme resulted in the removal of subsidies on agriculture and the shrinking of the formal sector. With the northern part of the country, for example, heavily dependent on the production of local rice, tomatoes, and maize, the removal of the subsidies affected many poor, vulnerable groups who could not bear the effect on their livelihood. The

preceding supports the argument of Berry (2017) to the effect that, while the recession reduced income and increased unemployment, demand for land increased because of people turned to farm, not only to survive the crisis but to protect themselves against a volatile or uncertain future. Juxtaposing this with Ghana's case, the only option available for these smallholder agricultural farmers and those retrenched from the formal sector was to migrate to cocoa areas and other urbanised centres to engage in wage labour (Ntewusu 2011; Asante and Gyimah-Boadi 2004).

5.1.2.3 The Northern Conflicts

The northern conflict is another factor that explains the relatively high settler population in the case study area. The northern conflicts have mainly centred on control over land, chieftaincy, and ethnicity. Although violence and inter-state wars have long been parts of Ghana's history, the intermittent eruption of intra-ethnic and inter-ethnic hostilities has been a troubling feature of the northern conflicts (Tsikata and Seini 2004). For example, the Konkomba ethnic group has, for a long time, had a history of conflict over land with the Dagombas, Gonjas, Nanumbas, and the Nawuris. These persistent conflicts in the northern parts of Ghana drove many Konkombas and other northern groups down to the forest areas in the southern parts of Ghana.

5.1.2.4 Decentralisation

The decentralisation of Ghana's political space in the 1980s was a definitive factor that influenced several migrants into the Afram Plains. The vast Afram Plains area was separated into four districts because of the decentralisation process. These districts are Sekyere East, Ashanti-Akim North, Afram Plains, and Kwahu (Tonah 2005:34). The essence of decentralisation was to create a higher degree of local autonomy, resulting in more effective district administration and development. This led to the opening and expansion of infrastructure networks and other social

services. Decentralisation, therefore, opened the hitherto isolated area and attracted many migrants to the place. These migrants are mostly farmers and fishermen who took advantage of the area's vast agricultural land and the presence of the many water bodies in the area. The migrants come from both the north and south of the country. Similarly, many migrant pastoralists, who had previously avoided the Afram Plains due to the dense vegetation cover and the threat of tsetse fly, began to take advantage of herding opportunities presented by the increased deforestation and the opening of the area for human habitation. Currently, nomadic Fulani herders now migrate with their cattle to the area during the period of drought to reap the benefit of the area's vegetation and the presence of the many water bodies (Tonah 2005:34).

5.1.2.5 Construction of Akosombo Dam

The construction of the Akosombo Dam in 1964 led to the displacement of several people from their previous settlements. In the Kwahu Afram Plains area, this resulted in the development of resettlement areas. The government of Ghana specifically created settlements for communities at Forifori, Mem-chemfe, Amankwaakrom and Ntonaboama for communities displaced from the Volta Region because of the creation of the Volta dam. This is one of the reasons for the high migrant settler population in the research study area.

5.1.3 Demographic Characteristics

The Kwahu Afram Plains South District analytical report by the Ghana Statistical Service (2014) stipulates that the population of the research study district is 115,812, representing 4.3 percent of the region's total population. Males make up 53.9 percent of the population, while females make up 46.1 percent. The district's higher male population is due to the area's status as a popular migrant destination. The majority of the people in the Kwahu Afram Plains South District are

migrants from the Volta and Northern Regions of Ghana who have been drawn to the area for agricultural work, as it is usually the men who migrate. The district is predominately rural, with 87,325 people living in remote communities accounting for 75.4 percent of the population and 28,460 constituting 24. percent in urban centres (Ghana Statistical Service 2014).

5.1.4 Vegetation and Soil

The Kwahu Afram Plains South District is covered by savannah vegetation. This zone comprises the savannah transitional and the savannah woodland zone. Short deciduous fire-resistant trees, often widely spaced, and ground flora, mainly grasses of varying heights, characterise the savannah vegetational zone. The district has few forest reserves, encompassing roughly 120.8 square kilometres and account for 15 percent of the Kwahu Afram Plains South District's total surface area. *Milicia excelsa* (odum), *Sterculia rhinopetala* (Wawa), *Terminalia superba* (ofam), *Khaya ivoriensis* (African mahogany), and *Antiaris toxicaria* (kyenkyen) are among the commercial trees found in the case study area. The major soil in the area is the Swedru-Nsaba-Offin compound group. This soil group is dominated by the Swedru series, which consists primarily of red silty, well-drained, deep gravel-free silty loam, and silty-clay loams. The Nsaba series is distinguished by yellowish-red silty clay loam that is moderately well-drained, extremely shallow, and rocky. The soil in the district is suitable for growing both food crops, mainly cassava, plantain, yam, maize, and cash crops, including cocoa, oil palm, citrus, cashew, mangoes, and cola. However, the soil, if left bare of vegetation, is susceptible to wind erosion (Ghana Statistical Service 2014; Codjoe and Owusu 2011).

5.1.5 Climate and Rainfall

The district's vegetation comprises the savannah transitional zone, and the savannah woodland. The area experiences two significant rainy seasons between June and October. The first rainy season lasts from May to June, while the second lasts from September to October. The average annual rainfall ranges from 1,150mm to 1,650mm. The dry season, which begins in November and lasts until late February, is distinct. The hottest months in the area are in February and March, with average temperatures between 36.8°C to 36.6°C. The months with cold temperatures are December and January, with average temperatures ranging from 19.9°C to 20.1°C. Throughout the year, relative humidity is high, ranging from 68.2 percent and 71.6 percent in the dry season and 81.6 percent and 71.6 percent in the wet season (Ghana Statistical Service 2014).

5.1.6 Relief and Drainage

The terrain of the district is generally rolling, rising from 60 to 120 metres above sea level. Bonkurom is the only area with high ground. The Afram River drains the Kwahu Afram Plains South District to the south, and the Volta River drains the district to the east. Both rivers flow all year and can be used for household and agricultural purposes. The Obosom River and several seasonal streams are also found in the district. The drainage pattern in the district is primarily dendritic, flowing in a north-south direction (Ghana Statistical Service 2014).

5.1.7 Economic Activities

The economy of the research study area is primarily dependent on agriculture. Agriculture employs 77.4 percent of the labour force. In rural communities, eight out of every ten households, representing 83.4 percent, are agricultural households, while, in the urban areas,

60.1 percent of households are in agriculture. Agriculture thrives in the area mainly because of the conducive climatic conditions that support the cultivation of both food crops, such as cassava, plantain, yam, cocoyam, and maize, and tree crops, such as oil palm, oranges, and cashews. The production of crops is done mainly on a subsistence basis, with smallholder farmers cultivating between two to five acres. Livestock rearing, which includes goats, sheep, and pigs, supplements the income of these smallholder farmers. Others are also engaged in fishing, while, recently, large-scale agriculture investors and migrant herders have started moving to the district to ply their trades because of the favourable environmental conditions present in the area (Ghana Statistical Service 2014).

5.1.8 Political Structure and Traditional Authority of the Study Area

The Kwahu Afram Plains South, like other Metropolitan, Municipal, and District Assemblies (MMDAs) in Ghana, comes under the direct supervision of the Ministry of Local Government, Decentralisation and Rural Development. As part of the decentralisation agenda in Ghana, the Metropolitan, Municipal, and District Assemblies are expected to bring governance to the doorsteps of the local populace. Under the local government system in Ghana, the districts operate a three-tier political administration structure, with the General Assembly being the highest decision-making body, followed by the Area Councils and the Unit Committees. The General Assembly of the Kwahu Afram Plains South District comprises of thirty-eight assembly representatives, twenty-seven of whom are elected and eleven appointed by the President. The Kwahu Afram Plains South District is led by the District Chief Executive, a government appointee, who is approved by two-thirds of the district's elected assembly representatives. As part of its core function, the district is responsible for preserving peace and security through the District Security Council, revenue mobilisation, and the overall development within the district

(Ghana Statistical Service 2014). All local authority is invested in the local assembly, in this case, the Kwahu Afram Plains South District, as stated in the 1992 Constitution of Ghana, Article 245 and the Local Government Act of 1993, Act 462. Traditional authorities, on the other hand, continue to have custody of stool lands. The Kwahu chiefs control stool lands in the case study area on behalf of their subjects. This role of the chiefs is in accordance with customary law and usage. The foregoing stipulates the presence of the state through the local administration and traditional authorities jointly playing a significant role in managing and upholding peace in the Kwahu Afram Plains South District.

5.2 Research Strategy and Design

Bryman (2012:35) defines research strategy simply as a general orientation towards the conduct of social research. To accomplish the task of this research process, the general research question, which examines the root causes of conflict between settler crop farmers and nomadic cattle herders in the Kwahu Afram Plains, was the focal consideration. This focus ensured a deeper insight into the issues by obtaining views and perceptions of smallholder settler crop farmers and nomadic Fulani cattle herders as well as other key stakeholders, such as government officials and the traditional authorities, through interviews, focus group discussions, and observations. The qualitative research strategy was employed in this study for the above reasons. Qualitative research is a method of investigating and understanding the meaning that individuals or groups attach to a social or human issue (Creswell 2014:32). Similarly, Kumar (2011:104) avers that qualitative research aims to comprehend, explain, investigate, and clarify a group's circumstances, values, and experiences. Denzin and Lincoln (2003) illustrate some characteristics that improve the effectiveness of qualitative methods. These characteristics include the interpretative and naturalistic approach to the subject matter being researched, which

allows the researcher to make sense of his investigation through the natural interpretation of the phenomenon in which the human element involved ascribed meaning to their experiences. The choice of the qualitative strategy for this thesis was essential because the research dealt with social and human behaviour in the dispute process amongst smallholder settler farmers and nomadic Fulani herders. Human actions and experiences are difficult to express in statistical values, which is why social scientists are increasingly relying on qualitative research. This is due to a growing understanding that quantitative strategies and statistical estimations are insufficient to comprehend human behaviour. More specifically, the use of qualitative research in this study was to recognise the research participants perspectives as necessary, limiting the imposition of ideas on participants and contributing to an in-depth study towards richer information and appreciation of human experiences and actions in society. However, in this research, qualitative data has a limitation to show some of the quantitative changes in the ecological conditions described in the research study area.

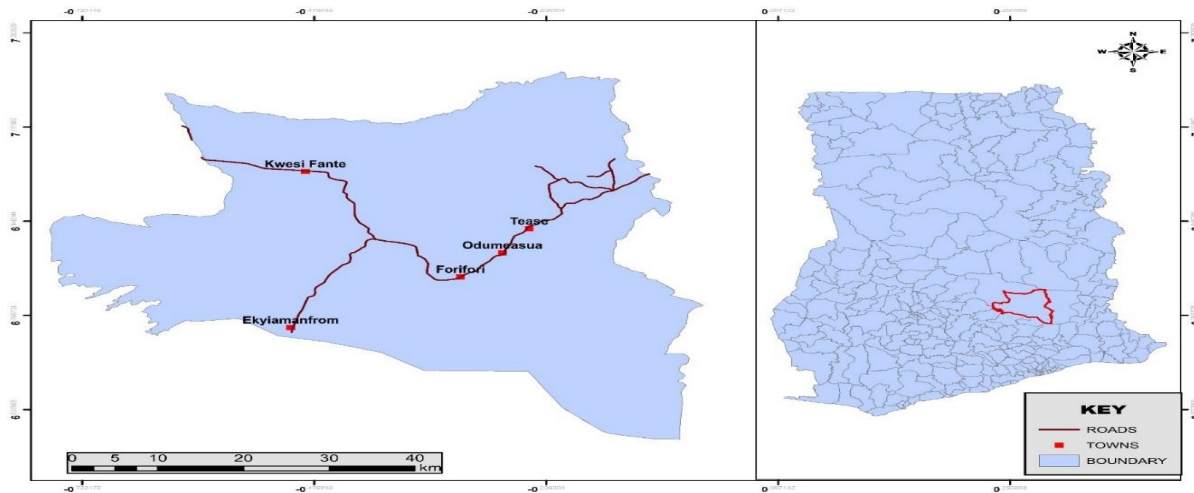
The case study design was a measure taken to ensure rich data collection. This research design delves deeper into one or few cases, focusing on numerous details within each case and the context (Neuman 2014). In the view of Kumar (2011:127), this design is valuable when investigating an area where little is known or when attempting to gain a comprehensive understanding of a situation, occurrence, community, or geographical unit. Case studies, according to Leedy and Ormord (2015:272), can be especially useful for learning more about a little-known or poorly understood situation. Even though the case study research design has been criticised as one of the most time-consuming research designs, as well as for the inability to generalise the findings of a single case to other situations, its benefits outweigh the problems associated with its usage. A key benefit of using a single case study was the close examination

and scrutiny, as usually, the population involved is not large, and it provided the opportunity to understand the context of the problem under investigation. Neuman (2014:42) summarises the value of case study design as a tool for researchers to connect micro-level, or individual activities, to the macro-levels, or large-scale structures and processes. The above motivated the selection of the case study design to understand the multifaceted dimensions through deeper investigations of the conflict relative to smallholder settler crop cultivators and nomadic cattle herders in the case study district.

5.3 Selection of the Study Area and Communities

The case study area was selected after deciding to study and research the farmer-herder conflict in Ghana. A thorough review of literature on the subject informed the choice of Kwahu Afram Plains South as the study area. The Kwahu people have been recognised as the traditional landowners of a large section of the Afram Plains, which, in the past, served, as a hunting reserve for the Kwahu chiefs who lived on the Kwahu plateau to the west of the plains (Ayee et al. 2011). In the case study area, research was conducted in communities such as Ekye Amanfrom, Forifori, Kwasi Fante, Odumasua, and Tease. These study communities are shown on Map 1. The high frequency and reoccurrence of conflict and the violent character of the conflict are the primary grounds for choosing these communities (use of arms, injuries, death, and loss of properties). The evidence of the increasing and recurring nature of the conflict is reflected in both the police report and news coverage in the area. See pages 165, 167, 202 and 207. In essence, these communities in the study area oppose the presence and activities of nomadic Fulani cattle herders, and they are frequently at odds with the nomadic cattle herders passing through or temporarily settling in the area to graze their cattle.

Map 1: Study communities in the research area



Source: GIS, University of Ghana, Legon (2020)

5.3.1 Outsider or Insider: Creating Positional Spaces in the Study Area

The determination of the researcher's position in a research environment is critical in the conduct of qualitative research. This has, in part, created a vibrant debate around the 'insider' and 'outsider' dichotomy in the qualitative research processes. While some have argued the objectivity and neutrality of the 'outsider' perspective, proponents of the 'insiders' perspective argue to the contrary, stating that 'insiders', who share a similar background, have an advantage over 'outsiders' in gathering detailed qualitative information (Flores 2018; Green 2014; Dwyer and Buckle 2009; Mulling 1999). However, this seeks to freeze positionality in a place and assumes that being an 'insider' or 'outsider' is a fixed attribute. According to Kerstetter (2012), all researchers fall somewhere within the spaces between complete 'outsider' or 'insider'.

In this study, the researcher assumed different statuses during the research process. As a student researcher coming from outside of the country and resident in the Koforidua, which is on the other side of the Volta Lake, the researcher was seen as an outsider who had no experience and

knowledge of the conflict between the farmers and the herders. The researcher's outsider status enabled him to elicit detailed information on the subject under investigation. As the researcher nodded while recording and writing the information into his field notebook, some of the participants looked excited and often remarked: 'Please write everything in detail as we have told you because we need help to stop the rampaging cattle from destroying our sources of livelihood'. On the other hand, as a Ghanaian PhD student, the researcher assumes an insider position while engaging with government officials. The researcher's knowledge of the conflict between farmers and herders in Ghana and, specifically, in the Afram Plains brought him to the level where key officials who were part of the informant population were ready and willing to offer the necessary support throughout the research data-gathering stage.

5.4 Sampling Methods and Selection of Respondents

In selecting respondents who can divulge relevant information that can be used to answer the study's research questions, the purposive and snowball sampling methods were applied. These two sampling methods were used to select settler farmers, nomadic herders, traditional leaders, and government officials. In addition, the purposive sampling method was employed to choose key stakeholders, who were settler crop farmers, traditional authorities, and government officials from the Land's Ministry, Security, Ministry of Agriculture, and the District Planning Office. The selection of these key informants was appropriate to this research as they made significant contributions to enrich the discussion because of their experience and judgment around the issues of land disputes between smallholder settler crop producers and nomadic cattle herders in the study area.

On the other hand, the snowball sampling method was used in selecting nomadic Fulani herders who were in hard-to-reach places in the case study area. The nomadic Fulani herders stay in bush camps far away from human settlements and rarely come into the communities unless they need very pressing essential items. To overcome this challenge of reaching the herders, the researcher's assistant introduced the researcher to a settled Fulani who is not a herder but owns a shop in Tease. This man promised to help me by linking the researcher to the herders should they come around. Unfortunately, it took close to two weeks before the researcher had the opportunity to interview the first herder at the shop. Subsequently, a week later, the first herder the researcher interviewed, together with the settled Fulani shop owner, took the researcher on a motorbike to other camps in the bush, where he interviewed the others who had arrived in the case study area. In all twenty-nine respondents participated in the research study. These respondents included fourteen smallholder settler farmers, seven nomadic Fulani herders, four traditional chiefs and local leaders, and four government officials drawn from the Ministries of Food and Agriculture, Ministry of Lands and Natural Resources, the Ghana Police Service, and the Planning Office of the Kwahu Afram Plains South District in the Eastern Region of Ghana.

Table 3: Categories of research respondents

Respondent Category	Number (n)
Settler Crop Farmers	14
Nomadic Fulani Herders	7
Traditional Leaders	4
Government Officials	4
Total	29

Source: Author, fieldwork 2019/2020

5.5 Data Collection Instruments

During a research process, various instruments could be used to elicit relevant information from respondents. This study relied on primary and secondary information sources. Semi-structured interviews, focus group discussions, and observations were the primary data collection tools used. Secondary data, on the other hand, was collected from journal and newspaper articles, government-published reports, theses, and books.

5.5.1 Interviews

Interviews involve a person-to-person interaction between two or more people. When a solid rapport is developed between the interviewer and the interviewee, it plays a key part in any research activity since it helps reveal certain facts that the researcher has not even considered. Furthermore, the established relations enable the researcher to explore emerging issues relevant to the study. The semi-structured interview technique was employed in this study. This interview technique provided an opportunity for further probing and also ensured the respondents expressed themselves freely during the interview process. In furtherance of the above, since the study focused on different categories of respondents, the semi-structured interview technique was suitable for all the respondents, having taken into consideration their educational levels and experiences relative to the conflict process in the research area. The interview procedure was directed by an interview guide. In all four groups of interviewees, semi-structured interview guides were used to elicit information from smallholder settler farmers, nomadic Fulani herders, traditional authorities, and government officials.

Smallholder settler crop farmers and nomadic Fulani cattle herders, who are at the core of the conflict, responded to issues on land contestations and the immediate causes of the conflict.

Traditional authorities responded to issues on land access because they have a responsibility in the leasing and renting of land, which is often under contestation by settler farmers and nomadic Fulani herders. In addition, their views on the mechanisms for resolving the conflicts were elicited because they are the foremost arbiters in local disputes in rural communities. On the side of the government officials, interviews were conducted to find out the management of farmer-herder conflict as well as the challenges there are in addressing the security implications of these conflicts, challenges around land access and their impact on food security and livelihoods as well as the approaches used by the local assembly in managing and financing operations against the activities of the nomadic Fulani herders in the research area. In ensuring strict adherence to research ethics in addressing issues of voluntary participation, the research participants were asked to sign the consent form after its content had been read and explained to them. Interviews were recorded, except for those with the nomadic Fulani herders, none of whom agreed to be put on record. To be able to capture their views in the absence of being recorded, the researcher captured the views they expressed as much as possible in his field notebook. The various interviews conducted with the key stakeholders were held in English (in some cases pidgin English for the herders) and Twi (the dominant Ghanaian language in the area) for the settler crop farmers.

5.5.2 Focus Group Discussions

Focus group discussions (FGDs) are a form of data collection strategy in which members of a group and the researcher express their thoughts, opinions, attitudes, or perceptions about a topic, product, or service in a free and open setting (Kumar 2011:128). This data collection strategy involves more than one person, usually at the least between four to ten interviewees on a specific topic or issue (Bryman 2012: 501). The interest in the use of focus group discussions has to do

with how people respond to one another's views and build up an opinion out of the interactions that take place within the group. The choice of focus group discussions as a data collection tool was because this study required heterogeneous views since farmer-herder conflicts involve multiple actors, and the effect of the conflicts affects people differently. Focus group discussions were held predominately among the settler farmers. The idea initially was to conduct focus group discussions among both farmers and herders alike, although in different settings. During the fieldwork, this strategy proved unsuccessful among the herders, as in their bush camps, there is usually one adult male and, in a few instances, a young male aged between 12 and 15 years accompanying the adult herdsman. The focus group discussion strategy, therefore, became inappropriate to use. All three focus group discussions were held with settler farmers at Forifori, Odumasua, and Tease, respectively. Each group had five discussants, with the researcher moderating the process. The mode of communication was in Twi, a dominant local dialect in the area, and community members representing various social actors, including both elders and the youth, were chosen.

5.5.3 Observation

Observation is considered fundamental to good qualitative research. Observation as a research instrument is used to collect various sorts of behavioural and interactional data (Schensul 2012). During a visit to one of the villages in the study site, the researcher saw a large tract of land being ravaged by fire. Upon reaching the village, he was told the fire had engulfed and destroyed nearby farms. The farmers blamed the nomadic Fulani cattle herders for indiscriminately burning bushes. They claimed the herders do this in the anticipation that fresh grass will germinate on which their cattle would graze. In another development, the researcher observed close to about 300 cattle passing by under the supervision of only one herdsman, a clear violation of Article 11

of the ECOWAS protocol, which states that one herder must be present for every fifty herds of cattle. In all situations, transhumant herds must always be accompanied by at least two herders. Finally, the researcher observed farmlands in the case study area that had been grazed, destroyed, and abandoned by farmers.

5.5.4 Secondary Sources

Secondary sources of data used during this study were government publications, census publications, and media reports of conflicts between smallholder crop farmers and migrant Fulani cattle herders. Others were published journal articles, theses, and books. These secondary data sources broadened the researcher's appreciation of the subject under consideration.

5.6 Data Analysis

In qualitative research, the goal of data analysis is to make meaning of the materials obtained from the field (Leedy and Ormrod 2015:309). During the study, participants' data were collected from interviews, focus group discussions, and observation. The information obtained mainly in the Ghanaian language (*Twi*) was transcribed into English. NVivo, a qualitative software, was used to generate primary themes, out of which emerged other sub-themes related to the research questions. The researcher arranged the themes into the empirical chapters six and seven of the thesis after the themes had been further refined. There was the continuous engagement of data with the conceptual framework of environmental scarcity and political ecology theories and academic literature in presenting the study findings.

5.7 Research Ethical Appraisal

In line with standard research, the following ethical issues were considered during the research process.

5.7.1 Ethical Clearance

The University of Cape Town's ethical guidance on the conduct of research was followed. The researcher satisfied all ethical clearance issues from the Humanities Faculty of UCT before the start of fieldwork. In addition, an introductory letter obtained from the Centre for African Studies introduced the researcher to all relevant stakeholders in the research area.

5.7.2 Informed Consent

Informed consent is a critical attribute inherent in conducting standard ethical research. Informed consent implies that research participants are made sufficiently aware of the type of information a researcher requires from them, why the information is required, for what purpose the information sought will be used, how respondents are expected to partake in the research, and how the research will possibly affect them (Kumar 2011:244). During the research process, permission to elicit information from respondents was sought before interviews were conducted. The permission was done through the consent form, which was explained to participants who were not literate. Upon agreeing to participate in the research, the respondents were asked to sign or thumbprint the consent form as evidence of voluntary participation. One of the most important advantages of the consent form is that it allows respondents to be fully informed about the research and the ramifications of their involvement from the start (Bryman 2012:140).

5.7.3 Confidentiality and Anonymity

The sensitive nature of research around conflicts requires that information be collected, and the sources of the information cannot be identified. This is because failing to protect respondents and the information obtained from the study respondents is unethical in research (Kumar 2011:246). To protect the respondents during the data-collection process, views articulated by participants in the research were represented by pseudonyms. For example, the researcher used SHSF to represent smallholder settler farmers, NFH for nomadic Fulani herders, and TA to represent Traditional Authorities. For government officials, MoFA was used to represent the views of representatives from the Ministry of Food and Agriculture, DPO for District Planning Office, SS for Security Services, and MLNR to represent views expressed by the official of the Ministry of Lands and Natural Resources. The conflict between crop farmers and cattle herders over land in Ghana is a very sensitive discourse and politically charged. Therefore, the protection of respondents is paramount. Information that the research participants requested to be kept private was treated as confidential and not used in the study for better protection of research informants.

5.7.4 Reliability

Quality research outcomes are fundamental to the conduct of any good research. To achieve this, researchers use multiple forms of data-collection instruments related to the same research questions, with the goal of identifying patterns or discrepancies in the data (Leedy and Ormrod 2015: 278). The researcher employed this technique to ensure the accuracy of the data collected. These include the use of interviews, focus group discussions, and observations. Information using these data-gathering instruments was elicited from smallholder farmers, nomadic Fulani herders, traditional authorities, and government officials. These primary sources of data mined

by means of the above-mentioned data-collection tools were complemented with secondary data sources.

5.7.5 Data Trustworthiness

There is a growing debate on whether the foundation of the concept of validity and reliability in the quantitative tradition renders them inapplicable or inappropriate for use in qualitative research (Bryman 2012:48). To eliminate the inappropriateness of these quantitative measurements, the term trustworthiness has been used as a good criterion of how good a qualitative study should be (Bryman 2012, citing Lincoln and Guba 1985). Trustworthiness, therefore, comprises the concepts of credibility, dependability, and transferability in qualitative research.

5.7.5.1 Credibility

Credibility as a measure of trustworthiness involves establishing whether research findings are realistic from the perspective of research participants (Kumar 2011:185). Research of the qualitative tradition explores perceptions, experiences, and feelings, and so, it is these respondents who are best placed to determine whether the research findings accurately reflect their opinions, ideas, and sentiments. Therefore, it is prudent to take the research findings to those who took part in the study to corroborate, validate, and consent to them to determine the credibility of a research finding. To satisfy this condition of data trustworthiness, the researcher undertook to recap all the key points which were mentioned during the interviews and focus group discussions. This enabled the researcher to further seek clarity and confirmation as a way of establishing that what had been captured reflected the views expressed by respondents. This

was done because of time constraints, as the researcher did not get the opportunity to go back to the research participants to validate the research outcome.

5.7.5.2 Transferability

This is the degree to which a research finding can be universal or transferred to other settings, groups, or contexts (Kumar 2011:185). Context in qualitative research is essential, making the generalisation of research findings difficult. However, if a detailed description of the study procedure adopted is outlined, others could replicate the study. The essence of this research is not about the generalisation of the findings but rather to produce specific knowledge-based information on the contestations and conflicts over land access between peasant settler crop farmers and nomadic Fulani cattle herders in the case study area of the Afram Plains in Ghana. The researcher has, therefore, to ensure some level of transferability, detailed a clear description of the research procedure, methodology, and data sources to facilitate the transferability of the study.

5.7.5.3 Dependability

This measure of data trustworthiness concerns whether the same results could be obtained if a researcher observed the same thing twice (Kumar 2011:185). The flexibility and freedom advocated in qualitative research make this very difficult to achieve. However, if thorough and detailed records of the research process are kept, other researchers could replicate the study to ascertain the level of dependability. Therefore, the researcher ensured that complete records of all phases of the research process were preserved in order to achieve dependability.

5.7.6 Security Consideration

The sensitive nature of the research meant adherence to strict security protocols during the research process. Before the researcher undertook the research, he knew that the area he had chosen was a conflict area. With this information, the researcher made sure he was kept safe and also that his presence in the research area did not aggravate the conflict or put the respondents in any harm's way. He achieved this by avoiding isolated volatile areas as much as possible during the research process. The researcher engaged respondents in areas where the conflict was muted for his safety and that of the research respondents. Again, he conducted separate interviews with smallholder settler farmers and the nomadic Fulani herders at different times and locations. In any community, all interviews involving the settler farmers were completed before proceeding to interview the nomadic Fulani herders. The essence of conducting different interviews for both groups was to erase the impression of a possible bias towards any of the feuding parties or that he was eliciting information for either the settler farmers or nomadic herders. Finally, the researcher recruited two assistants, who were familiar with the environment, culture, and local conflict dynamics of the research area. These two assistants accompanied and assisted the researcher when he undertook field observations of farming or grazing sites within the research area.

5.8 Conclusion

The chapter provided an overview of the research study district, highlighting the location and ethnic composition, demographic characteristics, vegetation and climate, and the political and local authority structure. The methodology related to the research strategy and design used, as well as the selection of the specific communities in which the study was conducted were

discussed in this chapter. This was followed by the researcher's positionality in the study area, sampling methods, and selection of respondents. The study also reflected on data-collection and analytical tools and ethical and security considerations incorporated in the study.

CHAPTER SIX

The Land Factor in Farmer-Herder Conflict

6.1 Introduction

Access to secure land is of utmost importance to broadly smallholder farmers, nomadic herders, and the nation. At the local level, land impacts the lives of the rural folk, who are mainly smallholder farmers and herders, while, at the national level, it enables production, which contributes substantially to the Gross Domestic Product (United Nations Environment Programme [UNEP] 2012). However, limited access to appropriate and secure land, particularly for peasant farmers and cattle herders in Africa, is a serious barrier to agricultural productivity. The challenge to secure adequate land for smallholder farmers and nomadic Fulani herders is heightened by the commercialisation and competition by other stakeholders, such as commercial agriculturalists and residential users (Flintan 2012; Peters 2004). Large-scale organised political violence in sub-Saharan Africa has decreased, as Carter and Strauss (2019) correctly point out, but other forms of violence, such as conflict over livelihood, and electoral disputes, are on the rise. The Land is under intense pressure due to the expansion of commercially cultivated lands and competitive exploitation of common property resources, such as pastoral rangeland and water, which has been exacerbated by population growth, climate variability, and other competing factors.

This chapter addresses the specific research questions: What factors influence conflict over access to land? Furthermore, do challenges around land access contribute to farmer-herder conflicts? To answer these questions, the historical development of the farmer-herder conflict in Kwahu Afram Plains South District is highlighted, and the means to access customary land in the

research area are explored. Challenges in access to customary land and how these challenges contribute to the farmer-herder conflict are also highlighted. It further outlines how corruption, greed, and politics influence tensions in the study area between settler crop farmers and nomadic cattle herders. These are themes that emerged from the data analysis. These underlying considerations for answering the research questions were explored through the lenses of environmental scarcity and political ecology theories to understand the nuances of the conflicts.

6.2 Historical Development of Farmer-Herder Conflict in KAPSD

The conflict between crop farmers and cattle herders is common, particularly in Ghana's rural areas. However, what could have triggered the escalation of the conflict between farmers and herders in the Kwahu Afram Plains South District? As highlighted in the problem statement of this thesis on page 4, the obvious is land. Previously, the area was sparsely populated, with few settlements. However, events over time prompted crop farmers to migrate to the area. Because of the fertile nature of the soil in the area, smallholder farmers have come to ask for land from local landowners to engage in crop farming. Lately, there has been an influx of migrants with cattle also looking for land to graze their cattle in the Kwahu Afram Plains South District.

It is difficult to point out the beginnings of farmer-herder conflict in the Kwahu Afram Plains South District. However, according to Akumey (2017), the increasing and recurring conflict in the Kwahu Afram Plains area began in the first decade of the twenty-first century. During this period, the case study area saw an influx of nomadic herders. This was due to the expulsion of nomadic herders from Sene, Agogo and other areas in the Volta region of Ghana. Since then, farmer-herder conflicts have been an annual issue in the case study area of the Afram Plains.

6.3 Land Access in Kwahu Afram Plains South District

The means to access land in the case study by non-indigenes has evolved over the past decades. The most popular means through which land was given out to migrants in the past in the Kwahu Afram Plains South was sharecropping contract arrangements. These were *abusa* and *abunu* arrangements. The former is where one-third of harvested crops go to the landowner, and the tenant farmer receives the other two-thirds, while the latter refers to where harvested crops are shared equally between the two parties. A unique feature of these sharecropping arrangements is centred on the relative contribution of labour and capital by the tenant farmer and the landowner. While in an *abunu* sharing agreement, the owner of the land is required to contribute some seedings and funding in addition to land and is associated more with tree crops, in an *abusa* sharing agreement, the landowner contributes only the land to be used in cultivation by the tenant and is associated more with food crops. These means of land access by migrants have changed as market-determined pathways now dictate migrants' land access in the research study district of the Afram Plains. During the focus group discussions and interviews, both settler farmers and cattle herders indicated that migrants' access to land was basically through the village headmen who represented the stool/landowners at the local level. Village chiefs (Headmen) oversee the day-to-day management of land in the research study area, particularly for smallholder settler crop farmers and nomadic Fulani cattle herders.

The smallholder settler crop farmers detailed the process through which a settler could access land for farming as follows:

To access land in a farming community in the Kwahu Afram Plains South District, one must request from the village headman or other landowning family a piece of land for farming purposes. Upon

receiving the request, the headman and his elders deliberate to either grant or refuse the request. Usually, if the size of land requested is within their limit for subsistence farming, they grant the request upon payment of a token mainly referred to as ‘drink money’⁸. The token is usually in kind in the form of drinks or money. However, if the demand for land is more than they can grant, the headman takes the tenant to the stool chief after the tenant has paid *akwantwadie*⁹. The chief has the allodial title, who then negotiates and grants land on lease to the farmer after an agreement on terms for the use of land. Subsequently, the required documentation is signed for titling and registration (FGDs, SHSF-Tease: 10th December 2019).

The means to land access by nomadic Fulani herders are also detailed as below:

Our knowledge of an area that is conducive to grazing is based on information obtained from other pastoralists we meet on our journey during the grazing of the herds. After we are satisfied with the conducive ecological nature of the environment, we seek the assistance of a middleman in the host community who leads us to the local chief to negotiate for land to be used in grazing our herds. Upon the payment and performance of the needed rites, the herder is shown the area to graze his cattle without any definite demarcation. These arrangements we have with the landowners are mainly oral, but in some instances, an agreement is made with a written receipt (allocation note) given by the landowner as a form of documentation on the area given to grazing our cattle. We, therefore, establish a social relationship with the landowners that enables us to come back in subsequent years. It must be noted that not all nomadic Fulani herders have the permission of the landowners. While some are in the

⁸ This is a consideration fee that upon payment grants the tenant farmer access to customary land.

⁹ This is money paid to the headman and elders of the village, so the investor or tenant farmer is led to the stool chief who oversees the land.

area because of the invitation of nomadic pastoralists who have acquired the right to graze their herds from the landowners, others do not have any permission from the landowners but graze their way through the land without staying at one place. These nomadic herders usually cause destructions to crop fields and the land (Interview, NFH-Odumasua:16th November 2019).

Land access for farming and grazing in the case study area currently includes a wide range of rights obtained through leasing, renting, and sharecropping. The last, which was dominant in the past, is no longer popular with landowners. According to one traditional leader, gaining land access has evolved over time. He pointed out that, in the earlier days, sharecropping was a common method of gaining access to land in the area. However, this means of land access is gradually fading away, and, even in areas where it exists, the formula for sharing has been altered entirely. In some areas where sharecropping is prevalent, the landowners require that a specific quantity of the produce be given as payment for the use of the land. For example, where the sharecropper cultivates maize, the landowner takes one bag of maize on an acre of land cultivated and twenty tubers of yam, where an acre of land is used for planting yam. This is because landowners accuse tenant farmers of not accounting correctly for harvested proceeds from the farm in the crop-sharing arrangements, making them less profitable. ‘To get value on our land, we have resorted to only accept cash payment based on the acreage the farmer cultivates’ (Interview, TA – Kwasi Fante: 4th December 2019). Currently, rentals are the predominant tenure arrangement through which smallholder settler crop producers and nomadic Fulani cattle herders access land in the case study area. The dominant land rental types in the area are fixed cash land rentals and leases. The former is an annual and short-term arrangement that is renewable at the will of the landowner and applies mainly to smallholder crop producers and nomadic Fulani herders, while the latter is used by large-scale agriculture investors. The

settler farmers and cattle herders, who use fixed cash land rentals, are expected to pay cash upfront before the land is released.

Essentially, the changing means of land access is mainly because of competition from different users, including large-scale agricultural investors, nomadic cattle herders, and smallholder settler farmers. Indeed, as Deininger and Mpula (2003) argued, rental arrangements have a strong tradition in West Africa and have evolved dynamically in response to increased land scarcity. Land rentals are mainly used by vulnerable groups to access more land for cultivation, though the size of such rented land is usually small. The narrative corroborates the position that the customary tenure system is flexible and dynamic, responding to ecological and social dynamics (Flintan 2012). The evolving means of access to land lends credence to the findings drawn by Amanor and Diderutuah (2001) in the palm and citrus belt of Ghana that, in the past, share contracts provided a means for poor landless farmers to become independent, but this is much less the case today, as land has become commodified with access to land now dependent on having access to cash. Significantly, sharecropping has become less popular because there is an upsurge in demand for land from other stakeholders, such as large-scale agriculture investors and migrant cattle herders, which has raised the value of land in the area. Landowners, therefore, prefer to give out their land for money rather than wait for harvest time to get a part of harvested produce from the land.

6.4 Factors Influencing Conflicts over Land at KAPSD

This section addresses the study's first research question: What factors influence conflict over access to land? The analysis of this section of the thesis chapter is through the environmental scarcity theory, which stipulates that resource competition is the interplay between population increase, degradation, and unequal resources distribution. These interactions manifest into what

Homer-Dixon (1991) described as demand induced, supply induced, and structural induced scarcity, which are the causes of the frequent conflict across the globe. Thus, as the quantity of natural resources decreases or the demand for these resources rises, competition for these resources increases, causing people to migrate to new areas, increasing social tensions and the greater probability of conflict. In the case study area, conflict over land access is influenced by three key factors: population growth, migration induced by dwindling ecological resources, and large-scale land acquisition for agriculture investments. These underlying factors are termed proximate factors (Bassett 1988) and are not apparent in farmer-herder relationships; they are, however, a potent force that fuels conflicts between peasant crop settler farmers and nomadic Fulani cattle herders.

6.4.1 Population Growth

The population in the case study area has been growing steadily over the years. An area that, hitherto, was sparsely populated and served as a hunting ground for the Kwahu chiefs has seen a growth in human population and settlements. The population statistics of the large Afram Plains area according to census data from 1970 to 2000 were 31,486 and 135,928, respectively. These figures show how the population in the area has quadrupled over the last three decades. By the year 2010, the population had risen to 218,235. The Kwahu North District of the Afram Plains, through a Legislative Instrument (L1 2045), was divided into two districts, namely, the Kwahu Afram Plains South and North, in 2012. The newly created district, Kwahu Afram Plains South (KAPSD) had a population of 115,812 in 2012 (GSS 2010; 2005; Bening 2010).

As an agrarian environment, the increase in population growth over the years has resulted in the rise in the number of households engaged in agricultural activities. The agriculture sector in the

area employed about 77.4 percent of the entire population in the area translating into 19,000 households engaged in agriculture out of the 25,007 household population in the district (GSS [PHC]2010)¹⁰. With a growing agricultural household population, there is increasing demand for land, which is a key resource for agriculture in the area. Deducing on the environmental scarcity theory, the impact of population increase on land-related issues is that available land would be outstripped, resulting in rivalry or contestations between groups, which would lead to conflicts. The increasing population growth in the case study area has resulted in an increase in agriculture households, which has triggered demand for more land and the subsequent expansion of farming areas and cultivation into formerly fallow lands. A settler farmer explained the increasing population as follows:

I recall that when my family moved to the area in the past, there were not many people living here. We could cultivate about five farms in different locations in a year. Even when some crop fields lose their soil fertility, they are left for about three cropping seasons to reestablish their fertility naturally, with no one trespassing or cultivating them. However, the situation has changed as more people have moved to the area to engage in crop farming. You cannot, therefore, leave your land to fallow; if you do, the next time you visit the land, it will be under cultivation by someone else. As a result, there is pressure on the available land, leading to competition between different users of the land which includes nomadic Fulani cattle herders and large-scale agriculture investors (Interview, SHSF-Tease: 7th January 2020).

Another farmer expressing an opinion on the increasing population in the area explains:

¹⁰ A population census has just been conducted in 2021 but the census results have not been published. However, we expect these figures to change when the census result is released for the Kwahu Afram Plains South District.

“I grew up in this area, with few settlements scattered throughout the village. There were only a few farmers, and everyone in the village knew the person whose farm was closest to them. Those who had the strength to cultivate vast areas did so without conflict with anyone over the use of a specific piece of land back then. Currently, many people are cultivating the area, and it is difficult to tell whose farm is next to yours. In addition, many people are cultivating and expanding into areas that were not cultivated. This has resulted in complaints about people cultivating areas that are not theirs, which frequently causes tensions and conflicts between land users” (Interview, SHSF-Forifori: 13th November 2019).

The views on the increasing population of the area expressed by the crop farmers are confirmed by the Agriculture Directorate at Tease. The Directorate stated that the population of the area has grown over the last four decades. As an agrarian area, and with the government subsidised programme ‘Planting for Food and Jobs’, the Directorate posits that many people have taken to farming. As a result, there is a struggle to obtain more land in order to expand cultivation or increase farm sizes. This has intensified the contest among the different users of the land, especially nomadic Fulani cattle herders, over who has the right to cultivate or graze in a specific area, which often sparks conflicts (Interview, MoFA-Tease: 12th March 2020).

Presently, population growth in the case study area feeds into what Homer-Dixon (1991) referred to as demand-induced scarcity and is mainly driven by rising consumption levels, which have led to a decreased amount of accessible land resources. Therefore, the increasing human population in the case study area aligns with neo-Malthusian thinking that links increasing scarcity to population growth as the primary cause of land and other resource conflicts. In the research study district; the more people are engaged in farming, the more lands are needed to satisfy the growing agricultural population and the more likely they will consolidate their holdings and

expand into areas they previously did not cultivate, especially the commons, which has engendered competition between other users, such as nomadic herders, resulting in contestations and conflicts. The observation in the case study area regarding increased population and conflict over resources is well predicted by the environmental scarcity theory, which states that increasing population raises demand for available resources, resulting in a reduction in the natural resources base available to everyone, leading to intense competition and the eventual outbreak of conflict. The findings support the position of several authors that the scarcity of water, pasture, and farmlands is exacerbated by the increasing human population in many parts of the world (Oyama 2014; Blench 2005; Breusers et al. 1998).

6.4.2 Migration Induced by Dwindling Ecological Resources

The dwindling ecological resources in the northern part of Ghana are a basis for nomadic Fulani cattle herders migrating into the southern parts of the country. The deteriorating ecological conditions, mainly in the Sahel and which are creeping into the northern parts of the country, serve as a driving factor (drought, desertification, and hunger) to explain the migration of the herds. A nomadic herder from Niger has this to say of the declining climate condition:

The conducive ecological environment that prevailed in the past in the northern parts of the country and was used by nomadic herders is gradually deteriorating. This assertion is based on the general decrease in rainfall patterns and prolonged dryness, resulting in diminishing pastures and water bodies. It is now difficult for cattle to access pastures all year round. The deteriorating ecological resource is what influenced me to migrate to the Afram Plains (Interview, NFH-Odumasua: 16th November 2019)

The migration of the nomadic herders because of the dwindling ecological resources supports the three-choice theoretical argument of Reuveny (2007) that people facing acute climate issues have the option of remaining where they are and doing nothing, staying where they are and attempting to mitigate the effect, or leaving the affected area entirely. The last option seems to be the way out, as the nomadic herders migrate to the case study area of the Afram Plains. Other authors have argued to support the proposition that the declining ecological conditions in the northern parts of Ghana have led to nomadic Fulani herders moving to the fringes of the forest areas and, further to the Afram Plains (Dosu 2011; Tonah 2005). According to the Kwahu Afram Plains South District analytical report (2014), cattle accounted for most of the livestock of various species counted in the case study area, with a total of 64,646. The highest number of cattle recorded was due to the activities of Fulani nomads and other local herders, who took advantage of the area's rich vegetation and water bodies (Interview, MoFA-Tease:12th March 2020). Participants during focus group discussions revealed how cattle had been kept in kraals in the past and were hardly seen around settlements and farming areas. The situation, they lamented, has changed, as large numbers of cattle are seen moving around human settlements under the supervision of only one or two young males (FGDs, SHSF-Odumasua:14th November 2019).

A smallholder farmer, recounting the raised cattle population in the area, said:

Growing up, only a few people owned cattle in the area. These cattle were kept in enclosed pens and fed with cassava and plantain peels, or the owners cut grasses from the bushes to feed the animals. The cattle were rarely seen outside grazing, but when they were, they grazed in areas where there were no farming activities, thus, reducing disputes caused by cattle destroying crops. Therefore, large cattle numbers

herded by nomadic pastoralists are unknown in the area (Interview, SHSF-Kwasi Fante: 4th December 2019).

Another settler farmer also stated:

The herders' presence has been felt in their large numbers. The nomadic herders migrate to the area from all over the West Africa sub-region. The cattle are everywhere. You see them in the bushes when going to the farm, around human settlements, and along the main roads in the area. The worse part of this was in 2012 when the court ruled that nomadic Fulani herders should be evicted from Agogo land. Most of the herders have migrated to this place because the area is close to Agogo (Interview, SHSF-Tease: 7th January 2020).

A nomadic Fulani herder confirmed their presence in the area, stating:

“I first temporarily settled at Gushiegu after crossing the border with my herds from Burkina Faso into northern Ghana. However, the deteriorating conditions up north forced me to move through Atebubu into the Asante Akim North area. Nevertheless, with the court order for the eviction of cattle from the Agogo land in 2012, together with other nomadic herders, we moved into the Kwahu Afram Plains South area because of the presence of lush vegetation and water bodies that support cattle rearing” (Interview, NFH-Forifori: 11th November 2019).

The herders' presence in the research study area has resulted from searching for new grazing lands for their cattle. The herders seek large areas closer to cultivated areas or watering points. As a result, their presence has created tensions between the smallholder settler crop farmers and nomadic Fulani cattle herders. This tension is explained by a settler farmer as follows:

With the herders present, the farmers are likely to lose out on their cultivated land. This is because the herders can easily persuade landowners to allow them access to large areas, which will invariably affect farmers' access to land for subsistence farming. Also, their presence has the potential to change the environment rapidly. The weight of the cattle will harden the soil and make it difficult to till, and it will not be long before the whole area is transformed into a grassland. The resultant outcome will be competition for available land in the area (Interview, SHSF-Tease: 7th January 2020).

The narrative depicts what Homer-Dixon on termed as supply induced scarcity, which describes environmental change caused by depletion of resources occurring faster than they are replenished by natural processes, which leads to migration and the resultant struggle and disputes between smallholder crop farmers and nomadic cattle herders over available land resources. A condition created not within the geographical area has forced the two groups of migrants to live together and source their livelihood from the same resource, the land. The presence, therefore, of the nomadic Fulani herders has led to jostling for conducive ecological space with the smallholder settler farmers, leading to conflict and its ramifications in the case study area of the Afram Plains. The migration of herds because of environmental changes is well-articulated by the environmental scarcity theory, which states that deteriorating environmental conditions drive people to migrate in search of better environmental conditions and livelihood opportunities. When the migrant destination is a resource-constrained area, this leads to conflict with the locals as they compete for the dwindling resources.

6.4.3 Large-Scale Land Acquisition for Agriculture Investment

The Kwahu Afram Plains has been described as a new frontier of agricultural productivity in Ghana mainly because of the savanna ecological zone, which supports mechanised farming.

Therefore, research study district has attracted investors interested in acquiring large tracks of land for agricultural development. Both the state and traditional authorities are enthusiastic about supporting and making land available for agricultural investment on the premise that such investments come with more investments in technology, job creation, and infrastructure development. This presumption of the inherent benefits of large-scale land investment is the basis of the facilitation role of the state to design policies and incentives, such as the creation of one-stop-investment promotion centres to facilitate land investments in Ghana. These centres include the Ghana Investment Promotion Council (GIPC) and Ghana Commercial Agricultural Project (GCAP) which the state has established for creating enabling environment for large tracks of land to be available for foreign and local agricultural investors (Interview, MLNR - Accra: 19th February 2020).

Large-scale agriculture investment in the case study area is an emerging issue. This was intimated by the Ministry of Food and Agriculture Directorate in the research study district of the Afram Plains, premising the development on the conducive ecological nature of the environment. Large-scale agricultural investments such as Gyidiman farms owned by the Saviour Church, Assisi Farms, and Kwanim Agric are all in the case study area. For example, the Saviour Church has acquired 1600 hectares of farmland for mangoes, cashew, rice, and maize cultivation at Odumasua. Similarly, a joint Ghanaian and Danish investors had acquired 22,000 hectares of land at Kwanim, a farming community near Maame Krobo to produce food crops and livestock in 2007. This contract was, however abrogated in 2015. There are other large-scale agricultural investments also coming up between Forifori and Nkwanta as well as at Asukese No.1, all in the case study area. The Ministry of Food and Agriculture Directorate at Tease intimated that between 32,000 to 40,000 hectares of land had been acquired for large-scale agriculture in the

case study area. Acquisitions of fewer than 1,000 hectares and those under negotiations are not included (Interview, MoFA-Tease:12th March 2020).

Prior to these acquisitions for agriculture investment in the Kwahu Afram Plains South District, these areas were tilled for subsistence farming by smallholder settler farmers. The Ministry of Food and Agriculture Directorate at Tease confirmed that these significant acquisitions were made possible because smallholder settler crop farmers were evicted from their previously cultivated land. These smallholder farmers are migrants whose right to the land was mainly secondary, having been derived from the landowners, therefore, they have little say nor are they consulted during the process leading to such large-scale acquisitions for agriculture investments in the research study district of the Afram Plains.

Contrary to the expectations of large-scale agriculture investment in the local economy are the concerns of the adverse effects on both smallholder crop farmers and nomadic Fulani cattle herders, who stand the risk of losing control of, and access to informal land rights. Discussants during focus group discussion revealed that the emergence of such large-scale agriculture investments had affected their livelihood in the form of loss of farmland:

The areas we previously cultivated were those that the investors have acquired through the traditional authorities. The landowners did not consult us prior to the lease of the land even though we were cultivating on the land. We were only paid a token for the crops destroyed by the tractors and only given a small plot of land as a replacement for that which we lost because of the large-scale agriculture development in the area. These are lands far away from our settlements, making it difficult to effectively monitor our farms. The new areas are also not fertile compared to where we previously cultivated (FGD, SHSF-Odumasua:14th November 2019).

To reinforce the views expressed during the focus group discussions, individual responses of farmers captured similar sentiments on the effects of the emergence of large-scale land acquisitions on their farming activities. A smallholder farmer said:

“I moved to the Afram Plains with my husband and children from northern Ghana in the early 1990s. During those days, we could cultivate four crop fields in a year. When a field lost its fertility, it could be allowed to fallow. Around the year 2007, we lost all our crop fields because the traditional landowner gave out the area to a large-scale agriculture investor for the cultivation of tree crops and other food crops, such as maize. We were given GHC150 [\$26] for each crop field lost and allocated a new piece of land that was not fertile, resulting in a low yield. This impacted adversely on our livelihood. This made us move from Kwanim near Maame Krobo to settle at our present location” (Interview, SHSF-Odumasua:14th November 2019).

Similarly, the views expressed by the smallholder crop farmers concur with that of the nomadic Fulani cattle herders on the effect of large agriculture investment. One nomadic Fulani herder recounted how he has been migrating in and out of Ghana over the last fifteen years. It was easy to access large grazing fields and watering points along the Volta Lake during these years. However, within the last five years, most grazing areas have been covered with plantations, blocking access to watering points for the cattle. Attempts to go through these plantations to the banks of the lake are met with stiff resistance for fear that the cattle will destroy the plantation (Interview, NFH-Odumasua:15th November 2019).

Traditional authorities, who are landowners, present a different opinion on the emerging phenomenon of large-scale agriculture investments in the case study area. They intimated that every leader wants development in his town or village. Large-scale agriculture investment brings

jobs to the youth and provides infrastructure, making the area develop quickly. One traditional leader was emphatic that such areas given for large-scale agriculture investments are idle lands that were not cultivated by the smallholder farmers (Interview, TA-Odumasua:16th November 2019). During a focus group discussion, the farmers debunked this claim by the traditional authorities. The farmers pointed out that such perceived idle lands were frequently left for various purposes, such as shifting cultivation or bush fallowing to allow the land to regain its fertility (FGD, SHSF-Odumansua:14th November 2019).

Observations and interviews conducted during the fieldwork with smallholder settler farmers and nomadic cattle herders confirm the presence of large farms in many parts of the district. Areas along the Volta Lake are covered with tree crops such as mango and cashew. There are also large maize and vegetable farms stretching many hectares along the Volta Lake. The presence of these plantations, therefore, blocks access to watering points. In some of these plantations, there are security points along the stretch. This is to prevent intruders such as nomadic cattle herders from accessing the area. Similarly, in places where these plantations are located, farmlands are far from human settlements, and farmers spend several otherwise productive hours walking to their farm on foot, with some spending a percentage of their income on motor transport to their farms. Again, farm sizes are smaller, ranging from one to 2 acres, compared to areas without plantations, where smallholder farmers cultivate between three and five acres.

Even though the traditional authorities have argued that lands for agriculture investments in the area are idle lands, this is contrary to a recently published report by Oxfam International (2011) and the Economic Commission of Africa (2012) to the effect that lands acquired by investors were often fertile land with easy access to water and market. It is these fertile lands that smallholder crop farmers are evicted from for large-scale agriculture investments, which leads to

land loss or smallholders being pushed into marginal lands. The situation demonstrates that, because of large-scale agricultural investments, less productive land is left for migrant farmers and herders in these areas, leading to increasing rivalry and land tensions over the few available fertile lands. This strengthens the position that migrant farmers cultivating customary land are the most vulnerable to expropriation (Kuusaana 2016). Expropriation of lands belonging to migrants for huge agricultural investments has resulted in the loss of farm and grazing lands for smallholder crop farmers and nomadic cattle herders. Tsikata and Yaro (2011) further corroborate that, large-scale acquisitions for transnational land transactions have resulted in land-use conflicts between farmers and herders due to the loss of arable farm and grazing lands.

6.5 Farmer-Herder Conflict in KAPSD: Immediate Causes

Beyond the core issues of competition and contestation over land, there are immediate causes that ignite disputes between smallholder crop farmers and nomadic Fulani cattle herders in the case study district. According to Turner et al. (2011), resource-related conflicts are generally caused by triggering events rather than increasing competitive pressure driven by physical scarcity. Similarly, Peters (2002) succinctly states that disputes over land between groups or individuals manifest themselves in disagreements over a variety of issues. This could range from a case such as cattle nibbling crops to the most serious concern related to death. These are the issues that instantaneously flare up into conflicts between smallholder crop farmers who are settlers and nomadic cattle herders in the case study area of the Afram Plains.

6.5.1 Destruction of Crops

An immediate cause of conflict between crop farmers who are settlers and nomadic cattle herders in the case study area is the damage to farmlands by cattle. Crop destruction comes

about because of differences in land use and needs between crop farmers and cattle herders. As farmers require more land to expand and cultivate new crop fields, herders require the same resource to graze their cattle especially in fertile ecological environments and areas around water bodies. The situation is created where crop farmers and cattle herders expand their activities, leading to crop fields expanding to grazing fields, thereby bringing the herds closer to farms and vice versa. Crop destruction, therefore, becomes the apparent outcome in such situations.

Crop farmers accuse nomadic Fulani cattle herders of grazing their cattle mostly at night, thereby destroying farms. Supervision of cattle at night becomes very difficult for herders as cattle easily stray to farms to feed. The farmers in the case study area have accused nomadic Fulani cattle herders of intentionally allowing their herds to graze on farmlands since finding forage for their livestock is difficult during the dry season. A crop farmer lamented that:

By the sheer number of the cattle, they can eat everything on the farm in a few minutes. The herders intentionally drive their cattle into peoples' farms to graze while looking unconcerned. Even if the farmer is around, you are afraid to confront the herder because he has a gun. The cattle either eat the crops yet to be harvested or those harvested and stored in barns on the farm. Only last year, about four acres of yam I had harvested were eaten and destroyed by the cattle of a nomadic Fulani herder. I only got to know of the damage caused by the cattle when I visited the farm in the morning with no sign of the herdsman and cattle around (Interview, SHSF-Kwasi Fante: 4th December 2019).

Picture 1: Farms and harvested crops destroyed by cattle



Source: District Police Command, Kwahu Afram Plains South, Tease

Herders, on the other hand, make the case that they do not intentionally drive their herds to destroy farmlands. The challenge, according to the herders, has to do with farmers cultivating along pasture and cattle routes, thereby restricting access to critical ecological resources like water and pasture. While farmers argue that crops are *insitu* and are rather cattle that move to where crops are, Traore and Lo (1996) take a contrary view by stating that it is equally reasonable to consider ‘straying fields’ into grazing lands which connote a situation where farmers expand their farmlands which makes it easier for cattle to graze crops on farms. Most nomadic Fulani herders admitted that sometimes their cattle stray into farms and destroy crops,

but this they mostly attributed to nomadic Fulani herders who do not have any formal contract on the use of the land for grazing with the traditional authorities. A nomadic herder stated that these nomadic Fulani herdsmen are those individuals whose activities result in crop destruction and are difficult to track due to their constant movement. This enrages farmers, who then vent their frustration on all herders, culminating in violent clashes (Interview, NFH-Odumasua:15th November 2019). However, herders indicated that the point of departure on the issue of crop destruction has to do with the payment of compensation.

Compensation relating to crop destruction has been central to the disputes in the case study area between the two migrant groups. The farmers believe that herders do not pay the right amount, which commensurate with crops destroyed on the farm. On the contrary, nomadic Fulani herders argue that farmers purposefully increase crop damage costs in order to receive huge compensations. A nomadic Fulani herder remarked that when cattle destroy a crop field, the herder will have a fair idea of how much he will be expected to pay. If you expect to pay about the cost of two bags of maize and the farmer is asking for ten bags, then that necessarily becomes a problem (Interview, NFH- Ekye Amanfrom: 18th November 2019). The contradictory stance on the issue of compensation in relation to crop damage has resulted in antagonism between settler crop farmers and nomadic cattle herders in the case study area. Several scholars corroborate this finding of crop damage as an immediate cause of dispute between smallholder crop farmers and nomadic cattle herders in Africa (Turner et al. 2011; Ofuoku and Isife 2009; Tonah 2006).

6.5.2 Killing of Cattle by Farmers

Cattle remain the predominant investment of wealth creation by nomadic Fulani herders. This means that herders will go to any length to protect their investment and wealth. When farmers

shoot and kill cattle of nomadic Fulani herders, they become confrontational and physically attack the farmers. A Fulani herder angrily remarked:

“The farmers deliberately shoot at our cattle when they are not even closer to crop fields, an act which has affected our investment and livelihood over the years. The farmers kill our cattle not only through shooting but also intentionally spray chemicals close to grazing areas around crop fields which poison and kill the cattle when they feed on the grass. I lost about fifteen of my cattle the previous year when the herds grazed in an area that had been sprayed with a poisonous substance by a farmer” (Interview, NFH- Ekye Amanfrom:18th November 2019).

This accusation has outrightly been rejected by the crop farmers, who claim that they only spray weedicides on their crop fields to kill the weeds and not to target the cattle of herders. This has created tension between the two migrant groups in the area, which occasionally generates open conflict. The act of spraying chemicals on crop fields around grazing areas is a way crop farmers create space to take control and keep nomadic Fulani cattle away from crop fields and the area entirely. The herders posit that they do not understand why farmers will resort to killing their cattle rather than demanding compensation from them through the appropriate laid down channel in the case study area. Out of fury, one nomadic Fulani herder expressed his rage by saying, “the farmers kill our cattle at the slightest provocation, oblivious that cattle are our source of income. We will physically assault any farmer who attempts to kill any of our cattle. If the farmers’ mantra is to shoot cattle on sight, we will not hesitate to shoot back to protect our source of wealth and livelihood” (Interview, NFH-Odumasua:15th November 2019).

Picture 2: Cattle shot by a farmer



Source: District Police Command, Kwahu Afram Plains South, Tease.

6.5.3 Burning of Grasses and Farmlands

Burning grasses in the dry season is another immediate cause of conflict between settled migrant farmers and nomadic cattle herders in the case study area. The dry season is accompanied by prolonged drought leading to wildering of grasses, scrubs, and forage. As a survival strategy, farmers accuse herders of deliberately setting fire to dry grasses for fresh ones to regenerate to feed their cattle. The farmers in the case study area resent this practice as they blame the herders for leaving the fire unattended, which spread across wide areas destroying large crop fields and granaries. Furthermore, the farmers lament that this practice has led to a loss of huge investment

in their crop fields (FGD, SHSF-Tease: 10th December 2019). A 58year old farmer recounted how he lost his farm as follows:

“My three-acre maize farm was destroyed by fire a year ago. From the farm, I could not even harvest a bowl of maize. All my efforts were to nought. This happened because a Fulani herder started a fire in a bush near my farm, which swiftly spread and burnt my farm. Fulani herders do this to ensure that new grasses germinate for their livestock to feed on” (Interview, SHSF-Kwasi Fante:4th December 2019).

Another farmer stated that:

“On my way home from the farm on Monday evening after sundown, I met one young adult with his cattle heading towards the direction of my farm. I waited for some time until they passed before going back home. When I returned to the farm the next morning, I was shocked to see that the entire farm had been destroyed by fire, including crops that I had harvested the previous year and stored in barns on the farm. I was deeply disturbed and saddened by the incident and that if I had met that particular herder who had wreaked such havoc, I would have been imprisoned by now” (Interview, SHSF-Forifori:13th November 2019).

The reactions of the nomadic cattle herders towards this allegation by the farmers were mixed. While some conceded that they engage in bush burning but were emphatic that such practice is not intended to destroy crop fields, others dismissed it outrightly, stating that it was a kind of rhetoric facilitated by the farmers to cause community displeasure against them. They noted that the grasses are burnt in areas not closer to crop fields as it is challenging to find suitable grass for the herds to feed during the dry periods. Therefore, the burnt areas regerminate, which gives the cattle nutritious grass to feed on to survive during the dry season. The herders also added that the

farmers also undertake the practice of burning bushes in the dry season. The farmers, according to the herders, burn grasses so they can prepare the farm during the lean planting season. It is the claim of the cattle herders that both users of the land are engaged in the practice of bush burning in the case study area, but very often, the farmers are quick to blame the herders for causing havoc to crop fields through bush burning. Arguing vehemently against the accusation of the burning of grasses, a nomadic Fulani herder stated that:

During the dry season, finding grass for the cattle is quite difficult. This is due to the unavailability of suitable pastures, leading to the cattle becoming extremely lean. Would it be reasonable to burn the few remaining grasses and starve the livestock while waiting for pastures to regrow? I do not think so. I can tell you that this claim is intended to incite community hostility against us, resulting in our eviction (Interview, NFH-Ekye Amanfrom: 18th November 2019).

6.5.4 Alleged Social Vices by Nomadic Herdsmen

Fulani herders in Ghana are suspected of committing societal vices such as robbery, rape, and killings; although some of these accusations are anecdotal rather than empirical. However, such negative social vices are widely recorded in both the print and electronic media as they are deemed to be contrary to good societal norms and values in Ghana. During focus group discussion, the farmers unanimously accused nomadic Fulani herders of sexually harassing their women, engaging in robbery activities, and shooting at farmers who confronted them on such vices. Discussants were of the view that because nomadic Fulani herders reside in the bushes alone without their wives, the presence of any woman is an opportunity to satisfy their sexual needs. The reason why herders sexually molest female farmers in the bushes at gunpoint. The farmers further alluded to the fact that sexually molesting women is a form of social violence;

that is why they resist and fight the nomadic Fulani herders (FGDs, SHSF-Forifori: 12th November 2019). Describing how a group of three herdsman nearly raped a middle-aged woman, the Assemblyman of the *Ahenbronomu* electoral area in Tease, who is also a settler farmer recounted that:

In the last three months, a middle-aged woman was attacked and nearly sexually molested by three nomadic Fulani herders on her way back from the farm. Had it not been her shout for help that attracted other farmers in the area to her rescue, the narrative would have been different. We could not apprehend the herders as they fled into the bush (Interview, SHSF-Tease:7th January 2020).

While this allegation was dismissed without a response by many of the nomadic herders, one herder stated: “my culture forbids me from having sexual relations with women who are not officially wedded to me. I feel this is one of the many claims levelled against herders by farmers who are enraged by our presence and want us to leave the area” (Interview, NFH-Ekye-Amanfrom:18th November 2019). Even though sexual harassment was clearly articulated as an immediate cause of the conflict and the reason why farmers resent the herders’ presence in their farming villages, the farmers could not substantiate this allegation as none of the participants could tell boldly if they had encountered or witnessed anyone who a herder has harassed in the past. Furthermore, records from the District Police Administration at Tease from February 2015 to October 2020 did not show any reported rape cases against the nomadic Fulani herders. The issue of rape, therefore, remains largely an allegation in the absence of substantiated evidence. However, it must be understood that the fact that these sexual harassments are not formally reported to the security agencies does not mean they do not occur. In the traditional Ghanaian culture, sexual affairs are upheld in secrecy and even more so with rape cases because of the

stigma that comes with it. Rape victims, therefore, prefer to keep such violence to themselves than let others know of their ordeal for fear of either risking getting a suitor in the future or losing their marriage.

On the issue of robbery, farmers disclosed that nomadic Fulani herders have made the case study area insecure through incessant robbery attacks. The farmers claim nomadic Fulani herders strike on market days and rob poor market women of their monies. The robbers are successful in such operations, they argue, because of the poor road network and absence of police visibility in the area. The farmers claim the robbers are of Fulani descent because of their ascent and dressing. The farmers further reveal that in the latter part of the year 2020, members of the Nkwanta No. 1 community between the Maame Krobo and Forifori road mobilised and arrested one suspected Fulani herder who robbed vehicles along that stretch (FGDs, SHSF-Forifori:12th November 2019). The District Police Command confirmed the incidence of robbery in the case study area, but he was quick to add that robberies recorded in the area involve both natives, settlers, and nomadic Fulani herders. The District Police Command indicated that most settlers speak the Hausa language just as the nomadic herders. It will be erroneous to use dialect or ascent to link robbery entirely to the nomadic Fulani herders. The Police Command, however, indicated that the issue of armed robbery is on the ascendency in the area, and so the District Security Council (DISEC) is marshalling all strategies to nib the phenomenon in the bud (Interview, SS-Tease: 13th March 2020). When the issue of robbery was put before the nomadic Fulani herders, they accepted that all of them cannot be ‘angels’ and that some miscreants among them who engage in such acts have been arrested while others are being pursued by the law enforcement agencies. The herders posit that the fact that some nomadic Fulani herders engage in criminal activities in host communities does not mean all nomadic Fulani herders are criminals. Thus, they contend

that you cannot use the act of a few to judge the whole. Some of the herders pointed to the incident in the Afram Plains when two policemen were arrested for robbing a Ghana Commercial Bank bullion Van in 2016, killing the driver instantly and injuring the escort police officer. One Fulani herder posed a rhetorical question, were those policemen also nomadic Fulani herders? The nomadic Fulani herders retorted that crime is a crime and should not be attributed to any group in the country (Interview, NFH-Kwasi Fante: 5th December 2019). This notwithstanding, farmers are convinced that the robbery in the area is due to the activities of the nomadic Fulani herders. They stated that they were living in peace before these cattle herders arrived in the area. An opinion leader and settler farmer at Forifori summarised the insecurity that has engulfed the area with the presence of the nomadic herders in the following words:

These social vices engaged in by the nomadic Fulani herdsmen have affected the local economy. As a result, economic activities have been brought to a standstill. Traders are reluctant to come and trade in the district, while women are not able to carry out business in other neighbouring communities and villages for fear of being killed, robbed, or raped (Interview, SHSF-Forifori: 13th November 2019).

Lastly, the shooting and killing of farmers by herders in the research study district is also an immediate reason for the conflict. Farmers accuse the cattle herders of intimidation, claiming that if a farmer challenges a herder for allowing his cattle to destroy his crop field, the farmer is likely to be shot by the armed herder. This speaks to the existential threats that confront farmers and herders while plying their trade. The farmers are livid and accuse the nomadic cattle herders of using sophisticated weapons to threaten and kill their kinsmen who confront them when cattle take over their farms. The migrant farmers recount how a Konkomba man was shot on his farm when he confronted a herder who had allowed his cattle to graze on a maize farm. The farmers

express frustrations over the recent killings of farmers by the nomadic Fulani herders and have vowed to retaliate in equal measure if the security services do not act swiftly to disarm and evict the nomadic Fulani herders from the area (FGDs, SHSF-Tease: 10th December 2019).

The accusation of killings levelled against each other has made the two groups resort to using deadly weapons for self-defense, sparking a vicious cycle of violence in the case study area. From field observation and interviews, the bastardisation of Fulani herders can only be presumed as prejudice and stereotypes, which is not anchored largely on empirical fact. This is not to say that some nomadic Fulani herders do not engage in the social vices levelled against them, but the general bastardisation of Fulani herders is what seems to be the problem. This attitude against the Fulani herders, however, is founded on cognitive, social biases and categorisation, in which prejudices are based on peoples' proclivity to categorise and hence react to and assess other people by seeing them as members of a group rather than individuals (Bukari and Schareika 2015; Dovidio et al. 2010). More broadly, these prejudices against Fulani herders have become an essential element of national and community discourse aimed at denying them access to resources and causing their eviction in host communities in the country (Tonah 2002).

In effect, the manifestation of violent conflict resulting from crop destruction, the killing of cattle, burning of grasses, and the loss of lives and property is the result of the growing scarcity of land resources, particularly around the Volta River and in inland fertile bush areas which has been occasioned by population growth, migration induced by degradation, and large-scale land acquisition for agriculture investment in the case study area. The foregoing has manifested in the increasing conflicts between smallholder crop farmers who are settlers and nomadic Fulani cattle herders in the case study district of the Kwahu Afram. These manifestations of the increasing and recurring conflicts in the case study area can be seen in the area's various local media coverage.

The print and electronic media highlight the Kwahu Afram Plains as being notorious for deadly clashes between crop farmers and nomadic cattle herders during every harmattan season. The following are some of the media reportages on the increasing conflicts in the case study area:

1. Afram Plains: renewed tensions as farmers vow to attack herders¹¹
2. Afram Plains farmers demand taskforce against rampant herdsmen attack¹²
3. Afram Plains: four shot, dozens injured as farmers clash with herdsmen¹³
4. REGSEC, military to establish base in Maame Krobo to end clashes between residents and herdsmen¹⁴

The recurrent conflict has not only attracted media attention in Ghana but has also caught the attention of the president of Ghana, who has declared to permanently tackle the incessant farmer-herder conflicts in the country¹⁵

6.6 Challenges Around Access to Land and its impact on Farmer-Herder Conflict

The competing interest over land resources has raised land values, resulting in increased land rents, leading to the insecurity of land tenure in the case study area. Underneath the arbitrary land increases is the desire of traditional landowners to exert control over and, in some cases, claim

¹¹ Starrfm.com.gh (21st February 2020). Afram Plains: renewed tensions as farmers vow to attack herders. Available@<https://starrfm.com.gh/2020/02/afam-plains-renewed-tension-as-farmers-vow-to-attack-fulani-herders/>

¹² Newghana.com (20th January 2022). Afram Plains farmers demand taskforce against rampant herdsmen attacks. Available@<https://newsghana.com.gh/afam-plains-farmers-demand-taskforce-against-rampant-herdsmen-attacks/>

¹³ Starrfm.com.gh (5th October 2021). Afram Plains: four shot, dozens injured as farmers clash with herdsmen. Available@<https://starrfm.com.gh/2021/10/afam-plains-four-shot-dozens-injured-as-farmers-clash-with-herdsmen/>

¹⁴ Citinewsroom.com (16th February 2022). REGSEC, military to establish base in Maame Krobo to end clashes between residents and herdsmen. Available@citinewsroom.com/2022/02/regsec-military-to-establish-base-in-maame-krobo-to-end-clashes-between-residents-herdsmen/

¹⁵ Citinewsroom.com (15th March 2018). I will permanently tackle farmer-herder clashes-Nana Addo. Available@citinewsroom.com/2018/ill-permanently-tackle-farmer-herder-clashes-nana-addo/

lands they deemed their own and have been contested by others. This complicates land access and in the case study area, invariably influences crop farmer's and cattle herder's conflict. This section of the thesis chapter answers the research question; do challenges around land access contribute to farmer-herder conflict? The section is analysed around the political ecology theory. The theory used in this section is purposely to better comprehend the relationship between nature and society by looking at resources access and control and the implications that this has on the relations between the migrant groups in the area. The case study area's access and control of resources are analysed around increasing land rentals, the dispute over land ownership, and corrupt practices in multiple land allocations and rentals. The actions of some traditional landowners, security agencies, and political actors are also explained within the political ecology discourse of what Moritz (2012) referred to as self-seeking, where the parochial interest of some of these actors overrides that of the general populace in the case study area.

6.6.1 Increasing Land Rentals

The high land rental in the case study area is a significant barrier to accessing customary land. This has arisen because of the competing demand for land by different users; smallholder settler farmers, nomadic cattle herders, and large agriculture investors, which has raised land values. Underneath the increasing rental is the desire of traditional authorities to take control over their land. The growing demand for land has ostensibly increased land values which have led to the emergence of new forms of control and access centred on market logic rather than traditional egalitarian principles around customary lands (Yaro 2010). Thus, the emergent changes in land tenurial dynamics in the case study area are far more complex than the often assume linear conceptualisation by the evolutionary theory of land rights (Platteau 2000).

To comprehend the dynamics of the conflict between settler farmers and nomadic herders, it is necessary to understand that there was already an uneasy tension between traditional leaders who served as the custodians of the territory and particularly Ewe and Konkomba migrant farmers before the coming of the nomadic Fulani cattle herders into the area. Thus, among the two migrant parties who are settled crop farmers and nomadic herders; the traditional leaders prefer or give preference to the latter because of the prior tensions before the coming of the nomadic herders. The Ewes and Kwahu landowners have had a long-standing feud over resettlement lands, particularly in the district resettlement areas. While the Kwahu landowners claim ownership of the resettlement zones, the Ewes say they or the government possess them. The claim and counterclaim regarding who is entitled to use reserve land have long been a source of contention between Ewes and the Kwahu people, resulting in simmering tension in the area.

The Konkomba and other northern tribes believe they are part of the community and should not be discriminated against because they have resided in the area for many years. They have accused the traditional authorities of unfair land access practices and arbitrary land rental increases. The conflict posture of the Konkomba settler farmers could, therefore, be ascribed to their long history of fighting over land in the northern parts of Ghana with the Gonja, Nanumba, and Nawuri ethnic groups. Therefore, the resort to violence over land with the traditional Kwahu landowners and nomadic Fulani cattle herders is a carryover of their previous experience. Migrating from an area where there was no strict tenancy to use the land, they resent the current arbitrary land rentals in their host communities.

The smallholder settler farmers have a challenge with the landowners over arbitrary land rental increases which they believe deprives them of the land they have cultivated for many years leading to defiance in fulfilling their land rental obligations to the traditional authorities.

Generally, defiance is a form of resistance against unfair land allocations and arbitrary tenancy rentals. Therefore, to resist is to defy tenancy rules, thereby incurring the displeasure of the traditional landowners. The persistent defiance in land rental payments by some smallholder settler farmers and the muted uneasy tension in the past explains why the Kwahu traditional authorities, who are landowners, will go behind smallholder settler crop farmers and give land to nomadic Fulani cattle herders.

Even though it is argued that land rentals, in which land rights are transferred temporarily, are key in land redistribution to more effective users and grant access to the poor and other marginalised groups, thereby increasing employment and productivity (Colin and Woodhouse 2010; Ngaido 2004), the arbitrary increase in the evolving customary land rentals is a source of insecurity for smallholder migrant farmers in the case study area. With a weak bargaining power, the migrant crop farmers often lose out to nomadic Fulani cattle herders as they are not able to meet the increasing rentals for the use of the land.

A smallholder settler farmer explains that:

“Within a period of four years, an acre of land which I initially rented for a year at GHC15 has today increased to GHC200. With no option, I am forced to rent so to make a livelihood” (Interview, SHSF-Tease:7th January 2020).

Another settler farmer stated that the land he rented for only the major planting season has increased significantly in the past five years. He explained:

“Some farmers rent the land to cultivate for a year or either for the major or minor seasons. In my situation, I only cultivate maize during the major season and used to rent an acre of land per planting season

at GHC10. Currently, I pay GHC120 for that same acre of land I previously cultivated for a cropping season. This has become extremely tough for me because I am sometimes unable to produce enough to pay my overhead costs, making it impossible for me to save enough money to rent land for the following planting season” (Interview, SHSF-Forifori: 13th November 2019).

Discussants during a focus group discussion unanimously:

Agree that the arbitrary rental charges by traditional landowners have made it difficult for poor settler farmers to access land, thus impacting negatively on their livelihood in the area. The farmers revealed that the rising land rental cost is part of bigger unfair terms and conditions governing land access and use in the case study area. The farmers complain that some traditional landowners only rent land for only a cropping season without the obligation to renew, or in the event of a renewal, the rent is increased without consulting the farmer. Therefore, when the farmer is not able to pay the new rent, the land is taken away by the landowner. These unfair terms regarding land access, the settler farmers, believe are subtle attempt by landowners to evict them from the land and give it to nomadic Fulani herders because they do not have the power to influence the decisions of landowners to their favour as do herders with financial power (FGDs, SHSF-Odumasua:14th November 2019).

These observations cut across almost all the interviews and focus group discussions conducted with the migrant smallholder farmers. The increasing land rental charges have arisen due to competition from the influx of both migrant crop farmers and nomadic herders and large-scale agricultural investors into the area. The struggle to access land by both migrant farmers and herders has raised land values, thereby exposing the vulnerability of the migrants to the landowners because of their limited right to land. The increasing land rentals were not based on

any benchmark as traditional authorities decided land rentals on an individual basis with no advice from the Land Valuation Board or the Office of the Administrator of Stool Lands (OASL). The phenomenon has created land tenure insecurity for smallholder migrant farmers who struggle to raise the required money to gain land access in the area.

The manifestation of this capitalist relation explains how large portions of labour and land were hired through the market in English tenancies in the sixteenth century and the Amansie District of Ashanti in 1900-1916, respectively (Wood 2002; Austin 1987). However, in the case study area, land markets are informal, which are evolving not directed by a national policy but in response to pressure from different land users who are large-scale agriculture investors, nomadic herders, and migrant crop farmers and the desire of the traditional authorities to take control over their lands. The overbearing attitude of chiefs towards the leasing of land can be attributed to efforts at reestablishing traditional control over customary lands and their boundaries in Ghana (Boamah 2014). This is akin to the description in Ivory Coast, where autochthones who risk losing their control over uncultivated land without compensation took to monetary land transfers in the mid-western and southern regions of Ivory Coast. Through this act of renting out land, the traditional landowners seek to establish their status as owners of the land (Colin and Ayouz 2006).

The settler farmers further argued that their tenure insecurity arises from arbitrary land rental increases because their rental tenancies are not formalised and mainly oral. Most of the farmers could not provide any documentation to support their tenurial arrangement on the use of the land. Chimhowu and Woodhouse (2006) refer to these as vernacular markets, which form the most direct ways for foreign nationals to access land in rural Africa. This oral tenure arrangement forms the basis of the tenure insecurity of smallholder migrant farmers in the case study area.

Such oral tenancies often result in conflicts between land users and owners over the exact terms of a specific oral agreement. A smallholder settler farmer remarked that oral tenancy is mainly between the traditional owners of the land and a settler tenant farmer and, in some cases, with a witness who might be from the side of the landowner or the tenant (Interview, SHSF-Forifori:13th November 2019). This form of oral tenancies has led migrants to face high tenure insecurity leading to tenant farmers facing threats of ejection and untimely abrogation of land rental agreements. Interestingly, while farmers' right to land access is oral, the nomadic Fulani herders try to secure their rights by asking for receipts attesting to such transfers on land use for grazing purposes.

A smallholder settler farmer explains:

“Our land tenancies are seasonal and short, so there is no reason why one must require any form of documentation since, in all instances, there is always a witness to attest to such land rental transaction” (Interview, SHSF-Ekyi-Amanfrom:19th November 2019).

A nomadic Fulani herder, on his part, stated that:

“Our experience over time relating to land for grazing and the substantial amount we pay for the right to access land informs why we often ask for a receipt or note to attest to the right to access and use an allotted area for grazing” (Interview, NFH-Ekye Amanfrom:18th November 2019).

During interviews with nomadic Fulani herders, some of them could display some form of documentation showing the transfer of occupancy by some chiefs and headmen in the area. Although the document did not show any detailed information on how long the land has been given out and the size the land covers. It shows a statement stating the permission of the

landowner granting the right to the herder to graze his cattle on the land. This process of granting informal documentation is referred to as vernacular formalisation where transfer rights and duties remain largely unspecified, specifically in terms of rights and compensation that migrant tenants are expected to provide (Chauveau and Colin 2010). The stance of the herders in requesting receipt does not in any way confer land title but proves that a transaction has occurred between the nomadic herder and the landowner.

This reinforces the conclusions of Mireku et al. (2016) in the Kumasi traditional area that allocation papers in their current form and substance are incapable of conveying title to purported grantees but may be used as evidence that an individual or corporate body has purportedly acquired land. Boni (2008) reinforces the effect of oral tenancies by stating that traditional authorities willfully or unknowingly rent out the same parcel of land multiple times due to the absence of any documented evidence in the form of agreement over land access between landowners and tenant farmers. The lack of documentation of tenancy arrangements between landowners and farmers reflects a broader pattern in Ghana's rural agrarian communities. The national report on the Ghana Census for Agriculture (GCA) 2017/2018, reveals that 82.6 percent of the parcel of land used by holders is not covered by any form of documentation on tenure arrangement. The report further reveals that only 13 percent of the parcels have complete documentation while 3.2 percent have partial documentation. The significant number of oral agricultural tenancies not backed by formal documents creates land tenure insecurity for smallholder farmers, leading to disputes over the specific terms of a particular grant with landowners.

Indifferent treatment given by the traditional landowners to tenant farmers, which leads to conflict in the Kwahu Afram Plains South District, is not an isolated case on the African

continent. According to Sone (2012), local chiefs in Anglophone Cameroon welcomed Fulani herders because they considered them useful clients eager to pay taxes for the chief's self-aggrandizement. Tonah (2002) makes a similar argument, claiming that the presence of nomadic Fulani herders in the Lower Volta Basin of Ghana opened a door to riches for chiefs who publicly welcomed Fulani herders in their territories. At present, in the case study area, traditional authorities and landowning families prefer to give nomadic Fulani herders priority over land access because of the economic gains arising from their presence in the area and the desire to establish control over their land. Chitonge (2019) rightly argued that open inequity in land access is a serious cause of insecurity and conflict, which is much the case in the research area. Deducing this occurrence within the political ecology theory, the dispute between smallholder crop farmers and migrant cattle herders is due to the imbalance in the rights to resource access (Moritz 2012). Thus, in the case study area, political decisions that favour nomadic Fulani herders over land access create tensions and an outbreak of conflict with smallholder settler farmers. This is because the nomadic herders can influence the landowners in cash and kind to access land over the migrant crop farmers. The herders pay a substantial amount of money for the use of the land, more than what the migrant farmers pay. This makes the landowners prefer to rent land to nomadic herders over the migrant crop farmers.

The unfair terms from the high rental tenurial arrangement by landowners have created a challenge around land access as settler farmers feel insecure in the current land tenancy in the research study district. The farmers contend that lands that they have cultivated over the years have now been allotted to nomadic Fulani herders and other agriculture investors because of their inability to pay for the arbitrary land rental increases. The situation has often led to open confrontations between the two migrant groups. The settler farmers' inability to confront the

landowners over such unfair land access and use practices has led to tense relations with the nomadic Fulani herders. The settler farmers have resorted to undermining the right to land access and use by nomadic Fulani herders, which they have acquired rightly from the traditional landowners. The nomadic cattle herders are viewed as ‘soft targets’ by the settler farmers in the contestation of access rights to cultivated lands. Therefore, at the least provocation, conflict is triggered between the smallholder migrant farmers and nomadic Fulani cattle herders. The reaction of nomadic Fulani herders towards the settler farmers has been retaliation leading to a vicious cycle of attacks on each other. This is because both feuding parties perceive the other as a threat to their very existence in the area.

6.6.2 Dispute over Land ownership Rights between Chiefs

Disputes over land ownership right between chiefs in the case study area is also a challenge to land access. Since the predominant access to land in the area is mostly through chiefs, any dispute between traditional landowners and families creates tensions. In the case study area, there are subtle disputes over substantial lands, especially Forifori, which is a resettlement town. Lands in Forifori are of two types, namely substantial and acquired lands. The former refers to lands owned by traditional leaders, while the latter were those lands that the government acquired from the traditional authorities and distributed to families that were displaced because of the construction of the Akosombo dam. The area is owned by three traditional authorities, namely the chief of Nkwatia, Pitiku, and Afram. A subtle dispute exists in the case study area between the chiefs of Nkwatia and Pitiku over the rightful owner of portions of substantial lands, bringing into focus the issue of boundary disputes. As a result, both feuding chiefs have instructed migrant farmers who want to cultivate such land in dispute to seek their permission. Disputes between chiefs over land impact negatively on farmer-herder conflicts through the

rental or lease of the same piece of land by different chiefs disputing over claims to a parcel of land. The situation has resulted in the allotment of lands to multiple users who are nomadic herders and migrant crop farmers by different chiefs leading to the loss of crop and grazing fields.

A smallholder settler farmer recounted his experience as follows:

“At Forifori, the land I hired from one chief was taken over by another who claimed jurisdiction over it. Without being given the opportunity to harvest my farm’s produce, I noticed cattle roaming around the area after a few weeks. It did not take long for my entire maize farm to be grazed down by cattle of a nomadic Fulani herder who claimed the whole area had been rented to him by another chief. In that situation, I felt helpless because the chief who rented the land to me did little in helping to resolve the problem. This presented a significant difficulty to my family, as we struggled to stay afloat during that period” (Interview, SHSF-Forifori:13th November 2019).

In another instance, a 56year old farmer describes how he nearly lost his three-acre yam farm. He explains:

“About two years ago, I was confronted with the challenge of not having the right to a land I had rented and cultivated yam on. A different chief from whom I originally rented the land invited me to his palace and issued an order for me to leave the land with immediate effect. I, however, reported to the chief who granted the right to cultivate the land, and he advised me to disregard the threats of the other chief and go ahead and cultivate the land. However, the other chief was bent on carrying on his threats as one day, whilst on the

farm, I saw some people demarcating the area for another farmer, including my three-acre yam farm. I was, therefore, forced to pay another rent to the other chief in order to prevent him from carrying out his threat. This meant to survive and not to have my farm destroyed, I was compelled to pay money to the two feuding chiefs over the disputed land to maintain my right to use the land” (Interview, SHSF-Forifori:13th November 2019).

In a further development, a smallholder settler farmer recollected how the same piece of land was rented to him and a nomadic herder by the same traditional leader. He explains:

Not quite long ago, the same parcel of land I rented unknowingly, had been hired to another herder by the same traditional leader. I had to struggle over who had the right to use that land with the nomadic herder. It was later that we got to know that the land in contestation had been rented to us by the same traditional leader. The issue was settled as the herder was allocated a different area for grazing his cattle. However, these situations frequently occur in the area, with many resulting in violent clashes. I can confidently say that granting the same piece of land to different users can only be borne out of greed and nothing else (Interview, SHSF-Kwasi Fante:4th December 2019).

The farmers are of the view that such disputes in the area have become unbearable as they are the most affected and are losing their rights to use the land in pursuit of their livelihood. The unresolved disputes in the area over the years have led to contestations between different users, mainly between peasant crop farmers who are settlers and nomadic Fulani cattle herders over who has the right to utilize the land leading to violent clashes. This situation reflects a broader issue of increased land conflict cases in the courts of Ghana. This recognition that led to the Land Administration Project suggesting the creation of specialised land courts in the regional capitals

to deal with the backlog of land cases (Crook 2008). The growing number of land cases in Ghana's courts support Crook's (2004) findings from his studies of land disputes in Kumasi, Goaso, and Wa, which found that trespass/boundary disputes, intrafamily disputes, and chief's unauthorised disposition of land rights were the most common causes of land disputes in Ghana. By granting the same piece of land to different users, the stage is set for conflict to erupt. This has been one of the reasons for the frequent clashes between smallholder settler crop farmers and nomadic Fulani cattle herders in the case study area of the Afram Plains.

6.7 Corruption and Greed in Land Allocations and Rentals¹⁶

In rural agrarian areas, the role of traditional authorities as proprietors in customary land distribution is crucial in promoting harmonious coexistence. The effective performance of this duty guarantees that land is distributed fairly among the community's many users. Traditional authorities assist in land allocations and judge on disputes that arise within their jurisdiction. In the case study area, however, the traditional landowners have been accused of abuse of chiefly power through corrupt practices in land allocations and rentals. The competition for land between smallholder settler farmers and nomadic Fulani herders has led to a compromise of traditional landowners in fair land allocation who favour nomadic Fulani herders over land access because of their economic power. In a situation where land-use competition exists due to suitability for agriculture and livestock raising, relative power may dictate land use patterns (Bassett 1988, citing McCown et al. 1979). This relative power wielded by traditional authorities favours nomadic Fulani herders over smallholder settlers in land access. This creates an

¹⁶ In the context of the factors alluded to as the causes of the conflict, greedy and corrupt landowners make the conflict worse.

unbalance hierarchical relation leading to tensions and the eventual outbreak of conflict in the case study area.

Discussants during a focus group discussion strongly expressed the following sentiments:

The favouritism in land allocation and access shown by traditional landowners towards nomadic Fulani herders is because of money and, cattle that exchange hands between them and the intent of traditional authorities to evict us (settler farmers) from the land. These underhand dealings have compromised chiefly authority in the fair allocations of land. The unfair land allocation practises by traditional landowners in the case study area include the traditional authorities feeling reluctant to rent farming land during specific times of the year, especially in the dry season, in anticipation of a higher rent when the nomadic herders arrive. This occurs mainly around areas closer to water bodies which deprives smallholder settler farmers of land access to dry season farming. Additionally, the chiefs intentionally allocate grazing lands closer to areas where settler farmers cultivate, thereby bringing the cattle closer to crop fields often leading to destruction of crops or in some cases grant access to lands already under cultivation by settler farmers. It is not uncommon for chiefs to rent areas that they know are under cultivation to a different land user, setting the stage for conflict between tenants. This explains why multiple land allocations and arbitrary rent increases are common in the area (FGDs, SHSF-Tease:10th December 2019).

The farmers argued that the unfair terms and conditions governing land usage in the case study area is essentially to evict them from the land. This behaviour, the farmers said, is only borne out of greed and corruption as the motivation for increasing land rentals and denying farmers land access for cultivation in the dry season by the landowners is to exact higher economic rent from

the nomadic cattle herders who have the economic means leaving the settler farmers who have cultivated the land for a longer time landless. The settler farmers confirmed their suspicion of the tacit support of some traditional landowners when a local chief was enstooled at Tease. The settler farmers recounted that:

It was not surprising that when one of the sub-chiefs was installed, several nomadic Fulani herders came to support him. They came with gifts, including cattle. This confirms our long-held suspicion that these herders have the tacit backing of some traditional leaders in the community (FGDs, SHSF-Tease:10th December 2019).

Giving credence to the tacit support of the traditional landowners to nomadic Fulani herders, it was clear from the interview with the Fulani herders that their herds included that of some traditional authorities from whom they were allotted grazing lands. A nomadic herder explained: “I move my herds along with that of the traditional landowner and that when it is time for me to leave, hired herders take over the job of looking after the cattle of the traditional leader” (Interview, NFH-Forifori:11th November 2019). Chiefs can build their own herds within a relatively shorter period, a reason for their support for the nomadic Fulani herders. With some chiefs now owning cattle, they could not be seen as fair arbiters in any conflict between the two migrant groups. Their role has now been compromised, which in the view of the farmers has led to the loss of trust. This has created tensions as most settler farmers have resorted to self-help when conflict arises in the area claiming that they are not likely to get justice from the traditional authorities. The tacit support and favouritism shown to nomadic Fulani herders is consistent with Hagberg’s (1998) finding in northwest Burkina Faso, where Karabobo farmers blame state bureaucrats for receiving inducements and siding with herders over local farmers. Moritz (2006) articulated a similar situation in Cameroon of how traditional and regional administrative

structures skillfully avoided resolving the disputes between Tupuri farmers and nomadic pastoralists because of what they sought to gain from the perpetuation of the conflict.

These acts of unfair and multiple land allocations and arbitrary land rental increases by the traditional landowners in the case study area are contrary to the fundamental objectives of Ghana's Land Administration Project, which seek to establish a sustainable and well-functioning system that is fair, efficient, participatory, equitable, cost-effective, accountable and that which enhances land tenure security. Even though the 1992 Constitution of Ghana states in article 267 (1) that 'all stool lands in Ghana shall be vested in the appropriate stool on behalf of, and in trust for, the subject of the stool in accordance with customary law and usage', many traditional authorities are gradually shifting from acting as custodians of the land to becoming owners of the land, thereby engaging in sales and multiple land transactions and allocations (Alhassan and Manuh 2005). This has resulted in insecurity of tenure for most users of the land, especially poor migrant farmers, and other vulnerable groups whose rights are not sharply defined under customary tenure.

Traditional authorities seek to uphold their privileged position in the current democratic dispensation, as was the case in the colonial period. During the colonial period, British colonial administrators used an indirect rule system to administer and control the local population by relying on local indigenous rulers. Because the chiefs were allies of the colonial administration, they were supported as the only social group that could transact land (Amanor 2008:60). Some of these historical and current actions of the traditional authorities have made some scholars (Amanor 2010; Ubink and Quan 2008) question the success of the establishment of the Customary Land Secretariat under the auspices of traditional rulers. Rather than improving tenure security, they argue, such implementation will enhance the hegemonic position of

traditional authorities regarding the control over customary lands. The revered position and the states' inclination toward a non-interference approach in chiefly affairs have led some chiefs to act in ways contrary to statutory establishments. An example is the resistance to the payment of stool land revenue to the Office of the Administrator of Stool Lands (OASL).

The chief's opposition revolves around stool land revenue, claiming that the money collected for land allocations is 'drink money', which is viewed as a ritual obligation or cultural recognition of the chief's authority as the landowner (Ubink and Quan 2008). However, in locations where land values are high, the sum paid as 'drink money' is significant and might be considered a market price for land sold (Kasanga and Kotey 2001; Alden Wily and Hammond 2001). This non-interference of the state in chieftaincy issues is part of why traditional authorities have arrogated to themselves powers that enable them to act as owners of land rather than as custodians and fiduciaries as required of them by law. In the Kwahu Afram Plains South District, government officials are not likely to engage in the affairs of chieftaincy and its related issues of land. This explains why the stakeholder engagements in the case study area do not substantially address the core issue of land in the conflict between the two migrant groups. The narrative is in no way to demonise traditional authorities or the chieftaincy institution as they are a critical institution in the administration of customary lands but to instead advocate for checks and balances on the institution to ensure a sustained land governance system that ensures accountability, participation, representation, and transparency to improve on the security of tenure of the rural poor mainly migrant farmers and other vulnerable groups.

The new land Act 2020 (Act 1036) seeks to fine-tune some of these grey areas under the LAP to improve land administration of both statutory and customary lands in Ghana. It was enacted to revise, harmonise, and consolidate land-related laws in the country to ensure sustainable land

administration and management, effective and efficient land tenure, and address related issues. The inclusion of these features in the new land law is expected to improve Ghana's administrative framework for land registration, security, and governance. This legislation will have a positive impact because it will help mitigate the numerous land conflicts, particularly among migrant groups who have no firm rights to customary land. For example, the Land Act 2020 (Act 1036), Article 1, section (a-f) spells out the various interest in land in Ghana and places an obligation on traditional leaders in section 13 (1-2) to act as fiduciaries for the benefit of the stool or skin and shall be transparent, open, fair and impartial in the decisions affecting such specific lands and 13 (4) states the implication when a person acting as a fiduciary contravenes section 13 (2) of the Land Act, 2020 (Act 1036). Specifically, section 13(4) states that a fiduciary who contravenes 13(2) commits an offence and is liable to a summary conviction to a fine of not less than five thousand penalty units and not more than ten thousand penalty units or a term of imprisonment of not less than five years and not more than ten years or both. In the new Land Act, 2020 (Act 1036), there are about thirty reforms that address a broad array of issues in the land sector that ultimately strengthens the land rights of land users and ensure an effective land tenure security for mostly the vulnerable smallholder migrant groups and women in the country.

The accusations of corruption and greed in the case study area are not only directed at the traditional leaders, but also the security agencies, judiciary, and political elites are implicit in the conflict involving settler farmers and nomadic herders. The police and the judiciary are two key agencies in the state's security architecture that dispenses law, order, and justice. The citizenry's trust in these institutions is premised on how effective and efficient they discharge their functions. During the outbreak of conflicts, the security services are expected to maintain law

and order to the satisfaction of the feuding parties. The migrant farmers accuse the security agencies of extortions and corrupt practices when they report cases of nomadic herders trespassing on their crop fields, leading to crop damage.

A smallholder settler farmer stated:

If one reports a herder to the police and does not ‘grease the palm’ of the police personnel, that person will be frustrated until he decides to let go of the case. Even in some cases, when the community undertakes citizen’s arrest of a Fulani herder who has committed an offence to the police station, such offenders are released without being sent through the justice system after the herder’s kinsmen pay a bribe to the security officers (FGDs, SHSF-Tease:10th December 2019).

The frustration of these farmers is captured in the narrative of a settler farmer who angrily accuses members of the security and judiciary service of being implicit in the conflict between settler crop farmers and nomadic cattle herders. He recounted:

“My five-acre yam farm was destroyed by a nomadic Fulani herder; when the case was reported at the police station, the security personnel showed no interest in apprehending the culprit to face the law. This is because I did not give the police officers any money. However, when I shot two cattle at another time grazing on my farm, I was arrested and placed in police custody and sent to court and fined GHC5000[850USD]. I sincerely believe killing the cattle of herders who invade our farms is wrong but reporting the case to the police or going to court is a waste of time. In the absence of getting the needed justice, I have decided to take the law into my hands to protect my livelihood” (Interview, SHSF- Tease: 7th January 2020).

Some of these narratives have made the settler farmers form the impression that security agencies accept bribes (money and cattle) from nomadic Fulani herders so as not to pursue cases through the criminal justice system. The loss of trust and credibility in the security and law enforcement agencies has led to many settler farmers taking the law into their hands. A manifestation of this mistrust has led to the call for security officers to be transferred and the nomadic Fulani herders to be evicted from their communities. The allegations of corruption fuels resentment and erupts muted tensions between crop farmers and cattle herders. The corrupt practices of traditional authorities and the security agencies in land allocations and the dispensation of justice define what Moritz (2012) calls in political ecology 'belly politics' where most traditional landowners are self-seeking rather than in the best interests of the general public. Therefore, this personal interest corrupts political decisions and has led to smallholders rapidly losing their land to the powerful and well-connected, primarily nomadic Fulani cattle herders and large-scale agricultural investors.

In the case study area, political elites, on the other hand, play a critical role in the tensions between the two migrant groups. These political elites are elected representatives at the national, district, and local levels. The politics of political elites are manifested in their rhetoric during the election period in the area. Political actors, therefore, use their power to exploit institutional ambiguities to the disadvantage of the poor in farmer-herder land use rivalry (Mwamfupe 2015). Nomadic Fulani herders accuse political actors of making political capital out of the conflict in the area. The interest of these political actors overrides that of the generality of the populace. It is the basis for which Moritz (2006) avers that to better understand farmer-herder conflict in the West African sub-region, it is necessary to consider more explicitly what individual actors stand to gain from the conflict. Although the machinations of political actors relative to the farmer-

herder conflict were not glaring as in other areas such as Agogo, however, considering that political elites only visit the Kwahu Afram Plains South during the electioneering period and talk about the activities of nomadic Fulani herders creates the impression that their interest is mainly political power and not that of sincerity in solving what has become known as the Fulani menace. A nomadic herder summed his views of the situation in the following words:

“We do not hear of politicians commenting on issues of Fulani herders except when an election is around the corner. Instead, these politicians will visit every community in this area, professing ways to tackle the Fulani menace, with the obvious solution being eviction. They have always used this narrative to appease farming communities to garner votes” (Interview, NFH-Forifori: 11th November 2019).

Such rhetoric emboldens farmers to attack nomadic Fulani herders since they believe they have the backing of the political elites. For example, the assembly member of *Ahenbronomu* electoral area at Tease and other aggrieved smallholder farmers demonstrated and called on the government for swift intervention else, they would invade the bush to fight and move the cattle and herders from the area. The call for eviction has always heightened the tensions in the case study area of the Afram Plains between crop farmers and cattle herders. The approach of various political regimes in Ghana on Fulani issues has been kneejerk, without a concretised commitment to end the conflict between the two migrant groups. Political elites, therefore, gain from the continuation of the conflict because they use the Fulani issue in the country to garner votes to attain political power. A nomadic herder summarised his opinion of the Fulani menace in the following words:

“When political elites solve the conflict between farmers and herders, what will be the basis of their campaign for seeking reelection in the

upcoming assembly and national elections? The rhetoric of violence and eviction of nomadic herders in the Kwahu Afram Plains South, therefore, serves as a political springboard that propels politicians to political power be it at the local or national level” (Interview, NFH-Forifori:11th November 2019).

The narratives and observations in this section of the thesis chapter align perfectly with the political ecology thesis, which states that people’s interaction with the environment is motivated by their interests, which is evident in the research study district. The actions of the landowners in granting land access to the migrant groups are driven by monetary consideration toward their personal interests. Political actors involved in the conflict are more concerned with how much they can profit from the conflict than its resolution. Corruption and greed in the case study area describe a system where traditional landowners and government officials systematically exploit political power and authority, negotiate institutional ambiguity and complexities to appropriate public resources for their personal benefit (Massey 2017; Moritz 2012). The outcome is resentment and the eventual outbreak of conflict between the two migrant groups in the case study area of the Afram Plains

6.8 Conclusion

This chapter discussed the role of land in the disputes between smallholder settler crop farmers and nomadic Fulani cattle herders in the case study area of the Afram Plains. The section discussed the means of land access by migrant groups in the area while stressing the changing means of land access from sharecropping contract arrangements in the past to fixed land rentals and leases. The chapter further stressed factors underlying contestations and conflicts over land and the immediate causes of the conflicts. It is argued that even though population growth, migration induced by dwindling ecological resources, and large-scale land acquisition for

agriculture development were the factors underlying contestations and conflicts over land, the immediate causes that instantaneously ignite conflicts between the two migrant groups are crop destruction, killing of cattle, burning of bushes and Fulani herders engaging in social vices. The chapter also highlighted the economic and political considerations that influence farmer-herder conflicts. Increasing land rents and disputes between chiefs over land rights presented challenges to land access and influenced conflicts between settler farmers and nomadic herders. The challenges in land access have presented an opportunity for corrupt practices in land allocations by traditional authorities and the dispensation of justices by the security agencies. Such corrupt practices are highlighted as a factor that leads to resentment and conflict between crop farmers and cattle herders. The theoretical foundation of the chapter was through the interface of the environmental scarcity and political ecology theories. The interface of the two theories has aided in unpacking the complexities of the conflict involving settler crop farmers and nomadic Fulani cattle herders in the research study area. The theories highlighted the underlying factors of the conflict and the opportunism of some actors to exploit the conflict for their personal interests. The next chapter investigates the effects of and mechanisms in alleviating disputes between crop farmers and cattle herders in the case study district of the Afram Plains.

CHAPTER SEVEN

Effects and Mechanisms for Alleviating Farmer-Herder Conflict

7.1 Introduction

Conflict is ubiquitous in any human society, but in Ghana, the dispute between crop producers and cattle herders has become a national issue because of its recognition as an emerging security threat. Hardly a day passes in the country without the media reporting clashes relating to crop producers and migrant cattle herders. In terms of its intensity and frequency, the conflict has ramifications both locally and nationally. This chapter is broken down into three parts. The first part looks at the consequences of farmers-herdsmen confrontations in the case study district of the Afram Plains, and the second part focuses on the mechanisms used in alleviating the conflict. The chapter's last section assesses the effectiveness of these mechanisms in resolving the clashes between the two migrant groups in the case study district.

7.2 Effects of Farmer-Herder Conflict in the KAPSD

The research revealed that the conflict between crop farmers who are settlers and nomadic cattle herders had affected every facet of life in the case study area. The effects ranged from livelihood, rising debt, development, community safety, lives and property, social issues, and the effect on land governance and administration. The consequences of the conflict involving the two migrant groups are analysed through the environmental scarcity and political ecology theories.

7.2.1 Effect on Livelihoods

A significant consequence of the dispute in the case study area is the implication on farmers' and herders' output and income. Lower crop yields because of the conflict directly affect the incomes

of farmers and herders. Farmers explained that lower crop yields are recorded mainly when the conflict erupts, especially in the dry season. The farmers posit that they are not able to go to their farms to engage in diverse agronomic practices to improve crop yield. Farms in conflict-prone areas are virtually abandoned for fear of being attacked by nomadic Fulani cattle herders. This impacts crop yields from the farms, which predictably affects the incomes of the actors during the conflict. A smallholder farmer describes his personal experience of how his income from the sale of harvested produce over the years has reduced drastically as follows:

“My three-acre maize farm previously could give me an income of GH¢2160 per planting season. This is six bags per acre and sold at GH¢120 per bag. However, due to the incessant conflict over the years between farmers and herders, I am not able to go to the farm and weed around the crops. As a result, the farm was virtually deserted, with weeds completely taken over the farm. It was only last week that I visited my farm with three of my siblings to harvest what had been left on the farm. I only had GH¢ 275 after selling what we harvested. You can see that there is a significant reduction in my income. From the same piece of land I cultivated and harvested 18bags of maize three years ago, today, that same piece of land is giving me less than three bags. The simple explanation is that the conflict has created insecurity as farmers are afraid to go to their farms” (Interview, SHSF-Kwasi Fante: 4th December 2019).

Another smallholder settler farmer who was virtually heartbroken recounted how the conflict negatively impacted him economically:

“I recollect vividly when some farmers attacked some nomadic herders in their camps for destroying their crop fields. The nomadic herders were hell-bent on retaliating against the farmer’s attack. As a result, they targeted individual farmers in their crop fields. I know of

about four farmers who were attacked and brutalised on their farms by some of the nomadic herders. Unfortunately, one of the farmers, a 52-year-old male, lost his life after he run home and was taken to the hospital. From that time, I never returned to my five-acre yam farm. Since the herders had threatened to attack any farmer seen in the bush or on their farm. Because of this situation, I could not harvest even a tuber of yam from the farm. The situation affected my income and negatively impacted my family's livelihood" (Interview, SHSF-Odumasua:14th November 2019).

During a focus group discussion with some settler farmers, they broaden the effect on livelihoods as follows:

The problem caused by the nomadic herders' activities in the area affects the farmers and the livelihoods of the women who come here to buy foodstuffs to the larger cities. Traders come from most major cities, including Nkawkaw, Koforidua, Accra, and Kumasi. So, if we are not able to produce, how will they survive? Worryingly, the majority of the youth in the area have lost interest in farming. They now idle around, with others migrating to the cities in search of wage labour. If it were not for the destructive activities of these nomadic herders, our youth would have remained in the village and engaged in agriculture, which is preferable to the hustling in the city (FGDs, SHSF-Tease: 10th December 2019).

The effect of the conflict on productivity and income does affect not only smallholder farmers but also nomadic herders. This occurs when cattle of nomadic Fulani herders are gunned down either by farmers or personnel of the joint police and military forces deployed to ensure peace during such conflict operations. A nomadic Fulani herder describes his experience as follows:

“I lost twenty of my cattle last year through shooting by farmers and security forces. This affected my investment as one cattle could be sold at GHC3000. A ‘herder without cattle is not a herder’. I am a herder because of the cattle I look after. This is the only work I am engaged in, and therefore, if farmers and the security forces shoot and kill my cattle, then I will be deprived of my sources of income and investment, which will invariably affect the livelihood of my family” (Interview, NFH-Ekye-Amanfrom:18th November 2019).

For this reason, Bannon and Collier (2003) argued that as conflict rages, income tends to plummet while mortality rises and disease spreads. Both actors in the conflict, who are crop farmers and cattle herders, bemoan the economic consequences of the disputes on their incomes. It is evident from the discussions that the conflict among the two migrant groups in the research study district of the Afram Plains is wreaking havoc on crop and animal production, which has a direct effect on farmers’ and herders’ incomes. This conflict effect is exactly anticipated by the environmental scarcity theory, where the interactions of population growth, degradation and unequal distribution of resources produce a social effect such as a reduction in productivity leading to socio-economic deprivation. Hence, the recurring conflict involving farmers and herders has led to reduced food and animal production, affecting the incomes of the feuding parties and, ultimately, their livelihoods.

The debilitating effects of farmer-herder conflicts, particularly on agricultural productivity and security, apart from the narrative of the farmers and herders, have received extensive media coverage and commentary from government officials over the years. Local media in the research area, and the Ghana News Agency have reported on the conflict between farmers and herders, portraying it as gruesome, violent and on the rise. These media reportage further enhances the narratives on the effects of the conflict on the people’s livelihood in the area. For example, there

are reported cases of farms being destroyed by the cattle of nomadic herders and farmers mobilising to attack herders and kill their cattle. Both actions by the two parties directly impact the livelihood of the people (See <https://gna.org.gh/19151273>; <https://citifmonline.com/2018/03>). Similarly, government officials have weighed in on the conflict between local farmers and nomadic cattle herders in the country. On the floor of Ghana's Parliament in February 2017, statements were made by some Members of Parliament to give support for the passage of legislation that will mitigate the effect of the conflict. Their statements were to the effect that some nomadic Fulani herders allowed their cattle to massively storm and destroy crops which adversely affected the livelihood of the communities. In his supporting statement, the Minister of Interior, Honouable Ambrose Dery argued that the issue is both timely and perennial and that the ramifications are widespread and cannot be ignored. Thus, these commentaries and media reportages give credence to the narrative of the effects of the conflict on the loss of agricultural productivity, thereby impacting negatively on the livelihood of the people in the research area.

7.2.2 Effect on Food Security

Agriculture drives the local economy in the case study area. Specifically, the agriculture sector employs 19000 out of the 25007 household population in the case study area. These households are involved in subsistence agricultural production, which is the bedrock of the local economy of the research study area. Smallholder subsistence agriculture in the area ensures and promotes food security. However, the current clashes between the two migrant groups in the area, mainly during the dry season, present imminent food security challenges to the local economy with reverberating consequences nationwide. Although Ghana is fairly stable in terms of food security, at the household and individual levels, food security is not guaranteed (Osei et al. 2013). The present recurring conflict between smallholder settler farmers and Fulani nomadic

cattle herders in the case study area has prompted serious worries about food insecurity, which present a pervasive threat to the livelihood of both actors in the conflict and the members of the larger community. These food insecurity concerns do not fall short of Martin-Shields and Stojetz (2018) contention that millions of people globally are affected by food insecurity, becoming increasingly concentrated in conflict-affected areas. A smallholder farmer described the consequence of the conflict on agriculture productivity in the research district as follows:

“As subsistence farmers, we cultivate basically for home consumption, but where there is excess, it is sold at the market. The sale of harvested food surplus is used to meet basic needs such as paying fees for children, buying clothes, and paying for medical bills, among others. Usually, during the dry season, when the conflict between farmers and herders erupts, most farmers are forced to buy foodstuffs from the market. This is because during the outbreak of the conflict, farmers could not go to the farm to harvest crops. The crops are left in the bush and are destroyed by cattle or stolen by miscreants leaving nothing for the farmers and their households to feed on” (Interview, SHSF-Kwasi Fante: 4th December 2019).

Another farmer recounted how he struggled for his family to survive when his farm was destroyed by the activities of the nomadic herders as follows:

“Because of the conflict, I lost every produce on my farm. I did not go to the farm again when I heard that the nomadic herders were attacking farmers in their crop fields. My family survived by buying foodstuff from the open market. However, with pressure on the few produces on the market, prices of foodstuff began to increase, affecting our access to the quality and quantity of food for my household. Had it not been the benevolence of neighbours, relatives

and friends, I would not know of our fate as a family today”
(Interview, SHSF-Kwasi Fante: 4th December 2019).

To further confirm food insecurity concerns, Discussants during a focus group discussion were of the view that the activities of the nomadic Fulani herders have reduced food productivity. The farmers stated that the large herd’s population had reduced the arability of several places. The continuous grazing by the cattle of the Fulani herders has exposed the area to soil erosion and further compacted the soil, which makes it difficult to prepare for farming. The net effect of this is that previously cultivated areas are left, thereby reducing the farm sizes, which has led to reduced productivity in the area. This is especially in areas in the district where the presence and activities of the herders are prevalent (FGDs, SHSF-Odumasua:14th November 2019). The food insecurity concerns were also highlighted by the nomadic Fulani herders, who stated that sometimes they had to travel outside of the case study area to buy some foodstuffs. The nomadic herders intimated that the few farmers who gifted them foodstuffs during the harvest season no longer do so as those farmers are also struggling to feed their families (Interview, NFH-Forifori:11th November 2019).

It is evident from the narrative that the recurring conflict between smallholder crop farmers who are settlers and nomadic cattle herders in the case study area drastically affects food production, which hinders food access and utilisation. Food access and utilisation are embedded in the concept of food security, which is primarily defined as a situation in which all people, at all times, have physical and economic access to sufficient, safe, and nutritious food to meet their dietary needs and food preferences for an active and healthy life (Food and Agriculture Organisation [FAO] 1996). Conflict, therefore, has a positive correlation with food insecurity (Brinkman and Hendix 2011). This is the case in the research study area, as food crops, and

livestock production are negatively impacted. Observations during fieldwork confirmed the views expressed by smallholder crop farmers and nomadic cattle herders on the food insecurity concerns in the area. My observations showed that some households had exhausted their food stock and were consuming grains that they had reserved as seeds for the coming planting season. I also observed a four-acre maize farm, yam stored in barns on the farm and a two-acre watermelon farm that had been entirely grazed by cattle and abandoned. These observations and other occurrences in the area have led inhabitants to be confronted with food insecurity concerns.

These concerns, however, in the case study area were debunked by the Ministry of Food and Agriculture Directorate (MoFA) at Tease. The Ministry of Food and Agriculture premised the directorate's argument on the improved agricultural yield over the past three years. The Ministry further stated that the policy of Planting for Food and Jobs (PFJs), which came with fertiliser subsidies and improved seedlings, has resulted in substantial increases in agricultural output over the last three years. The Agriculture Directorate at Tease claimed that, as a result of the strategy with some selected farmers, cultivated areas of these maize farmers increased from 3000 hectares in 2017 to 4,464.8 hectares in 2018, with an average maize production yield increasing from 2.5 to 3.9mt/ha during the same period. Other food crops, including yams, rice, and cassava, also had significant increases in output during this time (Interview, MoFA-Tease: 12th March 2020).

Despite the growth in agricultural yield in the district, households, and individual smallholder farmers and nomadic herders have suffered considerable damage to their crops and livestock through the recurring conflict. In the study area, steady food security is ensured by the combined production of individual and household units. Hence, the presence of conflict means that these individuals and household units will not be able to achieve the desirable crop yields, thus, affecting the cumulative agriculture productivity and raising the possibility of food insecurity in

the research study district. The concern of food security in the case study area because of the activities of farmer-herder conflict reflects an illustration of a larger problem in the West African sub-region which is supported by the conclusion drawn by Kah (2017), where insurgent activities, especially by Boko Haram in northern Nigeria and Cameroon, have affected the food quantity and quality of smaller households and those in internally displaced people's camps, leading to poor health outcomes.

7.2.3 Rising Debt

Debt refinancing is a critical economic effect of farmer-herder conflict in the research study district. Evidence from the field suggests that most farmers had contracted loan facilities from various financial institutions operating in the area. A smallholder farmer stated:

“I contracted a loan from the Afram Rural Bank to expand my maize farm. The loan terms were for me to pay the bank after the harvest of my crops with interest. However, my five-acre maize farm has been destroyed through the activities of the nomadic Fulani herders making me incur substantial debt, which am still paying to the bank on a new renegotiated payment term” (Interview, SHSF-Tease: 7th January 2020).

This narration corroborates the views expressed by discussants during focus group discussions with some smallholder farmers in the case study area. The farmers revealed that their inability to repay loans from some financial institutions had led to their collateral being liquidated by the financial institutions to offset their loan obligations. Others stated that those without any collateral and who had to pledge the sale of harvested crops are heavily indebted to the banks, which are always on the heels of the farmers to pay their debt. The failure to pay loans contracted from the banks by smallholder farmers is because of the destruction caused by the

marauding herds, which have led to crop failure or lower crop yield (FGDs, SHSF-Odumasua:14th November 2019). This is socio-economic effect that Homer-Dixon and Percival (1995) describe within the environmental scarcity theory. People's income reduces, and they become indebted as a result of reduced agricultural yields, which invariably leads to agitations and deprivation conflicts at the local level.

7.2.4 Effect on Development of the Area

The recurring confrontations between smallholder crop farmers, who are settlers, and nomadic Fulani cattle herders in the case study area present development hindrances to the local administration. The effect of the conflict on local administration implies that the much-needed funds for development and administration are sunk into resolving the conflict between the two migrant groups in the area. The overall outcome of this recurring phenomenon is the underdevelopment of the area, with the essential needs of the inhabitants unmet. One approach that the state and its agencies had used to address farmer-herder conflicts was the use of state security forces to evict nomadic Fulani herders when conflict erupted. These are joint police and military forces code-named 'Operation Cow Leg'. The task of these joint security forces is to serve as a buffer between crop farmers and cattle herders to stop the conflict from worsening but, more specifically, to evict the nomadic Fulani cattle herders from their areas of operations in the country. In the research study district, the operations of the joint security forces are activated at the instance of the District Security Council (DISEC) when tension heightens and escalates into violent conflicts. The confrontation between the settler farmers and nomadic Fulani cattle herders is an annual ritual, especially in the dry season when nomadic Fulani herders move from the Sahel through the northern regions of Ghana into the case study area of the Afram Plains.

The operations undertaken by the joint security task force in the research study area are financed mainly through the Internally Generated Funds (IGF) and District Assembly Common Fund (DACF). These founding sources are meant for undertaking development-related infrastructural projects across the district. Nevertheless, infrastructural development is sacrificed to ensure peace and order through security deployment towards conflict resolution between smallholder settler crop farmers and nomadic Fulani cattle herders. A public official commenting on the effect of conflict on development in the area said:

The Kwahu Afram Plains South District Assembly spends a substantial part of its budget curbing the upsurge of farmer-herder conflict per annum. The money is expended on the joint police and military operations through the provision of food, accommodation, allowances, and logistics. This affects the development budget of the assembly, and it explains why the KAPSD lags in terms of the provision of basic needs, such as water, health, and education facilities. The economic implication of this phenomenon is the assembly's inability to meet its development targets, thereby rendering many of the areas in the district underdeveloped, with residents lacking access to essential needs, such as water, health, and education (Interview, DPO-Tease:11th March 2020).

A smallholder farmer lamented the impoverished conditions in his area. The farmer commented on the situation as follows:

“We do not have a good source of drinking water in this village. When the stream dries up, usually in the dry season, our women and children must walk miles to fetch water. Upon completion of the primary school here, our children also travel great distances to access junior high school in the big towns. The situation has forced many parents to send their children to stay with people in the towns so they

can have access to education at the junior high school level. We have complained countless times through our elected assembly representative, but the challenges have not been addressed” (Interview, SHSF-Kwasi Fante: 4th December 2019).

My observations in some areas where I conducted research confirm this farmer’s narrative. Except in the major towns, there were no standpipes. What I noticed were mechanised boreholes and hand-dug wells from which the communities accessed water. During the dry season, most of these hand-dug wells quickly dry up. Where these mechanised boreholes are available, they are few, and the members of the community had to queue to get access to water. In the villages, however, this type of water source is non-existent, forcing the villages to rely on streams and rivers as their source of drinking water and for use in household chores. I further observed young students walking from their villages to nearby towns like Maame Krobo, Forifori and Tease to attend school. The distances between the villages and the towns where the schools are located are many kilometres.

7.2.5 Community Safety

The conflict in the case study area has erupted into implicit and explicit expressions of hostility and antagonism between smallholder crop producers and nomadic cattle herders. This is because of the introduction of small arms and light weapons (SALWs) in the conflict by the two parties. Both smallholder settler crop farmers and Fulani nomadic cattle herders are armed against unsuspected attacks. A nomadic cattle herder explains the reasons why they carry guns while herding their cattle: “The guns we hold are not meant to harm farmers in the host communities but is because of the threats we face from fiercely armed rustlers and other criminal groups in farming communities” (Interview, NFH-Forifori:11th November 2019). Notwithstanding this

explanation from the herders, crop farmers blame nomadic cattle herders for using guns to intimidate them. This has, therefore, led to settler farmers also acquiring locally produced guns for self-protection. The proliferation of light weapons in the research study district has, thus, increased residents' sense of insecurity. An opinion leader, who is also a smallholder settler farmer, summarised the security concerns from the disputes between the two migrant groups as follows:

The recurring conflict has created general insecurity in the area. While farmers have deserted their bush farms, women who trade in adjoining villages and communities have stopped for fear of being attacked, robbed, raped, and killed by gun-wielding nomadic Fulani herders. On the other hand, Fulani herders who stay in bush camps on the outskirts of villages are also not able to come into the communities to purchase basic needs for fear of being attacked by the farmers (Interview, SHSF-Tease:7th January 2020).

I observed that most adult males in the case study area have purchased locally manufactured guns which they display on themselves when going to their farms. Therefore, the young men are under obligation to defend their communities against the attacks of nomadic Fulani cattle herders. This is contrary to the gun culture in Africa, which, hitherto, was prevalent in hunting and performing traditional rites, such as funerals, festivals, and chieftaincy rites. The increasing dangers of the gun culture in rural African societies dovetail into the argument that masculinity is largely tantamount to militarised aggression. As a result, men are under constant pressure to assert their manhood by joining terrorist groups and engaging in a variety of violent acts (Matusitz 2014). These young men, thus, must prove their bravery and preparedness in defence of their communities against any encounter with nomadic Fulani herders both in the bush or around human settlements, thus raising the stakes of insecurity in the area.

The growing local gun manufacturing points and porous borders of the country, accentuated by the general insecurity in most West African countries, have increased the transfer of illicit arms into Ghana, further exacerbating the violent nature of the conflict between crop farmers and nomadic cattle herders. Krasner (1999:13) argues persuasively that a country that cannot control what enters its territory will be unable to control what happens to it. The threat, therefore, from these illicit arms transfers into the country has heightened the safety concerns in the research study district. The implication of these illicit arms on insecurity is captured by the expression of the Police Command at Tease in the following:

The general security situation in the Kwahu Afram Plains South has become highly explosive. As a result, steps to quickly de-escalate tensions are required, given the resolve of settler farmers to defend themselves and their communities against the aggressive activities of nomadic Fulani cattle herders. This insecurity has caused the general peaceful environment to deteriorate, hurting not just the feuding parties but having a broader security implication nationwide. However, with the increased police visibility in hot spot areas and the continued stakeholder dialogue, the security concerns in the area will be addressed soon (Interview, SS-Tease:13th March 2020).

In terms of the social effect of the conflict, this much has been articulated by the environmental scarcity theory, which states that increased scarcity culminates in weakened states and, consequently, results in ethnic conflicts, the overthrow of regimes and deprivation conflict. However, what is new in our observation in the case study area in terms of security concerns is that the conflict is at the micro-level, affecting community safety, rather than the macro-level prediction of the social consequences of environmental scarcity.

7.2.6 Social Effect

The social implication of the conflict in the case study district is manifested in the prejudices and stereotypes directed at nomadic Fulani cattle herders and social tensions that have resulted in the lack of social cohesion and solidarity between the two migrant groups. The conflict between smallholder crop producers and nomadic Fulani herders has resulted in prejudices and stereotypes against Fulani herders. The herders believe that farmers disrespect them and call them names which is an affront to their very existence as humans. A nomadic Fulani herder explains the prejudices that farmers have against them as follows:

“The crop farmers look down on us as if we are not human beings. They refer to us using demeaning names, rapists, robbers, murderers, primitive and dirty people. Others sometimes refer to us as terrorists”
(Interview, NFH-Forifori:11th November 2019).

The farmers, during a focus group discussion, confirmed these prejudices they have about nomadic Fulani herders while describing the nuisance the nomadic herders pose to the environment and the insecurity that has engulfed the area with their presence. The farmers sarcastically stated that when a Fulani cattle herder passes by you, his body smells cow milk. The farmers further stated that because the herders live in the bush with their animals, they behave the same way as their cattle (FGDs, SHSF-Tease:10th December 2019). It is important to appreciate that, far from living in the past, pastoralists are among the most enthusiastic users of new technology, such as solar panels and mobile phones (Kratli and Toulmin 2020).

Another prejudiced perception of the farmers that came up strongly during the interview sections was the non-citizen status of the nomadic Fulani herders. The general perception of the settler farmers in the case study area is that nomadic Fulani cattle herders are not Ghanaians and do not

have citizenship rights. The non-Ghanaian status of the Fulani nomadic herders has led to calls for their eviction from the Kwahu Afram Plains South District. The prejudice against Fulani herders is not only at the local level but has taken on a national character, culminating in various policies to evict and discriminate against nomadic Fulani herders (Tonah 2002). These prejudices and stereotypes have created a strained relationship between farmers and herders. Some herders have stated that the prejudices and stereotypes that farmers have about them make them feel not welcome in the host communities.

Another social consequence of the conflict is the division or fragmentation of the community. This division has affected social interactions between crop farmers, who are settlers, and nomadic cattle herders in the case study area. Society comprises individuals or groups who are bonded together through shared values, norms, principles, understanding, and reciprocity. These attributes or values ensure that individuals or groups live in peace, harmony, and tranquillity. In the case study area, the conflict has weakened the cohesive force that bonds community together. The weak cohesive binding force is based on suspicion, mistrust, and rancour that has characterised the relationship between crop farmers and cattle herders. The social ambience in the area today is that of tension and animosity between the two migrant groups. For example, in the case study area, if cattle die strangely, farmers face retaliation, and if vegetation is destroyed, farmers' anger is directed at nomadic Fulani herders (Otu et al. 2020). The mistrust has broken the social cohesiveness in the community.

As aptly pointed out by Putnam (1995), the more we connect with other people, the more we trust them and vice versa. Unfortunately, mistrust between farmers and herders has created a social gap that fuels conflict at the least provocation. Discussants during a focus group discussion whose family members had suffered from the conflict indicated that they would not

relent until they received justice for the victims. This has created a high level of animosity against the nomadic cattle herders. While a few farmers expressed pain and anguish over the loss of their loved ones, they could not hide their desire to avenge their loss (FGDs, SHSF-Odumasua:14th November 2019). The effect of this experience could result in a negative narrative that could be passed down from one generation to the other, leading to an aggressor cycle of demonising other feuding parties, which will ultimately result in the desire to revenge, thereby further heightening the social tensions between peasant crop farmers and migrant cattle herders (Ademola-Adelehin et al. 2018).

The division or fragmentation of the communities in the case study district has further resulted in the lack of cooperation leading to the non-integration of herders into their host communities. Integration, in this context, refers to people's participation in a particular geographical area's social and political activities. I observed in the case study area that there is a high level of economic exchanges leading to increased levels of social interactions among the different ethnic groupings in the area, but that with the nomadic Fulani herders was very minimal and, in some areas, non-existent. The nomadic Fulani cattle herders hardly come to the communities to engage in social activities, such as marriage ceremonies, funerals, and other community social occasions. They only come to buy basic needs under cover of darkness for fear of being assaulted by farmers much as farmers are afraid to walk to their farms alone for fear of a surprise attack by a lurking herder (Otu et al. 2020). This contrasts sharply with the economic and non-economic ties between cattle herders and the people of the West Mamprusi District. In this area, Mamprusi men entrust their cattle to Fulani herders, frequently assisted Fulani herders to convert their thatched homes into mud houses, assisted the herders to construct kraals when the old ones became too weak to retain unruly cattle, and even intense social relations do develop between

Fulani girls and Mamprusi boys (Tonah 2005:207). The tensions, unlike what exists, in the West Mamprusi District, have resulted in exclusion and a lack of interactions making it impossible for the two migrant groups to cooperate for a peaceful resolution of the conflict in the case study area.

7.2.7 Effect on Lives and Property

Conflicts, when they occur between groups, result in the loss of lives and property. In the case study area, clashes of farmers and herders have been violent and widespread, characterised by attacks and reprisal with recorded deaths, injuries, and destruction of properties. Casualties in the conflict include the main actors, who are crop farmers and nomadic cattle herders, security officials, and members of the community where the conflict erupts occasionally. Records from the District Police Command at Tease showed that several persons died through the recurring farmer-herder conflicts as a result of gunshots or machete wounds. A cursory observation of the station diary shows that, in October 2015, three nomadic herders were murdered following a probable retaliatory attack by residents of Odumasua in the case study area. Five people were killed in yet another deadly confrontation between nomadic Fulani herders and Konkomba settler farmers in the research study district of the Afram Plains in June 2016, and, in March 2020, tension arose in the farming community of Gyenebofo, when a nomadic Fulani herder shot and killed a Konkomba farmer over disagreement on grazing land.

Usually, the conflict involves mobilising groups to attack each other. For example, the farmers mobilise and invade huts and tents of nomadic Fulani herders by setting fire to their homes, leading to the destruction of properties and vice versa. In the incident at Gyenebofo, a farming community in the case study area of the Afram Plains, the farmers mobilised and burnt down the

household of Fulani herders, thereby destroying the personal property of innocent herders, while the suspect absconded (Interview, SS-Tease: 13th March 2020). A nomadic Fulani herder lamented how, during disagreements with farming villages, the youth mobilised and ransacked their homesteads with some of the invaders stealing the calves of their cattle (Interview, NFH-Ekye-Amanfrom: 18th November 2019). The farmers claim that they had lived peacefully among themselves until the Fulani herders arrived in the area.

Ever since these unknown herders surfaced in our communities, it is one problem after the other. The community has not known peace ever since. The activities of the nomadic cattle herders have brought us misery and pain. They have murdered our kinsmen, rendering some women to be widows and single parents. Because of how these herders are terrorising us, some of the members of this community have left and relocated. If nothing is done to stop the nomadic herders, very soon, all of us will be forced to abandon farming and leave the area entirely (FGDs, SHSF-Odumasua:14th November 2019).

This sense of helplessness and frustration resonated with all the settler farmers who participated in the study. The interview with the police revealed that the outbreak of farmer-herder conflicts in the case study area happens mainly in the dry period when nomadic herders arrive to feed their cattle. The District Police Command confirmed the killing of humans and herds and the destruction of property, including houses, motorcycles, bicycles, and other personal possessions. The District Police Command was, however, quick to add that most of the perpetrators of these heinous crimes are hardly apprehended as the acts occur in the bushes or in the wee hours of the night. This notwithstanding, the police have increased their presence in hotspot areas and are visible even in areas where the tensions are muted. The police reveal that they have arrested

some suspects who are facing the justice system while they are on the heels of others who have absconded. The Police Command indicated that the District Security Council is engaging stakeholders on effective ways to address the recurring conflict between settler farmers and nomadic cattle herders in the case study area (Interview, SS-Tease:13th March 2020).

The 2018 report of the West Africa Network for Peacebuilding (WANEP) and the findings of Kratli and Toulmin (2020) confirm the extensive nature of the incidences of armed attacks by herders in Ghana. The report stipulates that there were nine separate incidents of armed attacks by herders in 2018, all of which resulted in the deaths of people and the loss of property in Zabzugu in the Northern Region, Boliga Nkwanta in the Brong Ahafo Region, Agogo, Drobonso, Geduako and Nsuta in the Ashanti Region as well as the Afram Plains and Ntrognan in the Eastern Region of Ghana. Similarly, Kratli and Toulmin (2020), using the Armed Conflict Location and Event Data (ACELD) report, identified the hotspot of incidences involving pastoralists between 1997 to 2017 in the Eastern Region of Ghana to include Afram Plains, Kwahu East, and New Juaben. The report shows 603 violent incidents in Ghana in the above stated years, 2.6 percent involving Fulani pastoralists, with 38 fatalities. The data, therefore, speak to the growing concern about the activities of nomadic Fulani cattle herders broadly in Ghana and specifically in the Afram Plains area.

7.2.8 Effect on Land Administration and Governance

The chieftaincy institution plays a pivotal role in land governance and administration in Ghana. This is because traditional authorities oversee around 80 percent of customary lands in the country, where they act as allodial title holders on behalf of members of their communities. This important function of traditional authorities is enshrined in Article 267(1) of the 1992

Constitution of the Republic of Ghana, which stipulates that ‘all stool lands in Ghana shall vest in the appropriate stool on behalf of, and in trust for the subjects of the stool in accordance with customary law and usage’. The chiefs are revered and are regarded as both spiritual and political forerunners who serve as a link between the living and the ancestors and between the rural folks and the modern political state. The chiefs play a facilitation role in customary land allocation and adjudication over disputes in their jurisdictions, but also have the authority to impose and apply sanctions on community members.

The authority of the traditional leaders in land management on customary lands in the case study area currently is gradually dwindling. Customary land administration in the case study area has produced discontent among traditional landowners, community members, tenant farmers and herders due to the lack of accountability and openness. The diminishing powers of traditional leaders are evidenced by the lack of ability to mediate disputes, enforce traditional norms and rules, and reach agreeable solutions in the community, especially on issues that involve nomadic Fulani cattle herders. This challenge has arisen because of two main issues. First, while some traditional authorities are said to be compromised, making it impossible to take fair decisions over land allocations and adjudicate disputes between the two migrant groups without being biased, second, the concept of space of land by Fulani herders has influenced their disregard for norms and rules around land. The Fulani herders, for example, view any piece of land that is unoccupied as not for anyone, which informs their grazing pattern. The declining power of traditional authorities was confirmed by a sub-chief who stated:

It has been difficult to control the conflict between the settler farmers and the nomadic cattle herders. The recurring conflict between the two groups, which used to be isolated skirmishes has now turned violent. The nomadic Fulani herders are now out of control, making it

difficult for the traditional authorities in the area to control. This is why the assistance of the joint police and military task force is brought in when conflict erupts between smallholder settler farmers and nomadic Fulani herders (Interview, TA-Tease:7th January 2020).

The settler farmers, on their part, advance the argument that the declining authority of the traditional leaders in customary land management in the area is due to the involvement of some of the traditional leaders in the conflict. According to participants in a focus group discussion:

The chiefs are the ones that welcome nomadic herders into their jurisdiction because of the gains they derive from their presence. Some of these chiefs are corrupt because our access to land is restricted for higher monetary gains from nomadic Fulani herders. The disguised gifts in the form of cash and cattle from the herders have made the chiefs powerless, as they are not able to control the Fulani herders when they go on the rampage. Even when disputes between crop farmers and cattle herders erupt, the chiefs become unfair arbiters because they are allies to the herders. The nomadic Fulani herders fail to take instructions from the traditional authorities, and the farmers do not trust the chiefs to dispense fair justice in land-related disputes. We sometimes take to defiance to cultivate the land without the consent of traditional authorities (FGDs, SHSF-Tease: 10th December 2019).

Thus, the craving for money and parochial interest of some chiefs has given rise to multiple rentals and land allocation, which has resulted in land tenure insecurity within the customary land administration system in the case study area. The conflict between the two migrant groups has, therefore, weakened the powers of traditional authorities to settle disputes and enforce orders, thereby affecting their role in land administration in the area. The effect of the narrative on land governance and administration in the case study area is very well within the political

ecology theory, which helps to understand the interaction between people and nature. The theory states that people's interaction with the environment is driven by their interests, and that is what we see in the case study area through the actions of the traditional landowners relative to multiple sales and land allocation.

7.3 Mechanisms to Alleviate Farmer-Herder Conflict in the KAPSD

Various mechanisms have been deployed both in the past and present to alleviate farmer-herder conflicts in the case study area. While some of these mechanisms have proved successful in alleviating the tensions in the area, others have failed and instead exacerbated the tensions between crop farmers and cattle herders. Traditionally, sustainable peace in most rural agrarian societies was achieved where internal traditions and customs were exploited (Glowacki and Gonc 2013). However, with the level of mistrust against traditional authorities, who have been accused of benefiting from the presence of the nomadic cattle herders and biased in resolving disputes between farmers and herders, the traditional process has become weakened and less effective, particularly among elders of the communities in the research study area. Similarly, the policy of expulsion, which has been used as a tool for eviction of nomadic cattle herders during periods of violent conflict outbreaks, has failed to achieve the desired outcomes. The failure of the expulsion policy is attributed to competing interests of various actors in the cattle business, which breeds corruption, selective justice, and the fear of retaliation by other members of the Economic Community of West African States (Paalo 2020; Agyemang 2019). The current mechanisms used to alleviate farmer-herder disputes in the research study area include the establishment of a cattle ranch, enacting a bye-law on livestock, and stakeholder engagements.

7.3.1 Establishment of Cattle Ranch

A major means by which authorities in the case study area have worked at reducing the recurring conflict between the two migrant groups have been through the establishment of a cattle ranch at Wawase, essentially to confine as many cattle as possible in the area. Aside from the Wawase ranch, which is fully operational, others in the Afram Plains are at various stages of completion in Forifori, Amankwaakrom, and Chemfeh. Upon the completion of all the four fodder banks in the Afram Plains, 2,269 acres of land will be available for herders to move their cattle there. The cattle ranch at Wawase has presently been established on a 680-acres of land and can accommodate 6,000 cattle. The Government of Ghana and the African Development Bank partnered to support the effort in establishing the ranch.

The Wawase cattle ranch currently has two mechanised boreholes and four dams within the ranch to ensure an adequate supply of water. There is also a veterinary officer and other auxiliary staff responsible for the cattle's health. The ranch has been divided into sections, each with 20 to 50 cattle capacity. Upon arrival at the ranch, cattle are foot-bathed, weighed, and vaccinated to avoid transmission of any disease into the ranch. Afterwards, the cattle are given unique tags to make it easier to identify them. The animals are also fed rice straw, wheat bran, elephant grass, and special nitrogen grass specially grown on the ranch (Interview, MoFA-Tease: 12th March 2020).

Confining the cattle essentially prevents them from grazing on crop fields, which leads to clashes involving farmers and herders. The crop farmers unanimously recommended confining herds as a mitigation to the frequent conflict between crop farmers and cattle herders. During a focus group discussion, the farmers remarked that when the cattle are confined, particularly at the

newly established ranch, the herds will not engage in open grazing, especially at night, leading to the destruction of crop fields and the disagreement over payment of compensation, which eventually results in conflicts (FGDs, SHSF-Odumasua: 14th November 2019). However, this suggestion was dismissed by the cattle herders, who opined that confining the herds is not an effective strategy. Furthermore, a nomadic Fulani herder argues that when the cattle are confined, it will not be long when the whole area is depleted of the grazing pastures, which will render the herds malnourished, causing their eventual death (Interview, NFH- Ekwe Amanfrom:18th November 2019).

Sedentarisation of migrating herding groups has always been a challenge from historical times. The perception of nomadic herding by both colonial and post-colonial governments in Africa as unproductive, unorganised, and environmentally destructive has led to attempts to sedentarise nomadic herders by confining their use of resources to certain defined areas. Examples of such sedentarisation policies include Operation Taurin in Ivory Coast, *Gestion de Terroirs Villageois* in the Sahel, the Villagization project in Tanzania and the National Livestock Development Project (NLDP), and the current discussions on the establishment of cattle colonies in Nigeria (Benjaminsen et al. 2009; Bello-Tukur 2005; Turner 1999; Bassett 1988). While the attempt to confine livestock is a good idea, some of these areas lack adequate pastures, water supplies, and extension services, forcing nomadic herders to move their cattle from the confined areas in search of resources elsewhere. Again, confining the cattle will limit herds' access to spatially variable resources (Benjaminsen et al. 2009; Turner 1999).

7.3.2 Enactment of Livestock Bye-Law

The Kwahu Afram Plains South District, as a way of assuaging the perennial settler farmers and nomadic herders' conflict, has enacted a bye-law for regulating the activities of livestock in the area. This is in accordance with the powers granted to the District Assembly by section 181 of the Local Government Act, 2016 (Act 936) on the 21st day of November 2018 and gazetted in the Local Government Bulletin, No. 69 on 4th September 2019. The purpose of the bye-law is to regulate the movement and management of cattle and other livestock in the research study area. The bye-law stipulates, among others, in regulation 2, that a person who owns or keeps livestock shall confine the livestock to a place licensed by the District Assembly. Again, regulation 4 further states that, unless authorised to do so by the District Chief Executive (DCE), no owner, occupier, or person required to confine livestock shall permit or allow livestock to be herded along a highway or over any land of which the person is not in possession. This bye-law aims to prevent herds from coming into contact with crop fields, resulting in crop destruction and the eventual outbreak of crop farmers and nomadic cattle herders' conflict.

A blatant flouting of the bye-law on livestock in the research study district of the Afram Plains attracts severe sanctions under regulations 13 (1 and 2). The sanctions subject to the Local Government Act 2016 (Act 936) and the Criminal and Other Offences (as amended) Act 1960 (Act 29) state that a person who contravenes regulations 2 and 4 of the bye-law is guilty of an offence and is liable to a fine of not less than 100 penalty units and not more than 250 penalty units¹⁷ or a term of imprisonment of not less than 6 months and not more than 12 months or both the fine and imprisonment. Additionally, in the case of continuing flouting of the bye-law, an

¹⁷ A penalty unit is a standard amount used to compute penalties for violations of the law. In Ghana, the monetary value of a penalty unit is GHC 12.00.

offender shall be liable to a penalty unit for each day the offence continues after written notices have been served (KAPSD livestock bye-law 2018). Despite the bye-law on livestock, the difficulty the District Assembly is confronted with in enforcing the bye-law is that most nomadic Fulani herders have not fully bought into settling their herds at the cattle ranch. The herders flout the bye-law and often feign ignorance. Yet, upon being educated on the need to send their herds to the cattle ranch, they refuse with the excuse that their cattle will die or are likely to contract some strange disease (Interview, DPO-Tease:11th March 2020).

7.3.3 Stakeholder Engagement

Stakeholder engagement is another strategy used by the Kwahu Afram Plains South District (KAPSD) to alleviate farmer-herder conflict. The stakeholders include representatives of settler farmers and nomadic Fulani herders, security agencies, assembly members, traditional authorities, and government officials. These stakeholder engagements are held on a regular basis and are, essentially, to discuss ways toward swift response in addressing the occasional violent crop farmers and nomadic herders' clashes in the area. A significant outcome of the stakeholder engagements is establishing a community or village task force in various areas within the research study district. The role of these established taskforces is to respond quickly to any confrontation between crop farmers and cattle herders by escalating it to the appropriate agencies for swift redress before it degenerates into violent conflict (Interview, DPO-Tease:11th March 2020).

In furtherance of this, the involvement of the various stakeholders has built some level of confidence among the feuding parties in the conflict resolution processes. The Ministry of Food and Agriculture Directorate at Tease intimated that they collaborate with the security agencies to

assess and offer recommendations on compensation to be paid when livestock destroys a crop field. Most of these cases are resolved as the nomadic cattle herders see the need to arbitrate for the needed compensation to be paid. However, some cases become extremely difficult to resolve, resulting in them being taken to the law courts or escalating into open conflict (Interview, MoFA-Tease:12th March 2020). When the latter occurs, the District Security Council (DISEC) recommends the intervention of the security agencies to help deal with the conflict. The deployment of joint police and military forces code-named ‘Operation Cow Leg’ has been activated in various parts of Ghana essentially to evict herders from the country. Over the past years, specifically in 1988 and 2000, two major operations were set in motion by the state to evict nomadic herders from the country, and even more recently, in 2012, a high court in Kumasi ordered the Fulani cattle herders to leave Agogo in the Ashanti Region of Ghana (Olaniyan et al. 2015; Tonah 2005). In essence, these mechanisms have been instituted to mitigate the conflict involving the two migrant groups in the research study area.

7.4 Assessing the Mechanisms in Alleviating Farmer-Herder Conflict in KAPSD

As part of the strategies to curb the recurring farmer-herder clashes, the case study area has put in place measures to address the phenomenon. These mechanisms involve the establishment of a cattle ranch, enactment of a livestock bye-law, and stakeholder engagements. In addition to these measures, the District Security Council occasionally activates the joint security task force to undertake eviction of nomadic cattle herders from the area. While these measures are commendable, the conflict’s underlying causes have not been adequately tackled. These intervention strategies have, at best, focused on managing the conflict but do not address the underlying causes of the conflict. There is no strategy to address the land issue as a mitigation measure in the conflict among the mechanisms. The weakness in the mechanisms adopted by the

Kwahu Afram Plains South District, aside from not addressing the core issue of land, is that it mutes the conflict over a short period to violently erupt at the least provocation.

The cattle ranch at Wawase, for example, has failed to attract nomadic Fulani herders because there is only one functioning ranch at Wawase which cannot accommodate the over 64,646 cattle in the area. The three other ranches are at various stages of completion. With the only available ranch able to accommodate about 6,000 cattle, it is difficult to even enforce the bye-law on livestock, especially the provision which requires all herders to send their cattle to the ranch. Even more critical on why the nomadic herders underutilised the ranch is how the ranch is managed. Cattle herders have accused managers of the facility of mismanagement and corrupt practices. One herder stated: “I sent my cattle to the ranch but was informed that six of my cattle were dead within less than four months without any evidence to prove this. In addition, the poor management practices in the ranch had led to premature livestock deliveries” (Interview, NFH-Forifori:11th November 2019). Nomadic herders have, thus, kicked against the idea of being forced to settle in a specific location

Stakeholder engagements, on the other hand, discuss issues related to shooting and killing of cattle and humans, crop destruction, compensations, pollution of sources of drinking water, and other issues associated with farmer-herder conflicts. Even with traditional landowners involved in the stakeholder engagements, the core issue of the land is not discussed. This is because the state or government officials do not want to meddle in chieftaincy issues. This stance of the Local Assembly weakens the stakeholder engagement approach to effectively resolve the conflict. District officials are reluctant to discuss land management issues, which they mainly claim are within the domain of chiefs, who are custodians of customary lands. Ubink and Quan (2008) articulated this when they reiterated that government officials at both the national and

local levels regularly proclaim that they do not involve themselves in chieftaincy issues. So, with traditional authorities as part of the stakeholder engagements, the core issues of land are mainly muted while issues of compensation are instead highlighted, leaving the underlying causes of the conflict unresolved. This explains why, despite the efforts of the Local Assembly, clashes between settler crop farmers and nomadic cattle herders continue and reoccur with no end in sight. Finally, evictions as a mechanism for conflict resolution have been unsuccessful over the years in the case study area. Driving the herders and cattle away to unknown locations, only to have the same conflict erupt, indicates how unsustainable the policy is in addressing the perennial conflict between farmers and herders. Usually, when the nomadic herders have been driven away during the peak of the conflict, it does not take long to return and renew existing agreements with the traditional landowners in areas they have been driven away from. This speaks to the growing interest in Fulani issues where people are willing to protect the presence of the nomadic herders basically because of the economic gains they derive from their presence. This corroborates the findings of Agyemang (2019), who contends that the activities of the herders' eviction in Agogo were characterised by favouritism, nepotism, and bribery. Aside from being selective, some officers accepted bribes from the Fulani cattle herders and allowed them to stay. These weaknesses in the mechanisms have rendered them ineffective in addressing the disputes between the two migrant groups in the research study area.

In effect, the conflict-mitigation mechanisms that have been put in place have been ineffective in addressing the recurring conflict in the area. This is because the very actors who are supposed to ensure the success of these mitigation strategies are engaging in actions that undermine the measures' effectiveness. While government officials mismanage the ranch and engage in corrupt practices, some traditional authorities engage in multiple land sales undermining efforts to curb

the conflict. Similarly, some security personnel also accept bribes by selectively evicting nomadic herders. Such actions by these unscrupulous actors tend to benefit them rather than serve the intended purpose of the mitigation strategy. This is exactly anticipated by political ecology theory, which states that peoples' interactions with the environment are driven by their own personal interests rather than, in this case, guaranteeing the success of conflict mitigation strategies.

To find a coherent solution to the recurring clashes between crop farmers and cattle herders in the case study area, strategies that involve discussions around land rights, tenure and administration need to be instituted. This will ensure equitable land allocations and transparent customary land rentals, which can contribute to resolving the conflict. The discussion on land rights and tenure should transcend the local environment to include the national and the sub-regional levels. This is because the nomadic cattle herders are from different neighbouring countries, which, therefore, imposes a transnational character on the conflict involving crop farmers and nomadic herders. It is also critical to assess the herders' perspectives and challenges regarding sedentarisation to develop a coherent strategy towards a win-win outcome. Thus, subscribing to the development of a ranching scheme should be contingent on how the two migrant conflicting groups receive it. Similarly, since population growth in the area is a major issue that is exerting pressure on land, measures aimed at land conservation, such as reforestation, and conservation education and regulation, are needed to prevent the degradation and depletion of the biodiversity in the area. Other strategies that also aid in mitigating migration should also be explored. The migration mitigation strategy could be done by the Kwahu Afram Plains South District taskforce and immigration officials at the various entry points into the district to ensure that all migrating herds use approved routes into the district. These herds at the

point of entry must be registered for easy identification. The details of where the herds will be located, and the duration of their stay must all be recorded. Those who use unapproved routes should have their cattle confiscated, and their owners surcharged before the herds are released. These records aside, checking migration will assist the district officials to ascertain nomadic herders' identities in cases of breaches of the law of the country and the livestock bye-law of the Kwahu Afram Plains South District.

Additionally, a conscious effort must be directed at addressing the conflict in the area through effective public education and advocacy on the use of non-violent mechanisms to address communal conflict. This approach should be integrated into the formulation and implementation of the District Assembly's medium-term development plan. The effort to ensuring the success and implementation of this initiative should be undertaken by state agencies such as the National Commission on Civic Education (NCCE) and complemented by the various civil society groups involved in conflict prevention and mitigation. These agencies should develop and document peace education narratives in local languages on tolerance, peaceful coexistence, and respect for existing national laws. These educational narratives can potentially change the perspectives of the feuding parties towards each other.

7.5 Conclusion

The chapter discussed the effects and mechanisms for alleviating settler crop farmers and nomadic cattle herders' disputes in the research study area. The chapter had three sections. The first section dealt with the effects of the conflicts. It discussed the effects from the livelihood, food security, rising debt, community safety, social, developmental, lives and property, and land governance perspectives. These effects of the conflict were interpreted through the interface of

the environmental scarcity and political ecology theories. The section argued, among others, that the conflict has affected the livelihoods of the people in the area. The effect on livelihoods is manifested in the reduction of productivity and its consequences on the incomes of the farmers and herders. It was also pointed out that the conflict has led to a downward slide in the community safety in the area, and this has been exacerbated by the introduction of small arms and light weapons in the conflict process by both farmers and herders. The section also discussed how the conflict had affected land administration and governance. The section highlighted the diminishing powers of traditional landowners in the case study area because of their involvement in the conflict. Their involvement, the section argues, has led to traditional authorities not being able to settle disputes and enforce orders because they are seen as interested parties in the conflict. The second section highlighted the mechanisms used in the research study area to alleviate the conflict. The mechanisms include establishing a cattle ranch, enacting a bye-law, and regular stakeholder engagements. Although these mechanisms were commendable, they are short-term in nature. The third section assessed the weakness in the strategies adopted by the district assembly in the case study area. The section pointed out that the adopted mechanisms have weaknesses, which is why there are recurring disputes between the two migrant groups in the research study area. The section also highlighted that the weakness in the mechanisms is because of corruption and the parochial interest of some traditional chiefs and government officials, which is rightly predicted by the political ecology theory. The section suggest that to be able to find a comprehensible resolution to the recurring clashes between farmers and herders, strategies that involve discussions around land rights, tenure and administration need to be instituted. Other measures aimed at land conservation and mitigating migration should also be explored. The study also highlighted the need to engage nomadic herders regarding the

establishment of cattle ranch as a measure for alleviating the incessant conflict, and lastly, measures at addressing the violent conflicts through public education and advocacy should be undertaken. The next chapter presents the findings, conclusion, and recommendations.

CHAPTER EIGHT

Findings, Conclusion and Recommendations

8.1 Introduction

In this chapter, I provide an overview of the study's findings. The central argument of the thesis is that the conflict between the two migrant groups is basically about land access. A significant finding from the study is that land is becoming scarce as more people move into the area to undertake farming or herding activities precisely along the banks of the Volta River and the fertile areas inland. The root causes of this scarcity are the interplay of three main sources of conflict: population growth, migration induced by diminishing resources, and large-scale agriculture investments. This has resulted in an intense contest between crop farmers and nomadic herders for the most suitable ecological spaces in the study area. There are three sections in this chapter. The first section outlines the focus of the study and the research questions that the study sought to answer. The second section highlights the summaries of key findings of the study based on field evidence, which is covered in the empirical Chapters Six and Seven of the thesis. The last section contains the conclusion, recommendations, and areas of further research. The study concludes that the phenomenon of farmer-herder conflict is complex, and it needs to be examined from diverse perspectives to find better ways of addressing the root causes of the land conflict.

8.2 Focus of the Study

The study broadly sought to examine the conflict involving two migrant groups over land access in the under-researched area of the Kwahu Afram Plains South District through the lenses of the interface between environmental scarcity and political ecology theories. As indicated in Chapter

One, the study emerged from the contested debate around the increasing farmer-herder conflict in sub-Saharan Africa. While some argue in favour of the influential environmental scarcity thesis (Homer-Dixon 1999; Baechler 1998), others focus on political ecology, criticising the scarcity narrative for ignoring important issues, such as political and economic factors that have a significant impact on resources and the environment (Benjaminsen et al. 2009; Gleditsch 1998). The evidence drawn from the research study area, however, reveals that the complexity of farmer-herder conflict is an interplay of ecological, demographic, political, and economic factors, the rationale for why the interface of the theories was germane to explaining the conflict. The study's uniqueness is situated in the context where crop farmers and cattle herders are non-indigenes to the area, making their access to land tenuous, thereby exposing their vulnerability to exploitation by the traditional landowners. This contrasts the context of conflict involving indigenous farmers and migrant herders in Agogo, Atebubu, Nkwanta, and Gushigu (Agyemang 2019; Olaniyan et al. 2015; Tonah 2005; 2002). The study, therefore, fills a gap in the literature relating to the land conflict between smallholder crop farmers, who are settlers, and nomadic Fulani cattle herders, who are also non-indigenes in the under-researched area of the Kwahu Afram Plains South District.

The study is guided by the main research question: What are the root causes of farmer-herder conflict in the Kwahu Afram Plains South District? The research sub-questions are as follows:

- What are the factors influencing conflicts over access to land in the research study area?
- How does challenges around land access contribute to conflict between farmers and herders in the case study area?

- What are the consequences of the conflict on the livelihoods of both farmers and herders in the research study area?
- How effective are the mechanisms put in place to alleviate the effects of the conflict in the case study area have been?

In answering the above questions, the research demonstrates that conflict over land access between the two migrant groups is underpinned by three main factors, namely, population growth, migration, and large-scale land acquisitions but what instantaneously ignites conflict between settler farmers and cattle herders include cattle destroying crops, burning of grasses, killing of cattle by farmers, and herders allegedly engaging in vices in host communities. Farmer-herder conflicts in the area have far-reaching implications both on the main actors and the local administration, with reverberating consequences nationwide. It is thus incumbent on stakeholders to examine this hydra-headed development against competing interests towards its resolution.

8.3 Key Findings

The main findings that emerged from the analysis of the empirical chapters of the study are presented below:

8.3.1 Land Scarcity

The main finding of the analysis is that land scarcity is one of the causes of the farmer-herder conflict. Due to the area's growing population, the land is becoming scarce. An area that was previously sparsely populated has seen an increase in population (see Chapter Five). The growing scarcity of land is precisely around the banks of the Volta River and in fertile bush farms mainly occupied by Ewe and Konkomba and other northern tribes, respectively. This is

attributed to the declining ecological resources in the Sahel areas and the northern parts of Ghana, driving nomadic herders to the country's southern regions, particularly the Afram Plains, where the land is fertile, and there are abundant water bodies. Aside from migration, natural population factors also contribute to the growing population. Both migration and natural factors have increased the population, resulting in land scarcity.

The emergence of large-scale land acquisitions for agricultural development in the area has also contributed to the growing scarcity of land. The phenomenon has eroded the land resource base of the two migrant groups, resulting in intense competition for the limited available land resources. With the increasing human and herd populations, and large-scale land acquisitions in the area, land has become limited in supply, thereby creating scarcity. Moreover, since land in the area is predominantly stool and family lands, non-landowning citizens are at the mercy of traditional authorities who control land. This becomes difficult in a situation where chiefs now see land as a means of getting rich by granting land access to the 'highest bidder'.

8.3.2 Destruction of Crops, Killing of Cattle, Burning of Grasses, and Alleged Vices of Herders

Beyond the core land issues of land scarcity, which have arisen from the interactions of population growth, degradation and unequal resources access, the study analysis identified crop destruction, killing of cattle, burning of grasses and herders' alleged vices in host communities as the immediate causes of conflict between the migrant crop farmers and nomadic cattle herders. Crop destruction occurs because herders graze cattle at night, resulting in poor supervision as cattle stray into crop fields. A significant finding on the issue of crop destruction had to do with the payment of compensation. While crop farmers accuse herders of not paying compensation

commensurate with crop damage, herders blame farmers for inflating the cost of crops destroyed on crop fields. The contradictory stance on the issue of compensation for crop destruction has created animosity between the two migrant groups, which often flares up in conflict outbreaks.

Another significant finding that sparked immediate conflict between the two feuding parties is the killing of herders' cattle by crop farmers. The crop farmers attack and kill cattle that intrude on their crop field by either shooting at them or spraying chemicals on grazing areas around crop fields. The settler farmers have denied intentionally spraying toxic chemicals around crop fields where cattle graze but explained the chemical is weedicide meant to burn grasses on their crop fields. This has heightened tensions in the area, with nomadic herders threatening to attack any farmer who tries to kill any of their livestock, which serves as a source of investment and livelihood.

The burning of grasses is also identified as an immediate cause of the conflict. With the dry season accompanied by prolonged drought, herders burn grasses as a survival strategy, allowing fresh grasses to regenerate for cattle to graze. Unfortunately, such wildfires spread to nearby crop fields and granaries, causing massive destruction. This has made settler farmers in the case study area harbour resentment towards nomadic herders, which escalates into conflict at the least provocation.

Lastly, the study analysis reveals that the alleged vices of rape and robbery in host communities by nomadic herders are also immediate cause of the conflict. Even though the settler farmers articulated this sentiment strongly, none could substantiate these allegations by providing any evidence to the effect, especially regarding the issue of rape. The police, on the other hand, stated that both migrant farmers and nomadic herders undertake robbery in the area. It, therefore,

cannot be correct when nomadic herders are blamed entirely for the upsurge in robbery cases in the area. The general vilification of nomadic herders can only be presumed as prejudice, without any hard-core evidence. The labelling of all nomadic herders as criminals is centred on people's proclivity to categorise, react to, and judge others by viewing them as a group rather than as individuals.

8.3.3 Impact of Conflict on the Livelihoods of Both Migrant Groups

Another key finding from the analysis of the study is that the conflict between the settler crop farmers and nomadic cattle herders negatively impacts the livelihoods of both groups. Both crop farmers and cattle herders suffer the implications of the conflict on their output and income. This is due to the farmers' inability to visit their farms and implement agronomic practices to improve crop yield, resulting in a poor crop harvest, which increasingly affects their income. Similarly, nomadic Fulani herders suffer significantly during the conflict when their cattle are gunned down by farmers or by personnel of the joint police and military forces to maintain peace during such conflict operations. In effect, the recurring conflict negatively impacts both crop and animal production, which directly affect the livelihoods of smallholder settler crop farmers and nomadic cattle herders in the research study area.

8.3.4 Ineffective Farmer-Herder Conflict Mitigation Mechanisms

The Kwahu Afram Plains South District Assembly has put into place measures, such as the establishing a cattle ranch, a cattle byelaw, and stakeholder engagements, to address the recurring conflicts involving the two migrant groups effectively and coherently. Similarly, when tensions in the area escalate into conflict, the District Security Council activates the joint security team to assist in resolving the upsurge of the conflict. However, a key finding of the study is that

these mitigation strategies have been ineffective in addressing the conflict because of corruption, poor land governance structure, and some greedy chiefs' actions in the area.

Aside from the established ranch not being able to accommodate the increasing herd population, it is characterised by corruption and mismanagement. This has forced many cattle owners to relocate their cattle from the ranch. The herders blame the ranch's management for failing to properly account for the cattle sent to the ranch and failing to properly care for the herds resulting in premature deliveries and unaccounted deaths of livestock on the ranch. Similarly, the joint security operations have been characterised by favouritism and selectivity in the eviction processes. Some of the security forces accept bribes from the nomadic herders and allow them to stay. Some chiefs also protect the herders from the eviction process by alerting the herders of an impending eviction in the area. Even when the herders are evicted, it does not take long for them to reappear and renew existing agreements with traditional landowners in the area. These actions of such unscrupulous chiefs are born out of greed as they seek their interest through economic gains, neglecting the harm and dangers the activities of nomadic herders cause to the environment and the community.

8.3.5 State's Reluctance to Intervene in the Conflict

An important finding that emerged from the analysis of the study is the state's reluctance to intervene in what we are observing in the area because of the nature of land ownership. The case study area is primarily controlled by traditional chiefs, and as a result, the state is hesitant to interfere in land disputes because the state considers customary land private for a specific group of people. The revered position of traditional leaders, as well as the states' inclination to avoid interfering in chiefly affairs and by extension, customary lands, are reflected in the actions of the

KAPSD Assembly, where land issues are kept to the minimum during stakeholder engagements meant to discuss strategies to resolve the conflict involving smallholder settler farmers and nomadic cattle herdsman in the case study district.

8.4 Discussion

The conflict between the two migrant groups in the research study district falls within the ideas of the environmental scarcity and political ecology theories. The use of the two theories is premised on the fact that environment scarcity theory helps us see nature and the dynamics that lead to supply constraint of land, while political ecology helps understand the interactions between people and nature. In this study, the theories have been applied to farmer-herder conflicts, particularly to understanding the conflicts where both disputants are migrants with no land ownership rights in the area.

In terms of the environmental scarcity theory, we observe that the area's conducive ecological environment has attracted several people to engage in farming activities. Also, the declining conditions in the country's northern regions and other Sahelian countries have affected nomadic herders, forcing them to move down south where the land is fertile. The increasing herd population in the area has affected the population of the area and resulted in scarcity in the sense that supply terms of land are becoming imbalanced and that induces a situation of scarcity leading to conflict. In the case study area, therefore, land scarcity has arisen because of the increase in population which is underpinned by both natural factors and migration and large-scale land acquisitions for agricultural investments. These factors that induce land scarcity are what Homer-Dixon (1991) classified as demand induced scarcity, supply induced scarcity and structural induced scarcity.

The nature of land ownership in the area significantly induces conflict. Because the traditional authorities primarily control land in the study area, migrants' access to land is at the mercy of the chiefs, who decide whom they want or prefer to grant land access to. The chief's preference towards the nomadic herders over the settler farmers because of the influence of the herders, breeds animosity between the two migrant groups, causing tensions and, eventually, conflict. Tonah (2002) explicitly articulated the chiefs' preference for nomadic herders arguing that the presence of the nomadic cattle herders has opened a 'gateway of prosperity' for the traditional authorities who largely control customary lands. The largely traditional-authority-controlled customary land across Africa has made migrants vulnerable, as they are exploited through labour and cash prestation. This reinforces the argument that migrant farmers cultivating customary land are the most vulnerable to exploitation and eviction (Kuusaana 2016). The literature has largely demonstrated the vulnerability of migrants who have no land ownership rights. This vulnerability is manifested by stricter requirements to access land, shorter lease durations, and arbitrary land rental charges (Alhassan and Manuh 2005). In some areas, some traditional authorities have sought to renegotiate terms on land access, leaving migrants exploited in terms of the land they have cultivated and their money (Chauveau and Colin 2010; Ubink and Quan 2008). In the case study area, therefore, the nature of land ownership has furthered the tendencies of the chiefs to remove land from smallholders and transfer the rights to the 'highest bidder', who are mainly nomadic herders and large-scale agriculture investors. The situation impacts negatively on land access of migrants but specifically in the case study area of the Afram Plains, on settler smallholders who lose access to arable farmland, thereby engendering land-use conflict.

In relation to the political ecology theory, the actions of some traditional authorities, political actors, and government officials regarding land access and adjudication of justice are motivated by greed. These actors, through their actions, seek their interests at the expense of the wider society. The greediness of some of these traditional leaders, for example, explains why they will engage in multiple land sales and allocations, while others are hesitant to lease their land at certain times of the year in anticipation of the arrival of nomadic herders. These actions by the traditional leaders in the area are motivated by the desire to extract a higher rent from the nomadic herders, who pay significant amounts of money for the temporary use of the land to graze their herds. The situation is mirrored in other parts of the continent, where the interests of government officials and traditional authorities have led to discrimination against smallholder farmers in favour of nomadic herders (see Moritz 2006; Hagberg 1998). The same can be said of political actors, whose rhetoric is primarily intended to gain political capital from farming communities. The political class has used the conflict to relaunch or sustain their political campaigns. They profit from the perpetuation of the conflict in the absence of concrete measures to resolve it. Indeed, some of these political actors have been accused of owning some of these herds, which is why evictions have been unsuccessful in the past. Such personal interests explain why Moritz (2006) rightly stated that to understand the farmer-herder conflict in West Africa, it is necessary to consider more explicitly what individual actors stand to gain from the conflict. The opportunistic tendencies of the various actors in the conflict create a precarious situation that negatively impacts smallholders' access to land as they cannot compete with nomadic herders and large-scale agricultural investors for secure land. This, therefore, leads to land-use conflict between the settler farmers and nomadic herders. The occurrence of conflict between the two

migrant groups in the case study area of the Afram Plains is adequately explained by both the environmental scarcity and the political ecology theories.

8.5 Contribution to Scholarship

This study contributes to scholarship in two main forms. First, the thesis has provided insight into the fact that land conflict does not only occur between indigenous and migrant groups, but that land conflict can also occur between migrant groups. As migrants, they lack indigenous land rights or have weaker land claims, which may make them vulnerable or more prone to conflict. This relates to the theory of land rights certainty, particularly in customary areas where land rights are established through membership in the community or historically confirmed land rights. The study's novelty stems from the context in which the two conflicting groups are migrants and have weaker claims to land in the research study area. Secondly, we used to think that land insecurity was more prevalent among nomadic herders in the literature and theory, but in this case, we see land insecurity among agricultural migrant settlers. In the case study area, the migrant herders are better off because local landowners prefer them as they can pay more, whereas settler farmers pay less, especially as both migrant groups pay for the use of the land.

8.6 Conclusion

Using empirical insights through the lenses of the environmental scarcity and political ecology theories in the case study area of the Afram Plains, three overarching conclusions can be drawn from the analysis of the study findings. First, access to land is central to the conflict in the research study area involving smallholder migrant farmers and nomadic herders. Both migrant groups have no ownership of land and, therefore, depend on the traditional landowners for land access to sustain their means of livelihood. For example, the settler farmers require land to

cultivate and expand their crop fields, while nomadic cattle herders require the same resource to graze their herds. The importance that each group attaches to the land to sustain livelihood makes land an essential resource central to the conflict especially when any group is denied access to land in the research study district.

Secondly, the study has shown that population growth and climate variability have affected the dynamics around land access and use in the area. Due to the deteriorating environmental conditions in the Sahelian areas and Ghana's northern regions, nomadic herders have been forced to relocate south, specifically to the Afram Plains, where the land is fertile and supports cattle and crop production. This, combined with the area's natural population increase, has resulted in population growth, which has impacted land access and use dynamics in the research study area. Land that smallholders previously used is now under intense competition for grazing and large-scale agricultural cultivation by nomadic cattle herders and large-scale agricultural investors, respectively. Similarly, access dynamics have shifted as the commonly egalitarian means to land access have given way to market-determined pathways in land access.

The study has also demonstrated that addressing land issues is necessary to resolve the conflict. The study's central argument is that the entire conflict in the research case study area is about access to land. As a result, effectively addressing the conflict will necessitate some form of capacity building of key stakeholders in conflict resolution and addressing the issues around access to land in the case study area. Overall, the complexities of the conflict involving settler farmers and nomadic cattle herders required the need to examine the phenomenon from diverse perspectives to appreciate the nuances of the conflict, hence the use of the environmental scarcity and political ecology theory in the study.

8.7 Recommendations

In the light of the findings discussed, the study recommends the establishment of a Customary Land Secretariat (CLS) in the Kwahu Afram Plains South District. The creation of this administrative body will help streamline the land management regimes of the customary landowners by ensuring accurate record keeping, establishing accurate and transparent management structures, and building effective conflict resolution procedures such as alternative dispute resolution (ADR). This establishment of a Customary Land Secretariat is particularly crucial since, as spelt out in Article 37(3) of the Land Act 2020 (Act 1036), such an administrative entity will establish and maintain a register of oral grants to safeguard the security of tenure of poor migrant farmers whose rights to land access exist only orally. Again, the establishment of the CLS will, to a large extent, avoid the multiple land allocations to competing groups. This is because under such an established administrative structure, traditional authorities can utilise other means, such as alternative dispute resolution, to ensure that defaulting settler farmers pay mutually agreed land rent, thereby avoiding the temptation to reallocate farmlands to other users. The establishment of the CLS should be done with technical and professional assistance from the Lands Commission, Office of the Administrator of Stool Lands, and the Land Use and Spatial Authority. This recommendation for establishing a Customary Land Secretariat is as per regulation 14(1) of the Land Act 2020 (Act 1036). Furthermore, there should be land demarcation/zoning for exclusive farming and herding activities. This should be undertaken by traditional authorities and the forestry commission officials with support from the Land Use and Spatial Authority. This will prevent each group from straying into the sphere of operation of the other group. Finally, there is the need for the enforcement and reevaluation of the various ECOWAS protocols on livestock development to ensure its proper operationalisation. For

example, after over two decades of implementation, the Transhumance Regulation by the ECOWAS Heads of States and Government (Decision A/DEC.5/10/98) requires an evaluation in order to incorporate issues of new dimensions and current threats of farmer-herder conflicts, land access, and forceful eviction of pastoralists in various West African countries.

8.8 Areas of further study

The study suggests exploring the gender dimensions of the conflict by looking at the effect of the conflict on women and children, who are most vulnerable in conflict situations. Also, a broader study combining mixed methods of data collection and analysis applications is also proposed. This will ensure a broader appreciation of the conflict dynamics between the two migrant groups in the research study district. The study further proposes an investigation of the gun culture in the area and the extent to which the phenomenon influences and intensifies farmer-herder conflict in the light of the proliferation of small arms and light weapons in the Kwahu Afram Plains and other areas in Ghana.

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