FARMER-HERDER RELATIONS IN GHANA: INTERPLAY OF ENVIRONMENTAL CHANGE, CONFLICT, COOPERATION AND SOCIAL NETWORKS

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DEDICATION

To my siblings, Bawah Noagah Bukari, Tahiru Noagah Bukari, Basira Noagah Bukari and Habiba Noagah Bukari, who showed me infallible love and unflinching support throughout my life.

ABSTRACT

Farmer-herder relations and interactions are not new in West Africa. They have existed for a long time and have been the subject of scholarship. These relations are presented as marked by conflict, cooperation and complementarity. What is new, however, are widespread reports of the increase in violent farmer-herder conflicts in many parts of Ghana. Structural and neo-Malthusian/environmental scarcity theories have tended to dominate interpretations of these violent conflicts. These interpretations focus on scarce resources and environmental change, increased herder migrations from the Sahel, increased crop destruction, cattle rustling and armed robbery as drivers of farmer-herder violence. Interestingly, despite these violent conflictive relations in Ghana, one can find cooperation and resource sharing as well as the building of social ties/networks between farmers and herders. However, several studies, discussions and discourse have not actually examined what determines and drives farmer-herder relations, be it conflict or cooperation. Questions remain as to what actually constitutes farmer-herder relations. What processes shape and determine a conflictual or cooperative relation between farmers and herders? How do we explain similar instances where some farmers and herders are engaged in violent conflicts whilst others co-exist and cooperate? What roles do environmental change and resource scarcity play in shaping farmer-herder relations? What social networks/ties exist between farmers and herders and how do these networks influence conflict and/or cooperation between them? This study, therefore, examines these key questions and issues within the context of farmer-herder relations in Ghana.

A number of theories helped to contextualise the study in order to understand the processes and underlying and mediating factors in farmer-herder relations. Theoretically, therefore, the study adopts a processual approach in studying the escalation of farmer-herder conflicts; a conceptualisation of cultural neighbourhood is used to study cooperative relations; and social network analysis is used to see the influence/effect of social ties in enhancing conflictual and/or cooperative relations between farmers and herders. A qualitative approach was used in the data collection and analysis of the study. These methods included extended case studies, comparative case studies, interviews, social network analysis and Focus Group Discussions (FGDs). The study was conducted in Agogo (southern Ghana) and Gushiegu (northern Ghana), with follow-up studies in Karaga, Sekyere Kumawu, Konongo, as well as in Accra, Kumasi and Tamale. Respondents comprised local farmers, Fulani herders, cattle

owners, inhabitants of the communities, chiefs and opinion leaders/elders and government officials.

The study shows that farmer-herder relations, whether conflictual or cooperative in terms of resource access and use, are multi-dimensional, complex and develop through several processes. These include a long history of interaction and contact; herder migrations, long-time settlements among local people and the nature and type of social networks that exist between them. The study contextualises farmers and herders as cultural neighbours who share cross-cutting ties, build everyday peace and cooperate even in the midst of violent conflicts. The two equally exchange and share natural resources (water, land, pasture), trade and build personal relationships (friendships, cattle entrustment and social solidarity). Further, reducing farmer-herder conflicts to just structural factors and to environmental/climate change and resource scarcity, from the perspectives of both the environmental scarcity/security school and that of farmer-herder perceptions, is far more complex than assumed. Rather, a plethora of political, historical, social and ecological factors drives violent conflict escalation. In addition, violent conflict escalation develops through a process, social networks and a constellation of diverse actors who play significant roles in their escalation.

The study recommends that the complexity of farmer-herder relations calls for a harnessing of issues that are common to cooperation and cross-cutting ties between local farmers and herders. Theoretically, the study questions simplistic and general conceptualisations of farmer-herder relations and calls for extended case studies and multi-theoretical studies of farmer-herder relations. Thus, better comprehension and analysis of the totality of farmer-herder relations are needed. Besides, a Bottom-up Peace Approach from the local level from the perspective of local peoples, instead of the top-down national government approach, is needed to address violent farmer-herder confrontations. Moreover, clear national and local policies are required to deal with issues of land use and access, cattle rearing and pastoralism in general. Issues regarding the unavailability of accurate data on pastoralists' migration trends, conflict, census data of Fulani pastoralists, land size required for both farming and cattle keeping and climatic data must also be addressed.

Key words: Farmers; Fulani Herders; Ghana; Conflicts; Cooperation; Environmental Change; Land; Resources; Social Networks.

ZUSAMMENFASSUNG

Beziehungen und Interaktionen zwischen Bauern und Viehhaltern sind in Westafrika keine Neuerscheinung. Sie existieren bereits seit langer Zeit und waren bereits Gegenstand vielerlei Forschungstätigkeiten. Ihre Beziehung wird sowohl als konfliktgeladen als auch kooperativ bezeichnet. Neu sind allerdings Berichte über die Zunahme von gewalttätigen Konflikten zwischen Bauern und Viehhaltern in vielen Teilen Ghanas. Strukturelle und neo-Malthusianistische Theorien dominieren hierbei die Interpretation der Konflikte. Diese Theorien beinhalten zum Beispiel den Mangel an Ressourcen, Klimawandel, zunehmende Migrationswellen aus dem Sahel, die Zerstörung von Plantagen und Viehdiebstahl als treibende Kräfte. An dieser Stelle muss auch hervorgehoben werden, dass sich eine Reihe von sozialen Interaktionen, Verteilung von Ressourcen sowie Netzwerke ausbilden. Es ist bis jetzt Forschungen und Diskussionen nicht gelungen, herauszufinden, was tatsächlich der Antrieb dieser mehrdimensionalen Beziehung ausmacht, sei sie konfliktgeladen oder kooperativ. Fragen bestehen: Woraus bestehen die Bauern-und Viehhalter-Beziehungen? Bei welchen Ereignissen entsteht eine konfliktgeladene oder kooperative Beziehung zwischen diesen beiden? Eine weitere Frage muss deshalb gestellt werden, nämlich warum einige Bauern und Viehhalter sich in Konflikte begeben, während andere koexistieren und kooperieren. Inwiefern trägt der Klimawandel und Mangel an Ressourcen zur Ausbildung der Beziehungen zwischen den Parteien bei? Welche sozialen Netzwerke existieren zwischen Bauern und Viehhaltern und welche Rolle spielen diese Netzwerke bei Konfliktverschärfung oder kooperativem Zusammenhalt? Die vorliegende Arbeit setzt sich mit den oben angeführten Schlüsselfragen und Ereignissen innerhalb dieser Beziehungen zwischen Viehhaltern und Bauern in Ghana auseinander.

      Es wird Bezug auf einigen Theorien genommen, um nicht nur dieser Fragestellung nachzugehen, sondern auch sie zu konzeptualisieren, mit dem Ziel, den Prozess zu verstehen, der der Bauern-und Viehhalter- Beziehung unterliegt. Um das Eskalieren konfliktgeladener Auseinandersetzungen zwischen Bauern und Viehhaltern zu verstehen, stützt sich die Untersuchung auf eine prozedurale, politische und ökologische Perspektive; dazu wird einerseits die Konzeptualisierung bzw. die Rolle der Nachbarschaft der Untersuchung des Phänomens zugerechnet und andererseits Analysen sozialer (kultureller) Netzwerke zur Darlegung sozialer Interaktionen zwischen ihnen eingeschlossen. Ein qualitatives

Datenerhebungsverfahren wurde zur Datenverarbeitung und -bewertung verwendet. Diese Datenerhebungsmethoden beinhalten: Erweiterte Fallstudien, vergleichende Fallstudien, Interviews, Analysen sozialer Netzwerke sowie Fokus-Gruppendiskussion. Die Untersuchung wurde in Agogo, einer Gegend im südlichen Ghana und in Gushiegu, einer Gegend im nördlichen Ghana durchgeführt, mit Follow-Up-Studien in Karaga, Sekyere Kumawu, Konongo, Accra, Kumassi und Tamale. Die Auskunftspersonen waren lokale Bauern, Fulani-Viehzüchter, Viehbesitzer, Bewohner, Dorfoberhäupter, Ansprechpartner, ältere Menschen und Regierende.

Es wurde festgestellt, dass die Bauern-Viehhalter-Beziehung multidimensional ist, ob konfliktgeladen oder kooperativ, denn sie hat sich weiterentwickelt und weist mehre Ebenen auf. Diese Ebenen sind unter anderem ihre gemeinsame Geschichte, Zuwanderung von Viehzüchtern, ihre Sesshaftigkeit und die Art der sozialen Interaktionen, die sie während längerer Zeit hindurch mit den Bewohnern bzw. den Einheimischen verknüpft hatten. Die Untersuchung begreift Bauern und Viehhalter als Nachbarn, die kulturelle Gemeinsamkeiten aufweisen, insofern dass sie sich kulturell überschneiden. Sie schließen jeden Tag Friedensabkommen ab und kooperieren trotz bestehender Konflikte. Sie beanspruchen dieselben Ressourcen (Wasser, Land und Futter); sie verhandeln und bilden enge Beziehungen miteinander (Freundschaften, Tierdeckung und Solidarität). Daher können diese konfliktgeladenen Auseinandersetzungen nicht nur aus dem Blickwinkel des Klimawandels und des Ressourcenmangels betrachtet werden, sondern auch aus dem der politischen und historischen sowie sozio-ökologischen aber auch menschliche Faktoren bzw. Ereignisse, die den Nährboden für solche Konflikte und darstellen.

Es steht folglich fest, dass eine Reduzierung der Bauern- und- Viehhalter- Konflikte auf nur ökologische Gründe - sowohl aus der Perspektive von Knappheit als auch aus der Wahrnehmung von Bauern und Viehhaltern - komplexer ist als angenommen. Es gibt ebenbürtige Bestimmungsgrößen und Aspekte wie Kooperation, soziale und kulturelle Netzwerke, Verteilung und Zugang der Ressourcen, die kaum erforscht werden. Die Untersuchung empfiehlt, dass die Komplexität der Beziehungen durch Kooperation zunutze gemacht werden können. Theoretisch stellt die Studie vereinfachende und pauschale Konzeptualisierungen von Landwirt-Hirten-Beziehungen in Frage und fordert erweiterte Fallstudien und multi-theoretische Studien der Beziehungen zwischen Studien dieser Beziehungen. Ein besseres Verständnis und eine Analyse der Gesamtheit der Beziehungen ist deshalb nötig. Das Buttom-Up-Verfahren aus Seiten der Betroffenen, das heißt, der Bauern und Viehzüchter, und nicht das Top-Down-Verfahren, das von den Regierenden

ausgehend genutzt wird, ist vonnöten, um den gewalttätigen Konflikten zur begegnen (*Bottom-up Peace Approach*). Weiterhin werden klare nationale und lokale Leitlinien gebraucht. Der Mangel an ausreichenden Daten zu Migrationsbewegungen, Konflikt, Zensus-Daten der Fulani-Viehhalter sowie Zahlen zur benötigten Landgröße für Landwirtschaft und Viehhaltung sind auch erforderlich.

Schlagwörter: Bauern; Fulani Viehhalter; Ghana; Konflikte; Kooperation; Umweltveränderungen/Klimawandel; Land; Ressourcen; soziale Netzwerke.

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ABBREVIATIONS

AANDA	Asante Akim North District Assembly
ATC	Agogo Traditional Council
CBOs	Community Based Organisations
CSOs	Civil Society Organisations
DCE	District Chief Executive
DISEC	District Security Council
ECOSOC	Economic and Social Council
ECOWAS	Economic Community of West African States
EPA	Environmental Protection Agency
EU	European Union
FBOs	Faith Based Organisations
FC	Forestry Commission
FCUBE	Free Compulsory Universal Basic Education
FGD	Focus Group Discussion
GDA	Gushiegu District Assembly
GFC	Ghana Forestry Commission
Gh	Ghana
GHS(₵)	Ghana New Cedis
IFAD	International Fund for Agricultural Development
IPCC	Intergovernmental Panel on Climate Change
LI	Legislative Instrument
mm	Millimetres
MMDAs	Metropolitan, Municipal and District Assemblies
MOFA	Ministry of Food and Agriculture
MoU	Memorandum of Understanding
MP	Member of Parliament
NCCAS	National Climate Change Adaptation Strategy
NDC	National Democratic Congress
NGO	Non-Governmental Organisation
NPP	New Patriotic Party

OCL	Operation Cow Leg
PhD	Doctor of Philosophy
PNDC	Provisional National Defence Council
REGSEC	Regional Security Council
RIP	Rest in peace
UN	United Nations
UNDP	United Nations Development Programme
UNEP	United Nations Environmental Programme
USA	United States of America
USD	United States Dollars
USAID	United States Agency for International Development
WANEP	West African Network for Peacebuilding
WOII	Warrant Officer Second Class
ZEF	Zentrum für Entwicklungsforschung (Center for Development Research)

GLOSSARY OF TERMS USED

Agogomanhene	Paramount chief of Agogo
Agogomann Mma Kuo	Agogo Citizens Association
Asantehene	King of the Asantes
Gushie Naa	Paramount chief of Gushiegu
Gyesehene	The chief in charge of land and financial matters
Kontihene	The traditional Prime Minister (he is in charge of a traditional area in the absence of the paramount chief)
Odikro	Village/Community chief
Ohene	Chief
Omanhene	Paramount chief
Ya-Naa	King of Dagombas

TABLE OF CONTENT

LIST OF FIGURES

LIST OF TABLES

1. INTRODUCTION

Analyses of farmer-pastoralist relations and interactions in Africa show a long history of pastoralists' migration in and across borders, co-settlements with sedentary groups, violent confrontation with host farmers or other pastoralists and the building of social ties over long-time interactions (see Elhadary & Samat, 2011; Davidheiser & Luna, 2008; Mkutu, 2001). Historically, there have, for instance, been conflicts over ethnic differences, forage and water resources by local farmers and nomads or among African pastoralists themselves along the Great Lakes Region, West and East Africa, particularly in Nigeria, Chad, Ethiopia, Kenya and Sudan with dire consequences for the security of these areas (see Henku, 2011). At the same time, the relations between these farmers and nomads are characterised by complementarity, cooperation and strong social networks.

However, many of the studies examining farmer-herder relations have focused mainly on conflict relations (Adano, Dietz, Witsenburg, & Zaal, 2012; Bassett, 1988; Benjaminsen, Alinon, Buhaug, & Buseth, 2012; Bevan, 2007; Blench, 2004; Hussein, Sumberg, & Seddon, 1999; Moritz, 2006a; Tonah, 2008) neglecting other forms of relations existing between the two, such as, the extent to which farmers and herders cooperate and the social ties/networks existing between them. Furthermore, context-specific and ethnographic approaches that provide a processual examination of interactions and social relations between farmers and herders, the role of actor constellations and local dynamics are often inadequately presented in the literature. This study shows the manifestations and dynamics of farmer-herder relations, by examining specifically how conflict, cooperation and social networks are acted out and the role that environmental change and resource access play in shaping farmer-herder relations, particularly conflict. In the following section, I contextualise this discussion of farmer-herder relations generally and then specifically to Ghana.

1.1. Background and Problem Statement

Relations between sedentary farmers and semi-sedentary and nomadic pastoralists, in both arid and semi-arid regions, have characteristically been a mixture of cooperation and conflict. From the Middle East, Asia, the Americas and across Africa, farmers and pastoralists have historically competed over the use of resources and, in some cases, engaged in violent conflicts, while at the same time they have mutually cooperated in trade, land/resource use

and have peacefully coexisted. Barth (1973) has noted that nomad-sedentary relations are embedded in the ecological, economic, social and political environment, as seen in everyday interactions. Despite the violent conflicts between farmers and herders and the cattle raiding among various pastoralist groups across Africa, cross-cutting ties, from intermarriages, friendship and social ties, to land leases, economic and resource exchanges, have endured among farmer-herder groups in East Africa like the Maasai and the Kikuyu of Maiella and Enoosupukia (Kioko & Bollig, 2015), Pokot and Turkana (Bollig & Österle, 2007; Fleisher, 2000; McCabe, 2004) and the Maasai and Kalenjin (Berntsen, 1976). In the West African context, Hagberg (1998) similarly found that migration, conflict, cooperation and patron-client relationships are fundamental to farmer-herder relations. In addition, while herders are strangers to farmers, who are ethnically and socially different from them, at the same time, they are neighbours with whom local farmers engage in various social, economic and political relations (Hagberg, 1998; Waters-Bayer & Bayer, 1994).

In the case of West Africa, the majority of these herders are Fulani (also called Fulbe),[1] nomadic and semi-sedentary pastoralists who engage mainly in herding cattle. The Fulani's widespread regional distribution has added to their interaction with a large array of groups, including many subsistence farmers, community leaders, chiefs and landowners (Davidheiser & Luna, 2008). Thus, farmer-herder relations are basically situated within the milieu of cultural neighbourhood, characterised by cross-cutting ties of co-existence, and, at the same time, by ethnic/cultural differences and conflict. These relations are also shaped by social networks and social ties built over time.

Farmer-herder relations have been changing over the past three decades, particularly in West Africa because of the impacts of environmental/climate change. This has subsequently led to increased migration, the commoditisation, commercialisation and individualisation of land, the involvement and emergence of new actors, change in the mood of livestock ownership, change in patron-client relations and the 'politics of othering' (Breusers, Nederlof, & van Rheenen, 1998; Glowacki & Gönc, 2013; Turner, Ayantunde, Patterson, & Patterson III, 2011). Accordingly, environmental/climate change has, for example, made it difficult for herders to find pasture, especially in the Sahel, which forces herders to migrate southwards leading to competitions with farmers (Njiru, 2012; Odoh & Chilaka, 2012). These changes have led to less cooperation and have rather increased the

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[1]Fulani, which is derived from Hausa, is the English term for these pastoralists. Fula is derived from the Manding languages and is also used in English. Fulɓe is the original term for the people. This has been adopted into English, often spelt Fulbe. In French, Fulani are called Peuls (See Davidheiser & Luna, 2008).

tendency for violent conflicts, as Hagberg (1998) illustrates in the case of Camoe Province of Southern Burkina Faso. Unlike local farmers, who claim 'autochthonous' roots in the communities, own land and have unlimited access to it, Fulani herders are landless, 'strangers,' cattle caretakers and differ from local farmers and other groups with respect to their use of space, culture and socio-political organisation (Hagberg, 1998).

Conflicts have dominated discussions and discourse of farmer-herder relations. This is because of the claim that conflicts have assumed a violent trend with increased deaths, destruction of farmland, security threats to communities and less co-existence between herders and sedentary farmers (Butler & Gates, 2012; Msuya, 2013). There have been numerous reports of violent clashes between Fulani herders and native farmers in Ghana (Dosu, 2011), Burkina Faso (Brockhaus, 2005; Brockhaus, Pickardt, & Rischkowsky, 2003), Nigeria (Ofuoku & Isife, 2009) and Cote d`Ivoire (Diallo, 2001). Table 1.1 presents various estimates of farmer-herder conflicts in some West African countries. These estimates are not exhaustive because many violent incidences are not documented or reported.

Table 1.1: Incidences of Violent Farmer-Herder Conflicts in some West African Countries

Country	Years of occurrence	Estimated Number of deaths	Other consequences
Ghana	2001 to 2016	68[2]	Destruction (burning) of farms, killing of cattle, more than100 injuries
Nigeria	2005 to 2010	302	7000 hectares of farms destroyed, 1300 cattle lost, 7 communities sacked
Burkina Faso	2005 to 2011 (over 4,147 cases)	55	Many cattle killed, injuries and destruction of farms
Benin	2006-2007 (283 cases in northern Benin)	NA[3]	Cattle killed, destruction of farms, injuries, destruction of property
Mali	2012 (Dogon farmers clash with Fulani herders)	25	Cattle killed, property destroyed

Source: Compiled from various media sources, Ministry of Animal Resources (n.d), Msuya (2013) and L'Haridon (2012, pp. 15–19).

Due to the dearth of official statistics on incidences of violent conflict, much of the discourse on increased violence between farmers and herders is depicted in the media and

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[2]Most of the data in Ghana are based on my own field study, as well as, reports from the media and police records. The number of deaths includes 40 in Agogo, 14 in Gushiegu, 12 in the Afram South District and 2 in the Sekyere Afram Plains District.
[3] Data not available.

reported by local farmers and herders themselves. Media reports of violent conflicts between farmers and Fulani herders, for instance, include Sari, a village located few kilometres from the border between Burkina Faso and Mali in May 2012 resulting in the death of 30 people, several displacements and the destruction of several properties.[4] Also, in January 2013, an estimated 600 Fulani herders and their families fled from Yorikor and Zaabire communities in Burkina Faso and sought refuge in Sapeliga, in the Bawku West District of the Upper East Region of Ghana, following violent conflict between them and the Busanga ethnic group in various communities.[5] In Nigeria alone, Fulani militants killed a total of more than 1,200 people in 2014 making it the world's fourth deadliest militant group, according to the most recent Global Terrorism Index.[6] Similar cases have been reported in Ghana: 13 Fulani herders were reported to have been murdered in the Gushiegu District of the Northern region of Ghana in August 2011[7]; and more than 20 farmers and a number of Fulani herders were reported killed in Agogo in the Ashanti Region of Ghana after several violent clashes.[8]

The causal factors that are often put forward by both scholars, farmers and herders for the increases in violent conflicts include the continual destruction of crops by Fulani cattle, competition over the use of natural resources, especially land and water, ethnic cleavages, misunderstandings arising from personal animosities between the two groups and the lack of institutions in managing farmer-pastoralist conflicts (see Abubakari & Tonah, 2009; Baxter, 1994; Moritz, 2006a; Ofuoku & Isife, 2009; Tonah, 2005b). Theoretically, the environmental/resource scarcity debate has become a major focus (and driver) in discussions and scholarship about the interactions between the environment, scarce resources and conflicts between farmers and Fulani herders. This has also arisen because of the different interests in the ongoing discussions about the impacts of climate change and climate variability in many parts of the world (Hummel, Doevenspeck, & Samimi, 2011). The argument is that environmental and climate hazards have exacerbated conflicts between farmers and herders (see

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[4]See le1faso.net. (31 May 2012). *Conflit agriculteurs/éleveurs: 30 morts dans le Lorum*. Retrieved from http://www.lefaso.net/spip.php?article48179 (Accessed on 21 December 2012).

[5]See Peacefmonline.com. (04 January 2013). *600 Burkinabes seek refuge in U/E*. Retrieved from http://www.peacefmonline.com/pages/local/news/201301/152122.php (Accessed on 04 January 2013).

[6]BBC News. (29 February 2016). *Nigeria's Buhari orders investigation into Benue clashes*. . Retrieved from http://www.bbc.com/news/world-africa-35686264 (Accessed on 29 February 2016).

[7]Myjoyonline.com. (7 August 2011). Update: *13 die in Gushiegu unprovoked attacks*. Retrieved from http://edition.myjoyonline.com/pages/news/201112/77829.php?storyid=77829 (Accessed on 10 December 2012).

[8]Ghanaweb.com. (16 September 2011). *Agogo residents demonstrate against Fulanis*. Retrieved from http://www.ghanaweb.com/GhanaHomePage/NewsArchive/artikel.php?ID=219052 (Accessed on 10/12/2013).

Brunnschweiler & Bulte, 2009; Welsch, 2008; Braukämper, 2000). Dosu (2011) equally makes similar arguments about Ghana, claiming that unpredictable climate patterns and unsustainable practices have intensified conflicts between farmers and migrant Fulani herders in the northern, central and Middle Volta Basin.[9] Yet doubts about these linkages normally arise from the seeming lack of substantiated evidence of the real, direct or immediate impacts of environmental change on farmer-herder conflicts. The Malthusian and environmental scarcity/security debates have failed to account for the multiplicity of farmer-herder conflict drivers (cf. Moritz, 2010; Shettima & Tar, 2008; Harshbarger, 1995).

The environmental/climate change discourse and its role in influencing conflicts is not only debated in the literature, but generally perceived among lay people (including farmers and herders) and also in media discourses in Ghana.[10] Local farmers and herders believe that violent conflicts between them are the result of the changing climate and scarce resources, which have led to competitions between them for land and resources. Perceptions of farmers and herders are that environmental/climate change has induced conflicts between them. These perceptions are hinged mainly on the assumption of mono-causal links of herders' migration from the Sahel to semi-arid areas in search of resources (water and pasture) for their cattle. However, these discourses and perceptions of the environmental/climate change-conflict nexus require further scientific studies in the case of Ghana to actually see the linkages in juxtaposition with climate data (of rainfall and temperature).

Political ecologists take into account not just the ecological dimensions of farmer-herder conflicts, but the political underpinnings, power relations, actor networks (of both state and non-state actors) and the multidimensional nature of farmer-herder conflicts (Bassett, 1988, 1993; Benjaminsen et al., 2012; Benjaminsen, Maganga, & Abdallah, 2009; Le Billon, 2001; Turner, 2004). Political ecology thus challenges the simplistic linkages of environmental change/resource scarcity and farmer-herder conflicts. While political ecology considers the political and social nature of farmer-herder conflicts, so far it has not taken into account the processes involved in violent farmer-herder conflict escalation and development. For instance, political ecology does not tell us the stages at which violent conflicts escalate.

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[9]The Volta Basin lies within the semi-arid and sub-humid savanna area of West Africa. The basin lies mainly in Ghana (42%) and Burkina Faso (43%), with minor parts in Togo, Cote d'Ivoire, Mali and Benin. The main channel is 1400km and it drains 400,000 km^2. Ghana occupies the downstream part of the basin. The basin stretches from the northern part of Ghana to the Kwahu Plateau, which marks the southern end of the basin(Andah, van de Giesen, & Biney, 2003)

[10]See Dakurah, C. (15 January 2012). *The FULANI menace: a product of climate change, education and misconception of nationality*. Retrieved from https://www.modernghana.com/news/372037/the-fulani-menace-a-product-of-climate-change-education-an.html (Accessed 24/10/2014).

A more progressive study of violent farmer-herder conflict escalation is needed, which apart from considering the political and multi-dimensional nature of the conflicts, looks at the diachronic and political processes involved in the escalation of these conflicts into violence. In this study, therefore, farmer-herder conflicts are looked at from a processual political perspective where multi-actors, the political dynamics and processual development of the conflicts are examined (see Moritz, 2010). This study, thus, argues that violent conflicts are the results of political processes, made up of power relations between various actors and series of interactions the actors organise around to confront each other.

Farmer-herder relations also need to be understood from a socio-political and ecological perspective (in relation to land and resource use) and through the role of social ties and networks among the various actors (cf. Hagberg, 1998). Social relations in terms of land and the use of resources (for example, water and pasture) are important for understanding how interactions develop between farmers and herders. As herders depend on local people for land to settle and the use resources, they (land and resources) are a confluence for relating with each other. Claims to access resources are acted out either through contestations (conflicts) and negotiations (cooperation). This is why Kuznar and Sedlmeyer (2005) argue that dynamics in resource maximisation, use and herder migrations are key in discussions of farmer-herder relations. Also significant in their relations are power configurations, politics and primordial bonds which influence conflict or cooperation between them. Social and power networks and the mobilisation of various actors during conflicts are also found in the interactions of farmers and herders. The kind of networks built between the actors can positively influence conflicts or cooperation between the two and herders' access to land and use of resources. The interplay of ecology (resource access), conflict, cooperation and social ties/networks between actors are, therefore, important in discussions of farmer-herder relations. Simmel (1955) notes that both conflict and cooperation are forms of *sociation* in society, as both phenomena are the result of interactions.

Fulani pastoralists' permanent relations with local people in Ghana date back to the early 20th century (Oppong, 2002; Tonah, 2005a). In many parts of Ghana, relations were late except in the northern part where they had temporary relations before colonialism and then established more lasting relations with the local people in the early 20th century. As Fulani pastoralists began to permanently settle in Ghana, they established varied forms of relations with the local people. They have, for instance, exchanged and rendered services to local communities such as cattle entrustment, used of bullocks to plough farmers' land,

helped with farm labour, made friendship with people in the community, showed social solidarity towards one another and cooperated largely in the distribution and use of resources, particularly land and water usage. Strong social networks between them and chiefs, local cattle dealers, government officials, politicians and landowners in host communities are equally built, which is important for determining conflict or cooperation. The scope of farmer-herder conflicts has changed with the involvement of more actors, the mobilisation of groups and the inclusion of local politics. Farmer-herder conflicts have become *arenas* through which constellations of actors build ties and mobilise through politics to achieve their agenda and interests (Bailey, 1969, 2001; Bierschenk & Olivier de Sardan, 1997; Long, 2001). Similar to Hagberg (1998) observations of the case of farmer-herder conflicts in the Cameo Province of Southern Burkina Faso, a wide range of actors in farmer-herder conflicts in Ghana take advantage of these conflicts for political, financial and other interests beyond the actual conflicts. Local politicians and Fulani intermediaries, for instance, use conflicts as a means to achieve political power and financial benefits respectively.

In Ghana, the perception of local peoples, local authorities, the media and the general populace is that farmer-herder relations are basically conflictual. For example, we know little about how cooperation and social networks among the two are built and hardly anything about how they are maintained. The over-emphasis on conflicts, especially violent conflicts often presents a gloomy situation by exaggerating it and portraying the Fulani in a particularly negative light, as perpetrators of these violent conflicts, which makes them the target of hatred in communities. Even so, cooperation, unlike conflict, is seen as a 'non-event' and is, therefore, not the sole focus of study by many researchers (Rogers, 1999). Conflict and cooperation shape relationships between local farmers and Fulani herders and are both "ideologically expressed and practically acted out by various actors" (Hagberg, 1998, p. 57). Besides, situations in which farmer-herder relations are described as conflictual are not always so, even in the midst of violence (Breusers et al., 1998). In local communities in Agogo and Gushiegu, where conflicts with farmers are violent, social ties exist when it comes to the herd management practices of local people, gift exchange, chiefs' and community support for the protection of herders, patron-client relations, resource relations (e.g. land rentals) and cattle owners' membership of political/social groups. Therefore, irrespective of the relations between local farmers and Fulani herders - conflictual or cooperative - the determinants are the nature and types of social networks that exist between Fulani herders and the community. In light of this, Gluckman (1956) argues that while human beings belong to different cultural

groups and are in a state of antagonistic relations with other groups, they at the same time develop amicable webs of ties with members of these other groups.

The actors referred to in farmer-herder relations comprised both local (including farmers, herders, cattle owners, chiefs, community leaders, community members, etc.) and external actors (government officials, politicians, cattle dealers, etc.) who build different types of relations through various networks/ties. For example, various actors mobilise social networks that transgress local settings (cf. Hagberg, 1998). In my field study of farmer-Fulani conflicts in Ghana, Fulani herders who have strong positive relations with 'powerful individuals'[11] in the community are always seen positively in the community and are, therefore, more likely to avoid violent conflictual relations. These 'powerful individuals' depict people in possession of power who are able to influence decision-making and also control the use and access to resources. They may include, but are not limited to chiefs, community elders/opinion leaders, local politicians, government officials and leaders of local associations. If a cattle owner, for instance, has good relations with some local people, groups (such as a farmer association or a youth group) or important opinion leaders in the community and is also seen as belonging to the 'community,' he is very likely to avoid conflicts between him and local farmers even when there is obvious crop damage. Thus, the mobilisation and building of social networks are important in the type of relations (whether conflictual or cooperative) that exist between Fulani herders and local farmers in a community. The group dynamics, the participation of many other people (through mobilisations), the influence of community leaders and 'powerful individuals,' the processes of negotiations that take place after crops are destroyed and the series of everyday interactions of the various actors are important determinants of the propensity of violent conflict escalation or peaceful settlements of conflict.

This study, therefore, examines in details the relations between local farmers and Fulani pastoralists in Ghana, in particular the interplay of violent conflict between them in the midst of so-called climate/environmental change and the level of cooperation and overall social ties between them. The concept of social relations here refers to the connections, interactions and relationships between local farmers, Fulani pastoralists and various other actors, both local and external (Hagberg, 1998).

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[11]Chapter Eight maps these individuals and their levels of influence.

1.2. Objective and Research Questions

While there are many perspectives from which I could have studied farmer-herder relations, I chose to study conflicts, cooperation, social networks and the role that environmental/climate change discourse play in influencing these relations. I could have, for instance, studied gender relations, ethnic relations, traditional patron-client relations or other manifestations of relations between farmers and herders. I decided, however, to study these aspects because it is a timely topic in terms of the current national discourse, which depicts Ghanaian/local community relations with Fulani pastoralists as being the result of violent conflicts. When considering the public 'outcry' that resonates in the media, I thought that it is necessary to study farmer-herder relations within the field of peace and conflict studies where conflict and cooperation are core components; hence my focus on these aspects of their relations. In addition to this, I integrate the environmental change/resource scarcity debate into the study of farmer-herder relations, which emanates primarily from both international and local discourse/perceptions in terms of its role in escalating conflicts and impeding access to resource. Given the current national discourse about the response to violent farmer-herder conflicts, which includes tackling the menace of climate change, which is said to be the main cause of pastoralist migrations from the Sahel into Ghana and their subsequent conflicts with farmers over land and resources, a more detailed study of this debate and its relation to farmer-herder relations (conflicts) is also required.

Therefore, the main objective of this study is essentially to understand how relations between farmers and Fulani herders are expressed through conflict, cooperation and social networks in Ghana vis-à-vis the influence of environmental/climate change in farmer-herder conflicts and relations.

The main questions that this research addresses are: How are relations between farmers and herders conceptualised, shaped and acted out in Ghana, and what role does environmental change play in shaping these relations, especially in terms of how access to resources and conflict are affected?

The research answers the following specific questions:

- What are the local discourses/perceptions of farmers and herders of the linkages between environmental change/resources and conflict?
- How do violent conflicts escalate (in a processual sense) between local farmers and herders?

- How does access to land and resources influence conflicts and relations between farmers and herders?

- What cooperative relations exist between farmers and herders and how are these relations expressed?

- How do social networks in farmer-herder relations influence/affect conflict and/or cooperation between them?

Each of these specific research questions is addressed in chapters 4, 5, 6, 7 and 8.

1.3. Scope of the Study

The scope of this research was limited mainly to two districts in Ghana: the Asante Akim North District (AANDA) in the Ashanti Region and the Gushiegu District in the Northern Region of Ghana (Figure 1.1). The study in both districts focused on communities where conflicts between farmers and Fulani herders were high and also where there was a large presence of Fulani herders. To see the different levels of cooperation between farmers and herders, there was also a study in a community from each of the two districts where Fulani herders cooperated and co-existed peacefully with farmers. The choice of these areas (districts) was because they have been scenes of increased violent conflicts between farmers and Fulani herders, and, also because they have different biophysical characteristics (different vegetation, climate, etc.), which helped to study the influence of environmental factors in farmer-herder relations, especially conflictual ones. The choice also allowed for comparative studies of the cases. Aside from these two districts, I also conducted follow-up field studies in adjourning communities in the two field sites - in Karaga (because of its proximity to Gushiegu) and Konongo, Juaso and Sekyere Kumawu (in Samsu and Mossipenyin) (see Figure 1.1), which were closer to Agogo. The interviews in these communities were to learn from government officials, herders and others about major issues (e.g. migrations of Fulani from Agogo and Gushiegu to these areas). They also allowed for comparisons to be made on the issues of resources, conflict and cooperation.

Besides the national capital, Accra and other regional capitals, Kumasi (capital of the Ashanti Region) and Tamale (capital of the Northern Region) were studied (Figure 1.1). The focus of the study in these cities was to get official responses from government officials (including security agents) and some NGOs on issues surrounding environmental/climate change and resource scarcity in the study sites and their interventions with regard to conflict.

In terms of content scope, the research focuses on the core issues of conflict, cooperation, social ties/networks and environmental change.
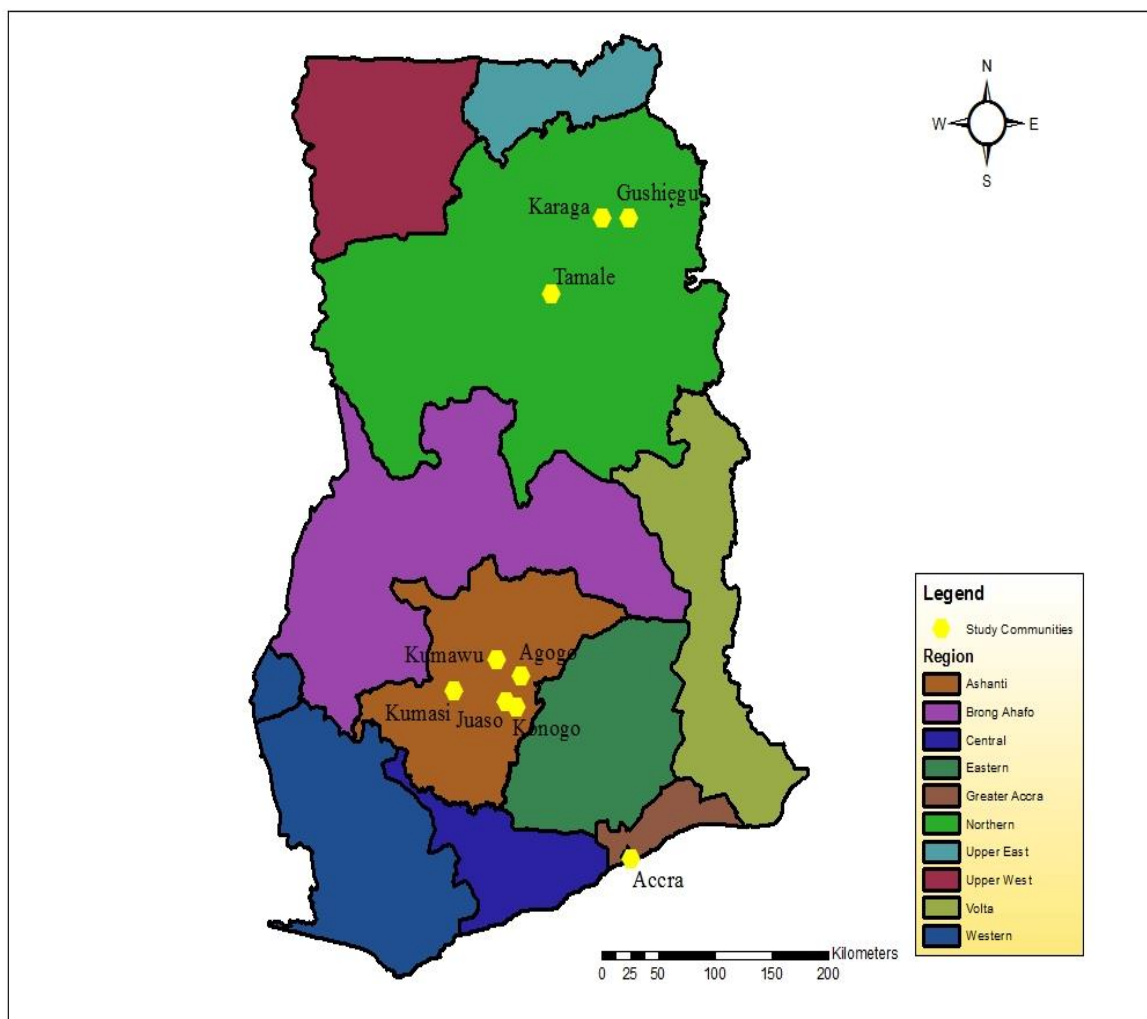
Figure 1.1: Map of Ghana Showing Study Areas
Source: Author's Construct, 2014.

1.4. Significance and Contribution of the Study

My study sites (in both northern and southern Ghana), make up one of the most comprehensive scientific studies of cooperation and social networks in farmer-Fulani herder relations in Ghana to date. In addition, the study focuses on resource relations in terms of access to and use of land, rather than the usual focus on only conflict, which has been extensively looked at by other authors in Ghana (e.g. Abubakari, 2004; Tonah, 2002a, 2003, 2006a, 2008). The particularity of my work is therefore the comprehensive examination of the interactions (social relations) of farmers and herders not only during times of conflict, but also in relation to resource access, cooperation and social ties/networks in two geographical (north and south),

multi-ethnic and climatic locations. This study of farmer-herder conflicts is different from previous studies insofar is it explores and emphasises the constellations of actors, who also constitute and contribute to the overall understanding of these relations; the role of politics and mobilisation rather than the usual crop destruction and the ethnic and structural drivers of farmer-herder conflicts. As there are few studies on farmer-herder issues in Ghana, my study contributes to the body of knowledge and literature on farmer-Fulani herder studies in Ghana and human interactions and social relations (the development of conflict, cooperation and social ties) in general. The study adds to the literature on the role of processual drivers in conflict escalation.

Pastoralists' access and rights to land, which has not been emphasised in the literature on farmer-herder conflicts in Ghana so far, has also been examined in this study. The study of the issue of land as a source of farmer-pastoralist conflicts in Ghana emphasises that it is not only scarce resources (and environmental change) that drive conflicts between farmers and herders, but that issues of legitimacy, belonging, access and an increase in the value and abundance of land and resources are equally important drivers. Since only few scientific studies have previously looked at this issue, this study contributes to both the scientific literature and empirical discussions of land conflicts in Ghana, especially those concerned with farmers and Fulani herders. This study therefore puts into proper perspective farmer-herder conflict escalations beyond the buzzing media reportage of them.

Although the study of social networks (SNA) in social sciences is not new, applying it to the study of conflicts and cooperation specifically to farmer-herder ones is relatively new and unique. This study thus adds to the recent literature on social networks and their influence on conflicts and cooperation discussed in Chapter 8. The study also contributes to the field of conflict studies in Africa, adding to the literature on social networks in farmer-herder conflicts.

Finally, violent farmer-herder conflicts have security implications and are therefore worth bringing to the fore for policy action. Fulani pastoralists move to, from and across borders into Ghana, or internally from one community to the other. As they settle in various communities and conflicts between them and local farmers emerge, more people (actors) become involved in these conflicts, widening their scope with many negative consequences. As reported deaths, damages to property, violence and restricted movements of both farmers and herders, the clashes between local farmers and Fulani herders show, they have deleterious consequences on security both at the local and national levels. This study brings to the

fore scientific information on the implications of these clashes on security as well as policy suggestions for resolving violent conflicts.

Thus, the study contributes to a multi-theoretical approach to farmer-herder relations, which allows for novel analysis of the issues and empirically shows new dimensions of farmer-herder relations, especially violent conflicts.

1.5. Structure of the Thesis

The thesis is organised into nine chapters: the introduction, a conceptual and theoretical chapter, a chapter on methodology and the field study, four analytical chapters and a concluding chapter. The book starts with an introductory chapter in which I present the arguments and perspectives of the study. This chapter comprises the background information where the research problem is defined, the key research questions and objectives of the study are outlined and the scope and significance of the study are highlighted. Chapter two focuses on the state of the art of the study where conceptual issues and the theoretical underpinnings of the study are examined. It discusses issues such as political ecology theory, the process-oriented approach to conflict studies, environmental scarcity/security theory and the concept of cultural neighbourhood. In the third chapter, I describe my field study area, fieldwork and the various methods I employed in the study. It also describes the two study areas in relation to their history of herders, climatic, social, economic and political characteristics. Chapter four is the first empirical chapter in which the links between environmental/climate change and conflict are discussed. In this chapter, I examine farmer and herder discourses and the role of environmental/climate change on their relations (conflict), on the one hand, and what data sets (mainly of rainfall and temperature) helps in our understanding of these linkages, on the other hand. It applies an environmental scarcity/security approach for analyzing the environment-conflict nexus. This chapter is intended to set the stage for a processual and multi-dimensional discussion of farmer-herder conflict escalation.

Chapter five takes a processual political ecology approach of farmer-herder conflicts escalation. The chapter analyses the role of politics and mobilisations in farmer-herder conflicts in Ghana. I trace different narratives and interpretations of events in the history of farmer-herder conflicts, the causes perceived by the actors for violent conflict escalations and the analyses of the processual drivers for violent farmer-herder conflict escalations. In addition, I use two extended cases and the specific incidents within each case to point out that the structural interpretations of farmer-herder conflicts by farmers, herders and others are not

what result in violent escalation. Rather, there are politics, different actors, mobilisations and the contestation of land politics which escalate these conflicts. Chapter six examines the land question in farmer-herder relations through resource access theory. The chapter is intended to help the reader understand the land conundrum in farmer-herder conflicts, its significance and the role plays among different resource users in shaping conflicts and farmer-herder relations. I present how the competition for land between herders, farmers and agro companies shapes farmer-herder conflicts. Overall, this chapter adds to our understanding of the ecological aspects of farmer-herder relations, challenging the theoretical postulations that resource scarcity and environmental/climate change are the main drivers of farmer-herder conflicts.

Chapter seven explores cooperation in farmer-herder relations from the cultural neighbourhood approach and everyday peace conceptualisation. A community from each of the study areas is analysed to further understand the concept of "cultural neighbourhood". Other forms of cooperation and conflict resolution mechanisms are discussed in this chapter. This chapter argues that despite violent conflicts between the two, there are many levels of cooperation between them. The chapter argues further that conflict is not just what exists between local farmers and herders, but that cooperation is also an integral part of their interactions. Chapter eight, which identifies social ties and networks among actors as the cornerstone of farmer-herder relations, vividly discusses power, political, social and economic ties/networks and how they influence conflictual and/or cooperative relations between farmers and herders. The chapter mainly focuses on two propositions to argue that ties and networks between various actors determine conflict or cooperation between farmers and herders. The concluding chapter summarises the key issues and insights discussed in the previous chapters. It takes up my arguments that ecological issues surrounding resources and land, the role of politics and power relations in conflicts, cooperation despite violent conflict and social ties/networks are important in the discussions of farmer-herder relations. Furthermore, this final chapter serves to link my findings to broader issues of farmer-herder conflicts in Ghana and Africa in general. It ends with both scientific and policy recommendations.

2. THEORETICAL AND CONCEPTUAL ISSUES

Various studies that have been conducted on farmer-herder relations in Africa concentrate on the subject of conflicts, and also on the influence of resource scarcity and environmental/climate change on conflicts between farmers and herders. Even so, these studies have tended to concentrate on structural and historical influences of farmer-herder conflicts. Besides, there are few studies on cooperative relations between farmers and herders, the social networks/ties that they build, and the extent to which these networks influence conflicts and/or cooperation between them. In this chapter, I review concepts and theories that are relevant to the themes and objectives of the study. The aim of the review is to provide a deeper understanding of the links between conflict, environmental change, cooperation and social networks in farmer-herder relations and to delineate the gaps in the literature. The chapter begins with a discussion of violent conflict escalation, followed by a theorisation of farmer-herder relations and conflicts, the conceptualisation and theorisation of land and resources, a delineation of cooperation and, finally, a discussion of social network theory.

2.1. Conflict Escalation and Violence

Conflict is one predominant form of social interaction that exists in human society. Conflicts are likely to exist where opposing interests, values or needs hinge on people's relationships with each other (Jeong, 2008). These can be due to overt and covert power struggles, political issues, values, identity or dependence on natural resources. The parties of a conflict involve individuals, groups or countries that pursue incompatible interests or goals (Coser, 1956). Sometimes, conflict is seen as a competition over power or resources (natural resources) between two parties of which one party may attempt to eliminate, injure or damage the other (Coser, 1956).

Whilst there is an assumption that competition for scarce resources mainly characterises social relationships (see Farley, 2000), conflicts involve issues that are far more complex than just competition over scarce resources. Conflicts between farmers and herders, for instance, cannot solely be due to competition over scarce resources, but involve both structural and processual factors (Moritz, 2010). While conflict, in the sense of this study, comprises differences, disagreements, competition or struggle between two groups or simply the existence of incompatible needs or interests between two groups in which they sharply disagree,

it is mainly used in the sense of violent conflict and non-violent farmer-herder conflicts. It is non-violent farmer-herder conflicts that develop into violent ones. This is because non-violent farmer-herder conflicts are usually characterised by tensions, which escalate into violent ones and exist in farmer-herder everyday interactions. These tensions are what are not seen by many actors involved in farmer-herder conflict resolution. Moores and Barrett (2005) posit that whereas tensions are often tacit, violent conflicts are explicit, and are the ultimate manifestation of tension. When many forms of non-violent farmer-herder conflicts become repetitive (the same causes keep recurring), they can escalate into violent ones. Many studies in farmer-herder conflicts have often discussed structural drivers of conflicts between the two, but failed to examine the extent and processes involved in their escalation. This is a major focus of this study.

2.1.1. Conflict Escalation

By the complex nature of conflicts, mere disagreements can escalate into full-scale violence. Conflict escalation refers to the increase in the severity of a conflict (Kriesberg, 1998). This involves an increase in the intensity of the conflict, in which it moves from a non-violent form to a violent form. There already exists a bulk of literature on how conflicts escalate and manifest themselves into violence. Fisher (2000), for example, identifies five stages at which conflicts escalate – Pre-conflict stage, Confrontation, Crisis, Outcome and Post-conflict stage. Mitchell's (1981) four phases of conflict development helps explain the escalation of farmer-herder conflicts into violence:

1. Isolation or cooperation stage where there exists no conflict or interaction (no incompatible goals) between the parties. Here, there are complementary goals between the parties;

2. Incipient conflict (existence of goal incompatibility). In this stage, the parties engage in interaction, and differences in their relations begin to emerge and shape further interactions;

3. Latent conflict (parties recognition of goal incompatibility). While at the incipient phase there are no recognition of the incompatibility of goals, at the latent stage, parties to the conflict become aware of their incompatibility;

4. Manifest conflict (parties engage in conflict behaviour to achieve goals). Here, conflict now exists between the two parties (see Chapter 5 for an application of these phases of conflict in the cases).

When the parties engage in conflict behaviour (at the manifest stage), conflict escalates resulting in open fighting. This violent escalation depends mainly on how the conflict is handled. Schilling, Opiyo, and Scheffran (2012) state that what matters in conflict is capability and motivation of the conflicting parties to pursue their goals, depending on the opportunities available to them to act. In conceptualising conflict escalation, therefore, farmer-herder conflicts develop from a latent phase, where the conflict is seen as dormant and exists at a low level, and then escalates into a manifest one, where actual violence is seen. Also important for explaining farmer-herder conflict escalation is Pruitt, Kim, and Rubin's (2004) three models of conflict escalation: the aggressor-defender model, the conflict spiral model and the structural change model. These models look at how the actors, interactions and the psychological dynamics help in the escalation of conflicts (cf. Rubin, Pruitt, & Kim, 1994), and thus show how actor constellations can escalate conflicts.

In addition to these frameworks, a number of authors (e.g. Zartman & Faure, 2005; Pruitt et al., 2004; Brecher, 1996) have identified factors as potentials for violent conflict escalation. These include imbalances of power between the actors, increase in the number of actors, group dynamics (including social, political, group solidarity and collective action), the externalisation of the conflict (e.g. involvement of others outside the area of conflict occurrence) and group relations (bonds, ties and networks) as equally important for understanding how conflicts escalate. Pruitt et al. (2004), for example, state that escalation is more likely when there is an imbalance of power or a lack of integrative options between the parties which make them inclined to adopt a confronting strategy. Also, whilst generally social bonds foster stability by ensuring positive attitudes, friendship, kinship, common group membership and future dependence and other social bonds that exist among actors can contribute to the escalation of conflicts. Increase in the number of actors, especially external actors in a conflict, can potentially lead to violent escalation. Brecher (1993, p. 150) argues that "more actors in a crisis lead to more disruptive interaction, with a consequent greater likelihood of violence including war" and more actors put more diverse values and differences to a conflict (cf. Van Keer, Deschepper, Francke, Huyghens, & Bilsen, 2015). This is important in farmer-herder conflicts, as more and more actors who get involved in the conflicts result in a higher likelihood of violent escalation.

2.1.2. Violence

Direct violence is usually the result of non-violent conflict and tensions that escalate. The concept of violence in this study is opposed to Galtung's (1969) structural violence, which

emphasises violence as being built into the way societies are structured. This study views violence as a form of struggle and mobilisation (of groups) for violent action (Demmers, 2012). Violent action is the use of direct physical attack on an opponent. Honderich (2003, p. 15) views violence as "a use of physical force that injures, damages, violates or destroys people or things." In non-violent conflict situations, grievances and disagreements arise between two parties without physical attacks. Non-violent conflicts then escalate into violence (depending on how the non-violent conflict is handled) resulting in direct physical attacks. For instance, a farmer who engages in a disagreement with a herder over the ownership of a piece of land or the destruction of his crops does not just resort to violent action until conditions (including group dynamics and past tensions – historicity of the violence) and tensions escalate. It is these conditions that can lead to the escalation of violence.

Violence is often framed in a discourse of legitimacy by society before or after it is carried out. This is why Schröder and Schmidt (2001) state that violence has an association with cultural factors in the sense that it is society that often creates violence, legitimises them and mediates in times of violence. They note that:

> Conflicts are mediated by a society's cultural perception that gives specific meaning to the situation, evaluating it on the basis of the experience of past conflicts, stored as objectified knowledge in a group's social memory […] Violence produces unique experiences that are culturally mediated and stored in a society's collective memory. Their representation forms an important resource for the perception and legitimation of future violence (Schröder & Schmidt, 2001, pp. 4–8).

The authors note that violence is expressed: *"as a synchronic event, as a type of social relations between individuals and collectivities that serves specific ends at intergroup as well as intragroup levels"* (Schröder & Schmidt, 2001, p. 1). They maintain that violence has a performative quality. Thus, violent actions are efficient because of their staging of power and legitimacy. Schröder and Schmidt (2001) note further that the performative quality makes violence an everyday experience and has, therefore, become malleable in cultural discourse. Violence is also a rational strategy of bargaining for power whilst emphasising violence as a form of symbolic action that conveys cultural meanings of legitimacy (ibid.). This symbolic claim is, especially so in farmers' violent actions to legitimise their control and ownership over land and resources.

Schröder and Schmidt (2001, p. 8) further explain that the legitimacy of violence can be based upon each (and usually all) of these three aspects:

1. it presents itself as recreating ideas and behavioural models from the past;

2. it appeals to strong feelings of social closure based on the experience of either superiority or suffering, as generated by this very tradition of confrontation; and

3. it offers itself as the most direct route to asserting the interests of those collectivities established by the above two mechanisms.

The authors observed that the most important code of violence legitimisation is historicity (history of past violence). When groups continuously remember past histories of violence, this has the tendency to escalate conflicts. Farmers and herders continue to cling to conflict discourse and past memories of violence, which motivates them to perpetuate the cycle of violence.

Stewart and Strathern (2002) observe that violence can destabilise the society depending on how it is framed in that particular society. Stewart and Strathern (2002, p. 2) argue that, "what constitutes order and how it is to be attained and maintained vary according to peoples' position in society and according to their own personal perception." They state that violence (and/or order) can reflect the subjective preferences or perception of dominant classes in society. Thus, discourses and perceptions are key in violent conflict escalation.

Violent farmer-herder conflicts in Ghana do raise tensions in communities, and can escalate to other communities (see Chapter 5 for details). As noted by Moritz (2006b), farmer-herder violent conflicts have the potential to increasingly overlap with other conflicts of interests, and to transform into other forms of conflict. A focus on the violent escalation of farmer herder conflicts from a processual political perspective (discussed later in this chapter) moves away from structural approaches dominant in the literature on farmer-herder conflicts. Scholars, for instance, study the linkages between resources and violent conflict, but fail to look at the processes involved in conflicts over the uses of these resources and how they can eventually manifest themselves as violent conflicts.

2.2. Towards a Theory of Farmer-Herder Relations

Social relations are embedded in a dynamic process and acted upon by specific context (Somerville, 2000). Somerville (2000, p. 1) states that "there is a sense in which human interaction and organisation represent a specific level of evolution where individual organisms adopt patterns of behaviour which 'best fit' the environments in which they operate." Social relations, according to Somerville (2000), can best be studied from an evolutionary approach informed by Rational Choice Theory and also the Theory of Human Capital. This approach argues that each individual acts or tends to act to maximise his or her

utility, and this is primarily what determines their orientation to their environment. According to Somerville (2000), cooperation amongst human beings is achieved mainly through the social construction of group advantage, and the understanding of how such construction lies at the root of explaining social relations generally. Although Rational Choice Theory has been criticised among other things for not being able to explain how unequal power relations exist in society and also for reducing human interaction to just economic exchanges (see Zey, 1998), it nonetheless helps our understanding of social relations. Rational Choice Theory assumes that humans are capable of self-determinism and act on their own interest to maximise costs and benefits (Somerville, 2000). For instance, cooperation can be achieved through human reasoning and negotiation. Fulani pastoralists, for example, will rationally choose to settle in communities where social and cross-cutting ties exist between them and community members.

In applying the Rational Choice Theory to social relations, individuals or groups in a community will engage in cooperation or conflicts with others based on the rational appraisal of the costs of cooperation or non-cooperation. Somerville (2000) notes that Rational Choice Theory sees cooperation as being guided by reciprocity.

> […] Essentially, each individual co-operates conditionally in return for improvements in their own situation. The form of co-operation is said to be governed by this principle of reciprocity. For the stronger members, the benefit could simply be the cooperation of the weaker members themselves […]. Cooperation should arise only where there is 'balanced reciprocity'; that is, where the act of one individual in benefiting another is 'balanced' by a reciprocal act from the other individual. Such 'balanced reciprocity' is based on a relationship of trust between the two individuals concerned: one individual takes a risk in co-operating, but if his or her trust in the other individual is broken or misplaced, then further co-operation may not be forthcoming. Trust is therefore the key to the normalisation of personal relationships. Trust also involves more than strictly balanced reciprocity or conditional obligation: it encompasses mutuality […] or complementary reciprocity […] (Somerville, 2000, pp. 4–5).

From the quote above, the argument is that people's cooperation with others is based on what they stand to benefit in reciprocal terms. Pastoralists, for instance, cooperate and build a range of social networks with chiefs or community leaders in order to gain access to community resources, and also to be protected from community attacks or agitations. This may involve the offer of gifts to chiefs in reciprocal terms for favours. In general, the rational choice approach to social relations argues that individuals and groups build social relations, whether through cooperation, conflict or social networks, based on their rational appraisal of the situation in order to gain benefits.

The other approach to understanding social relations is the Theory of Human Capital, which is aptly illustrated in the works of several social scientists, including Pierre Bourdieu (1986) and James Coleman (1988). The work of Bourdieu, *The forms of capital*, is particularly relevant for this study. In this seminal work, Bourdieu (1986, p. 243) argues that social functioning of society cannot be explained by economics alone and, therefore, makes a clear distinction among three forms of capital which are all necessary for the society's functioning: economic capital (depicted in the form of money and property rights), cultural capital (institutionalised as educational qualifications or cultural knowledge) and social capital (which is seen in social obligations and connections). Our social world, as both Bourdieu (1986) and Coleman (1988) argue, cannot be understood by prioritizing 'money (or profit maximisation) over other capital existing in immaterial forms.' Coleman (1988, p. S96), especially criticised economic capital stating that it:

> […] flies in the face of empirical reality: persons' actions are shaped, redirected, constrained by the social context; norms, interpersonal trust, social networks, and social organization are important in the functioning not only of the society but also of the economy.

Social capital, thus, remains by far the most relevant for conceptualising social relations and understanding the functioning of society. Bourdieu and Wacquant (1992, p. 119) define social capital as "the sum of the resources, actual or virtual, that accrue to an individual or a group by virtue of possessing a durable network of more or less institutionalised relationships of mutual acquaintance and recognition." To both Bourdieu and Wacquant and Coleman, social networks, a person's connections, interpersonal relations and exchanges with others, not his only kinship ties , are relevant for his/her maximisation of capital (resources). Also, Bourdieu (1986, p. 249) argues that a person's capital is a process that involves "the product of investment strategies, individual or collective, consciously or unconsciously aimed at establishing or reproducing social relationships that are usable in the short or long term." In other words, one's capital is maintained through the range of ties built over time and through institutionalised relationships. Pastoralists gain access to community resources, for example, as a result of exchanges and ties with community leaders built over time. Social relations are thus conceptualised in Figure 2.1.

Social Relations

Rational Choice Human Capital

Human acts for reciprocal Benefits (Somerville, 2000; Zey, 1998)

Dynamic & Complex

Connections, interpersonal relations and exchanges (Bourdieu, 1986; Coleman, 1988)

Social Networks, Reciprocity, Actors, Processes & Constructions
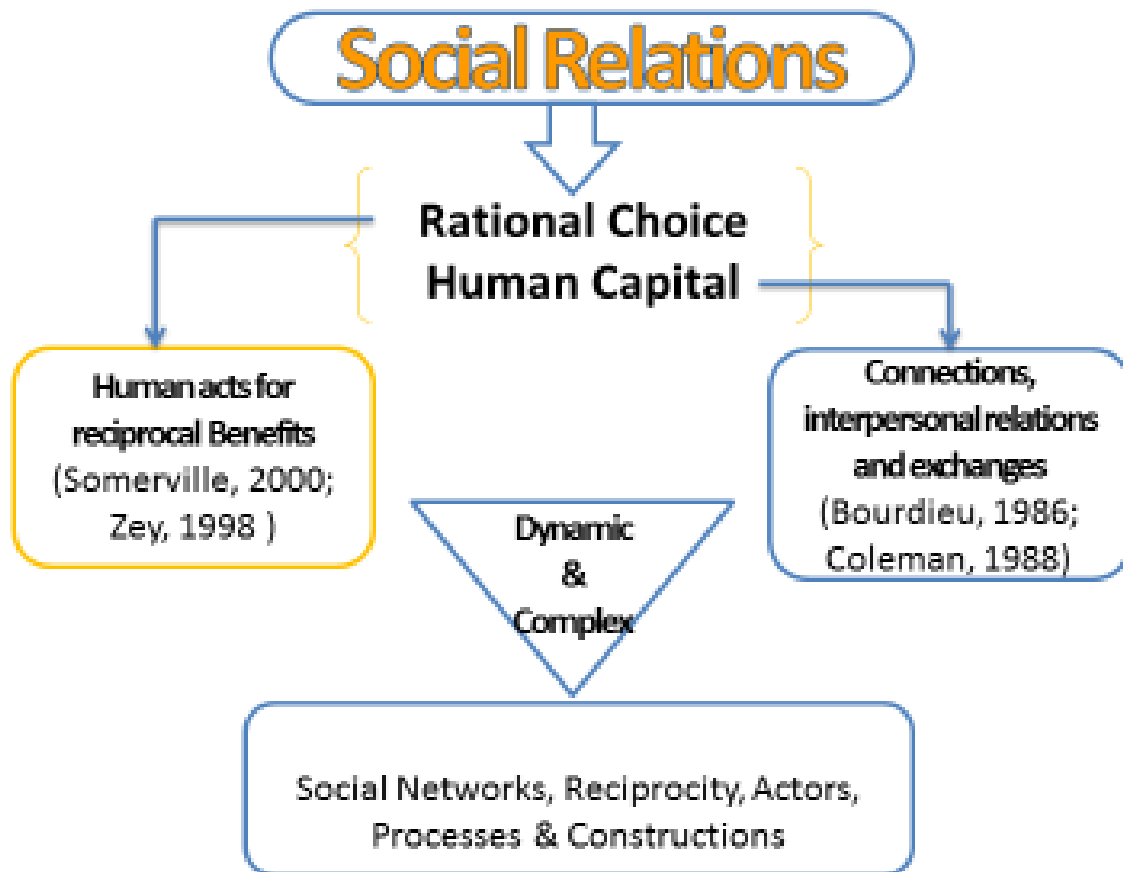
Figure 2.1: Theorising Human Relations

Historical studies of herder-farmer relations can be traced as far back as 1600 AD when white warriors, herders from the northern Sahel, continuously raided the black agricultural villages in the south due to competition over the scarce natural resources of the Sahel (Moritz, 2009). As this search for natural resources continued, herders extended to other areas particularly the coastal countries where they settled and co-existed with agricultural populations, but also conflicted with them. However, differing opinion exist as to whether or not farmer-herder relations have been more conflictive or cooperative in recent times. Some scholars argue strongly that while there are conflicts between farmers and herders, their relations in many instances have been cordial, cooperative and consensual in mutually beneficial ways (see Abubakari & Tonah, 2009; Benjaminsen & Ba, 2009; Davidheiser & Luna, 2008; Moritz, 2006b; Turner, 2004; Hagberg, 1998; Bassett, 1988). They argue that the two establish symbiotic economic and social relations in the forms of exchange, cattle entrustment, normal friendship and cooperation on land and water use. Others are of the opinion that the relations are characterised more by conflicts, and that

conflicts between farmers and herders are rising rapidly and assuming violent trends (Baca, 2015; Kimenyi et al., 2014). Blench (2010), for instance, claims that in Nigeria, there has been acceleration in the frequency of violent farmer-herder incidents between 1980 and 2000.

Diallo (2001) observes that a lot of complementarity exists between farmers and herders. He states that complementarity in northern Côte d'Ivoire between local Senufo agriculturalists and Fulbe pastoralists became high after the philosophy of *Société de développement de productions animals/Animal Production Development Company* (SODEPRA) was introduced by the government. Complementarity between the two existed in the practice of farmers entrusting their livestock to Fulbe, the loan of draught animals to farmers, the classical exchange of milk for cereals and the use of animal droppings for manure (Diallo, 2001). Diallo (2001) states further that, despite these high levels of complementarity between the two groups, hostility of Senufo farmers towards the Fulbe pastoralists remained high. Whilst all these previous studies have pointed out various forms of relations existing between farmers and herders, more in-depth studies and analysis are needed to understand the nature, drivers and complexities of these relations. In this book, I analyse the processes, levels and networks in farmer-herder relations.

2.3. The Complexity of Farmer-Herder Conflicts

Farmer-pastoralist conflicts or farmer-herder conflicts (both used interchangeably in this book) are conflicts between peasant/subsistence cultivators and nomadic/transhumant livestock keepers. Hagmann (2003) distinguishes herder-herder conflicts from farmer-herder conflicts. The former are usually conflicts between nomadic or transhumant livestock keepers that arise between receiving groups over their territory's resources and incoming groups searching for water and pastures, and cattle raiding. The violent cattle raids among pastoralists in East Africa are examples of herder-herder conflicts. Hussein et al. (1999) see farmer-herder conflicts as comprising different types of conflicts, including ethnic conflicts, interest conflicts, resource disputes, political action, evictions, killings, cattle raiding and cattle rustling. Both Scoones, Catley, and Lind (2013) and the Overseas Development Institute [ODI] (2009) describe conflict as one of the complex challenges facing pastoralism in Africa that has affected future pathways in pastoralism. ODI (2009) claims that in many parts of Africa, conflicts between pastoralists and farmers or among pastoralists are increasing. The Horn of Africa has been described as the hottest spot of pastoralists' contestations and conflicts,

where cattle raiding and armed pastoralist attacks are rampant (Adano et al., 2012; Eaton, 2010; Scheffran, Ide, & Schilling, 2014).

The response of various actors in farmer-herder conflicts remains important in their escalation. As indicated by Le Meur and Hochet (2010), farmer-herder conflicts involve a complex set of both state and non-state actors as well as institutional actors, thus extending beyond just farmers and herders. The actors and institutions involved in farmer-herder conflicts include: pastoralists/herders (nomadic, transhumant or sedentary pastoralists); farmers; cattle traders; traditional authorities; farmer groups; businessmen (including arms sellers); security officials (the police in particular and the army); agricultural officials (veterinary and agricultural extension officers); local and national politicians (MPs, DCs, ministers, etc.); local administrators; age organisations (elder groups, youth groups); NGOs; and the courts (Glowacki & Gönc, 2013; Hagberg, 1998; Krätli & Swift, 1999; Le Meur & Hochet, 2010). These actors are part of the process of the escalation and de-escalation of farmer-herder conflicts. Hence their roles are important in the resolution of violent conflicts. The actors' involvement or participation in a conflict through mobilisation can further escalate it and widen the scope of the conflict in terms of its causes. This can make conflict resolution complex and the cessation of violence difficult. Krätli and Swift (1999), in a study of pastoral conflicts in Kenya, found that many of the actors in pastoral conflicts are hidden, and suggest, therefore, the need for a conflict stakeholder analysis to identify them. They found in their study that some actors could play multiple roles, which can fuel conflicts.

> […] the (roles of the actors) may overlap. Individual raiders may engage in illegal trade with looted guns. Cattle traders may also be elders, politicians or administrators, and so may weapon dealers. Security forces may trade in weapons. Politicians may have interests in national/international business. Any of these may have a herd of their own, which may be built up by raiding, or be reduced by being raided by others (Krätli & Swift, 1999, p. 7).

Farmer-herder conflicts are also seen within the larger context of political, social, resource and ethnic conflicts. This is because these issues are embedded in their causes as well as well as the responses of the actors. Several scholars have, therefore, identified a number of environmental and socio-political drivers shaping and changing conflicts between farmers and herders. For example, Krätli & Swift (1999), Glowacki & Gönc (2013), Goldsmith (2013), Turner, Ayantunde, Patterson, and Patterson III (2011), Blench (1996) and Breusers et al. (1998) note that the nature of farmer-herder conflicts has been shaped by:

- the changing climate which exacerbates competition for natural resources between famers and herders;

- an increase in migration of herders towards semi-arid and forested regions in search of pasture, and in more recent times for herder jobs (as my own field studies also suggest). There is, therefore, a southwards shift of farmer-pastoralist conflicts due to the high presence of pastoralists in southern parts of West Africa;

- an increase in the population of pastoralists and subsequently cattle;

- changing land dynamics, land tenure insecurity, commoditisation of land and an increase in agricultural land use; and

- availability of weapons, especially in East Africa. There is a phenomenal increase in the supply of weapons to various groups in pastoral conflicts.

For instance, in a study of farmer-herder conflicts in four communities in Niger (Bokki, Katanga, Sabon Gida and Tountoube), Turner et al. (2011) found that changes in livelihood practices, increased expansion of cropped fields, increase in land use competition and land tenure had changed the nature of conflicts in these communities. They conclude that because of these changes, there is a greater likelihood of increased conflict triggers. Also, Fratkin (1997) had previously mentioned that the nature of farmer-pastoralist conflicts has increasingly been changing due to population growth and increasing commodity production which have led to the expansion of agriculture on formerly shared grazing lands, leading to increased tension and conflicts.

The environment, in terms of climate/environmental change and resource scarcity, is often mentioned as a major driver of farmer-pastoralist conflicts. The arguments here are that resource scarcity induces migration among pastoralists triggering competition between pastoralists and farmers and, subsequently, conflict (Benjaminsen et al., 2012; Intergovernmental Panel on Climate Change (IPCC), 2015; McCarthy & Zald, 1977; Njiru, 2012; Scheffran, 2011; Scheffran, Brzoska, Kominek, Link, & Schilling, 2012; The World Bank, 2011; Turner et al., 2011). I shall return later in this chapter to the environment-conflict nexus.

2.4. Drivers of Farmer-Herder Conflicts

Literature abounds on the reasons for farmer-herder conflicts. Much of the literature has focused on resource explanations to farmer-herder conflicts, and has argued that farmer-herder conflicts mainly result from competition between farmers and herders over natural resources, particularly land, pasture and water (see Adano, Dietz, & Witsenburg, 2009; Breusers et al., 1998; Brown & Crawford, 2008; Schilling, et al., 2012; Adebayo, 1997). These arguments

reignite Malthusian explanations which link scarcity to conflict. However, according to Moritz (2010), Hagberg (2000) and Bassett (1988), drivers of farmer-herder conflicts go beyond resource scarcity. Moritz (2010), especially, explains that an analysis of the causes of farmer-herder conflicts needs to involve both structural and processual factors. He notes that herder-farmer conflicts are complex:

> […] products of both structures and processes and cannot be explained solely in terms of either. A general theory of herder-farmer conflicts must include both structural and processual variables. Structural variables are necessary to explain the causes of conflicts, while processual variables can explain the outcomes of conflicts […] (Moritz, 2010, p. 139).

Moritz (ibid.) maintains that structural causes see conflict as resulting from systemic and socio-political failures. He maintains that structural factors such as resources, decreasing interdependence of pastoral and agricultural economies, institutional failure to resolve conflicts, the larger political context, historical context and cultural differences between herders and farmers, do not sufficiently explain the variations of farmer-herder conflicts. Moritz (ibid.), therefore, emphasises the need to as well identify processual analysis of the causes of farmer-herder conflicts. The focus of processual explanations in conflict is on the succession of phases in order to find patterns of political processes (Moritz, 2010). Moritz adds that processual analysis to conflict has its roots in process-oriented theories in anthropology. In two case studies of conflict escalation in the Grassfields of Northwest Cameroon between Aghem farmers and Fulani herders and in Cameo Province of Burkina Faso between Karaboro farmers and Fulbe pastoralists, Moritz (ibid.) notes that increases in participation in the conflicts by various actors change the nature of the conflicts, not just the crop damages. According to him, group dynamics and group mobilisation have helped escalate the conflicts in both cases and, therefore, farmer-herder conflicts follow general patterns of conflict theory, which should allow for more focus on conflict dynamics, rather than only the structural context.

Thus, farmer-herder conflicts involve different causes that need a multifaceted approach to analyse them. As noted by Turner (2004) and Bassett (1988), social, political and resource-related issues drive farmer-herder conflicts. Besides, different situations may determine the drivers of these conflicts. The setting of occurrence of farmer-herder conflicts is also important in determining how they escalate because every conflict is context-specific. For example, the socio-political dynamics could be a catalyst for conflict escalation in that different actors within the political, social or cultural milieu of a conflict can aggravate it.

Conflicts between farmers and pastoralists also involve different values, ethnic and cultural differences intertwined with resource access and use. Tonah (2006a) states that farmer-herder conflicts are frequently characterised by ethnic differences even when they do not originate from issues of ethnicity. In my study of violent conflict between Konkomba farmers and Fulani herders in communities in Gushiegu, where 14 Fulani herders were killed, what started as a conflict between a farmer and a herder over personal issues degenerated into communal violence (group mobilisation) against Fulani herders such that no one, including the Fulani herders, Konkomba, government officials and security agencies can adequately tell the cause of the violent attack except to make speculations and inferences.

It is worth discussing the role of citizenship, ethnicity and marginalisation in farmer-pastoralist conflicts. Unlike East Africa, where there are "indigenous' pastoralists" societies like the Pokot, Turkana, Abakuria and Samburu of Kenya, Maasai of Kenya and Tanzania, the Toposa of South Sudan and the Dassenatch of Ethiopia, the Fulani in some parts of West Africa have generally been considered strangers, non-autochthonous and non-citizens. Their access and rights to resources and landownership, as well as usage, are always limited and, in some cases, denied. Pelican's (2008) study of the Mbororo[12] agro-pastoralists in north-west Cameroon (Western Grassfields) shows that many Cameroonians consider them (the Mbororo) a stranger population, and think that they emerged from somewhere in West Africa. While there is recognition of their citizenship by the Cameroonian Government, according to Pelican, their access to land and other natural resources is still limited. Even in countries of West Africa like Niger, Nigeria, Burkina Faso and Mali, where Fulani are integrated, they are still considered as latecomers, non-autochthonous and their rights to ownership of land and other natural resources are limited and contested. In Ghana, most Fulani herder-local community relations are characterised as 'stranger-indigene', 'host-guest', 'indigene-alien' or 'local people-foreigners,' as well as a lot of local prejudices against Fulani herders (Bukari & Schareika, 2015; Tonah, 2002b, 2005b). Thus, local prejudices as well as issues of citizenship status, rights and the 'politics of othering' contribute to farmer-Fulani herder conflicts.

Much of the literature on the causes of farmer-herder conflicts has often focused on the initial stages at which the conflict started, but failed to look at the dynamics and process leading to the escalation. Many studies on farmer-herder conflicts - and even the disputants or parties of these conflicts - fail to examine the aftermath of say crop destruction. Different

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[12]Pastoral Fulani in Cameroon, Nigeria and other parts of West Africa are also called Mbororo.

actions and events, which take place after a single event, such as crop destruction, are important triggers to the escalation of a conflict. For instance, the role of group mobilisation and the processual development of the conflict, as emphasised by Moritz (2010), are often not taken into consideration. This is the void in the literature that the study seeks to fill. To this end, Le Meur and Hochet (2010) emphasise that theorising farmer-herder conflicts remains very difficult, since the actors, causes and dynamics are complex and varied. They, therefore, believe that a combination of theories is needed to explain vividly farmer-herder conflict escalation. This is why this study adopts a multi-theoretical perspective to discuss the issues in farmer-herder relations and to allow for a more in-depth study and understanding of the issues. The qualitative nature of the study allows for the adoption of this multi-theory approach.

2.5. The Environmental Scarcity/Security-Conflict Debate

With the renewed talks about climate change and the continuous warnings of its effects, the debate about the influence of environmental scarcity/resource scarcity on conflicts is even more intense. In the book, I examine if indeed environmental/resource scarcity influences conflict between farmers and herders in Ghana, since a few studies have dealt with this issue with respect to Ghana. I seek the views/perceptions of farmers and Fulani herders and consider what they see to be the role/influence of environmental/resource scarcity in conflicts between them. I then assess if indeed environmental/climate change and resource scarcity result in conflicts between farmers and Fulani herders. I am guided by the vast body of literature on the subject of links between environmental change and conflict.

Environmental security is inextricably linked with environmental scarcity. The former is often seen in relation to crises within the human environment, and is opposed to environmental insecurity. The latter implies "the vulnerability of individuals and groups to critical adverse effects caused directly or indirectly by environmental change" (Barnett, 2001, p. 17). Environmental change is often used in a broad sense to depict changes of all environmental variables, including climate as well as human anthropogenic factors which contribute to bio-diversity loss, desertification, environmental degradation and land use changes (see Stern, Young, & Druckman, 1992; Adger, Lorenzoni, & O'Brien, 2009). This environmental change is either the result of human anthropogenic actions or natural factors, which reduce the capacity to mitigate the change thereby making the world environmentally insecure (Barnett, 2007). These changes are seen through the effects of climate change, depletion of natural

resources (water, pasture, forest, etc.) and environmental degradation. An important dimension is climate change, which includes changes in temperature, rainfall, humidity, wind and severe weather events over long-term periods (Intergovernmental Panel on Climate Change (IPCC), 2007; 2014b). According to the Intergovernmental Panel on Climate Change (IPCC) (2007, p. 667) climate change refers to "a change in the state of the climate that can be identified (e.g., by using statistical tests) by changes in the mean and/or the variability of its properties, and that persists for an extended period, typically decades or longer."

Environmental change/resource scarcity is often said to have the potential of causing violent conflicts and insecurity. This argument has had a long history spanning from the time of Thomas Malthus and Robert Kaplan (1994) (i.e. *The Coming Anarchy, 1994*) to the present. Environmental conflicts are often driven by environmental stress and the competition for scarce resources (Page, 2000). The causal link between environmental change and conflict, for instance, is represented in Figure 2.2.
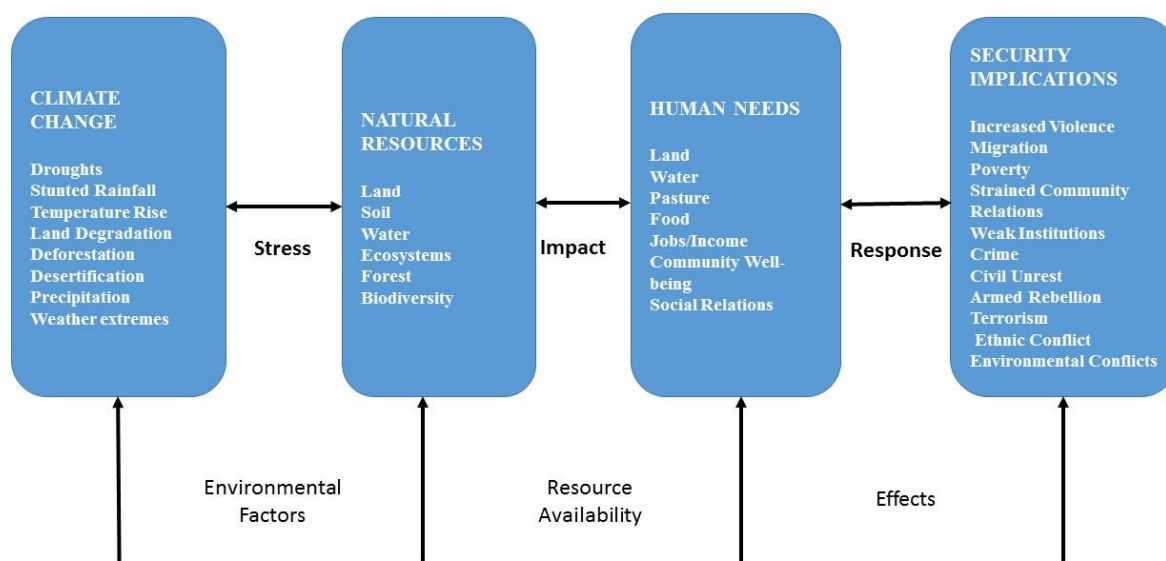
Figure 2.2: Linkages of Environmental Change, Natural Resource Scarcity and Security.
Source: Adapted from Scheffran (2011, p. 736) .

In Figure 2.2, Scheffran (2011) shows that stunted rainfall, droughts, land degradation, desertification etc. put pressure on natural resource use – land, pasture, water, which impact negatively on human needs. Consequently, when humans are unable to fulfill their needs, their response is conflict, migration, violence, crime, etc. which impact negatively on security. Similarly, Homer-Dixon (1999) observes that the stress on humans to fulfill their

needs of natural resource use leads to intense competition and impingements (conflicts). Resource (environmental) scarcity, according to Homer-Dixon (1999), involves degradation and depletion of natural resources such as cropland, water, forest and fish stocks. This scarcity, according to Homer-Dixon (1994), results from population growth and unequal distribution of resources. These are perfectly presented in his resource capture and ecological marginalisation theses. Homer-Dixon (1999) explains that when there is environmental scarcity, stress/pressure is put on human needs and when these combine with social effects such as ethnicity, marginalisation and social inequality, it results in violent conflict. The conflict in Darfur has often been cited as a classic case where environmental scarcity/resource scarcity has led to violent conflict. The United Nations Environment Programme [UNEP] (2007, p. 8) claims that "there is a very strong link between land degradation, desertification and conflict in Darfur." UNEP (2007) further argues that the environment acted as a trigger for conflict which was sustained by other political, ethnic and tribal factors while conflicts have in turn caused environmental degradation. The same is said of the South Kordofan region in South Sudan (Bronkhorst, 2011). Homer-Dixon (1999) and Spillmann and Bächler (1995) conceptualise that there are three key stages that link the causal process between environmental scarcity and violence:

1. the origins of environmental change/scarcity (thus the causes/reasons for the change/scarcity);

2. its socio-economic and political consequences (what happens as result of the environmental change, for example, the competition for natural resources); and

3. the outbreak of different forms of violent conflict (which emerge from the change such as the continuous competition for resources).

The effects arising from the accomplishments of these stages include constrained agricultural production, migration of people to more ecologically sensitive areas and crowded urbanisation.

Many scholars linking environmental scarcity/change and resource scarcity to violent conflict agree that the link is not always direct, but can occur due to environmental migrations and other social factors. Environmental change/resource scarcity on its own does not necessarily lead to conflict, but it interacts with other factors, which can both be physical and social to result in conflicts (Homer-Dixon, 1999; Page, 2000). These must be triggered by a number of other factors. In the case of pastoralists, migration is often their direct response to environmental change, and even when they migrate, there must be some factors in addition to

resource scarcity or competition to lead to conflicts. Much of the literature linking environmental scarcity to violent conflict has always been evidentially deficient and largely speculative. A school of thought argues that it is greed, not scarcity (thus grievances) that causes conflict (see Collier, 2001, 2006; Collier et al., 2003). They argue that the relative abundance of lootable resources, rather than scarcity explains violent conflicts. Thus, abundance of resources, rather lead to conflicts between resource users such as Fulani herders and farmers (see Le Billon, 2001; Welsch, 2008). In areas where resources are abundant, people are more attracted to such areas. These abundant resources attract migrants who compete with others for these resources. Greiner (2012), in a study of conflict in the East Pokot District of Kenya, states that it is increase in resources and the value of these resources that result in conflicts between various pastoralist groups in Pokot land (between the Pokot, Samburu and other groups), rather than scarcity. There are similar findings by Abubakari and Tonah (2009) in the middle Volta Basin of Ghana between migrant farmers and migrant Fulani herders, and that of Bassett (1988) in northern Cote d'Ivoire between Sunafu farmers and migrant Fulani herders.

In discussing environmental change in the field of ethnographic studies, evidence is mostly based on observations and perceptions – how people (farmers and pastoralists) observe and perceive these changes. Roncoli, Crane, and Orlove (2009, p. 87) point out that:

> […] Culture frames the way people perceive, understand, experience, and respond to key elements of the worlds which they live in. […] This framing is particularly relevant to the study of climate change […] Individual and collective adaptations are shaped by common ideas about what is believable, desirable, feasible, and acceptable. […] Anthropology's potential contributions to climate research are the description and analysis of these mediating layers of cultural meanings and social practice […].

Similarly, I study the perceptions, narratives and observations of farmers and pastoralists on the influence of environment change and resources on their conflicts.

2.6. Political Ecology of Farmer-Herder Conflicts

Political ecology became known in the 1980s when it was used to explain how ecology and power relations are integrated into the relationships between society and natural resources (Lund & Lund, 2005). The term became even more useful when it came to explaining the reasons for conflicts within society, especially the so-called environmental conflicts. Turner (2004) notes that resource-related conflicts have always and continue to be a major analytical focus of political ecology. Turner (2004) notes further that environmental conflicts are ex-

pressive of larger struggles in society, and go beyond the usual explanations of resource scarcity or historical ethnic cleavages. In the midst of resource-driven conflicts and farmer-Fulani herder conflicts, political ecologists see a multiplicity of social, political and ecological/environmental factors in these conflicts. Thus, there is an interplay of ecological and political factors in farmer-herder conflicts.

Watts (2000, p. 257) also says that political ecology "understand the complex relations between nature and society through a careful analysis of what one might call the forms of access and control over resources and their implications for environmental health and sustainable livelihoods." Watts (2000) identifies the role of power, politics, governance and social factors in explaining environmental conflicts. Thus, political ecology is about how environmental and ecological processes are influenced by political decisions. In the management of resources, political ecologists argue that social and political factors matter. This is why Bryant and Bailey (1997, p. 27) state that "political ecologists start from the premise that environmental change is not a neutral process amenable to technical management. Rather, it has political sources, conditions and ramifications that impinge on existing socio-economic inequalities and political processes." These areas are what this study seeks to apply in studying why conflicts between farmers and herders occur.

Both Turner (2004) and Bassett (1988) argue that farmer-herder conflicts do not necessarily come from the scarcity of resources or ethnic and historical rivalries, but are a mixture of ecological and political issues. Using conflicts between Senufu farmers and Fulani herders in northern Cote d'Ivoire, Bassett (1988) states that these conflicts are not just about ethnic hatred, resource scarcity and crop damage, but that the conflicts are due to political policies initiated by the state (Ivorian government) that allowed herders into the country in order to develop the cattle sector and help boost the economy. According to Turner (2004), political ecologists generally see peoples' struggles to ''access resources'' as multi-faceted, and not only shaped by social and environmental changes. The author states further that farmer-herder conflicts in the Sahel, seen within a broader framework, contribute to a fuller understanding of the interplay of material and non-material antecedents to resource-related conflicts. Similarly, conflicts between pastoralists groups in East Africa ''inevitably tends to have political dimensions and implications by virtue of the fact that the groups are organised and/or because the state is involved, either in trying to handle conflict or in becoming the arena for such conflicts'' (Mwaûra & Schmeidl, 2002, p. 45).

Thus, resource-related conflicts are not simply struggles over resources, but reflect a broader set of tensions within agro-pastoral societies (Turner, 2004). On how political ecology views environmental conflicts, Le Billon (2001, p. 564) notes that:

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

Le Billon (2001) explains that political ecology goes beyond these two perspectives to look at the role of the social groups and political forces behind these conflicts. In sum, the use of political ecology in this study is to allow for multi-dimensional analysis of conflicts between herders and Fulani-herders in Ghana, especially considering the social and political, as well as ecological (environmental) dimensions of these conflicts.

2.7. Processual Paradigm and Process-oriented Analysis of Conflicts

Environmental security and political ecology have always been advanced as two main theoretical approaches in the study of herder-farmer conflicts in West Africa (Moritz, 2010). The weakness with both theories is that they advance structural causes of conflicts, and do not involve processes of conflict escalation. Process-oriented analysis of conflicts is, therefore, a shift from a structural-functionalist perspective of static and synchronic interpretations of conflicts and social structures in society. It uses analytical methodologies such as the ones developed by the Manchester School, including situational analysis and the extended case method (see Gluckman, 1956; Mitchell, 2006), as well as network analysis. Processual paradigms are concerned with agent-driven politics, dynamic and diachronic processes (Kurtz, 2001). The processualists look at the *processes* (sequence of events) involved, the relations of various actors and, thus, imply that political processes are fraught with conflicts (Kurtz, 2001).

Therefore, the focus is on conflict and related political processes. The processual paradigm studies conflicts diachronically with a focus on the succession of phases in order to find patterns of political processes (Kurtz, 2001). In applying the process-oriented theory to farmer-herder conflicts, the study delineates through case studies the political and multi-faceted processes of these conflicts. Conflicts do not just reflect the different positions within

social structures, but follow a political process and the networks and alliances between various social actors (Bailey, 2001; Bierschenk & Olivier de Sardan, 1997; Kurtz, 2001). Besides, conflicts are composed of diverse actors interacting within these political processes and arenas.

Conflict remains the most definitive feature of the processual paradigm. Kurtz (2001, p. 101) argues that:

> […] Conflict is the result of oppositions in social relations at the heart of a political system that are compelled by the very structure of the system and that result in the alteration of sociopolitical statuses and roles, but not in the pattern of these positions […].

According to Swartz, Turner, and Tuden (1966), conflict is not merely an event, but the emergence and resolution of conflicts are a process. The authors developed a model of political processes from Turner's social drama to demonstrate the dynamic and processual nature of conflicts. The phases of the model are:

1. breach of the peace;

2. crisis;

3. countervailing tendencies;

4. deployment of adjustive or redressive mechanisms; and

5. restoration of peace.

The process, according to Swartz et al. (1966), begins with the *breach of the peace* in which the conflicting parties think they have acquired a decisive advantage in support, and then initiates a *crisis*. At the *crisis phase*, apparent peace turns to overt conflict and covert antagonism. In this phase, external support and mobilisation of powerful forces may be used to solidify support. When the crisis occurs, *countervailing tendencies* are adopted to reach a consensus by leaders and other outside forces. As the conflict develops and continues, *adjustive or redressive mechanisms* are deployed to seal off or heal the breach. When adjustive or redressive mechanisms are deployed effectively, they lead to the re-establishment of relations between the conflicting parties (restoration of peace), which ends the conflict. Kurtz (2001, p. 110), however, notes that "in dialectical thinking, contradictions beg resolution. And each resolution provides the basis for new conflicts, which suggests that there never really is a solution." Kurtz (2001) argues that new conflicts emerge not from peace and cohesion, but from the wings of the stage upon which the game is played as the source and outcome of conflict and, thus, reflecting that conflicts follow a process.

Moritz (2010) proposes a processual political ecology study of farmer-herder conflicts where multiple actors, the political dynamics and processual development of the conflicts are looked at. Basically, a processual political ecology perspective combines political ecology and the processual paradigm in analyzing farmer-herder conflicts. It argues that there are political processes made of power relations of state and non-actors involved in farmer-herder conflicts, whilst acknowledging the ecological dimensions (the role of resources, not necessarily the scarcity of resources) in these conflicts. Besides, a processual political ecology perspective examines the series of interactions and processes involved in the conflict. The multi-actor conflict approach, which also examines political actions of various actors in conflicts, is similar to the processual approach. I take Bailey's (1969) conceptualisations of actors in arenas in which political life, both at the local and national levels are games, where social actors organise around leaders. This arena is the social space where the actors confront each other (Bierschenk & Olivier de Sardan, 1997).

2.8. Group Mobilisation in Conflict

Groups mobilise in response to political, social/identity and resource needs. Conflict remains one important reason that motivates groups to mobilise. Etzioni (1968, p. 243) defines mobilisation as "a process in which a social unit gains relatively rapidly in control of resources it previously did not control. The resources might be economic or military, but also political." Thus, mobilisation is the result of a group's aim to gain control of resources, which could be power, economic, social or natural resources. Jenkins (1983, pp. 532–533) notes that the major issues in mobilisation are:

- the resources controlled by the group prior to mobilisation efforts;
- the processes by which the group pools resources and directs these towards social change; and
- the extent to which outsiders increase the pool of resources.

Thus, the collective action of groups and their array of resources, including material and group cohesiveness are important in the mobilisation process.

Ted Gurr (1993) explains that communal groups often have as their focus political mobilisation and action in defence or promotion of their self-defined interests. Gurr (1993, p. 167) defines group mobilisation as "the calculated mobilisation of group resources in response to changing political opportunities," while political mobilisation "refers to a communal group's organisation for and commitment to joint action in pursuit of group interests."

Gurr (1993) argues that these groups mobilise in response to challenges or obstacles posed by other groups. Gurr (1993) maintains that group mobilisations are based on ethnic identity and grievances or ethnic boundary maintenance (in a primordial and instrumental sense). Mobilisation and the collective action of groups depend on members' shared interests and organisation, as well as their opportunities (Gurr, 1993). Thus, in group mobilisation, members within the groups are recruited through networks, and their commitment for collective action is maintained through their collective identity.

Etzioni (1968) notes that in mobilisation, existing social patterns are usually supported by a parallel distribution of power, vested interests, social habits and ideological underpinnings, and the actors try to maximise support of allies. Etzioni (1968, p. 243) states that:

> A mere increase in resources of members or sub-units or even of the social unit does not make for mobilisation, though it increases the *mobilisation potential*; only mobilisation is the process through which resources, old or new, are made available for collective action, by changing their control.

Rather, he says that it is "the increases in the capacity to mobilise through improvement in administrative and communication capabilities" (Etzioni, 1968, p. 250). There is normally the argument that groups that mobilise do so because of grievances. Jenkins (1983), however, explains that resource mobilisation theorists have argued that grievances are secondary. He asserts that grievances are explained, either by changes in power relations or by structural conflicts of interest, and are only necessary for movement formation. According to Canel's (1997) 'political-interactive model,' political power, interests, political resources and group solidarity give rise to social movements and mobilisation. Canel (1997, p. 206) notes that the political-interactive model "focuses on changes in the structure of opportunities for collective action and on the role of pre-existing networks and horizontal links within the aggrieved group."

Just like all critics of the resource mobilisation theory, I also see the over-emphasis on resources at the expense of other factors that can mobilise groups to take action. Resources, especially material resources, are not the only motivation for groups' mobilisation. As noted by Gurr (1993), political interest or identity, especially ethnic identity arising from a primordial or an instrumentalist perspective, is an important motivating factor for mobilisation. What about informal groups that mobilise in response to a perceived danger posed by others? For instance, in my study of farmer-herder conflicts in Ghana, informal groups do

mobilise to attack, particularly Fulani herders, whom they see as posing 'destructive' tendencies to their livelihoods (farming). These groups are usually organised at the ethnic or political level, with support from some elites, elders or leaders of the community. In the August 7 and 8, 2011 attack on Fulani herders in some communities in Gushiegu, there was a clear informal group mobilisation that attacked and killed 14 Fulani herders. Even today, the mobilised group remains unknown. Therefore, mobilisation for violent action goes beyond resources.

Stewart (2009) states that collective or group organisation forms an essential element in political mobilisation for violent conflict.

> […] in both political and socio-economic dimensions, and/or the presence of high-value natural resources, people have to be mobilised if conflict is actually to break out. And such collective organisation and mobilisation generally requires some unifying mission or identity which is sufficiently powerful to get people to kill and be killed on a large scale. Material motives and forced conscription can and do play a role of course, but these are frequently subordinate […] (Stewart, 2009, pp. 3–4).

In furtherance of her arguments, Stewart (2009) posits that while the root causes of most violent conflicts lie in economic and political factors, mobilisation by identities, in particular ethnic or religious ones, remain important in exacerbating violent conflicts. She emphasises that whilst motives are useful for mobilisation, common identity is important to produce trust among the fighters, which is essential for the efficient prosecution of any conflict. To Stewart (2009), cultural identities appear a more important source of mobilisation, and these cultural differences encompass a wide range of phenomena: 'racial' differences; 'ethnic' differences; 'clan' differences; 'religious' differences; and differences between 'religious sects' (p.4). Thus to Stewart (2009), despite the fact that all conflicts have several motives with political and/or economic ones generally being central, mobilisation for these conflicts frequently occurs on the basis of particular identities. These identities, according to Stewart (ibid.), are determined largely instrumentally, and are a matter of resources and politics, rather than a matter of deep primordial beliefs. Baker (2003) equally stressed that identity becomes a very strong tool in environmental and resource struggles. He supports Brosius (1999, p. 288) assertion that "environmental struggles today are irrevocably tied up with identity politics."

2.9. Land Tenure Security and Conflicts

Land is very important in Africa, since many rural people depend on it for food, pasture and a valuable natural resource to both farmers and herders since their livelihoods are dependent on it. However, land is quite a difficult and complex issue when it comes to Africa (Lentz,

2013). Its complexity arises from the fact that its ownership is said to be both physical (mostly owned by the entire community or family) and spiritual (ancestors play a role), and also because it remains the most valuable tangible property people can claim. To this end, Lund (2011) sates that growing pressure on land resources, land-related conflicts and political mobilisation makes land rights a crucial political issue. As noted by Da Rocha and Lodoh (1999), Africa has diverse systems of land tenure which vary from place to place. Land tenure depicts the ownership, usage and transaction of land. In landownership (tenure), a person must prove that there is no reasonable probability of the existence of a superior adverse claim to his claim, and those through whom he claims to have possessed the land for so long (Da Rocha & Lodoh, 1999). Land in most parts of Africa is owned under customary tenure, which is guided by cultural and traditional laws (Kasanga, 1988; Kasanga & Kotey, 2001). Land tenure security remains very crucial in any land tenure since people need to be assured of the rights of use and control of their land.

A cursory study of land tenure regimes and policies in sub-Saharan African countries from the pre-colonial, colonial and post-colonial eras reveals that land tenure and ownership have transformed from a more traditional system to quasi modern system, although the customary holdings are still the predominant system practised. Muwonge (2009) reveals that in the pre-colonial period, land access and land resources were governed by families, clans, chiefs and the larger community to protect and guarantee individual and community rights to these resources. These were guided by custom and tradition and the land was for the entirety of the community (Muwonge, 2009). During the colonial era, colonial governments introduced land reforms into the system informed by European perspectives on landownership that best protected these European interests and gave them the largest bundle of rights possible under the imposed legal regimes (Economic Commission for Africa, 2007). These systems of tenure were based on freehold and leasehold. Post-colonial governments' land reforms were aimed at nationalising land tenure regimes and fusing modern and customary systems. Many laws were introduced in this regard to streamline the systems of land tenure. Ghana, for instance, in a bid to streamline land tenure, introduced the Land Administration Project (LAP) in 2007 for a period of 15 years. The project, which is in its second phase, aims, among other things, to avoid duplication in land registration/titles and, therefore, to avoid land conflicts. However, LAP does not take into consideration issues about pastoralism in such land use plans.

2.9.1. Land Tenure System in Ghana

There exists a plurality of land tenure systems in Africa. Ghana operates two types of land tenure system – the customary tenure system and the state tenure system. However, Quan, Ubink, and Antwi (2008) believe that the system of land tenure operating in Ghana is a dual land rights regime, which is a hybrid system of land tenure/administration (a combination of the customary land tenure system and the state land tenure system). The state administration of land is recognised by the *1992 Republican Constitution of Ghana* which vests all state lands in the president of Ghana in trust of the people, while equally recognizing the rights of stools and skins[13], clans and families to own land. Mahama and Baffour (2009) claims that 80% of landownership in Ghana operates under customary tenure system, which is communally owned, whereas stools and skins, clans and families hold these lands in trust for the entire community. The customary land tenure system operates under the customs, rules, norms and traditions of the community, while the land use rights of individuals are embedded in the tradition and customary laws of the community. Kasanga and Kotey (2001) state that, although the customary land tenure system is not written and codified into law, the land system is known by all members of the society. The rights to landownership under the customary system are handed down from generation to generation.

The various types of interests that exist in Ghana are: allodial title, freehold title (customary freehold or common law freehold), leasehold; and, to a lesser extent, holdings created through sharecropping e.g. *abunu*[14] *and abusa* tenancies (Da Rocha & Lodoh, 1999; Government of Ghana, 1999; Ollennu, 1962). The allodial interest is the highest land title in Ghana, which is held by stools and skins, clans, families and, in some cases, individuals (see Bentsi-Enchill, 1964; Da Rocha & Lodoh, 1999). Among the Akan and some Ga communities, stools and sub-stools hold the allodial titles. In some parts of Adangme (Greater Accra Region), the Anglo (Volta Region) and Adjumaku (Central Region), families and clans own

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[13]The use of the terms stool and skin represents the symbols of authority of chiefs in Ghana. While the stool is the symbol of authority for chiefs in the southern part of Ghana, the skin (of an animal) is the symbol of authority for chiefs in the Northern part. There is the tendency in Ghana to refer to the chieftaincy of a particular area as the stool or skin. There are even verbal forms created: to enskin, to enstool; and derived nouns: enskinment and enstoolment.

[14]In the case of *abusa*, the sharing proportions are two-thirds to the tenant farmer and one-third to the landlord. Under this arrangement, the tenant farmer bears the expense of clearing and cultivating the virgin forestland allocated by the landlord. The tenant is then rewarded with a two-third share of the returns for his investment in the land. Under the *abunu* system, the farm proceeds are shared equally between the tenant farmer and the landlord (Da Rocha and Lodoh, 1999). With this tenancy, the landlord does not only provide the land but also contributes to the establishment and management of the farm. It suffices to mention that, under the *abusa or abunu* system, the farm itself may be what is shared and not the produce.

land. In the Upper East and Upper West Regions, and in some parts of the Northern Region, *Tendaana* (the earth priest) hold the allodial interest (Bentsi-Enchill, 1964; Kasanga, 1988). Individuals and families from the allodial landholding group mostly hold the *customary freehold* – denoting the near maximal interest in land (Bentsi-Enchill, 1964). Chiefs and *Tendaana* belonging to families, also have an interest in family or communal land (Kasanga, 1988; Kasanga & Kotey, 2001). Both members of the land owning group *(subject usufruct)* or strangers *(stranger usufruct)* can hold the customary freehold interest[15].

Leasehold interest is a legal interest in land created in favour of a lessee for a specific duration, to occupy and use the lessor's land for a periodic fee. Under the current legal regime of Ghana (Republic of Ghana, 1992), a lease can be granted for as short as one year and for a maximum duration of 99 years for Ghanaians, and 50 years for foreigners. In many instances, Fulani pastoralists in Ghana have leasehold arrangements (purely cash-based) with allodial trustees (chiefs and usufruct holders). Since such land transactions by chiefs are completed with the limited participation of usufruct holders, this has implications for peaceful co-existence, transparency and accountability. The last category of land interests in Ghana is customary tenancies, in which a gratuitous tenancy is created when the landlord gives out his land to the tenant to use free of charge. The only known gratuitous tenancy in Ghana is a license – seasonal, annual or indefinite licenses, which can either be for farming (farming license) or building (building license). *Abusa* and a*bunu* sharecropping agreements are the most common customary tenancies and are mostly with respect to tree crops (Blocher, 2006).

All of these systems of land holding have implications for land conflicts. Despite the clarity in the law about these land titles, conflicts are not uncommon. A major problem of the land tenure systems is conflict, involving various actors such as chiefs, family heads, government and individuals including pastoralists, cattle owners and farmers. According to Yaro (2010), conflicts over land in sub-Saharan Africa arise from land tenure insecurity, rapid population growth, conflicting or multiple claims over land and unequal access to land and natural resources, marginalisation of some groups in the use of land and land resources. These are particularly important in the case of herders/cattle owners' conflicts over land and the use of natural resources.

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[15]According to Farvacque and McAuslan (1992, p. 28), subject usufructs are persons who have inheritable and alienable land owning rights while stranger usufruct is a "specific grant made by the stool or its subjects to persons who are not members of the land owning group."

2.9.2. Belonging, Tenure Insecurity and Land Conflicts

Both Peluso and Lund (2011) and Wehrmann (2008) acknowledge that conflicts and violence in landownership are common and widespread. Equally worth noting is that increases in the value of land can worsen land conflicts. Peluso and Lund (2011) observe that a group of new actors are emerging in the control of land, such as those acquiring land for large industrial crop production for export. According to the authors, this has increased competition for land. Commercialisation, privatisation and commoditisation of land make competition for it more intense (Flintan, 2012). Increases in the new phenomenon of *land grabbing* by bigger private corporations for both agricultural, biofuels and infrastructure have also exacerbated land conflicts. Thus, Large-Scale Land Acquisitions (LSLA) have prompted competitions for land use. Wehrmann (2008) states that, in most parts of Africa, land is continuously receiving a material value and increasingly becoming private property, prompting people to accumulate as much land as possible and prompting them keen to compete for it. Peluso and Lund (2011) added that the confluence of territorialisation, property rights and commoditisation of land, resources and space-making, enables spatial and more complex forms of enclosure, which contribute to land conflicts and land tenure insecurity. Yaro (2010) claims that lands are increasingly commercialised in Ghana for both residential and agricultural purposes which hitherto were not. He maintains that the customary land system in Northern Ghana, for example, is being greatly commercialised, especially in terms of access, ownership, control and mode of transactions.

Peluso and Lund (2011) contend that conflicts over land are not over land use per se, but rather over 'power and property rights.' According to them, the need to have control over land and the rights over its ownership underpin land conflicts, rather than the land (including resources) itself. In peoples' quest to gain control over land, which is the means by which they can control power and property rights, competition becomes intense and leads to conflicts. Thus, land conflicts between farmers and herders go beyond just competition for land and land resources. Embedded in land conflicts are issues of what Wehrmann (2008) calls *social relations of power and influence*. Structures of power play and control over land resources remain at the core of farmer-herder conflicts. These struggles of power structures are not necessarily between local farmers and pastoralists, but between autochthonous community members. Wehrmann (2008) notes that in land conflicts, two parties are involved in struggles over the property rights on land, the right to use land, to manage land, to exclude others from the land, to transfer it, and to have the right to compensation.

> Although land is always the central and obvious conflict issue, land conflicts often disguise other societal conflicts. They are often just the visible part of a more serious conflict which is rooted much deeper in the society and its history. Very often land conflicts only reflect the general inequality or unfair distribution of wealth, voice and power in a given society and/or the discrimination against certain groups […] (Wehrmann, 2008, p. 29).

Beyene (2014) maintains that emerging issues in land use practices have significant effects on rangeland management and sustainable use of natural resources in dry land areas. He states further that land-related conflicts between pastoralists and other groups occur when there is a large livestock population and communal grazing arrangements are widely practised. Beyene (2014, p. 66) emphasised that:

> […] Conflict limits livestock mobility and creates tensions. Demographic shifts can reinforce the same. Hence, conflict causes environmental damages (such as rangeland degradation) due to poor distribution of animals over a larger area and more herd concentration in a limited space. This will eventually affect land use and pastoral livelihood security […].

Customary land tenure systems, in particular, are characterised by high levels of insecurity on customary lands (Yaro, 2010). Pastoralists are a major group who suffers from land insecurity. Security of land tenure for most pastoralists in Africa remains a driver of farmer-pastoralist conflicts. Flintan (2012) therefore observes that, in the past, pastoralists had access to vast tracts of rangeland that were managed through customary institutions at different levels and for different resources. Flintan (ibid.) states that this unlimited land access, however, has reduced for most pastoralists due to the changing customary land tenure system to more private holdings leaving poor herders with smaller parcels of land or no land. This has resulted in land insecurities for pastoralists with little done to address the insecurities they face (ibid.).

Having land rights is tied to citizenship. Lund (2011, pp. 71–72) states that land and property rights in Africa are basically connected to citizenship and social identity:

> […] Property and citizenship are intimately related in their constitution. The core element of both is recognition. The processes of recognition of political identity as belonging and of claims to land and other resources as property simultaneously work to imbue the institution that provides such recognition with the legitimation and recognition of its authority to do so.

Lund (2013) explains that any individual's access to land depends on the rights and identity he/she has in the community, which are defined by one's membership (belonging/citizenship) in that community. Lund (2013) espouses further that mere membership of a national com-

munity (country) does not give one automatic access; what is important is the local citizenship and status. Therefore, the politics of belonging and citizenship are core to one's ownership of land and even the security of one's ownership of that land (see Lentz, 2013). This explains why conflicts with pastoralists in Africa over land are intertwined with issues of belonging and citizenship. I conclude by quoting Flintan's (2012, p. 16) treatise on land: "land is a political space where different groups of actors negotiate, conflict and/ or reach agreement over access, and use and manage physical land and its resources."

2.10. Resource Access Theory

Many attempts have been made to theorise how access to resources, especially access to natural resources and rights, influences conflict. Ribot and Peluso (2003, p. 153) define access "as the ability to benefit from things - including material objects, persons, institutions, and symbols." Ribot and Peluso (ibid.) emphasise that access has not been adequately theorised, although it is used frequently by property analysts and other social theorists. They note that access is different from property in that "access is about *all* possible means by which a person is able to benefit from things. "Property generally evokes some kind of *socially acknowledged and supported* claims or rights - whether that acknowledgment is by law, custom, or convention" (Ribot & Peluso, 2003, p. 156, emphasis in original). Ribot (1998, p. 310) defines these in terms of the ability and right to make clear the distinction between access and property:

> […] The term 'right' implies an acknowledged claim that society supports (whether through law, custom or convention). The term 'ability', however, is broader than right resting solely on the fact of demonstration without the need for any socially articulated approval. Right is a prescriptive term. Ability is a descriptive term […].

Ribot and Peluso (2003, p. 154) conceptualise that empirically access focuses "on the issues of *who* does (and who does not) get to use *what*, in *what ways*, and *when*." They note that access to natural resources and how people benefit from these resources are usually seen as *bundles of power* that these people possess.

> […] These powers constitute the material, cultural and political-economic strands within the "bundles" and "webs" of powers that configure resource access. Different people and institutions hold and can draw on different "bundles of powers" located and constituted within 'webs of powers' made up of these strands […] (Ribot & Peluso, 2003, p. 154).

Sometimes, law or other social norms (property rights) do not sanction one's rights or access to resources, but what is equally important is that social actors can gain and maintain access

to resources in many ways that do not amount to holding property (Ribot & Peluso, 2003). As Ribot and Peluso (2003, p. 160) maintain, mechanisms that allow people to gain access to natural resources, or property include, "first, *rights-based access*" (that which is sanctioned by law, custom or convention) including *illegal access* and, secondly, "*structural and relational access mechanisms*", which include technology, capital, markets, labour, knowledge, identities and social relations. Some people and institutions control resource access, while others must maintain their access *through* those who have control.

In Africa, the state, chiefs, elders, clan and family heads represent these institutions in the control of resources, especially land. Interestingly, Ribot and Peluso (2003) observe that access relations are always changing, depending on an individual's or group's position and power within various social relationships. This, therefore, means that power relations are crucial for determining access to relations and the networks one maintains with these 'bundles of power.' Fulani cattle owners and herders try to maintain good relations and networks with those who constitute these bundles of power in communities in which they find themselves in order to gain access to pasturelands. Their access to resources, particularly land, has to be built on good interactions and building of strong social network with those with power.

Sikor and Lund (2009) make an important observation that access to natural resources is often contested and rife with conflicts at many levels. They state further that people will often make attempts to secure rights to natural resources by having their access claims recognised as legitimate property by a politico-legal institution. The need for people to legitimise their rights and access to natural resources has remained central in competition and contestation for natural resources. According to Sikor and Lund (2009), access is not always the issue for contestation, but the legitimacy of the access that causes contestation or struggles. Whilst some claims over natural sources are due to common property rights (autochthon), others may claim legitimacy over them usufructuarily.

Ostrom (1990) states that common property is group-owned property that community members claim rights of access to. Common property theory assumes that fisheries, forests, rangelands and other resources, over which environmental struggles occur, are traditionally managed as collective or common property (Robbins, 2012). In Ghana, most lands, whether managed by the state or the community in which case the land is allodially owned, are managed as collective property. Access to community resources, such as land, are supposed to be guaranteed and without cost for community members (or those with ancestral roots). Therefore, any attempt to deny community members access to these resources could trigger contestation. Besides, when 'strangers' or 'foreigners' have access and control over resources to

which community members do not, struggles are more likely to occur. When traditional authorities leased out land to a group of four Fulani cattle owners in Agogo for 50 years, community members felt that they were not getting enough land for farming. This has been part of their contestation with the Fulani herders and cattle owners.

2.11. Cooperation

Cooperation is needed at all levels of society - whether at the individual or group level. It forms part of human interactions and social relations. Cooperation denotes the building of mutual relations. Scheffran, Link, and Schilling (2012, p. 113) define cooperation as "a process in which actors adjust their goals and actions to achieve mutual benefits." Scheffran et al. (2012) further maintain that, for actors in conflict to achieve cooperation, it requires the adaption towards common positions and mutually beneficial actions that stabilise the interaction.

Cooperation is also seen as a process in which groups come together, not only to address shades of disagreements among/between themselves, but also for mutually beneficial arrangements. There could be cooperation between/among groups when there is conflict or when there is no conflict at all between them (in this case, the aim is for mutually beneficial relations). These are very common in farmer-pastoralists modes of cooperation. In times of conflict, the two cooperate through compensation payments made, for example, by pastoralists for crop damage. They also involve traditional leaders to settle violent conflicts between them. Farmers and herders also settle conflicts amicably between themselves without involving the police. Besides, they also come together to find lost cattle in times of cattle rustling and find common ground to resolve cattle raiding (see Cleaver, 2001; Glowacki & Gönc, 2013; Krätli & Swift, 1999; Unruh, 2005).

In addition, many cooperative forms of resource sharing also exist between pastoralists and agriculturalists (Davidheiser & Luna, 2008; Tonah, 2006b). These include, for example, the entrustment of farmers' cattle to pastoralists; the exchange of milk and manure; and bond friendships held in common between pastoralists and agriculturalists. These forms of cooperation among pastoralists and farmers exist both at the group and individual levels. However, pastoralists are most likely to cooperate well with cattle owners, cattle buyers/butchers, traders (e.g. female petty traders from whom they buy food stuffs like salt, bread, sugar, etc.), chiefs, the police and landowners (see Chapter 7). Positive cooperation with the members of the community in which they settle is based on their relations with these

groups. Cooperation with these people helps them to build stronger networks in the society. Their cooperation with farmers is more at the individual level than the group level. Bogale and Korf (2007) state that, even in the midst of violence, cooperation between groups exists as exemplified in the case of Yerer and Daketa valleys in the Ethiopian Somali region in the Horn of Africa where inter-clan violence is very common and political instability is high, cooperative arrangements between pastoralists and agriculturalists for sharing grazing land in times of drought exist.

Institutions are very useful in enhancing cooperation among groups in conflict. Cleaver (2001, p. 28) notes that:

> […] Institutions of cooperation are embedded in everyday relations, networks of reciprocity and the negotiation of cultural norms rather than on the impositions of contracts, assertion of legal rights or exercise of sanctions. Such socially embedded forms of interaction also strongly reflect prevailing distributions of power. Nevertheless, they may point the way to community relations based on cooperation and compromise rather than public confrontation and formal conflict resolution."

Cleaver (2001) explains that indigenous institutions are particularly useful for maintaining relations and interactions between groups. Accordingly, these relations and interactions build networks of reciprocity. Leach, Mearns, and Scoones (1997) equally support the fact that both formal and informal institutions (indigenous systems) are crucial to forging cooperative relations among feuding groups. Similarly, Davidheiser and Luna (2008) posit that Fulbe groups in some West African countries have created social structures geared towards mini-mizing conflicts with farmers and preserving the overall harmony between these groups that are necessary for symbiotic production relations between them. They mentioned the *Ruga* in Niger and Nigeria who is an elected official in charge of regulating the grazing and pasture use of his group. The *Ruga* maintains cooperation within the group and with farmers outside the group. Traditional institutions have been particularly useful in helping farmers and pas-toralists to cooperate, especially in times of conflict.

Cooperation among and between groups, whether before or after a conflict, is more successful when certain conditions exist. Deutsch (2006) indicates that a cooperative relation is possible when there is effective communication; friendliness, helpfulness, and less obstruc-tiveness; feeling of agreement with the ideas of others; recognizing and respecting the other by being responsive to the other's needs; willingness to enhance the other's power; and mu-tually collaborating to solve their problems by recognizing the legitimacy of each other's interests. Deutsch (2006) says that competitive (conflict) relations, on the other hand, are the reverse. He maintains that cooperation is enhanced by similar beliefs and attitudes (e.g. cross-

cutting ties), readiness to be helpful, openness in communication, trusting and friendly attitudes, sensitivity to common interests and a de-emphasis of opposed interests, orientation toward enhancing mutual power rather than power differences. Important questions that this study poses include: what is the dichotomy between conflict and cooperation in cases where groups are engaged in both conflictual and cooperative relations? Does it mean that we should no longer look dichotomously at phenomena like conflict and cooperation? These questions are relevant to farmer-herder relations especially Breusers et al.'s (1998) 'divergent' argument that relations between herders and farmers are multi-stranded, not just that they meet in multiple settings.

2.11.1. Everyday Peace

Very relevant in farmer-herder relations is *everyday peace,* which is practised and routinised among individuals and groups. This *everyday peace* is what actually exists between farmers and herders in their daily lives and interactions such as trade, social solidarity, sharing and exchanges and also issues of conflict containment and conflict management. Conceptualising *everyday peace* has had a long history in social theory dating back to social theorists like Foucault, Bourdieu, Adam Smith, Durkheim, and Marx (Mac Ginty, 2014). According to Mac Ginty (2014, p. 549), *everyday peace* refers to:

> […] the routinised practices used by individuals and collectives as they navigate their way through life in a deeply divided society that may suffer from ethnic or religious cleavages and be prone to episodic direct violence in addition to chronic or structural violence.

The author maintains that *everyday peace* is about "the practices and norms deployed by individuals and groups in deeply divided societies to avoid and minimise conflict and awkward situations at both inter- and intra-group levels" (Mac Ginty, 2014, p. 553). It, thus, helps individuals and collectives to navigate their passage through a deeply divided society (ibid.). He actually conceptualises *everyday peace* in the light of '*habitus*', which refers to the values, dispositions and expectation of social groups that are acquired through everyday activities and experiences (Wacquant, 2006).

Mac Ginty (2014) suggests that *everyday peace* is conceptualised upon three premises:

1) Hybridity: Everyday peace embodies multiple conditions of peace and reconciliation. There are significant levels of inter and intragroup negotiation, change, adaptation, co-optation, resistance and agency. As a result, we can

think of everyday peace as fluid: possible at some periods and impossible at others, strong on some issues. There is malleability of individuals, collectives, ideas and practices;

2) The heterogeneity of groups often seen as homogenous. Groups in deeply divided societies contain a wide range of intensity of affiliation. Thus, groups are heterogeneous; and

3) Everyday peace occurs in a space or locality over which individuals and communities will exercise limited control. Everyday peace may occur episodically, or even clandestinely, according to prevailing conditions. It may be made impossible by direct violence or a physical separation between communities.

Everyday peace is a form of agency, and is something that people always and necessarily engage in (Mac Ginty, 2012, 2014). This peace is local peace, which is a *bottom-up approach* to peacebuilding and peacemaking in conflict-affected societies. It takes peace "beyond the realm of programmes, projects, initiatives, international non-governmental organisations (NGOs) and international organisations. It occurs in an informal sphere that is not immediately subject to the same controls" (Mac Ginty, 2014, p. 551). Local people themselves build this peace in their everyday activities and interactions. Everyday peace fits very well into farmer-herder relations because of the everyday cross-cutting ties, cultural practices, reciprocity, social and economic forms of cooperation and many forms of social capital that the two have.

The routinised norms and practices involve coping mechanisms such as avoidance, everyday social practices of co-existence and tolerance, reliance on reciprocity, or an unspoken pact whereby actors agree to abide by the same ground rules (Mac Ginty, 2014; Papacharissi, 2004). According to Mac Ginty (2014), the five types of everyday peace are: Avoidance (e.g. contentious topics of conversation); Ambiguity (e.g. concealing signifiers of identity); Ritualised politeness (e.g. system of manners); Telling (e.g. ethnically informed identification and social ordering); and Blame deferring (e.g. shifting blame to outsiders to appear more socially acceptable). Everyday peace practically exists in the case of farmer-herder relations at the individual and inter-group level (between herders and local communities). It is closely related to the concept of *cultural neighbourhood*, which I discuss below.

2.11.2. Cultural Neighbourhood

Implicit in pastoralists' cooperation is the concept of *cultural neighbourhood. Cultural neighbourhood,* according to Gabbert and Thubauville (2010) and Gabbert (2014), is based on long term comparative anthropological fieldwork to describe inter-ethnic relations between ethnic groups of southern Ethiopia, where cultural and ethnic diversity are part and parcel of inter-ethnic communication. According to Gabbert (2014, p. 15):

> […] cultural neighbourhood is a community that traverses ethnic boundaries. Cultural neighbourhood denotes a "community of place" […] that is as much a spatial fact as a mode of interaction. Essential features of cultural neighbourhood are patterns of social and spatial organisation like common habitats, intimate acquaintance and mutually intelligible customs and modes of communication as well as knowledge about the "Other" […] Cultural neighbours are aware of and interested in each other, they face each other, get used to each other and develop intimate contact with each other's differences and similarities. For all this, cultural neighbourhood needs time, effort and creativity. The will to reach understanding for the neighbouring "Other" may be most obvious in the general respect neighbours, whether they are friends or not, display for each other.

In simple terms, *cultural neighbourhood* refers to the relations that exist between two groups, usually neighbours, who belong to two different ethnic groups. Gabbert (2014) observes that cultural neighbours could be friends and allies, who cooperate in peaceful ways, or enemies, who are respected for their strength and virility, and engage in conflicts. In a cultural neighbourhood, the two groups could engage in inter-marriages; bond friendship as institutionalised friendship; trade; co-residence and adaptation; and cross-cutting ties such as kinship (Gabbert, 2010, 2014). Cultural neighbourhood is particularly related to farmer-herder relations. As two groups who are ethnically and culturally distinct, farmers and herders engage in conflict as well as friendship bonds, trade, co-residence and adoption and, in rare occasions, inter-marriages and have cross-cutting ties.

Cultural neighbourhood is a framework through which researchers can reflect on neighbourhood phenomena (Gabbert, 2014). Cultural neighbours know each other and, whether they are friends or foes, respect each other. This means that even if they fight, they have a good knowledge about each other. The farmers know the Fulani pastoralists in their community, or those that seasonally come with their cattle, and the pastoralists also know the farmers who try to keep him off their farmland. One principle of cultural neighbourhood is that knowledge about the familiar "other", whose actions are mostly predictable, develops through spatial and social contact (Gabbert, 2014). Two neighbours who know each other well in will know more or less how each will react for example, when one enters the border area of the other. There are, of course different kinds of neighbours (the good neighbour, the

bad neighbour, the close and distant neighbour), but they all know something about the other in order to maintain neighbourly relations.

Another central element of cultural neighbourhood is communication. For instance, how is land use communicated? Who is claiming that the land is theirs and why? Farmers and Fulani pastoralists are neighbours and they are in no way strangers to each other, they recognise their differences and live with these differences. When conflicts occur, cultural neighbours, in this case, farmers and Fulani, resolve them among themselves. The conflict situations and resulting resolution mechanisms are known to both neighbours. Importantly, cultural neighbours maintain boundaries, while, at the same time, they show respect and recognition of each other. Fredrik Barth's ethnic boundary maintenance theory becomes important here. Barth (1969, p. 15) notes that "entailed in ethnic boundary maintenance are also situations of social contact between persons of different cultures." Thus, despite obvious ethnic differences (boundaries), groups (cultural neighbours) interact and build relations.

In conclusion, cultural neighbours do not just live in the same geographical space and have knowledge of each other. For two to be cultural neighbours, they must have lived together long enough to know each other well. Knowing a neighbour is not simply knowing his name and seeing him. It is about close-knit contact and total understanding of the needs, likes and dislikes of your neighbour. This means it is several years of cohabitation, interaction, contact and communication. Without these, there is no cultural neighbourhood

2.12. Social Network Theory

Social networks are very crucial for building and maintaining social relations among groups. In conflictual or cooperative relations between groups, social networks show the kinds of relations involved, the actors (individuals and groups) involved and how actor relations influence each other. Wasserman and Faust (1994) see social networks as consisting of a set of actors and a set of relations between them. Similarly, Scott (1999) views social networks as relationship patterns between actors and the exchange of resources between the actors through these relationships. Social networks do not only show social relations between groups, but the type of relations that exist and how these relations affect/influence each other. Social Network Theory gained prominence in the 1960s and 1970s (Wasserman & Faust, 1994). Since that time, the theory has developed and gained currency and is now widely used in the Social Sciences.

Social networks exist as relationships between groups and individuals who share social ties, both in cooperation and conflict, and share resources. Social networks are very important for several reasons. According to Scott (1999), social networks allow for a deeper knowledge of relationships between groups and individuals, which helps us to understand these groups. Schepis (2011) also explain that qualitative methods in Social Network Analysis (SNA) are useful for describing and exploring concepts which are difficult to quantify such as culture, reciprocity and social regulation. Schiffer and Waale (2008) underscore that social network analysis tries to understand social and political situations by focusing on their structure, both formal and informal. They explain that a phenomenon like power relations among actors can easily be seen and explained through social networks. Social capital is another aspect that is important in the discussion of social networks. According to Bourdieu and Wacquant (1992), social capital is accumulated from a person's networks and social relations with others.

Bandyopadhyay, Rao, and Sinha (2011) assert that in social networks, a relationship can be *positive* or *negative,* such as, hostility or conflict, as opposed to friendship, alliance, mutuality or integration. The units within social networks can include individuals, families, households and rural or urban areas, according to the relationship under consideration, but there is always a specific dyadic relationship that exists or does not exist between the members of social networks (Bandyopadhyay et al., 2011). It is important to distinguish social groups from social networks. Bandyopadhyay et al. (2011, p. 3) make a distinction between social networks and social groups:

> While a social group can be both realist and nominalist, a social network cannot be a realist one. A social network is a category of actors bound by a process of interaction among themselves. It is thus a nominalist category. However, a social network or its parts are endowed with the potential of being transformed into a social group in a realist sense provided that there is enough interaction.

Thus, in social networks, a group or individual actors are in interactions or relations among themselves and these interactions and relations tend to influence each other positively or negatively. Groups' social networks can be a mobilising force, particularly for violent conflicts. Farmers and herders build everyday networks through their interactions, exchange and use of resources. In these everyday interactions, networks are built internally within or among them (such as farmer-farmer networks or pastoralist-pastoralist networks), as well as externally (farmer-pastoralists networks).

Social network is both a method and theory. As a method, it deals with measurements and analysis for establishing relations and interactions between individuals or groups (Katz, Lazer, Arrow, & Contractor, 2004). As a theoretical perspective, it seeks to study the social structure of relationships between groups or individuals and how these relationships influence power, resource or interactions among them (Katz et al., 2004). Kadushin (2012, 2004) states that social network theory is not a reductionist theory, but a theory that applies to a variety of levels of analysis of relationships from small groups to entire global systems. Wasserman and Faust (1994) explain that four theoretical propositions guide social networks:

- actors (individuals) in all social systems are interdependent, not independent;
- actors are related through links that channel information, affection and other resources;
- the structure of those relations both constrains and facilitates actions; and
- the patterns of relations among actors define economic, political and social structures.

  Bandyopadhyay et al. (2011, p. 4) maintain that social network theory:

  > does not deny the role of traditionally used a priori structural-functional concepts and categories in social research such as family, kinship, caste and ethnic groups, status groups, class, strata, and organization, it sees the actors and their roles in real-life situation rather than in the light of the crystallization of patterns of interaction among individuals […]. Social network theories do not consider individuals as forming a mechanical aggregate but as an organic whole where the constituent elements are connected among themselves as well as with the others through a mosaic of ties based on interactions, directly or indirectly, at various domains such as social, economic, political, and the like

In sum, social networks from a qualitative perspective involve social ties, interactions and relations between various actors, which can be important for building cooperation or hostilities (conflicts).

2.13. Conclusion

This chapter provides a theoretical overview of the results to be presented in the subsequent chapters. By linking the study to theory and conceptual discussions, a clearer understanding of what has previously been theorised with regard to the issues and objectives presented in the study is gained and gaps in the literature are identified. The literature on farmer-herder relations is often skewed towards structural interpretations that leave many fundamental issues missing. Besides, relying on a single theory does not help to thoroughly examine the issues. Each particular case of conflict or cooperation is unique, and will require in-depth studies and analysis. This study, therefore, seeks to fill these gaps by adopting a multi-theory

approach to studying farmer-herder relations (conflicts in particular) through a processual analysis of the issues using a case study methodology. The next chapter examines the methodological approach used in the study.

3. THE STUDY AREAS AND RESEARCH METHODS

The previous chapter of the book was dedicated to a conceptual and theoretical discussion of farmer-herder relations. This chapter focuses on the study areas and methods used in the study. It specifically looks at the demographic characteristics, vegetation and climate, ethnic composition and social organisation, political administration, the traditional set-up and economic activities of the study areas, the Ashanti Akim North District Assembly (AANDA) of the Ashanti Region and the Gushiegu District of the Northern Region. In discussing the research methods, the study examines the entire field study process and its theoretical conceptualisation, the various methods of data collection and the challenges encountered during the fieldwork. Much of the data and information used for describing the study areas are taken from the *Medium-Term Development Plans* of the two districts (see Asante Akim North District Assembly [AANDA], 2012; Gushiegu District Assembly [GDA], 2010) and the *2010 Ghana Housing and Population Census Reports* (see Ghana Statistical Service, 2012, 2013, 2014a, 2014b), as well as from interviews and other documentary sources.

3.1. History of Fulani Migration to Ghana

Pastoralist migration involves the movement of pastoralists from one area to another, either internally (within a country) or externally (to another country) in search of pasture, employment or as a result of conflict. Fulani pastoralists in West Africa have a long history of migration. Their migratory routes have often been rotational and cyclical, moving from north to south, east to west and vice versa. Historically, Fulani migrations to most West African states, particularly to Northern Nigeria and Cameroon, were through conquests for the spread of Islam. According to Stenning (1957), Johnston (1967) and King (2001), Fulani expanded and established themselves as the aristocratic class that controlled the political leadership, and also imposed Islam on the indigenous populations. Similarly, Tonah (2005a) notes that from the 13th century onwards, Fulani migrations increased across West Africa and they settled in most countries of the region. As they settled, most of them became integrated in a number of countries, especially Nigeria, Senegal, Mali and Niger. While others migrated with their own cattle, some of them migrated without cattle and looked after the cattle of the aristocratic classes such as the Wasangari (Tonah, 2005a).

Pastoral Fulani have often migrated with their livestock to other countries. Their migrations southwards were more frequent during the Sahelian droughts of the 1970s and 1980s. Despite improved climatic conditions, Fulani herders still continue to move southwards. Many authors argue that Fulani herders are using migration as a coping strategy to climate change (deteriorating environmental conditions) and resource scarcity (see Adisa, 2012; Zampaligré, Dossa, & Schlecht, 2014). The Sahelian region is known to have unpredictable and deteriorating climatic features. The region is mostly associated with droughts, poor rainfall and high temperatures (Hesse, Anderson, Cotula, Skinner, & Toulmin, 2013; Tschakert, 2007; Tschakert, Sagoe, Ofori-Darko, & Codjoe, 2010). Historically, the region has had many long droughts and famines spanning from the 1960s to the 1990s (Dai et al., 2004) with devastating consequences. Hardest hit by these were Niger, Mali and Chad. Dietz, Millar, Dittoh, Obeng, and Ofori-Sarpong (2004) have previously shown that rainfall from 1900 to the 1950s has generally been low in the Soudano-Guinean Ecological Zone. Similarly, rainfall patterns from 1960 to 1991 were characterised by highly variable and erratic patterns (Dietz et al., 2004). Mean average rainfall for the region ranges from 600-800mm (Cour, 2001) and the level of land degradation and hot temperatures are high in the region. Much of the Sahel is degraded and greatly impacted by desertification. However, Nicholson (2000) notes that rain has generally recovered in the West African Sahel and the region has increasingly become wetter since 1998.

In addition, the Sahelian regions is noted for high migrations of people due to these poor climatic conditions, conflicts and for economic reasons (see Hesse et al., 2013). Extensive movements of livestock over long distances are particularly common in the Sahel. The established patterns of migration of millions of Sahelians are usually southwards to better watered coastal countries, and northwards to the oases of the Sahara and onto the Maghreb coast (Hesse et al., 2013). Migration in the Sahel is often a coping mechanism for reducing political, economic or environmental stress. Many scientists claim that, in the midst of climate change, migration is an important human adaptive mechanism (Intergovernmental Panel on Climate Change (IPCC), 2015; Podesta & Ogden, 2008; Scheffran, 2011; Sow, Adaawen, & Scheffran, 2014).

Fulani migrations into Ghana are a recent phenomenon; any significant Fulani presence in the Gold Coast was documented at the beginning of the 20th century (Tonah, 2005a), although they seasonally migrated to the Gold Coast long before colonialism. The very first census in the Gold Coast in 1911 included Fulani because a number of them were found along the White Volta of northern Ghana. Fulani pastoralists themselves claimed they were

moving southwards to Ghana long before the British arrived in the Gold Coast, as these migrations were seasonal and limited to the northern part of Ghana. Historically, there are three major reasons for Fulani migration into the Gold Coast (now Ghana) in the 20th century: first, the expansion of the cattle trade; second, the establishment and development of native farms by the colonial masters and, third, the Sahelian droughts in search of pasture and water (Tonah, 2005a). Thus, Fulani presence in Ghana was due to economic (cattle herding jobs) and ecological reasons (search of resources for their cattle). Since migrating into Ghana and, for some, permanently settling there, Fulani are found in almost all parts of Ghana, where some are businessmen and others are engaged in various aspects of Ghanaian society (cf. Oppong, 2002).

In trying to understand the main drivers of Fulani migrations to Ghana, I refer to earlier studies which consider multi-contextual factors comprising ecological, political, economic or social causes to account for herders' migration (Dupire, 1970; Schareika, 2001; Stenning, 1957). The migratory drift model developed by Stenning (1957) is particularly important, as it argues that herders' migration flows are not just a response to environmental hazards, but that their migration is a systematic process that results in a completely new geographical setting for a particular group and entails a variety of reasons (ecological, political, ideological, economic or social) and includes the search for pastures, conflicts, political pressure, expulsions and evictions.

3.2. The Study Areas

The Asante Akim North District Assembly (AANDA) is one of the newly created districts established by Legislative Instrument (LI) 2057 by the Government of Ghana in 2012. It was carved out of the then Asante Akim North Municipal Assembly (now Asante Akim Central Municipal Assembly). Agogo is the capital of the AANDA. Located in the eastern part of the Ashanti Region, the Asante Akim North District Assembly lies between latitude 6^0 30' North and 7^0 30' south and longitude 0^0 15' East and 1^0 20' West. According to the *District Medium Term Development Plan* (AANDA, 2012), the district covers a total land area of 1125.69 sq. km. The district shares boundaries with Sekyere Kumawu in the north, Kwabre East in the east, Asante Akim South and Kwahu East in the south and Asante Akim Central Municipality and Sekyere East in the west (Figure 3.1).
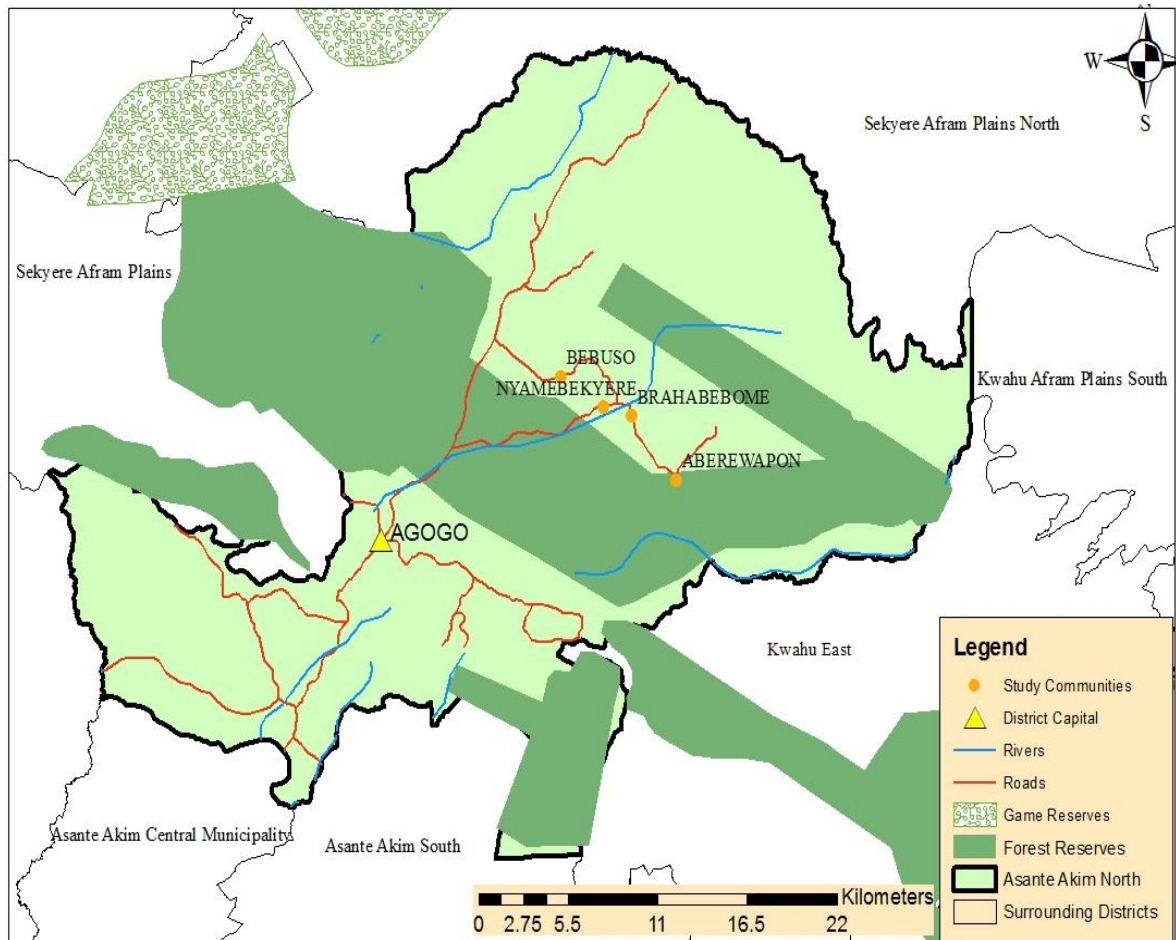
Figure 3.1: Map of Asante Akim North District
Source: Author's Construct, 2014.

The Gushiegu District (Figure 3.2) is one of the twenty-six (26) administrative districts of the Northern Region of Ghana that, following the introduction of Ghana's decentralisation programme, was carved out of the then Eastern Dagomba District in 1988. Located in the northeastern corridor of the region, the Gushiegu District Assembly (GDA) shares boundaries with Saboba to the east, Karaga District to the west, East Mamprusi District to the north and Yendi Municipality to the south. The District has a land surface area of approximately 5,796 km^2. The administrative capital of the district is Gushiegu, which is about 105 kilometres northeast of Tamale, the regional capital. The GDA is sub-divided into eight area councils for effective administration. These are Gushiegu Town Council, Galwei Area Council, Nabuli Area Council, Bogu Area Council, Kpugi Area Council, Nawuhugu Area Council, Kpatinga Area Council and Zanteli Area Council.
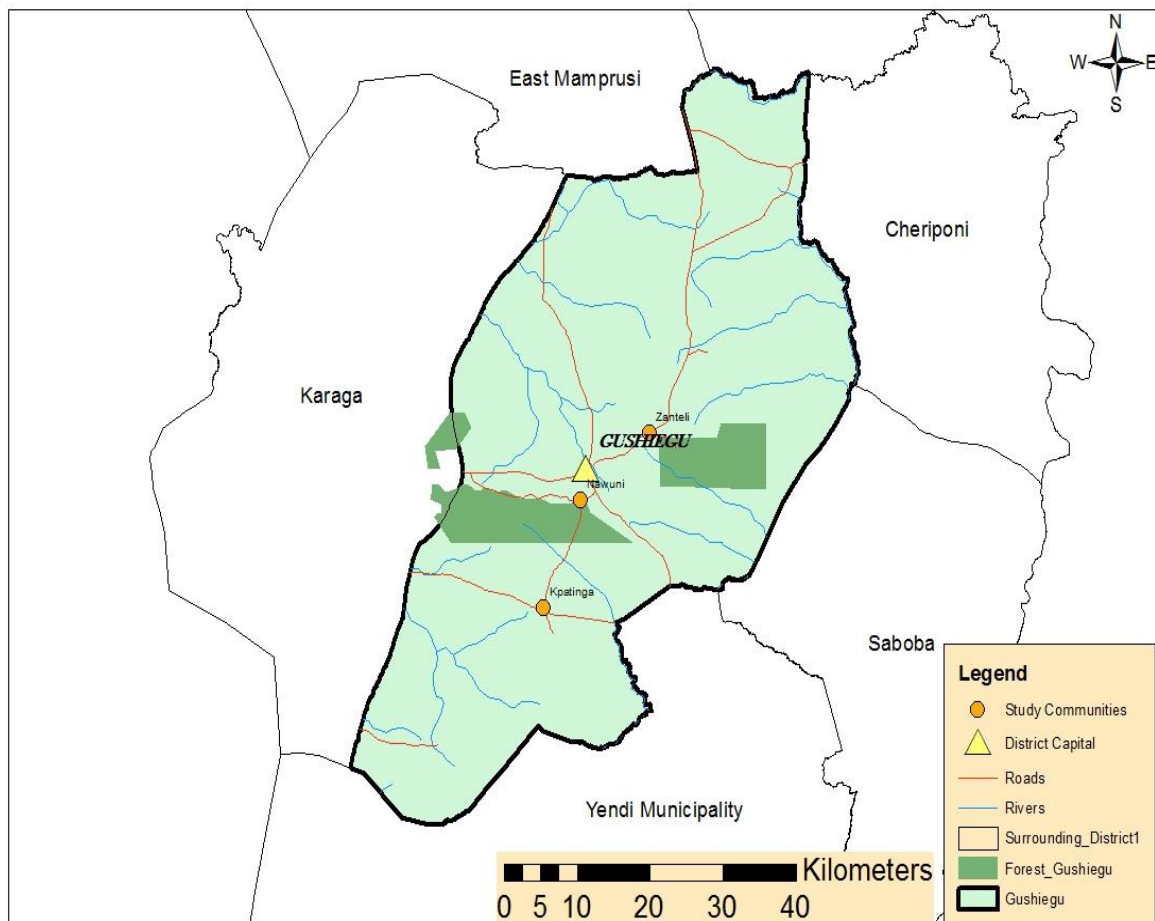
Figure 3.2: Map of the Gushiegu District
Source: Author's Construct, 2014

3.2.1. Demographic Characteristics

Based on the 2010 Ghana Housing and Population Census (Ghana Statistical Service, 2014a), the population of the AANDA is 68,186, representing 1.4 percent of the region's total population. Males constitute 48.8 percent and females represent 51.2 percent. The District has a growth rate of 3% according to the 2010 Housing and Population Census. The population of Fulani in the area is not known, as they are often not counted in the national census. They are estimated to be over 2, 000 in the area.[16]

The population of the GDA, on the other hand, is made of 111,259 inhabitants distributed in 395 communities (Ghana Statistical Service, 2014b). A total of 54,186 of the district population are males and 57,073 are females. The GDA has a population density of 22 persons per km^2 and a growth rate of 3%. There are about 11,150 households in the GDA. The predominant settlement pattern in the district is rural (ibid.), with the district capital,

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[16]Based on interviews with Government officials, 5-6/06/2013.

Gushiegu, as the major settlement with urban infrastructure. Other relatively bigger settlements in the district are Kpatinga, Yawungu, Zamanshegu, Watugu and Gbambu. The average household size in the district is 9.9. Many of the settlements are scattered and small.

According to the Gushiegu *Medium Term Development Plan* (GDA, 2010), the GDA has a large population of livestock and, therefore, the largest cattle market in the Northern Region. This large number of cattle has implications for farmer-herder relations. According to the district's livestock survey, it had a population of 31,866 cattle by the end of 2009. Cattle constitute the highest population of livestock in the district and are mostly herded by the Fulani pastoralists. The high population of cattle in the district could be one reason for the presence of many Fulani herders in the district. During my field study, the GDA could not provide me with statistics of the number of Fulani herders in the district, even though they collect cattle tax from the Fulani and other cattle owners. The GDA reported to have collected a total of GH₵ 5,378 (1,536 Euros) in cattle tax at the end of 2012.

3.2.2. Vegetation and Climate

According to the Asante Akim North District Assembly Medium Term Development Plan (AANDA, 2012), the district experiences a wet semi-equatorial climate and a double-maxima rainfall, ranging between 1250 mm and 1750 mm per annum from May to November. The first rainy season is usually from May to July, whilst the second is from September to November. The dry season lasts from December to March, but it is not rare to have some amount of rainfall during this period. Grasses and trees remain greener in the dry season providing pasture for cattle all year round; hence, a major reason for the presence of many cattle owners and herders in the area.

Also, the Asante Akim North District Assembly lies within the semi-deciduous forest zone and is largely interspersed with forest, timber and other tress like Wawa, Ofram, Otie, Sapele, Sanfina and Onyina (AANDA, 2012). Accordingly, the district has a mixture of three major vegetation types:
- The Open Forest covering 576 sq. km over the highland areas
- The Closed Forest covering 230 sq. km on the range and
- The Wooded Savannah covering 246 sq. km (ibid.).

The district has major forest reserves in the Bandai Hills, located at Nyinatokrom, Abrewapong, Bebome and Nyamebekyere, and the Onyemso and Dome River forest reserves. The characteristics of the savanna grasslands in the area are attractive to farmers, who boast about the production of maize, groundnuts, vegetables, and to pastoralists, since the

grass there meets the nutritional requirements of their cattle. Moreover, the presence of water bodies in the area, such as the Afram River, the Dome River, the Onyemso River, Kowere River and many other smaller rivers are especially attractive to pastoralists. The AANDA can also boast of mineral resources like gold deposits. Thus these biophysical characteristics and the availability of resources – water, fertile land and pasture - have made the area very attractive to different resource users, comprising Fulani pastoralists, migrant farmers and agro-companies as well as many local people who are 'scrambling' into farming.

Unlike the AANDA, the GDA lies in the Guinea Savannah Zone and cannot boast of many resources. The vegetation is characterised by high and tall grasses interspersed with drought resistant trees like Shea (*Vitellaria paradoxa*) and *Dawadawa* (*Parkia biglobosa*). The district lies in the tropical climate marked by the alternation of two seasons – a dry season occurring between November to April and a rainy season occurring from May to October. The dry season, during which time much of the vegetation and grasses dry up, is often intense with dry weather and hot temperatures, which are characterised by the *Harmattan* (the north-east monsoon winds). Temperatures rise to a maximum of 40ºC recorded mainly in March and April. Low temperatures of about 21ºC are recorded between November and February (GDA, 2010). The rainfall values range between 900 mm to 1300 mm per annum (ibid.).

According to the GDA (2010), the short and poor rainfall pattern in the district negatively affects agricultural activities – crop yields and livestock production - in the district. The long dry season results in the drying up of water bodies in the district making it difficult for farmers and herders to undertake dry season farming, especially of vegetables and livestock watering. Besides, there are no major water bodies in GDA with the exception of the Nasia, Daka, Nabogu and Oti Rivers. The district lies entirely within the Voltaian sandstone basin dominated by sandstones, shales, siltstones and minor limestone (ibid.). As a result of these biophysical characteristics of the district, herders claim that they are forced to migrate during the dry season to the southern part of Ghana, especially to the Brong-Ahafo Region in search of pasture and water.[17] It is, however, curious to find out why there is a high migration rate of Fulani herders to the area despite resource constraints as a result of erratic climatic conditions. Interestingly, networks are seen to be important in herder migrations to the area, not only resources, as commonly assumed by theory and other local discourse (discussed in detail in chapter 5).

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[17]Based on interviews with herders, 07/2013.

Therefore, the two areas share very different natural features with regard to climate, vegetation and resources; the AANDA being resource-endowed, whilst the GDA is resource-constrained.

3.2.3. Ethnic Composition, Traditional Authority and Social Organisation of Study Areas

Ethnically, the AANDA is dominated by Asante-speaking people who are Akan and are said to be the first settlers of the area. Akan/Asante culture therefore dominates in the area. There are also a large number of migrant ethnic groups mainly from the northern part of Ghana who migrated in the 1970s, primarily to engage in farming.[18] These groups include: Busangas, Frafras, Nankanis, Kasenas, Mamprusis, Dagaabas and Dagombas. Towards the southern part of the district are Ewes from the Volta Region of Ghana who have also migrated to engage in farming and fishing. In addition, many cattle owners have migrated to the area with their cattle since the 1990s. These cattle owners include both Ghanaians and Fulani who employ Fulani herders to care for their cattle. The Fulani herders come mainly from Nigeria, Mali, Niger and Burkina Faso.[19] Ethnic belonging (autochthony) remains largely important in acquiring land for farming or rearing cattle and enhancing social ties.

The social organisation in the area is done more at the family and ethnic levels. Communality, social solidarity and close-knit communities characterise social life (participation in funerals, marriages and communal labour) and the acquisition of land for farming. The AANDA has a centralised chieftaincy system that spans more than five centuries. The area has a paramount chief (*Agogomanhene*) who is under the *Asantehene* (King of the Asantes). The *Agogomanhene* is the allodial head of much of the land in the area. In each village, there is a village/community chief (*Odikro*) who rules the community on behalf of the *Agogomanhene*. These chiefs themselves have no allodial power over land, and must leave any land transactions to the *Agogomanhene*. Chiefs perform traditional and customary duties in the community. They preserve customs of the community and any stranger/migrant arriving in the community must first report to them. Also, land transactions are done through or in consultation with them (see Chapter 6 for details on the land tenure system of the area).

Socially, the GDA is organised into ethnic groups, clans and a well-centralised chieftaincy system. Ethnic groups are organised by clans and at the family level. There is a strong

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[18]Based on various interviews with the migrant farmers, June-August 2013.
[19]Based on interviews with the herders, June-August 2013.

emphasis on the extended family system, which involves several households of external family members living in the same housing units. Its composition is made of several nuclear families and immediate family members of the same lineage. Communities or villages are normally composed of the same ethnic group living together. With the exception of only a few, most communities are made of the same ethnic groups; Dagombas or Konkombas. The other minority groups do not have communities of their own. During interviews, an elderly man in the community stated that the reason for the ethnic segregation is partly because of the 1994/95 Konkomba-Nanumba/Dagomba Conflicts.[20]

The GDA is dominated by the Dagombas who, according to the GDA (2010), constitute 80% of the population. Dogambas therefore hold the highest traditional authority in the area and have control over much of the land. This is followed by the Konkombas. Other ethnic groups include Nanumbas, Basaris and Fulani. Ethnicity remains very important for landownership and use. One's right to landownership and use is dependent on autochthony. 'Strangers' and/or foreigners do not have that right and need to request permission for land for farming or building from the chief of the community. The land tenure system in the GDA, like the AANDA, is allodial where land is held in trust for the people by the *Gushie Naa* on behalf of the *Ya Naa* (King of the Dagombas). Community lands are also managed by village chiefs and held in trust for the people (see Chapter 6 for details on the land tenure system of the area).

Like AANDA, the GDA has a well-established traditional system of governance. The *Ya Naa* is the overlord (king) of the area and all areas of the Dagombas in the Northern Region of Ghana. The *Ya Naa* is represented by the *Gushie Naa* (paramount chief) who performs traditional duties on behalf of him (*Ya Naa*). The *Gushie Naa* is represented in each community by a sub-chief (*Tinkpan Nanima*) who performs traditional duties on behalf of him. There are clan (*Dang kpamba*) and family heads (*Dogri kpamba*) who are also important in the management of land in the community although they do not have direct control over land. The people of the two areas have greater access to land and land acquisitions, which is crucial in farmer-herder interactions and co-existence. This access is characterised by legitimacy and strong land politics.

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[20]This conflict is often described as the most devastating conflict in the history of Ghana. It resulted in the loss of 2000 lives and 18,900 animals, over 500,000 tubers of yam destroyed, 60,000 acres of crops set on fire, 144 farming villages burnt and 78,000 people displaced. The conflict took place in the Northern Region of Ghana between the chiefly tribes of Dagomba and Namuba against the acephalous tribe of the Konkomba who have hitherto been under the authority of these chiefly tribes. It was their demand for their own paramount chief and recognition that resulted in the conflict (see Mahama, 2003;Tsikata & Seini, 2004).

3.2.4. Political Structure of Study Areas

As with all Metropolitan, Manucipal and District Assemblies (MMDAs) in Ghana, both the AANDA and the GDA were established by an act of parliament (Legislative Instruments 2057 and 1783 respectively). They fall directly under the Ministry of Local Government and were established to bring governance to the people at the local level, which is part of Ghana's decentralisation policy. The AANDA and the GDA, therefore, are the highest political authorities with legislative, executive and administrative powers in their respective areas. As part of the functions of assemblies, they (AANDA and GDA) are responsible for the maintenance of peace and security through the District Security Councils (DISEC), revenue collection and general development within the district. The DISECs are important for the management and resolution of violent conflicts between Fulani herders and farmers. For instance, in the August 2011 attack of Fulani herders, the GDA DISEC brought in its police and military to ensure that security and order were maintained and the Fulani herders protected and brought to the district's Gushiegu Town Centre, where they were housed and fed until the situation calmed down. The District Chief Executive (DCE) stated in an interview that the GDA continues to ease tensions between Fulani herders and farmers in the communities. Also, in the midst of violent farmer-herder conflicts, the AAND has been responsible for maintaining security and coordinating the activities of Operation Cow Leg (OCL) [21] and other security agencies.

The assemblies are headed by District Chief Executives (DCE) who are appointed by the president of Ghana and endorsed by two thirds of the elected assembly members of that area. The assemblies have decentralised departments which perform financial, education, health, agriculture, social welfare, town planning and general panning function. Therefore, we see both political (state and local administrators) and traditional authorities (actors) playing an important role in farmer-herder conflicts through security maintenance.

3.2.5. Economic Activities of the Study Areas

According to the AANDA (2012), the area has a typical agrarian economy with 53% of the entire population employed in the agricultural sector. Most of these (72%) are small-scale holder farmers who mainly engage in plantain, maize, watermelon, cassava, yam, oil palm and vegetable cultivation. Farmers stated during a focus group discussion (FGD) that "nearly

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[21] OCL is a joint police and military security task-force set up by the government to evict alien Fulani herders from farmlands in various communities in Ghana and also intervenes to curb violent farmer-herder conflicts. See Chapter 8 for more details

every household in AANDA engages in agriculture." Most farmers are shifting from subsistence agriculture to commercialised farming because the marketing of farm produce is becoming common, especially with ready markets for the farm produce (plantain and watermelon) in Kumasi and Accra. Plantain (*Musa paradisiaca*) remains the most cultivated food crop in the area. Marketing of agricultural produce, trading and the commercial buying of goods from farms are done on a large-scale during the two market days (Tuesdays and Thursdays) that have been dedicated to this in Agogo, the district capital. The AANDA (2012) claims that commerce and services employ about 31% of the population in the district.

Cattle rearing is also done on a large-scale in the AANDA. Many of the cattle reared in the area are owned by people from other parts of Ghana (absentee owners living in Accra and Kumasi) or Fulani who have migrated with their own cattle from other countries to settle, although a few local residents are also stockowners. This partly accounts for the occurrence of conflicts in the area, since many farmers feel different (both ethnically and in their ways conducting business) from Fulani or cattle owners. Cattle owners also hire Fulani herders who come from the neighbouring countries of Nigeria, Niger, Mali and Burkina Faso to look after their cattle on a daily basis. The cattle are transported on trucks to major cities like Kumasi, Accra, Tema and Koforidua, where large markets exist.

Agriculture also remains the dominant economic activity in the GDA employing about 80% of the population (GDA, 2010). The majority of the population engages in subsistence and peasant farming, while only very few engage in large-scale yam farming. Most crops grown in the area are maize, sorghum, millet, groundnuts, cowpea, cassava, rice and yam. Apart from the growing of food crops, wild trees like the Shea and Dawadawa are picked mostly by women on a large scale. The beans of Shea are sold to traders from other regions whilst some are processed into Shea butter for local consumption. Farmers claimed that their conflicts with Fulani herders have also been because of the destruction of the Shea trees and nuts usually by the Fulani herders who feed their cattle in the dry season when it is hard to find pasture for their cattle.

Livestock rearing is also extensively done in the area. Cattle remain the most dominant animal reared in the district. Many families rear cattle as a measure of their wealth and for future investment. Other animals like sheep, goats, local poultry and guinea fowl are reared for both home consumption and sale. Much of the cattle are marketed at the Gushiegu Cattle Market. Many cattle in the area are herded by Fulani. There is a new trend of an increase in Fulani migrating from other counties with their own cattle to settle in the area and this has been major factor for violent conflict escalation (I discuss this in chapter 5).

3.3. The Field Study

Before I started my PhD studies at the Zentrum für Entwicklungsforschung (ZEF) in Germany, I had started writing a research paper on farmer-herder conflicts in Ghana "Farmer-Fulani herdsmen conflicts over natural resources in Ghana: Implications for local security and development." The main motivation for writing the paper was because of the numerous media reports and news about violent farmer-herder conflicts across the country, especially in 2011. Agogo, in particular, became 'notorious' for 'violent farmer-Fulani conflicts' in the media. I, therefore, decided to study these conflicts scientifically, rather than just following media discourse and reports. Whilst I was working on the proposal of my study, I got to know of the German Academic Exchange Service (DAAD) scholarship opportunity at ZEF. I then used this proposal to apply for the PhD scholarship. When I arrived at ZEF in 2012, and began working on my proposal for field study, I added the issue of environmental/climate change to my topic, since no scientific study had been done with regard to environmental/climate change-conflict nexus in Ghana. Upon further reading, and after gathering first-hand information and preliminary field study, I realised that conflict was not the only facet of farmer-herder issues in Ghana, despite extensive studies and discourse on the topic, but that cooperation and the building of social ties/networks were equally vital in understanding relations between the two. My in-depth field study further revealed this and, therefore, I added a wider dimension to the topic to look at the interplay of the environment-conflict nexus, cooperation and the social ties that exist in farmer-herder relations.

The entire duration of my fieldwork was nine months carried out between June 2013 and February 2014 in both northern and southern Ghana. I conducted one month of preliminary fieldwork in the two field sites, first studying in Agogo from the 4th of June to the 14th of June 2013, and then in Gushiegu from June 17th to June 30th, 2013. Before actually undertaking this preliminary study, I travelled on 1st June 2013 to the Builsa District of the Upper East Region where I hail from and heard of violent clashes between local farmers and Fulani herders in Bachonsa that resulted in the eviction of several herders. I then arranged with some Fulani cattle owners to go to the area to interview their herders. I spent two days in the area interviewing herders and local community members. This helped me to test, scrutinise and correct my interview and focus group discussion guides and to ensure my readiness for the field study. This resulted in the change of some questions like "Who are the Fulani? Where do they come from? What is your attitude towards the Fulani?" The preliminary field study aimed to establish contacts with stakeholders, the police, chiefs, government officials, friends

and other opinion leaders; to map out specific study communities (conflict areas in particular); recruit and train field assistants; identify interviewees and individual case studies, and then conduct interviews with indigenes, Fulani herders and communities to get a deeper sense of the study. These were successfully carried out and provided a better understanding of the field terrain.

After a one-month preliminary study, I analysed the data collected and wrote a ten-page report which helped me to work out core themes of the research and increased the focus and depth of the research. The main field study began in Agogo, where I stayed from July to September 2013, and then returned again from the 12th to the 23rd of January 2015. In Gushiegu, I conducted research from October to December 2013. Intermittently, I 'stepped out' of Gushiegu to go to Tamale and Karaga, Agogo, Konongo, Kumasi, Sekyere Kumawu (Samsu and Mossipenin) and Juaso to conduct interviews. Aside from my physical presence in the field sites, I did a lot of follow-up phone interviews with respondents from July 2013 until February 2016 to confirm some information, seek clarity on issues or fill in some missing information.

My main ethnographic approach was the "step-in-step-out" approach (Madden, 2010), which studies society from the viewpoint of the people or research subjects. The "step-in-step-out" ethnography allows the ethnographer to study and engage with informants who are closer to his/her natal society, while at the same time being able to come and go from that society during the field process (Madden, 2010). This ethnographic approach enhances in-depth understanding of the topic from the perspectives of farmers, herders and local people themselves about their relations. In applying "step-in-step-out" ethnography, I resided in the district capital and visited the communities on a daily basis to conduct interviews and focus group discussions. I stayed with community residents and moved with them daily observing and interviewing them. One revealing aspect of fieldwork in my own natal country (Ghana) was the extent of the 'lack of information' about the 'notorious' Fulani issue in the country.

By immersing myself into the study sites and studying these issues in-depth and for an extended period, I came to appreciate the issues very well. During my fieldwork, most community members thought that I was a 'secret security officer' who came to 'investigate' the 'Fulani issue' as they famously called it. This was in spite of my many explanations, and those of my assistants, some prominent community members and the police. Questions that were often posed during the initial stages included, for example, "Are you sure you are not a

security agent?" "Are you a soldier man?" "Are you a BNA[22] agent?" "What exactly are you researching that it is taking you so long because others come and it takes them only two or three days, but you are here for almost a year?" I often laughed off these questions and explained the purpose of my research by asking their literate relatives or my assistants to explain to them my letter of introduction for field research from ZEF. With time, many respondents trusted me based on my numerous contacts with respected opinion leaders who they trusted. They then opened up to me and I established, what Madden (2010) calls, 'immersion ethnography' in the community. By immersing myself into the study sites, I was able to get a better understanding of the relevant issues of the study.

The philosophical paradigm of the study is based on a social constructivist perspective where there is reliance on the participants' views of the issues studied. Following Crotty (1998), I allow my respondents to construct meanings of the issues from the world (viewpoints) they are interpreting based on their historical and social perspectives. I achieved this through open-ended questions that allowed my respondents to share their views on the issues. I then generated meaning from the data collected in the field (see Crotty, 1998).

3.4. Sampling Methods

The study adopted purposive and snowball sampling methods. The purposive sampling method was used in selecting key informants such as local farmers, sedentary pastoralists, community residents, chiefs, community/opinion leaders, government officials and security agencies. The technique enabled the selection of respondents who were relevant to the study and contributed to the quality of the discussions. The snowball sampling was used for selecting individuals (farmers and herders) involved in specific cases of conflicts and for selecting seasonal migrant Fulani pastoralists because of the difficulty in contacting them for interviews due to their dispersed nature. In this method, I purposively interviewed one herder or individual who has been engaged in conflict and they, in turn, led me to others.

3.5. Methods of Data Collection

A number of methods were used in collecting data that enabled me to gather multiple sources of evidence for the study. These ranged from secondary data gathering from published works, journals, online sources, news reports and other relevant information from government institutions, to basic mapping, interviews, observations and focus group discussions. The use of

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[22]The BNA, Bureau of National Investigations, is Ghana's security intelligence organisation.

multiple methods of data collection allowed for triangulation of the results as well as cross-checked information gathered from other respondents.

3.5.1. Mapping and Identification of Conflict Areas (Communities)

Before I began my research in the various communities, I did conflict mapping in these communities and identified a number of conflict cases. The first step involved was to obtain maps and medium-term development plans from the planning departments of these district assemblies. After obtaining the maps, I listed all of the communities in the districts and, through discussions with the planning officers of the district assemblies, we first mapped out the communities where Fulani are located. Having completed that, the deputy coordinating directors of the assemblies then helped to identify the communities where conflicts between farmers and Fulani had occurred. We then discussed the conflicts in the various communities. In the case of Agogo, a comprehensive report on conflict by a committee set up by the Government of Ghana and the Kumasi High Court Ruling on conflict cases were obtained in order to further map out the various conflict areas. For Gushiegu, the secretary of the assembly, who played a key part in the conflict resolution process, also helped in mapping out areas of the conflict in the district. He used the District Security Council (DISEC) minutes and reports of conflicts between farmers and Fulani herders to help in the mapping process.

After mapping the communities, I decided to visit these communities with my field assistants during the preliminary studies to find out from farmers, community members and Fulani if indeed issues of conflict exist. This helped to cross-check the mapping done with the government officials and as contained in the reports. The preliminary visits to the communities were equally important in identifying specific cases of conflict between individuals for the in-depth interviews. The mapping and choice of the communities were done for two main reasons: first, the selection took into consideration areas that have conflicts between farmers and Fulani herders and, secondly, the presence of Fulani herders in the community. It is important to note that the study also selected communities where there are peaceful relations between Fulani and farmers. In all, twelve communities were identified and selected in Agogo while 16 were identified and selected in Gushiegu as shown in Table 3.1:

Table 3.1: List of Study Communities

Agogo	Gushiegu
Ahomaporawa Beposo	Bulugu/Nawuni
Nyamebekyere	Kpesinga/Kpatinga
Bebome	Damdaboli
Abrewapong	Offini
Kowereso	Sugu
Bebuso	Zamanshagu
Kwame Addo	Zamashiegu
Onyemso	Lamalim
Mankala	Zanteli
Matuka	Toti
Kansanso	Jingboni
Kowereja	Timya
	Nnagmaya
	Makpedanya
	Kpakpaba
	Kpug/Yawungu

Source: Field Study, 2013/2014

The reason why Gushiegu had many villages selected is because some of the communities have only five households per community and with very few people. Some communities are also regarded as one traditional area in terms of kinship and clan ties and, therefore I needed to do follow-up studies in these other communities to properly understand the issues being studied. The study also involved, Samsu and Mossipenini (in Sekyere Kumawu District) and Nangong (in Karaga District).

3.5.2. Extended Case Study

The study uses an extended case study approach. Mitchell (2006, pp. 28–29) explains that the extended case study is:

> […] a further elaboration of the basic study of case material for it deals with a sequence of events, sometimes over quite a long period, where the same actors are involved in a series of situations in which their structural positions must continually be re-specified and the flow of actors through different social positions specified.

Thus, the extended case method is a detailed study of events over a long period of time, and with the same actors, in order to get much deeper insights of the events. Mitchell (2006, p. 29) further notes that:

> […] The particular significance of the extended case study is that since it traces the events in which the same sets of main actors in the case study are involved over a relatively long period, the processual aspect is given particular emphasis. The extended case study enables the analyst to trace how events chain on to one another, and therefore how events are necessarily linked to one another through time.

As a result of the use of the extended case study method and situational analysis, it was necessary to identify particular cases of conflict and to follow these cases. The use of the extended case method enabled me to trace the conflict situations over long periods, taking into consideration their process of development. I adopt this particular method to look at the processes of conflict escalation (cf. Moritz, 2010). The extended case study allowed deeper insight into farmer-herder conflicts, how they developed, the stakeholders and social networks built among others.

I used a multiple extended case study approach in Agogo and Gushiegu during discussions of farmer-herder relations, especially the development of conflicts. The multiple-case study design was especially useful for understanding the reasons for the occurrence of the issues in the two different sites studied and for tracing the historical development of conflicts. According to Yin (2009, p. 142), multiple-case studies have the goal to "build a general explanation that fits each individual cases, even though the cases will vary in their details." Besides, a multiple extended case study allows for studying and comparing two cases in their totality and also enables multiple levels of analysis within a single study (Yin, 2009). To this end, the multiple extended case study allowed for a comparative study of areas where farmer and Fulani herders live and cooperate peacefully and areas where violent clashes occur. As part of the two larger case studies, I identified specific conflict incidents and met with the respondents to interview them and followed up these cases. The individual case study interviews allowed for detailed descriptions and the narration of people's case stories, experiences, behaviours, social groups and interactions or relationships, which fit into the broader extended cases. In other words, as an important feature of the extended case study approach, specific incidents are analysed as part of the broader cases.

3.5.3. In-depth Semi-Structured Interviews

During the study, a number of respondents in farmer-herder relations and conflicts were identified and interviewed. These respondents were drawn from many individuals, households and groups. Group interviews were also carried out, though most were unplanned. Whenever my field assistants and I went to conduct interviews, other persons voluntarily took part in the interview. Sometimes, we met people who preferred to be interviewed in a group. These group interviews were useful as they brought many of the issues in the study to the fore and contributed to the quality of the discussions. Unlike the focus group discussions, which were pre-arranged, group interviews were spontaneous (see Schensul, 1999). Table 3.2 shows a detailed list of persons interviewed for this study.

The data also included interviews at Samsu (8), Mossipeni (5) and Nangong (9). A few community household interviews were done with the purpose of allowing residents of communities in which the study was being conducted to discuss the issues of farmer–herder relations and conflicts in the community. The households were haphazardly sampled. On average, interviews lasted 35 minutes. The shortest interviews were 19 minutes on average and the longest was 144 minutes.

Table 3.2: In-depth Interviews with Respondents

Stakeholders	Specific Individuals	Numbers	
		Agogo	Gushiegu
Farmers	Both autochthon farmers and Migrant farmers	43	44
Fulani Herders	Resident/permanent Fulani and non-resident/seasonal Fulani	36	38
Cattle Owners	Fulani cattle owners	4	7
	Local cattle owners	4	9
The Police	District police commanders	1	1
	Criminal Investigation Officers (CIDs)	1	1
Traditional Chiefs	Paramount chiefs	1	1
	Community chiefs	10	13
	Kontehene (Assistant to the Agogo paramount chief),	1	-
	Queen mother of Agogo	1	-
	Fulani chiefs/spokespersons,	2	1
	Secretaries of the traditional councils	1	1
Government Officials	District Chief Executive,	-	1
	Member of Parliament (MP),	1	-
	Elected Assembly members,	3	5
	District Coordinating directors,	1	1
	Secretary of District Assembly	-	1
	Veterinary Officials	2	1
Representatives of Associations and Groups	Agogo Mamakuo (Citizens of Agogo),	2	-
	Agogo Plantain Growers Association,	1	-
	Agogo Concerned Youth Association,	1	-
	Agogo Concerned Citizens Association,	1	-
	Agogo Concerned Farmers Association	1	-
Members of the Operation Cow Leg (OCL)	Police commander in charge of the operations,	1	-
	Army commander of the operation (2IC)	1	-
Opinion Leaders	Fulani elders	3	2
	Community chairmen (In case of Gushiegu)	-	4
Community residents/households		25	28
Total		148	159

Source: Field Study, 2013/2014

3.5.4. Focus Group Discussions

Focus group discussions (FGDs) were held with farmers, Fulani herders, cattle owners and community elders to get more information on the topic and to obtain in-depth understanding of the various dimensions of farmer-herder relations. They also supplemented the interviews and helped to cross-check information from the interviews. A total of eight FGDs were conducted during the field study – four in Agogo and four in Gushiegu (Table 3.3). Unlike the more spontaneous group interviews, the FGDs were pre-arranged and well-organised.

Table 3.3: List of FGDs conducted

FGD	Number of Discussants	Location
FGD with cattle owners	6 discussants: 4 local cattle owners and 2 Fulani cattle owners	Agogo Town
FGD with a group of elders	8 discussants	Agogo Town Centre
FGD with Fulani herders	9 discussants	Bebome, Agogo
FGD with local farmers	7 discussants	Bebuso, Agogo
FGD with young farmers	9 discussants	Bulugu, Gushiegu
FGD with youth association	11 discussants	Kpesinga, Gushiegu
FGD with Fulani herders (repeated with same group after two months)	8 discussants	Bulugu, Gushiegu
FGD with farmers	6 discussants	Damdaboli, Gushiegu

Source: Field Study, 2013/2014

The selection of the groups for the FGDs were done with local community members representing different social actors comprising elders, cattle owners and youth during which they were asked for their views on different issues because of their role in conflict and cooperation. The longest FGD lasted 125 min. Examples of the FGDs conducted are shown in Figure 3.1.

Figure 3.3: Participants of FGDs compromising Herders and Farmers in different Communities
Source: Field Study, 2013/2014

3.5.5. Participant Observation

Observation was integral during the field study. Both unstructured and structured methods of participant observations were adopted. I lived in the study sites and stayed in the communities throughout the whole day whenever I went for interviews. I went to the houses of the Fulani and stayed with them the whole day. As a result, I made friends with them, shared meals with them and followed them deep into the forest in search of water sources with their cattle. During my time with them, I participated in many activities like attending meetings, milking the cattle and carrying firewood with them. I also made friends with the farmers, accompanying them to their farms to observe the devastation of some farms, attended their meetings concerning issues of compensation payments and listened to their confrontations with the Fulani herders and cattle owners. While observing all these, I wrote down notes in my jotter. The aim of the observation was to get first-hand information and deeper insights into the issues of the study.

Participant observation was therefore very important in that it helped me to understand and see issues that the respondents would normally not divulge. Certain observations, for instance, were useful in contributing to my understanding of the processual development of conflicts and some of the cross-cutting ties inherent in farmer-herder everyday interactions.

3.5.6. Expert Interviews

Some expert interviews, mainly with government officials, were also conducted at the community/district, regional and national levels. The interviews were in Agogo, Juaso, Konongo, Gushiegu, Tamale, Kumasi and Accra. The purpose of the expert interviews were to give official backing to the data collected; get expert opinions on the issues; get official/policy responses to the issue of conflict and its management; and to also validate some of the information from the other interviews.

The interviews in Agogo, Gushiegu, Tamale and Kumasi were done alongside the individual interviews from July 2013 to January 2014. However, those of Accra were undertaken from 24th January to end of February 2014. Table 3.4 below provides the list of institutions/experts interviewed:

Table 3.4: Institutions/Individuals involved in the Expert Interviews

Institution interviewed	Place of Location
Northern Regional Police Command	Tamale
Ashanti Region Police Command	Kumasi
Agogo District Police Command	Agogo
Gushiegu District Police Command	Gushiegu
Gushiegu Veterinary Services Division, Ministry of Food and Agriculture	Gushiegu
Asante Akim Central District Veterinary Services Division, Ministry of Food and Agriculture	Konongo- Agogo
Asante Akim North District Lands Commission	Agogo
Juaso Forestry District, Ghana Forestry Commission – Bandai Forest Area	Juaso
Ministry of Food and Agriculture, Ghana	Accra
West Africa Network for Peacebuilding (WANEP) – Ghana (Formerly Ghana Network for Peacebuilding)	Tamale
World Vision Ghana	Agogo
ScanFarm Ghana Limited (ScanFarm (Gh.) Ltd) – the CEO and Farm Manager	Agogo
Ghana Meteorology Agency, Headquarters	Accra
Sociologist, University of Ghana – Legon.	Accra

Source: Field Study, 2013/2014

The Ghana National Security Council and Ghana Immigration Service, Headquarters in Accra were unwilling to give me information despite several meetings with them.

3.5.7. Social Network Analysis

A social network analysis of the various actors involved was carried out to see the connections of the actors in conflict and cooperation. This enabled me to see the social and political dynamics and relationships involved in both conflict and cooperation within the groups/actors in the conflict and how these networks help to influence the conflict process in terms of the escalation of violence and cooperation. The network analysis was done first by identifying various actors in farmer-herder relations (listed in Table 8.1), conflict and cooperation through interviews and FGD sessions. These interviews were done alongside name generator exercises. According to Schepis (2011), name generators elicit names of people and other entities to which the respondent has some connection. These are usually questions posed to the respondents and the connections between them and other entities are identified (Schepis, 2011). In the name generator exercise, respondents equally identified other actors whom they know and how these actors were connected. Through the in-depth interviews, I identified the important actors and then followed up with some of the actors and other informants to find the ties between them. Examples of some questions that I first posed were: "Who are you relating/interacting with and which farmers/herders are relating/interacting with each other?" "Name the people you have relations with, whether in conflict or cooperation?" I then listed this in my field notebook.

After identifying the actors, I identified the existing social networks in the community between the actors and analysed how their interactions affect conflict and cooperation among them. In order to see the connections/ties between the actors, I posed questions such as: "How is [are] he/she/they related?" "What connections exist between you and him or between them?" and "How do they influence your relations?" During the FGDs and group interviews, respondents identified, demonstrated and described their connections/networks with other actors. Interviewees also discussed how other actors and groups were networked and how they built them up and influenced each other positively or negatively with regard to conflict or cooperation. Observations were also useful to learn how social networks are built. This was done through my personal observations of people's interactions and relations in markets and within the community. As part of drawing linkages/connections of the actors and how these connections influence conflict and cooperation, sample network maps were manually

drawn with groups including elder farmers, local cattle owners and herders (cf. Schiffer & Waale, 2008).

The types of networks that I focus on here are mainly ego-centric networks which allowed me to build from 'name generator' questions that generated a list of a respondent's (ego) and their alters (relations with others). Edwards' (2010) arguments for the use of qualitative methods in social network analysis motivated me to do so to help understand the constellation of interactions and connections among actors in farmer-herder relations and to understand the content and context of these relationships. SNA historically developed from qualitatively driven anthropological network studies, observational, narrative and in-depth interviews on social relations (Edwards, 2010; Mitchell, 1969). Following Edwards, I used qualitative data for mainly the collection of data and then analysed the relational data both quantitatively (through sociometric graphs) and qualitatively (through in-depth discussions).

During the analysis of the SNA data, I used NodeXL to generate the socio-graphs and calculate the graph metrics such as the network density, network centrality, betweenness centrality, and degree centrality[23]. First, the data of the name generator exercises were fed into the NodeXL excel sheets and analysed through the computer system. NodeXL excel was then used to generate network graphs to show the connections and to calculate the graph metrics found in Appendix III. The qualitative analysis of the social network was done through detailed descriptions from the graphs generated and interviews of the connections and social relations of the actors in conflict and cooperation.

3.6. Secondary Data Collection

Secondary data sources were also gathered and used for the analysis. These include documents, official government reports, book chapters and articles on the topic and the collection of media reports and news. Obtaining official documents was difficult as many organisations did not have documents on the issue or could not trace them. This could partly be because of the lack of institutional interest and commitment on farmer-herder conflicts in Ghana. Rather, I got some official documents on the conflicts informally from some respondents. Besides, getting archival material on Fulani issues and conflicts was also difficult to access as both

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[23]I summarise the meaning of these terms according to Prell (2012): **Network density** is how actors are linked together, it is the proportion of possible ties (links) that are actually present in the network. **Betweenness centrality** indicates the network influence of an actor. **Degree centrality** is the number of ties an actor (node) has to other actors (nodes).

the local and the national archives had very little material on this. Police records on the issue were equally difficult to find.

Analysis of Ghanaian media reports involved print, electronic and online sources. These were mainly from the Ghanaian Daily Graphic Newspaper and Ghana News Agency.org (both state-owned), TV3 News Network, Daily Guide Newspaper, Citifmonline.com, Ghanaian chronicle Newspaper, Joy FM (myjoyonline.com), Modern-Ghana.com, VibeGhana.com, Peacefmonline.com and Ghanaweb.com (privately owned). The analysis took the form of a sociological discourse analysis (Ruiz, 2009) that involved three levels: first, textual analysis, in which discourse relevant to the topic from the media reports were characterised, and a content analysis of the media texts done. Second, a contextual analysis of these media reports was conducted, in which the communicative meanings of media discourse was analysed, and, third, generalisations were drawn based on the interpretation of this discourse..

3.7. Data Analysis Procedure

After arriving from the field, the first thing I did was to code all of the material obtained during the fieldwork. The recorded tapes and videos were given name codes based on the interviewees. Other materials, such as my field notes, secondary data and my transcribed data, which were completed whilst in Ghana, were all arranged and parts of them printed out. I first analysed my material by themes based on the study objectives. Parts of the analysis were initially done using ATLAS.ti 7. However, after challenges with the software, I reverted to manual analysis. What helped in the analysis was the fact that every day when I returned from the field I listened to my interviews and then wrote down key issues obtained from the recorded tapes. This made it easy to have already some analysed data.

An overall content analysis of the transcribed data was carried out, which involved deducing themes, concepts, quotes and texts from the transcribed data and secondary sources for the analysis (thus qualitative text interpretation). In many cases, respondents have been anonymously cited due to ethical reasons, the sensitivity of the topic and at the request of these respondents. Some responses have been mentioned verbatim to highlight some of the different opinions on the topic under study.

3.8. Challenges of the Study

A major challenge of the study was the lack of official data and statistics. Conflict data was conspicuously unavailable and difficult to obtain. Neither the police at the local, regional or national levels, nor the law courts had comprehensive conflict data. I was only able to obtain some conflict data from the police. Besides, statistics on Fulani migrations were also difficult to obtain. Several attempts to get this data from the Ghana Immigration Service, Headquarters in Accra were unsuccessful.

Another challenge in the data collection stage was the thorough digestion and understanding of the terms "environmental change" and "climate change" by those involved in the study. The farmers, Fulani herders and other respondents understood these terms in their own languages mainly in relation to rainfall and dry conditions. I therefore needed to explain both terms using them in relation to rainfall and how the terms affected their livelihoods. This, however, did not sufficiently conceptualise the terms as they embody more than that.

Finally, in as much as I tried to avoid biases in my field data collection, such as observing ethical rules of research and in my general reporting of the issues, the nature of the topic, particularly the conflict aspect, presented some inherent biases in my accounts of the issues. This is because some of the accounts are based on my own interpretations and impressions of the information reported to me by my respondents. Thus, there are selective and subjective biases inherent in some of the issues, which are inadvertent. Nevertheless, my use of multiple methods helped to minimise the effects of these challenges on the study. The combination of statistics, secondary data, interviews and FGDs helped to present, as much as possible, objective and comprehensive accounts.

3.9. Ethical Considerations

Due to the sensitive nature of the topic, ethical issues like anonymity, confidentiality and informed consent were strictly observed. Conflict is an issue that demands that the identity of respondents who voluntarily agree to participate in the research are concealed and protected. Therefore, I first and foremost sought the consent of the respondents and respected their right to voluntarily participate in the study. I did this by outlining and explaining in detail the purpose and reason for this study. People who were unwilling to take part in the study were left out and never forced to participate. Before an interview session began, I always reiterated my resolve to ensure anonymity of the respondents and keep their information

strictly confidential. Some respondents who agreed to be studied refused to be recorded and this was strictly observed.

3.10. Conclusion

This chapter examined in detail the study areas and methods used to collect the data for the study. The profiles of the study areas enable the reader to get background knowledge about the cultural, economic, socio-political and geographical environment of the study. Besides, it helps to contextualise the study and contribute to the analysis and understanding of the issues of the study. The subsequent chapters, the major analysis of the study, are carried out through the application of the above methods.

4. THE ENVIRONMENTAL CHANGE/ RESOURCE SCARCITY - CONFLICT DEBATE[24]

Studies in farmer-herder conflicts have been dominated by the environmental scarcity/security debates. Even recent literature on increases in farmer-Fulani herder conflicts considers environmental/climate change and resource scarcity as lead factors and thus reiterates the environmental scarcity/security and the neo-Malthusian postulations. Some literature from African countries suggests that environmental/climate change is indirectly leading to competitions for scarce resource, thereby resulting in conflicts between farmers and herders. While there have been studies exploring the connection between environmental change and conflicts in farmer-herder relations in Kenya (see Njiru, 2012; Theisen, 2012), Nigeria (see Blench, 1996; Odoh & Chilaka, 2012), Burkina Faso (see Brown & Crawford, 2008), Niger (see Turner et al., 2011) and Mali (see Benjaminsen et al., 2012), few studies have looked at the case of Ghana. Except for Dosu's (2011), policy paper on the topic, no empirical studies have been carried out on the topic.

Therefore, in the midst of debates on the influence and role of environmental change/resource scarcity, in this chapter, I seek to examine the perceptions of farmers and Fulani herders in Ghana on the role of resource scarcity and environmental/climate change on conflicts between them vis-à-vis data sets (of climate change indicators especially rainfall data) on environmental/climate change. I do this through a comparison of data sets and primary data (interviews) taken from the field to assess how environmental/climate change and resource scarcity influences on conflicts between farmers and Fulani herders. Before I look at the environment-conflict nexus from the views of farmers and herders, I would first like to detail the drivers of herder migrations from the views of herders and farmers because migration for scarce resources is seen by the respondents as indirectly driving conflicts. I also present their understanding, perceptions and knowledge of environmental change and resource scarcity and how this affects them so as to provide the impetus for a discussion of how environmental changes are connected to conflict.

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[24]Part of this chapter has been accepted for publication as a book chapter entitled: "Real or Hyped? Linkages Between Environmental/Climate Change and Conflicts – The Case of Farmers and Fulani Pastoralists in Ghana. In Mohamed Behnassi, Gupta Himangna and Olaf Pollmann (eds.), *Human and Environmental Security in the Era of Global risks*. Springer."

4.1. Drivers of Fulani Herder Migrations into Ghana - Agogo and Gushiegu

Fulani herders have long have migrated, though only temporarily, from Burkina Faso and Togo into parts of Ghana, especially the northern and eastern parts principally in search of resources (pasture and water) for their cattle and then returned[25]. Their permanent migration was to the northern part of Ghana around the late 20th century (Tonah, 2005a). Migrations of Fulani to Ghana are still ongoing and the Chiefs of Fulani, both in Agogo and Gushiegu, see these migrations as an everyday affair. Although Fulani herder migrations to Agogo started much later than they did to Gushiegu, their numbers in Agogo have increased over the years. Farmers and local government officials have indicated that many Fulani herders migrate to Agogo with cattle especially from September to January. According to the AANDA, there were over 10,000 cattle in the district as of 2011 (AANDA, 2011). Farmers claimed that migrations of Fulani to Agogo were because of the presence of "rich pasture" and the many sources of water for their cattle.

Fulani herders and cattle owners also maintain that Agogo is endowed with rich natural pasture suitable for large cattle production since green pasture is present throughout the entire year. With a wet semi-equatorial climate and double-maxima rainfall, the area has enough rainfall to sustain for sustaining the vegetation cover (AANDA, 2012). According to two officials of the Ghana Meteorological Agency and Ministry of Agriculture (Ghana), the combination of three major vegetation types - the Open Forest, the Closed Forest and the Wooded Savannah - makes both agricultural and animal rearing suitable. Sedentary Fulani herdsmen claimed that it was due to the pasture that new migrant Fulani from other neighbouring countries – Burkina Faso, Nigeria and Togo – came with their cattle to Agogo. The Veterinary Service Department in Agogo also agrees that there is indeed pasture in this part of the country that is suitable for mass cattle production.

In the case of Gushiegu, Fulani herders migrate from neighbouring countries in the dry season to places where they can find water and pasture. Despite the climatic conditions of the area (located in the Savannah Woodland area with dry spells and a single rainfall pattern for just a few months), migrations of Fulani herders to the eastern part of the GDA from Togo and Burkina Faso are common. Within the GDA, most Fulani herders migrate daily with their cattle from their communities to Bulugu, where the biggest dam in the area is located, to graze. A few settle there with their cattle until the rainy season and then return to

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[25] Based on interviews with elderly farmers and herders, July 2013.

their communities or countries. There are also external migrations out of the district south-wards, especially to Buipe, Yeipe, Atebubu and Yeji (located in and towards southern Ghana). A Fulani cattle owner, who regularly migrates out of the area to Buipe and Yeji in times of dry spells in search of pasture, noted that:

> It is normal for me to move towards southern Ghana during the dry season with my cattle in search of pasture. But this year [2013] has been rather too early because we have not had enough rains. The rainy season this year has been short and so the pasture has dried so early. You look at it yourself. As early as the beginning of October, the whole place was already dry. I would have gone to Buipe area around February or March next year [2014], but look at me, as early as November, I am already going (Interview with 42- year-old Fulani cattle owner, Gushiegu, 29/11/2013).

It is important to point out that herders find these migrations normal as they have often moved. The reasons for both in and out migration of Fulani, according to them, are mainly due to the search for pasture and water for their cattle and to look for herding jobs, but also to escape from conflicts. Fulani herders relocate to other communities when conflicts with farmers are rampant. For example, following the violent conflict with Konkomba farmers in August 2011, Ali and his family relocated from Toti to Nabulugu. He explained that:

> Most of us Fulani keep moving our cattle to places which are peaceful. For us, conflict is a key determinant for our migration. We left Toti in 2011 after the Konkomba attacked us. In fact, we were affected by this conflict since my father was killed and my younger brother Yakubu shot several times (Interview with Ali, [Fulani herder], Gushiegu, 12/12/2013).

Thus, a major reason for herder migration is to avoid conflicts. This is why some herders in Agogo also moved to the Sekyere Kumawu District due to increased conflicts with farmers.

Both farmers and herders see Fulani herder migrants as consisting of three types as illustrated in Table 4.1.

Table 4.1: Categories of Fulani Herder Migrants to Ghana

Type of Migrant	Reasons for Migration	Characteristics
Yaligonji/Jerigoji (temporary migrant Fulani). Both Stenning (1959) and Schareika (2001) described them as seasonal migration	Response to ecological needs and in search of resources, which could both be for reasons of pasture quality and quantity (push-pull reasons)	-Described as 'alien' herdsmen -Continuously move with cattle and are not stable -Mainly cattle owners -Move seasonally to Ghana from neighbouring countries in dry season -Normally nomadic and involves cattle mobility -Involves international migration (from one country to another)
Bouboji (sedentary migrant Fulani)	Response to ecological, social, political and economic needs	-Undertake permanent migration -Stay in communities for many years -Become sedentarised in community over time -Migration often for longer periods -Both human and cattle mobility -Often transhumance with families -Regional migrants (from one community to another)
Job seeking migrant Fulani herdsmen (*Gainako or Kainako* (plural *Gainaabe*)	Taken in response to economic needs, thus herding jobs	-Are just herders, do not own cattle -Employed to take care of other peoples' cattle -Employed because of skills in herding cattle -Involve human migration

Source: Field Study, 2013/2014

The migrants in Table 4.1 mainly come from other neighbouring West African countries such as Burkina Faso, Nigeria, Niger and Mali. The categories of herder migrations described above show that Fulani migrations are multi-faceted. Thus according to the data gathered (and as seen in Table 2), Fulani migrations are driven by different motivations:

1. Ecological: the availability of resources (water and pasture) in Ghana. This resource availability makes it much cheaper and easier to find resources for their cattle as indicated by some Fulani pastoralists from Mali, Burkina Faso, Niger and Nigeria.

2. Political and social: Gushiegu (in particular) and Ghana in general remain peaceful, and Fulani pastoralists are accepted in most communities.

3. Economic: the presence of cattle is a source of employment to Fulani herders who migrate from neighbouring countries to seek jobs.

4. Proximity to large cattle markets in Kumasi and Accra are also a motivating factor for cattle owners and businessmen.

Distinctively, the routes of the *Yaligonji/Jerigoji* have often been rotational and cyclical – moving from north to south, east to west and vice versa. Their movements are not always to a particular place, but wherever they can find pasture. Mostly they move into Ghanaian communities from November to March and then return to their countries of origin. Their destinations over the past few years have been more towards southern Ghana particularly the Brong-Ahafo, Ashanti and Eastern regions.[26] Some *Bouboji* (sedentary pastoralists) also move across regions and districts, especially during the dry season as seen in the case of the 42-year-old Fulani cattle owner above and also because of community evictions or conflicts with community farmers. Unlike the *Yaligonji/Jerigoji,* sedentary pastoralists are known in the community and take part in community activities of the community – community members entrust cattle into their care and they also engage in farming. Job-seeking herders can be called during any season of the year when cattle owners need them and arrive through established contacts with other herders already resident in Ghana.

4.2. Farmers' and Herders' Knowledge and Perceptions of Environmental Change

The knowledge that farmers and pastoralists have of environmental change is important for our understanding of how these changes affect their relations and activities. Schareika (2001) has already observed that pastoralists' ecological knowledge of the changes in the seasons and resource quality remains high. He maintains that they know when and where to find nutritional pasture and water for their cattle in dry seasons and their decisions hinge on their high knowledge of their environment. Farmers equally have a good knowledge of the changes that occur within their environment. Their knowledge of the weather and climate such as changes in rainfall, temperature and winds is also high (Ifejika Speranza, Kiteme, Ambenje, Wiesmann, & Makali, 2010; Mertz, Mbow, Reenberg, & Diouf, 2009; Thomas, Twyman, Osbahr, & Hewitson, 2007).

Farmers´ knowledge of the weather, especially rain, also helps them to understand the planting seasons, the type of crop to cultivate and generally what adaptation strategies to take in cases of rainfall fluctuations. Table 4.2 below shows how farmers and herders each perceive environmental change. Although their perceptions of environmental change in Table 4.2 are similar and conform to general categories of environmental change independent of

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[26]Ghana is politically divided into ten administrative regions (Greater-Accra, Ashanti, Volta, Central, Western, Eastern, Brong-Ahafo, Northern, Upper East and Upper West Regions).

who perceives them, they are interpreted differently. Herders, for instance, interpret poor rainfall based on its impacts on pasture while farmers base it on the amount (whether it is too much or small). In the case of farmers, yields (e.g. crop) have fallen and for herders amount of pasture has declined. Besides, whereas farmers see bush burning as greatly contributing to climate/environmental change, herders did not mention it as a contributor. Herders rather see it as their coping strategy to get fresh pasture. Bush burning has been one contentious issue between herders and farmers in Agogo where farmers accuse herders of burning[27] the areas around their farms in a quest to get fresh pasture.

Table 4.2: Perceptions of Environmental Change:

Farmer perceptions	Herder perceptions
Poor /stunted rainfall	Poor /stunted rainfall
Change in timing of rains/ Late start of rain	Change in timing of rains/ Late start of rain
Dry spells	Dry spells
Reduced crop yield due to soil infertility	Lack of pastureland/less pasture
Lack of good harvest	Less water
Higher temperatures – the weather is hotter than previously	Higher temperatures – hotter weather (in fact pastoralists claim this dries up water bodies and fresh pasture)
Desertification and environmental degradation – bush burning, tree falling, over-grazing	Destruction/burning of fresh pasture by farmers
Floods*[28]	Floods*

Source: Author's Extraction Based on Field Interviews and FGDs, 2013

The findings in Table 4.2 are consistent with the findings of Yaro (2013), Roncoli, Orlove, Kabugo, and Waiswa (2011), West, Roncoli, and Ouattara (2008) and Tschakert (2007) who report that farmers in the Sahelian region of West Africa identify shrinking water bodies, disappearing plants and crops, and changing settlement patterns as evidence of re-duced rainfall over the last three decades of the twentieth century. Lower rainfall has largely remained the most visible environmental change perceived by farmers. Since much of their agricultural activities in the study sites are rain-dependent, they listed rainfall as the most important environmental change they perceive. Farmers in Gushiegu especially observed that the weather has largely remained unpredictable with rainfall seeing the most changes. For example, a farmer noted:

> The weather has changed significantly. We all know that rainfall normally starts in
> April but these days it will be July and yet we will have no rain. When the rain

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[27]Myjoyonline.com. (03 February 2016). Fulani crisis; Regional Best Farmer weeps at loss; arms wife with pump action gun. Retrieved from http://www.myjoyonline.com/news/2016/february-3rd/fulani-crisis-regional-best-farmer-weeps-at-loss-arms-wife-with-pump-action-gun.php (Accessed 10 February 2016).

[28]*Both farmers and herders think that floods are no longer common.

eventually comes, we are unable to sow our traditional crops like early millet and groundnuts. By the end of July, we have continuous rain until mid- October when it stops all of a sudden. How can we sow with this kind of ´dwarf´ rainfall? We are seeing more dry spells and poor harvest these days. And the poor rainfall has been consistent for the past years – especially for 2009-2013. This year [2013], we were not able to sow early millet and groundnuts. Harvests for even the late millet have been very poor. The only good harvest is for maize. The changes are happening rapidly (Farmer from Zanteli–Gushiegu, 16/12/2013).

While herders equally see rainfall as an important indicator of environmental change, their observation of environmental change is looked at from the availability of fresh green pasture for their cattle. The herders thus think that reductions in green pasture, scarcity of forage resources and the quality of pasture clearly show changes in the environment. This is important since Zampaligré et al. (2014) found similar results in their study of pastoralists and farmers in Burkina Faso.

> […] Decline in crop yields, decreased soil fertility and increased erosion and land degradation were the major impacts of climate change as perceived by the crop farmers. For pastoralists and agro-pastoralists, major impacts of climate change on their livestock husbandry systems were the shrinkage of grazing areas and the decline of forage resources with consequently lowered animal productivity (offspring numbers, milk and meat yields). Since pasture areas and livestock corridors are increasingly cut-off by crop fields that cannot be trespassed during the rainy season until crop harvest, livestock mobility is restricted […] (Zampaligré et al., 2014, p. 773).

Farmers' perceptions of rainfall hinge mainly on its onset and cessation. Farmers and herders in Gushiegu were mainly those who stated that they had observed considerable environmental changes. To them, the changes are so rapid that the whole rainy and farming season has changed. However, the question I posed to them was "how can you conclude from your observations that there is 'environmental change' when the area (Gushiegu) lies in the Savannah woodland which is generally characterised by a semi-arid climate featuring dry spells and erratic rainfall?" In response, the farmers noted that although the area is semi-arid, there has been an intensity of dry spells and stunted rainfall. They contended that the dry season (Harmattan[29]), instead of lasting only three months, is now longer and therefore impacts the rainy season. Farmers further commented that, this has significantly changed the weather. The elderly among the farmers believed that the changes had occurred over a long period of more than ten years and have therefore affected their farming. In Agogo, farmers' understanding

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[29]The period of the dry season is called the Harmattan. This is where the northeast monsoon winds blow dust from the Sahara Desert into much of West Africa from the end of November to the middle of March. See more at: http://www.britannica.com/EBchecked/topic/255457/harmattan.

of environmental change is based on herders' migration from their countries to Agogo in search of resources Farmers in Agogo also see environmental change as the result of the activities of herders (anthropogenic factors) through over-grazing and bush burning which they believe is turning the land into savannah[30].

Environmental change in the language of Fulani herders is often described as: "*Yori kanye Toroka din wula yoomudu din tobi she koŋ no wuodi,*"[31] which is translated as "climatic/weather conditions[32] have changed." Herders also see migration as a response to environmental change. Using historical narrations, herders maintained that their migrations were propelled by droughts, an important indicator of environmental change. Sedentary Fulani (*Bouboji*) for instance traced their migration to Ghana to the early 1970s when the Sahelian droughts were severe in their countries whereas the seasonal migrants (*Yaligonji/Jerigoji*) indicated that migration was a seasonal affair and that environmental change (mainly dry spells) has worsened, hence their continuous migrations. A 47-year-old Fulani cattle owner narrates vividly that:

> I was brought to Ghana when I was at the young age of seven from Niger. You know at that time it wasn't raining in my country and our cattle grew very lean and were starving. I cannot tell you the year as my father told us this story. There was drought and famine everywhere. Human beings could not find food, how much more animals? We lost a lot of our cattle. Other Fulani were by then moving into Nigeria and the Ivory Coast. So we also set out to go into Ghana. We went through Burkina Faso and came to Ghana at Salaga in the northern region before I finally moved to Agogo here (Interview with a 47-year-old Fulani cattle owner, Agogo, 17/01/2014).

This herder claimed to have migrated in response to environmental change. Herders who were expelled in 1988 returned to Ghana due to the environmental conditions existing in their countries. One of them in Karaga stated that "when we went back during the expulsion exercise, we returned to Ghana in 2001 from Burkina Faso because of lack of pasture for our cattle in Burkina Faso." Fulani pastoralists' base their decisions to migrate to Ghana from information and knowledge they get from Fulani networks and contacts they have with other pastoralists already staying in Ghana.

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[30]Some parts of the land in Agogo have had features of savannah land after the 1983 bush fires that destroyed much part of it.

[31]Based on FGD with herders in Bulugu - Gushiegu, 22/11/2013.

[32]Herders understand weather and climate to be the same thing. These terms are of no difference to them mainly because it difficult to distinguish them in their language.

4.3. Farmers' and Herders' Knowledge and Perceptions of Resource Scarcity

Theoretically, environmental/climate change affects important resources needed by herders and farmers to increase productivity and maintain their livelihoods. The argument of scholars is that environmental/climate change further constrains resource availability in areas that already have problems of resources such as those of Africa (Intergovernmental Panel on Climate Change (IPCC), 2014b; Scheffran, 2011). In this vain, Scheffran et al. (2014) observe that agricultural societies with low levels of economic income are more dependent on natural resources and ecosystem services than industrial societies with high income. These agricultural societies are therefore likely to suffer from resource constraints during environmental/climate change. Livestock production is also likely to be affected in relation to grassland and rangeland productivity due to lack of water and droughts (International Fund for Agricultural Development [IFAD], 2009). This appears to be the situation of farmer and herder societies in Northern Ghana and West Africa as a whole, which are traditionally agrarian and natural resource dependent. Environmental/climate change affects resource use in these societies and leads to competition for the use of the existing resources. This could partly account for Fulani herders resorting to tree species such as the Shea, Dawadawa and thatch grasses to feed their cattle.

Farmers and herders look at resources from the perspective of their livelihoods. Farmers for instance list fertile and arable land, sources of water for crops and seed crops as important resources needed by them whereas herders name arable pastureland, green forage/pasture and sources of water as important resources required by them. In perceiving resource scarcity, therefore, they both look at it in the light of the absence or reduction in these resources. Farmers perceive scarcity as less/lack of water for crops, lack of good harvest, lack of land for agricultural expansion and infertile land. Herders on the other hand perceive scarcity as including lack of fresh pastureland, less pasture, less water and less forage resources. To migrant herders, one of the reasons for such scarcity is the large herds of cattle in their countries (Burkina Faso, Nigeria, Niger and Mali). Herders in the past have explained that due to too many cattle, herders compete for the little pasture available which impels them to migrate. Their coping strategy to this scarcity and competition for the resources is to migrate to areas or countries where these resources are available and where there are fewer cattle, hence their migration into Ghana. This is why Jónsson (2010) observes that Fulani use

migration as the most visible coping strategy in response to the vagaries of the Sahelian climate.

In Gushiegu, farmers stated that due to the scarcity of fresh pasture for cattle especially during the dry season, herders were resorting to tree species to feed their cattle. The Shea (*Vitellaria paradoxa*) and Dawadawa (*Parkia biglobosa*) trees (their leaves, branches and fruits) have become the most commonly used as both feed their cattle as both tree species are drought-resistant and available all-year-round. The reliance on these alternative feeds invariably puts the herders into conflict with community members, especially women who see the Shea and Dawadawa[33] as economically valuable to them. In addition to this, dependence on other forage resources such as thatching grasses (*Hyparrhenia involucrate Stapf*) also causes controversy between farmers and herders, since it is a major raw material used by the local population for roofing houses. Their usual grasses that are used to feed the cattle such as the elephant grass (*Pennisetum purpureum*), cat tail grass (*Sporobolus pyramidalis*) and torpedo grass (*Panicum repens*) accordingly are becoming unavailable due to the change of climate. Herders claimed that their unavailability is making them move to alternative places to search for resources.

> The consequences of this scarcity, Scheffran et al. (2014, p. 375) note, are that:

> […] since human beings need resources to live, produce and consume, resource scarcity can increase the motivation to acquire or defend resources by the use of violence, individually or collectively. This can in turn contribute to resource destruction. When people are forced to migrate, this can cause conflicts due to scarce resources or cultural differences in receiving areas.

Thus to these authors, the consequences of resource scarcity is the motivation to use violence for resource acquisition through competitions or collective motivation. This is the main argument that herders and farmers advanced for the violence between them. On the other hand, resource scarcity could also lead to cooperative opportunities for the use of resources by two users as has been the case of farmers and herders in some situations (as I shall show in chapter seven). Scheffran et al. (2014) again agree about the possibility of cooperative forms of interaction such as sharing of resources in times of scarcity and trading of goods on markets. The authors add that "the abundance of valuable natural resources may provide an incentive to acquire these resources violently. Access to resources may in turn raise the capabilities of actors to use violence, such as an increased ability to buy weapons" (Scheffran et al., 2014,

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[33]Shea and Dawadawa are valuable to farmers, especially women, since their nuts and seeds are sources of income and because they are sold for export whilst locally used for making cooking oil, body cream and local meat.

p. 375). Thus, the relations between resources and environmental/climate change is such that their scarcity or abundance could be a catalyst for violence or an opportunity for cooperative interactions.

4.4. Perceptions of Farmers and Herders on the Link between Environmental Change and their Conflicts

As the main objective of this chapter was to examine farmers and herders' views of the linkage between environmental change and resources and the conflict between them, a key question I posed to farmers and herders was: 'is resource scarcity/environmental change a cause of conflict between you and how?' Out of a total of 87 farmers, 53 of them responded in the affirmative whilst the rest either said they did not know or there was no link. For the total of 98 herders and cattle owners interviewed, 72 believed that changes in the climate (rainfall and dry spells) were mainly responsible for the increased conflicts. However, they admitted that although resource scarcity and environmental change were not the only reasons, it was a major factor. The basis for this argument is that resource scarcity induces herders' migrations to semi-arid areas in search of resources for their cattle, which leads to competition for land in particular, thereby leading to violent confrontations. There are no figures about the number of Fulani migrants into Ghana as their migrations pass through unapproved borders into the country. Herders argued that due to lack of pasture in their countries, they regularly migrate into Ghana.

> As pastoralists, we tend to be sensitive to changes in the environment because our activities and livestock depend on the availability of resources (water and pasture) which are negatively affected by climate change. When these resources are not available, we need to migrate to places where they are available […]. I have been here [Gushiegu] for over ten years now, but there are new Fulani coming in here frequently with cattle just in search of pasture for them. Even those of us here also move further to places like Yeji, Buipi and Atebubu to look for pasture in hard years […]. Due to the many farms these days, we have to be careful or else we would destroy crops which is a recipe for confrontations (Interview with 42-year-old Fulani cattle owner, Gushiegu, 29/11/2013).

Thus, herders that migrate are in search of natural resources due to poor environmental conditions such as poor rainfall, dry spells and lack of pasture and water, indirectly causing conflicts between them and herders. The cattle owner in the interview above admits that herders' migrations are frequent which indirectly induces competitions for land/pasture and water and these competitions tend to affect their relations. The farmers equally stated that the herders' continuous migration from their countries to Ghana has put pressure on resources,

particularly land, and hence their conflicts with farmers. Farmers, at Agogo particularly, argued that the influx of many cattle in the area was leading to land competitions, which was resulting in crop, and, subsequently, conflicts. Owusu, a farmer at Bebome maintained that:

> The Fulani migrate to Agogo with their cattle because of harsh climatic conditions in other parts of the sub-region. Many herders do not like other places, but rather prefer Agogo due to the availability of pasture, easy access to water and the absence of tsetse flies. When they come, because of the many farms, the cattle destroy our crops. This is the main problem we have with the Fulani herders (11/06/2013).

Farmers, as seen in the transcript above, admit that the area is endowed with resources (fertile lands and fresh pasture as well as sources of water) and that scarcity is not the problem, but competition for the rich resources (similar findings by Greiner, 2012). This is why De Bruijn and van Dijk (2005), after their case studies of some farmer-herder conflicts in West Africa, maintain that violent conflicts between farmers and herders are taking place in resource-endowed areas, rather than in areas with scarce resources. This appears to be the case of Agogo where fertile land, pasture and sources of water are readily available.

Thus, farmers (in Agogo) see herder migrations to the area in search of the seemingly abundant resources as a cause of scarcity and conflict and believe that the Fulani herders themselves are the drivers of resource scarcity and environmental change. They argued that the migration of the Fulani herders to Agogo tend to change the environment rapidly, which leads to environmental degradation and poor land use through bush burning, deforestation and over-grazing by the cattle. Officials of the Ghana Forestry Commission equally agreed that lands which have been designated as forest reserves are being destroyed by many of the herders, thereby turning much of Agogo into grassland. These observations by farmers and herders resonate with the findings of Henku (2011) that the scarcity of grazing areas in the Great Lakes Region by cattle herders has forced them to constantly move onto the land of farmers or into national parks in search of pasture and water, which have always resulted in constant clashes among the two. The perceptions that migrations of Fulani pastoralists are responsible for conflicts is also emphasised by NGOs. The national coordinator of WANEP, Justin Bayo[34] stated that: "They [Fulani herders] cross over into the country fully armed and with no regard for our laws. If unchecked they will escalate the many dormant conflicts, especially in the north over land.[35]" Even media discourses of conflicts between farmers and

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[34]He was the coordinator at the time of the statement, but has since left WANEP.
[35]See IRIN. (29 April 2010). GHANA: *Police crackdown on migrant Fulani herdsmen*. Retrieved from http://www.irinnews.org/report/88957/ghana-police-crackdown-on-migrant-fulani-herdsmen   (Accessed 24/10/2014).

herders tend to suggest a link between climate change and these conflicts. Articles in the media have sought to blame the harsh climatic conditions in the Sahel and the northern part of Ghana which propels herders to migrate to other parts of Ghana and has invariably resulted in the clashes between the two. For instance, a journalist, Collins Dakurah[36] stated categorically that: "Climate change is affecting the availability of forage land for nomadic herdsmen in Ghana, as a result they have slowly begun to migrate towards the middle savannah areas and in lower proportions to some southern parts of Ghana." Much of the discourse, like that of Dakurah's above, has no scientific basis to prove that it is climate change that actually propels herder migrations and, hence, herder conflicts, yet people categorically state that there is a link between herder migration and farmer-herder conflicts.

Also, herders and farmers (in Gushiegu) observed that due to the change in weather events such as stunted rainfall, dry spells and general reduction in rainfall, resources such as pasture and water are becoming scarce. They stated that rivers and streams easily dry up making it difficult to find water in the dry season. They pointed out that lack of water and pasture has then put pressure on the Bulugu Dam (the biggest dam in the area) to supply water for domestic use, dry season farming and cattle use. Farmers and community members in Bulugu, Yawungu, Kpug, Jingboni, Offini, Sugu, Toti and Makpedanya claimed that boreholes always dry up during the dry season making them resort to dams and streams as sources of water for drinking and domestic use. This puts them into competition with herders for the use of the water. The argument is that due to scarcity, which is mainly caused by weather events, competition for resource use has intensified. A farmer in Bulugu observed:

> You know these days it doesn't rain as it used to be and so our harvests have been very poor. The Fulani are also struggling to find grass and water for their cattle. So you have many of them moving from many parts of the district to Bulugu here. And as the largest dam and forest in the district are here, this puts pressure on the dam and resources here. That makes Fulani destroy our crops and this causes the conflicts we have with them. (RESEARCHER: Are you then saying that it is scarce resources that bring conflict between you and the Fulani?). Well, if you look at it, it is all because the resources are not there. If not, why do they have to leave and come to this community - it is because it is not raining which leads to lack of resources. In fact, this community I think hosts the largest number of Fulani and if they all come here like this they destroy more crops which can lead to conflicts (Interview with a 32-year-old male farmer at Bulugu, Gushiegu, 16/10/2013).

Thus, the farmer's argument is based on the resource-scarcity postulations. Schilling et al. (2012) found similar results in northwest Kenya among Turkana pastoralists that reduction

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[36]See Dakurah, C. (15 January 2012). *The FULANI menace: a product of climate change, education and misconception of nationality*. Retrieved from https://www.modernghana.com/news/372037/the-fulani-menace-a-product-of-climate-change-education-an.html (Accessed 24/10/2014).

in pasture, water and livestock has made raiding the only way of survival, which conse-quently leads to violent conflict. These views are fascinating, particularly in the midst of debates of forced migrations and environmental refugees (see Castles, 2002; Black, 2001; Myers & Kent, 1995).

Therefore, conceptualisation of farmers and herders perceptions of the environment-conflict nexus can be summed up systematically as:

1. Environmental/climate change and resource scarcity has worsened in the Sahelen region and some parts of northern Ghana

2. These have propelled herders to move to resource-endowed areas. At the same time, these areas have also seen expansion in farming activities

3. As a result, competition for both farming and pastureland is higher.

4. This competition is leading to crop destruction and the killing of cattle that are found grazing on farms. Farmers and herders are therefore defending their livelihoods by 'fighting' each other through violent means by acquiring weapons.

4.4.1. What Data Sets say about Environmental Changes in Ghana

Before I present a thorough examination and analysis of the views of farmers and herders that resource scarcity drives conflict between them, I want to present what data sets say about climate change in Ghana. Climate change predictions for Ghana are expected to see major changes in temperature, precipitation, humidity and annual rainfall. Increase in the average annual maximum temperature is projected to increase in Ghana. There has been a 1% rise in temperature in Ghana over the last decades and a 20% reduction in annual rainfall since 1960 (EPA, 2000). According to the *National Climate Change Adaptation Strategy* (NCCAS) - Ghana (UNEP/UNDP, 2012), temperatures in Ghana in all the ecological zones are rising whereas rainfall levels and patterns have been generally reducing and increasingly becoming erratic. The NCCAS (UNEP/UNDP, 2012, p. 10) notes that:

> Historical data for Ghana from the year 1961 to 2000 clearly shows a progressive rise in temperature and decrease in mean annual rainfall in all the six agro-ecological zones in the country. Climate change is manifested in Ghana through: (i) rising temperatures, (ii) declining rainfall totals and increased variability, (iii) rising sea levels and (iv) high incidence of weather extremes and disasters. The average annual temperature has increased 1°C in the last 30 years […] The major challenges in all zones are weather extremes such as flooding, droughts and high temperatures. In **the Transitional zone**, the projected trends that are most likely to pose the major problem are the early termination of rainfall which is likely to convert the current bi-modal regime to a uni-modal one […].

The report further projects rainfall variability in the near future and increases in temperatures between 0.8°C and 5.4°C for the years 2020 and 2080, respectively, with an estimated decline in total annual rainfall between 1.1%, and 20.5% for this period. The UNEP/UNDP (2012) notes that the agricultural sector would be the worst affected by these changes. This presupposes a decrease in resources for both farmers and herders.

Interestingly, both data sets and interviews with the Ghana Meteorological Agency show a different picture of changes in the weather and for that matter the environmental/climate change. Rainfall data (Figures 4.1 and 4.2) reveal that whilst there is rainfall variability, there were basically no significant changes in rainfall figures. Officials of the Ghana Meteorological Agency believe that what is happening is mainly due to variability, especially with regard to rainfall.

> Indeed the rainfall pattern has changed, but there have been no significant changes in amounts of rainfall that we have. These changes in rainfall have mainly to do with the onset of rain and its cessation. Normally for most farmers in much part of Ghana especially the north, the onset of the rainy season is April and its cessation is the end of October. These days it is indeed very difficult to predict the pattern especially for the northern part of Ghana. For the forest zone, the pattern has remained basically the same. The only place we are monitoring is Axim (in the Western Region). Sometimes, there are changes in the onset and cessation of the rainy season in Ghana. Last year (2013) for instance, we had heavy rain in February 2013 and from March to June, it stopped and so there was a dry spell. This was very abnormal. We warned that farmers should not rush to sow crops especially the early millet because the rain was going to stop and indeed it stopped and came in July. That would have been late for the planting season for most crops. If you take rainfall figures from the 1960s and compare them to now, the amounts are virtually same despite the erratic nature of the rain. What we are actually seeing is variability in rainfall. There are in fact no significant changes in the rainfall amounts. Climate change is happening, but the process is gradual (Interview with Mr. Charles York, Ghana Meteorological Agency, Accra, 10/02/2014).
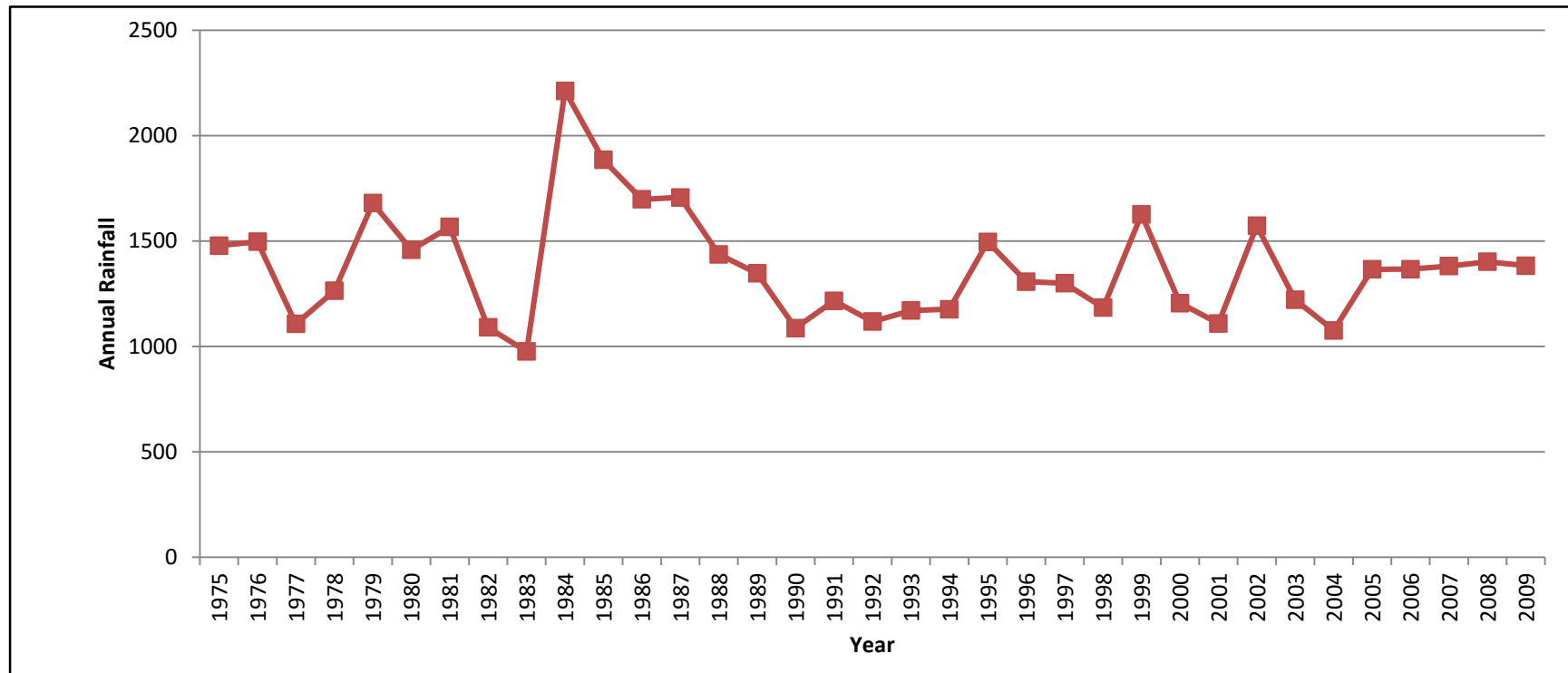
Figure 4.1: Annual Rainfall Figures for Agogo, 1975-2009
Source: Based on Figures Provided by the Ghana Meteorological Agency
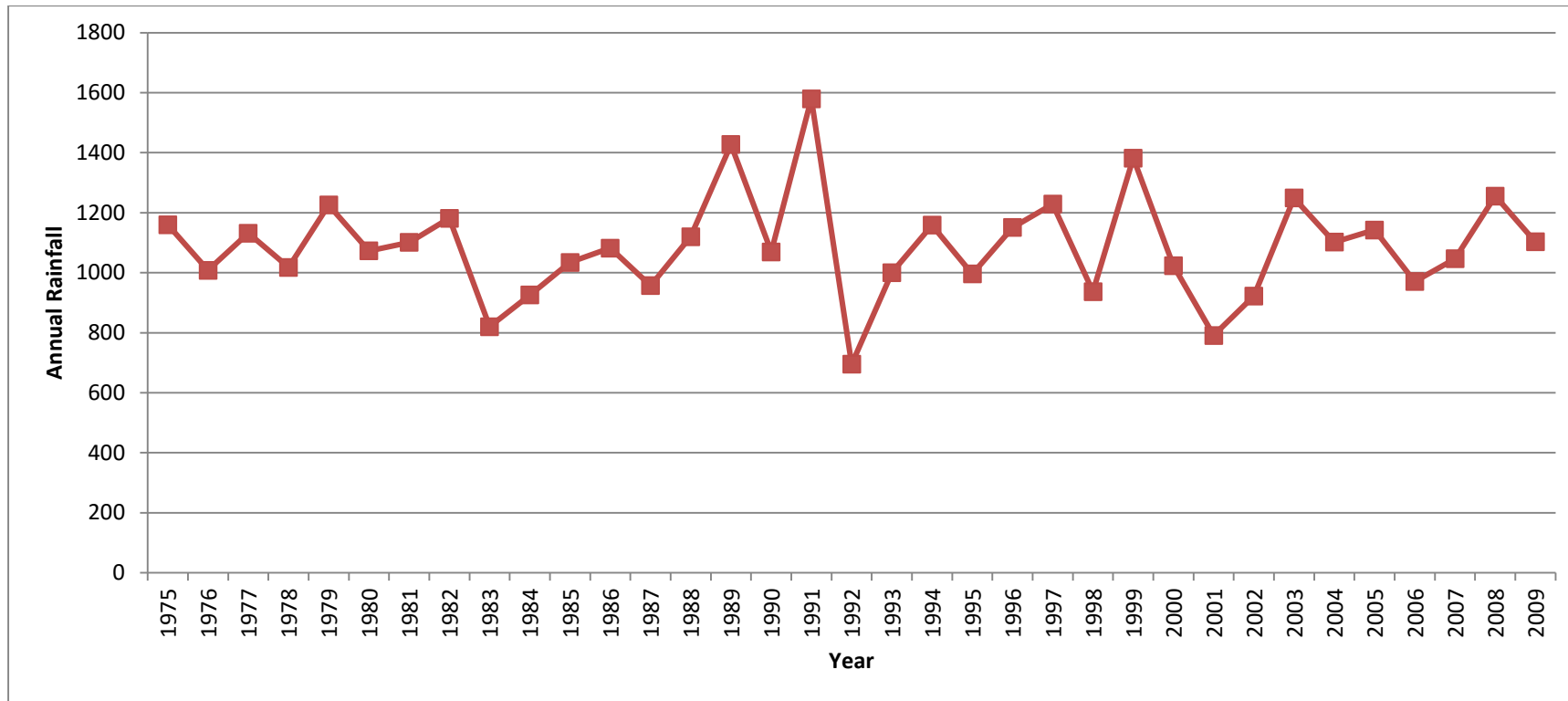
Figure 4.2: Annual Rainfall Figures for Tamale[37] (Gushiegu), 1975-2009
Source: Based on Figures Provided by the Ghana Meteorological Agency

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[37]Figures for Tamale were used for Gushiegu because rainfall figures for Gushiegu were unavailable. Besides, Gushiegu and Tamale are situated in same climatic region and receive the same amount of rainfall.

The annual rainfall for Agogo, as projected by the Ghana Meteorological Agency, is between 1000 mm and 1700 mm, although the year 1984 saw rainfall of 2212.3 mm (Figure 4.1), which is above the estimated range. As seen in Figure 4.1, there is no relevant change in the average rainfall over time. The mean rainfall in Agogo is 1376.1 mm. For Gushiegu (Figure 4.2), there are higher variations in the annual rainfall. A significant decrease in rainfall can be seen in 1983 (which cut across many parts of Ghana including Agogo) and again in 2001. The mean rainfall for Gushiegu is 1087.8mm. Both figures actually do show variations in the annual rainfall.

Dietz et al. (2004) had shown earlier that rainfall from 1900-1993 has seen recurrent patterns of variations and fluctuations in Northern Ghana (Figure 4.3), which is generally a feature of the Soudano-Guinean Ecological Zone (encompassing the whole area of northern Ghana). Rainfall patterns from 1960 to 1991 have generally been characterised by highly variable and erratic patterns (Dietz et al., 2004) which are not different from those experienced in recent times. Nicholson (2000) also notes that rains have generally recovered in the West African Sahel and the region has increasingly become wetter since 1998, which contradicts perceptions that rainfall patterns in the Sahel are worsening (and also, consequently, that it is due to this that Fulani migrate to Ghana). Similarly, Yaro (2013) states that periods of poor rainfall in Ghana have been followed by years of good rains, which appears to contradict the views of farmers and herders who have perceived a reduced amount of rainfall in Ghana.
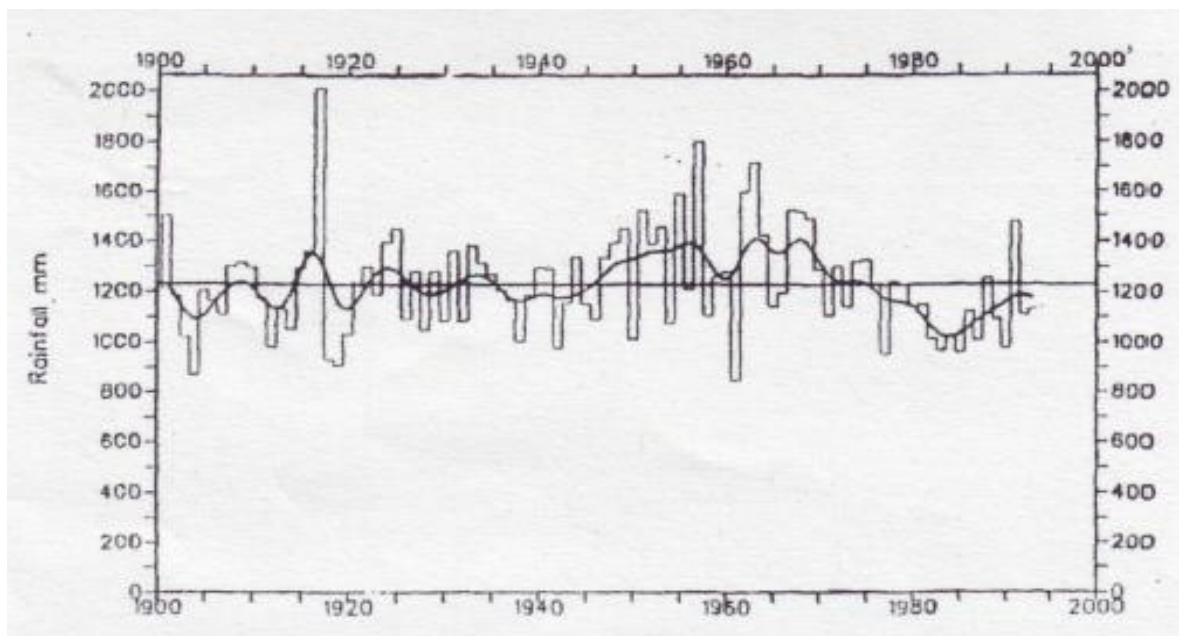
Figure 4.3: Rainfall Trends in Northern Ghana (1900-1993)
Source: Dietz et al. (2004, p. 156).

4.4.2. Are Farmer-Herder Conflicts the Result of Resource Scarcity and Environmental Change?

From the data sets as well as farmers and herders understanding of environmental/climate change, I examine the linkages between conflict and environmental change. Whilst the climate data presented above clearly shows climate variability and not relevant changes in rainfall and temperature, the views of herders and farmers are that there is a link between the environmental changes/scarce resources they are experiencing (as identified above) and the conflicts that have 'increased' between them. I must begin by stating that direct linkages between climate change, resource scarcity and conflict have always remained difficult to establish. This is why Hussein et al. (1999) question whether indeed all studies claiming increased resource scarcity and violent farmer-herder conflicts really have any figures on the frequency of past and present conflicts. Frerks, Dietz, and van der Zaag (2014, p. 17) note that present debates recognise that "the environment and associated factors like environmental degradation, resource scarcity and more recently climate change, do or may play a role in the rise and continuation of conflict, but are seldom the only or most important factor."

Other studies as well have found that the correlation/link between natural resources (scarcity) and conflict is not a direct one (e.g. Ballentine, 2004; Le Billon, 2001). Quite a few studies have argued for Homer-Dixon's environmental scarcity theory in which resource scarcity is said to increase the likelihood of violence. Many of these studies such as those of Schilling, Freier, Hertig, and Scheffran (2012), Njiru (2012), Opiyo, Wasonga, Schilling, and Mureithi (2012) and Henku (2011) have found an indirect link between resource scarcity and violent raiding and conflicts between farmers and herders or among pastoralists. For instance, Hsiang, Burke, and Miguel (2013, p.1235367-12), after a study of a variety of data, conclude that: "findings from a growing corpus of rigorous quantitative research across multiple disciplines suggest that past climatic events have exerted considerable influence on human conflict."

As the views of farmers and herders point to clear occurrence of environmental change, the data sets presented above have shown that there have been no relevant changes of rainfall and temperature over time; rather what they show is variability which is not uncommon in the region. Thus, there are different conceptions of what constitute environmental change for both farmers and herders, on the one hand, and meteorological data, on the other hand, as well as whether the changes are indeed climate/environmental change. This gap raises issues of scientific findings verses perceptions. While perceptions of these changes by

farmers and herders and how they affect them make sense to their understanding of environ-mental/climate change and resource scarcity and conflicts between them, their perceptions nevertheless does not reflect reality as it is difficult to see the link between them. This is because the environment-conflict nexus is more complex than actually assumed and pre-cludes simplifying classifications, since conflict will involve social, political, economic and ecological factors.

It has been reported that the Sahelian region has unpredictable and deteriorating cli-matic features such as poor rainfall and high temperatures causing land degradation, long droughts and famine between the 1970s and 1990s (Dai et al., 2004; Hesse et al., 2013; Tschakert et al., 2010). The arguments are that due to these poor climatic conditions, migra-tion in the region is higher (see Hesse et al., 2013). For instance, cattle move extensively over long distances in search of resources. Hesse et al. (2013) state that established patterns of migration of millions of Sahelians are usually southwards to better watered-coastal countries, and northwards to the oases of the Sahara and onto the Maghreb coast. Thus, the claim is that in the midst of climate change, migration is an important human adaptive mechanism in the Sahel. It is estimated that 60 million people will eventually move from the desert areas of sub-Saharan Africa to North Africa and to Europe by the year 2020 mainly due to droughts, changing patterns of rainfall and scarcity of resources in the Sahel.[38]

However, migration in Sahel is often a coping mechanism to political, economic or environmental stress. Herder migration out of the Sahel is very common and is often sea-sonal. Interestingly, De Bruijn and van Dijk (2005) note that despite high levels of resource scarcity and poor rainfall in Hayre in Mali which is located in the Sahel, violent conflicts between Fulani pastoralists and farmers are smaller and hardly occur. The two cooperate on the use of resources more than they conflict. De Bruijn and van Dijk's (ibid.) study, therefore, raises the question of whether scarcity indeed is the result of increased farmer-herder con-flicts. It is also worth stating that the Sahel region is characterised by many political conflicts, bad governance as well as poverty and economic and social challenges which have equally accounted for high migrations and these political conflicts are not linked to the environmental conditions.

Despite these arguments that migration is a response to climate change and the sub-sequent consequence of migration on resources (breeding competition for resource use and

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[38]"Scientists meeting in Tunis called for priority activities to curb Desertification," *UN News Service*, 21 June 2006.

conflicts), De Haas (2008) maintains that migration is not a phenomenon that is particular to the Sahel and that there are various migration patterns across the entire continent. These include migration for labour, which are even more pronounced than environmentally induced migrations. Jónsson (2010) argues that migration of pastoralists in the Sahel under conditions of environmental change appear to be progressive rather than sudden as commonly assumed by theory, researchers, farmers and herders. Her observation is supported by Bassett and Turner (2007) study of herders' migration southwards from the Sahel within West Africa, during periods of droughts, which are systematic. In particular, the migratory drift model developed by Stenning (1957) argued that herders' migration flows are not just a response to environmental hazards, but that their migration is a systematic process that results in a completely new geographical setting. De Bruijn and van Dijk (2003) also explain that Fulbe continuously move southwards from one village to another and that migration among Fulbe is part of the cultural milieu within which they live and survive. Thus, Fulani migrations are part of their normal life course.

Social networks are much more important explanations in Fulani migration. Fulani are likely to migrate to places where their kinsmen are present as well as to areas where social networks[39] with community leaders and members exist. Also, the decision for herders to migrate is made considering a number of reasons, including the opinion of the head of the family. Therefore, the issue is not just environmental. This line of argument which sees the environment as key in migration, and consequently conflict, have failed to account for the multiplicity of migration drivers because there are more complex issues in the environment-conflict debate (Ide & Scheffran, 2014; Scheffran et al., 2014; Scheffran et al., 2012).

Importantly, the *Fifth Assessment Report of the IPCC- Contribution of Working Group II* (Intergovernmental Panel on Climate Change (IPCC), 2014a), especially raises doubt about the evidence that climate change does actually lead to long-term war or conflicts. The report states:

> Climate change has the potential to increase rivalry between countries over shared resources. For example, there is concern about rivalry over changing access to the resources in the Arctic and in transboundary river basins. Climate changes represent a challenge to the effectiveness of the diverse institutions that already exist to manage relations over these resources. However, there is high scientific agreement that this increased rivalry is unlikely to lead directly to warfare between states. The evidence to date shows that the nature of resources such as transboundary water and a range of

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[39]In Gushiegu, in particular, social networks built with both sedentary Fulani and the community elders are important in Fulani in-migrations. Even in Agogo, new migrant Fulani always have social connections with sedentary Fulani and Ghanaian cattle owners before arriving in the community. In the case of Jallo in Chapter Five, his arrival in Agogo for a herding job was through established social connections with settled Fulani.

conflict resolution institutions have been able to resolve rivalries in ways that avoid
violent conflict (Intergovernmental Panel on Climate Change (IPCC), 2014a, p. 722).

While parts of the report acknowledge research that agrees that there are connections between
climate variability and non-state conflict in that increased rainfall or decreased rainfall in
resource-dependent economies enhances the risk of localised violent conflict, particularly in
pastoral societies in Africa, the link between these violent conflicts are interwoven around
social and political drivers. Even so, Gleditsch and Nordås (2014, p. 85) note this of the
report:

> The chapter notes that there is 'some agreement' that climate variability is associated
> with non-state conflicts (generally smaller and localised conflicts), but that the risk is
> mediated by the presence of conflict-management institutions. The chapter finds that
> 'Many of the factors that increase the risk of civil war and other armed conflicts are
> sensitive to climate change,' citing poverty, slow economic growth, economic
> shocks, and inconsistent political institutions (p. 17). This is not controversial.
> However, there are (at least) three problems here: First, none of the studies on climate
> and conflict, with the possible exception of literature on heat and individual
> aggression, assume that climate has a direct influence on violence. The assumption,
> usually if not always made explicit, is that climate change (be it increasing heat or
> changes in precipitation) influences other factors, which in turn lead to conflict.
> Without these intervening factors (or mechanisms) the relationship between climate
> change and conflict simply cannot be understood […].

Gleditsch and Nordås (2014, p.86), particularly emphasis that "even the relationship between
climate change and conflict via migration is presented in vague terms, with reference to 'in-
teraction of climate change, disaster, conflict, displacement, and migration' since not much
details and evidence are given regarding the nature of this interaction. The authors stated that
evidence of the linkages, as noted by the Fifth Assessment Report of the IPCC, is scant and
empirically limited.

Following the arguments advanced by farmers and herders that resource scarcity/ en-
vironmental change plays a role in conflicts between them, Frerks et al. (2014, p. 21) observe
that "African environments display much more variability than commonly assumed" and so
environmental change are much more complex and varied than usually portrayed. I also agree
with Yaro (2013, p. 1261) that:

> […] Even though there is a noticeable decline in rainfall, the emerging pattern shows
> that periods of generally low rainfall running for about 20 years are followed by
> cycles of improved rainfall lasting almost same time periods… Both annual rainfall
> and mean temperatures are not very useful in Africa. What is really important is
> variability, not only from year to year, but within each growing season [...].

Frerks et al. (2014) and Yaro (2013) raise the important question of whether the climatic conditions that are experienced are indeed new and that climate variability has always characterised the West African zone. Yaro (2013), especially notes that variability is common in African environments and has always been historical and is thus not new.

Political ecologists have already established multi-causal reasons for farmer-herder conflicts following a processual approach and mode of explanation that evaluates the influence of a number of variables (Robbins, 2012). Turner (2004), in particular has emphasised that environmental conflicts are bigger than usually assumed. He maintains that conflicts such as farmer-herder struggles in society are multi-faceted and go beyond just issues of resource scarcity or historical ethnic cleavages. I agree with Turner (2004, p. 866) explanation that "struggles over resources are often only superficially so – they in fact reflect not only broader tensions (with ethical dimensions) between social groups but also within these groups." As I shall argue in subsequent chapters of this study, abundance of pasture, fertile lands and an increase in the economic and productive value of land, the role of mobilisation and politics rather tend to trigger conflicts between farmers and herders in Agogo (a resource-endowed area) and that of Gushiegu cannot be said to be resource-driven since the area is a semi-arid zone and challenges with rainfall and dry spells are not recent phenomena. The data sets (Figs 4.1 and 4.2) and the Ghana Meteorological Agency have already revealed that the erratic nature of rainfall in terms of its onset and cessation is a sign of variability and not a significant change in rainfall amounts.

Besides, since there are no data on the resource endowment of the areas prior to the so-called scarcity and environmental change, it is difficult to determine the extent of scarcity of resources and how this has affected herders and farmers in terms of conflict. Homer-Dixon (1994) and Spillmann and Bächler (1995) state that to describe a conflict as occurring due to resource scarcity/environmental change, one must be able to establish and have knowledge of the origins of this resource scarcity/environmental change and its consequences before. It is therefore difficult to state categorically that conflicts between farmers are mainly caused by resource scarcity/environmental change. Also, De Bruijn and van Dijk (2005, p. 57) mention that:

> […] To establish the precise relationship between environmental scarcity and violent conflict, one needs, firstly, to ascertain whether there is indeed a growing scarcity of natural resources and that cases of violent conflict are in fact on the increase. Secondly, this scarcity needs to be perceived as such by the parties involved in violent conflict. Thirdly, is scarcity one of the reasons why the various stakeholders are engaging in conflict and resorting to violence? [...].

I also want to emphasise that it is important to be careful in linking scarcity of resources to evidence of just environmental/climate change. This scarcity could be from several causes including temporary factors such as periods of short dry spells, variations in the climate, type of farming practices, human environmental activities and even the natural resource capability of the area prior to the so-called changes. Therefore, the direct impact of climate and environmental change on conflicts between farmers and Fulani herders in the study areas are not known. Local discourses of environmental change do not translate into causes of conflict. One must not also lose sight of the fact that in the light of the so-called environmental change/resource scarcity, the adaptive capacity of farmers and pastoralists alike are higher. This resonates with the Boserupian thinking in which scarcity could be an opportunity for technological innovation (see Burger & Zaal, 2009). Also, quantitative data sets (of rainfall, temperature, perspiration, humidity, etc. even if they establish evidence of climate change) themselves do not adequately explain the link between environmental/resource scarcity and conflict. More evidence on the ground must indicate that scarcity or environmental change has indeed taken place and that it is this scarcity or environmental change that has brought about conflicts between farmers and herders.

Thus the link between resource scarcity/environmental change and farmer-herder conflicts is such that:

- while the perceptions of farmers and herders in discussions of migration clearly shows that resource scarcity is a major reason for herders migration to Ghana, it cannot be said to be the major reason for violent conflicts between farmers and herders. Thus there is no mono-linear relations between the migration of herders and conflicts between them and farmers
- farmers' and herders' knowledge of resource scarcity and environmental change are based mainly on stunted rainfall and the lack of good harvest or pasture. As a result of these scarcity/environmental changes, they claimed competition for land and resources are higher, subsequently leading to conflict. However, temperature and precipitation data show (Figures 4.2 and 4.3) that there is climate variability which has been a common feature of the areas and not total changes.

4.5. Conclusion

The purpose of this chapter was to examine farmers and herders views on the linkages between environmental change/resource scarcity and farmer-herder conflicts. Based on the

analysis of the interviews, farmers and Fulani perceived the changing environment/climate as indirectly influencing conflicts between them especially through increased herder migrations and competition for pastureland. Their views are based on neo-Malthusian linkages of resource scarcity and conflicts. The data sets (of rainfall), however, reveal that whilst there is climate variability, there were basically no major changes in rainfall figures/patterns. I also found in Agogo (Southern Ghana), that it was an abundance of resources and an increase in the value of land (discussed in Chapter 6) causing conflicts between farmers and herders rather than environmental changes whilst the conflicts of Gushiegu cannot be blamed on the changing climate. Thus, whilst environmental change is perceived to be indirectly causing farmer-herder conflicts, climatic evidence suggests otherwise. These findings themselves are not new with regard to the general theoretical and conceptual debates about the environment-conflict nexus, but the study is new in the context of Ghana as it has particularly brought to light issues of Fulani presence in Ghana to the fore that debunk the public discourses, both in national media and local/community level, about solely environmentally-induced migration of Fulani herders and conflict between them. The next chapter (Chapter 5) goes beyond the environmental change/resource scarcity conceptualisations to argue for a processual theorisation of farmer-herder conflict escalation.

Whilst it is worth stating that media reports from 2009 to 2016 reveals that there were increases of bloody clashes between farmers and Fulani herders in many parts of Ghana and there has been some penetration of Fulani herders and cattle owners into Ghana over the last decades, it does not mean that conflicts between them were the result of their migrations (which fit into the broader issue of the environmental change/resource scarcity conceptualisations). In many cases, herders' migrations were not just in search of pasture and water, but also for cattle herding jobs. I am also minded by the Hardin's (1968) *The Tragedy of the Commons*, which relates to pastoralists' use of pasture as contributing to environmental degradation. Just as Gleditsch (2012, p. 7) asserts, "it seems fair to say that so far there is not yet much evidence for climate change as an important driver of conflict," overall, evidence of the climate-conflict link in my case-study region remains limited. Further research is therefore needed.

5. VIOLENCE, POLITICS AND MOBILISATION IN FARMER-HERDER CONFLICTS[40]

In the previous chapter, I have already laid bare the environmental scarcity-conflict debates in farmer-herder relations. The perceptions and discourses of farmers and herders in relation to these debates are that resource scarcity and environmental change are major drivers of violent conflicts between them, especially from the perspective of land competition and increased migration of herders from the Sahel. The data sets presented (in Chapter 4), however, show no direct evidence of environmental change leading to violent attacks. The question to ask, therefore, is: if environmental change and resource scarcity are not responsible for conflictual relations between farmers and herders, as the previous chapter illustrates, then what other factors interact to cause violent conflict? From a processual political ecology perspective, many additional factors, especially political processes, multi-actors and multi-factors remain important in violent farmer-herder conflict escalation. Besides, structural causes of conflicts between farmers and herders, including decreasing co-existence of pastoral and agricultural economies, resource scarcity/environmental change and cultural differences between the two have been delineated by many scholars (e.g. Blench, 2010; Ofuoku & Isife, 2009; Hussein et al., 1999; Shettima & Tar, 2008; Tonah, 2006a) and are often advanced by farmers and herders themselves as causes of violent conflicts between them. In addition, herders and farmers attribute violent conflicts between them to crop destruction, cattle rustling and the killing of cattle.

This chapter is concerned with a processual development of farmer-Fulani herder conflicts, and generally dissects major precursors in farmer-herder conflict escalation. Its objective is thus to understand how violent conflicts escalate between local farmers and herders. I begin with the common discussion of drivers of conflicts between herders and farmers, followed by a look at media discourses on farmer-herder conflicts in Ghana and then at how both farmers and herders explain escalation of conflicts between them. Finally, I illustrate

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[40]Part of this chapter has been published as "Bukari, K. N. and Schareika, N. (2015). Stereotypes, prejudices and exclusion of Fulani pastoralists in Ghana. *Pastoralism: Research, policy and practice*, 5 (20): 1-12". Another part of it was presented at the *International Conference on Rethinking Peace, Security and Development* on November 6th, 2015 at the University of Bradford titled "Violent farmer-Fulani herder conflicts in Ghana: Constellation of actors, politics and mobilisation."

the violent escalation of these conflicts using the two broad cases in Agogo and Gushiegu for examining the role of multiple, processual and political factors.

5.1. Drivers of Violent Conflicts as seen by both Farmers and Herders

Relations between Fulani herders and farmers in Ghana are historical and span for many years, predating colonialism. Although Tonah (2005a) has stated that farmer-Fulani relations and contacts are recent and started formally in the early part of the 20th century, following the expansion in the cattle trade and the Sahelian droughts, there have long been relations between these two before colonialism. In northern Ghana, Fulani herders have long had interactions with local people. The migration of Fulani herders from other West African countries led to historical entrustment of cattle, trade, bond friendships, exchange relations and an array of interactions including conflictual ones. Such relations were commonplace in Gushiegu, as they are today, with the local people. Accordingly, Fulani herders occasionally came with their cattle from Burkina Faso and Togo to Gushiegu because of its proximity to Togo and Burkina Faso. Whenever they came, they settled in villages for some time and then went back. As they settled, they interacted with the people and developed relations between them.[41] In southern Ghana, especially around the Afram Plains,[42] unlike Gushiegu and Northern Ghana in general, their contacts and interactions with the local people were relatively late.

Characteristically, relations and conflicts between farmers and herders in Ghana developed from a period of non-contact (latent conflicts) to contacts (manifest conflicts) with the inclusion of multi-actors and factors. This is why Wilson (1984) states that relations between farmers and herders in West Africa changed after post-colonialism and were rather more about competition and conflict due to changing modes of production, urbanisation, demographic pressure and decreasing availability of pastureland. In the cases below, I shall discuss the interplay of these different actors and factors in farmer-herder conflicts in the two sites.

It is worth noting that farmers and herders conceptualise violent conflict (violence in general) as physical attacks that involve the use of arms (guns) or other weapons (e.g. cutlasses, knives, etc.) to kill, injure or intimidate others. This conceptualisation of violence is

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[41] Extracted from an interview with a 54-year-old farmer, 5/10/2013.

[42] Parts of my study area, Agogo, are located in the area referred to as the Afram Plain. The area covers parts of the Eastern and Ashanti Regions of Ghana. The Afram Plains have a combination of wet semi-equatorial climate and savannah woodland climate. Due to the climate and good amount of annual rainfall, the plains are suitable for crop and animal production.

similar to that of Honderich's (2003). In their conceptualisation of violence, farmers and herders see violence as:

- legitimate action to defend their livelihoods and assert control over resources (particularly land) and for the defence of their legitimate rights to resources (in the case of farmers).

- self-defence against attacks from a farmer or herder, e.g. "if you attack us we will attack back. They carry arms and attack us. We will also arm to defend ourselves."[43]

- collective action (mobilisation) against violent action. This is so especially for farmers who say they feel 'forced' to collectively take violent action against attacks from herders.

The above conceptualisations of violence by farmers and herders are similar to the works of Demmers (2012) and that of Schröder and Schmidt (2001), who theorised violence as a mobilisation against violent action and violence as re-affirming legitimacy.

Farmers and herders alike are always quick to point out a number of factors including structural ones as causes of violent conflict between them. These factors remain the visible causes that are often advanced to explain reasons why violent conflicts occur between farmers and pastoralists. Many scholars have equally found similar reasons (structural factors) for violent farmer-herder conflicts in Ghana. Tonah (2002a, 2006a, 2006b), Abubakari (2004) and Dosu (2011) found the problem of crop damage, cattle theft, raping of women, the contest for land, dwindling resources and cultural/ethnic differences as major reasons for these conflicts. I have already discussed Dosu's (2011) explicit attribution of conflicts to climate change and resource scarcity, which force herders from the Sahalian region to Ghana. In explaining the causes of conflicts between them, farmers and Fulani herders, apart from attributing conflicts to resource scarcity, also see drivers of conflicts between them as involving the following:

5.1.1. *Destruction of Crops and Water Sources*

In most of the literature on farmer-herder conflicts, crop destruction has largely remained the main cause of conflicts and confrontations between herders and farmers. This is also consistent with the perceptions of farmers and herders in the study sites. Unsupervised cattle move into farms and destroy crops, which farmers consider as intentional acts. This affects farming, which is their main source of livelihood. Farmers claim that herders intentionally

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[43] From phone interview with a 37-year-old farmer from Agogo, 02/02/ 2016.

drive their cattle onto farmlands to graze food crops (especially maize, yam, millet, watermelon and plantain farms). Interestingly, the presence of the *Yaligonji/Jerigoji* migrant Fulani is believed to intensify the destruction of crops. The *Yaligonji/Jerigoji* Fulani move with their cattle onto farmlands during the day and at night, which leads to the destruction of crops. One *Bouboji* Fulani cattle owner explained that:

> [The] cattle of new migrant Fulani stray into people's farms and the blame is put on all herdsmen. These new migrant Fulani, especially those from Nigeria, are not known by the community and are difficult to locate. They cannot be traced to pay compensation which makes farmers angry and this anger is extended to us all resulting in violent confrontations (Interview with Fulani Cattle owner, Agogo, 03/07/2013)

Particularly, in Agogo, farmers claimed that the presence of many other cattle owners and Fulani herders in the area who do not have any formal land lease contracts with the traditional council and landowners are destroying crops.

Herders, on the other hand, argued that spatial access to pasturelands and sources of water (rivers, streams, lakes, etc.) are restricted. According to the herders, farmers grow crops along the pathways that lead to pastureland and next to water sources, which make it difficult to access them and may cause the cattle to damage crops. Herders and cattle owners equally argued that they have always paid compensation for crop damages, yet farmers still attack them. Payment of compensation is important in that in can lead to either the escalation or resolution of conflicts caused by crop destruction. Disagreements that arise from the refusal or failure of herders and cattle owners to pay compensation can lead to violent conflicts. The perception of herders that farmers intentionally inflate the cost of destroyed crops in order to get huge compensation is completely opposed to farmers' perceptions of Fulani herders and cattle owners who they claim intentionally refuse to pay compensation. These two perceptions have tended to escalate conflicts between the two.

5.1.2. Cattle Rustling

Cattle remain the most valuable tangible property for the Fulani. It is literally translated in Fula as "*Diawdi woni Pullo, pullo woni diawdi*" which is translated as "*Cattle are Fulani and Fulani are cattle.*" Also, the economic value of cattle is high, which makes cattle rustling rampant in many communities. Cattle owners and herders see cattle rustling as a well-organised activity by criminal groups. Like cattle raiding in East Africa, cattle rustling in West Africa is becoming a commercialised business. According to herders in Agogo, organised groups steal the cattle, kill them and sell the meat in Kumasi to local restaurants ('*chopbar*'

operators). Fulani herders themselves have been found implicated in this organised crime of rustling cattle to other towns or countries to sell. They connive with these organised groups and butchers to sell the cattle. These organised forms of cattle rustling or what one of my respondents termed 'commercialised cattle theft'. This is why cattle owners provide arms to their herders to protect their cattle, and why violent conflicts are inevitable. Local farmers stated that violent conflicts in Gushiegu have mainly been due to cattle rustling. For example, after the cattle of local community members were continuously stolen for a number of years by Fulani herders, without any arrests, an attack against the Fulani was finally mobilised in August 2011, since Fulani herders were seen as the main perpetrators of cattle rustling.

5.1.3. Killing of Cattle

The killing of cattle is another major source of conflict between farmers and Fulani herders in Agogo. Farmers who have found cattle grazing on their farmland kill them either with guns (see Figure 5.1) or chemicals, such as weedicides to poison the cattle. According to herders, cattle that are entrusted to them are treated and taken care of as their own cattle. When cattle are then killed, herders become confrontational and physically attack the farmer whom they find killing the cattle. According to herders, spraying grass with chemicals close to grazing pastures escalates conflicts. Herders have lost cattle to such poisoning. One of the cattle owners stated that they would physically attack anyone who attempts to kill their cattle since that is their source of livelihood. One of the Fulani cattle owners said that he lost 35 cattle in 2012 due to poisoning. Farmers spray chemicals on grazing land as a form of space making in order to possess land and drive away herders.

Figure 5.1: Fulani Cattle killed by Local Farmers
Source: Ghana Police Service - Agogo, 2013.

5.1.4. Raping of Women

According to farmers and local community members, another major reason for conflicts with

herders has to do with the raping of women. Fulani pastoralists, who mostly live in the out-

skirts of villages and cities, are perceived as the rapists of women who go to pick shea nuts

and firewood in the forest or who go alone to the farm without a male accompanying them.

These are also represented in the Ghanaian media headlines such as:

1. WOMAN, 40, RAPED BY FULANI HERDSMAN[44]
2. COMMUNITY ARREST FULANI HERDSMAN FOR RAPE[45]
3. FULANI HERDSMEN RAPE WIVES BEFORE HUSBANDS AT AGOGO – WOMAN ALLEGES[46]

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[44]13ModernGhana.com. (16 January 2003). *Woman, 40, raped by Fulani herdsman*. Retrieved from http://www.modernghana.com/news/30043/1/woman-40-raped-by-fulani-herdsman.html (Accessed 16 November 2014).

[45]Ghana News Agency. (8 April 2011). *Community arrest Fulani herdsman for rape*. Retrieved from http://ghananewsagency.org/human-interest/community-arrest-fulani-herdsman-for-rape-27535 (Accessed 16 November 2014).

[46]Myjoyonline.com (16 August 2011). *Fulani herdsmen rape wives before husbands at Agogo – woman alleges*. Retrieved from http://edition.myjoyonline.com/pages/news/201109/73031.php (Accessed 16 November 2014).

Many of the respondents in Agogo emphasised that the link between rape and conflict seen in the degrading and abuse of their womenfolk and is seen as a form of cognitive violence against women and the society. Therefore, they defend these women against rape by fighting herders. For example, a male respondent claimed that a pregnant woman was raped by a Fulani herder resulting in stillbirth. As a result, female farmers are escorted by armed men to the farm. In an FGD with a group of young men in Kpesinga, one of them stated that the difficulty in proving the issue of rape stems from the fact that many women in Ghana do not report or talk of rape cases for fear of stigma from the society and family members.

The stories of rape easily spread among the local people and are also transmitted through media reports. Fulani pastoralists, on the other hand, argued that their tradition and customs do not accept sexual contact with women who are not legally married to them. They believed this is a ploy to 'paint them black.' A question worth asking is: does rape really lead to violent conflicts? The discourse and framing of rape is an interpretative schemata produced by local communities for the purpose of mobilisation, where perceptions and identification of rape form a certain cognitive model ingrained in peoples' minds (Esser, 1999). Local actors make these cognitive models (in this case, rape) acceptable to the community through alignment with common concerns about herders (see Benford & Snow, 2000; Snow, Rochford, Worden, & Benford, 1986).

5.1.5. Robbery

Another major driver of violent conflict according to farmers is theft by Fulani herders in the communities and along the main roads. Fulani herders are perceived as armed robbers or accomplices of robberies, hence, conflicts with them continue. Most of this is also highlighted in the Ghanaian media:

1. POLICE ARRESTS TWO FULANI ARMED ROBBERS[47]
2. ASHANTI POLICE GUN DOWN SEVEN FULANI ARMED ROBBERS[48]
3. 5 FULANI ROBBERS BUSTED[49]

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[47]Ghana News Agency. (4 March 2012). *Police Arrest Two Fulani*. Retrieved from http://ghananewsagency.org/human-interest/police-arrests-two-fulani-armed-robbers-40087 (Accessed16 November 2014)

[48]VibeGhana.com (27 January 2013). *Ashanti Police gun down seven Fulani armed robbers*. Retrieved from http://vibeghana.com/2013/01/27/ashanti-police-gun-down-seven-fulani-armed-robbers/ (Accessed 16 November 2014)

[49]GhanaReview International (4 October 2011). *5 Fulani Robbers busted*. Retrieved from http://www.ghanareview.com/Restyle/index2.php?class=News&date=2011-10-04&id=50552 (Accessed 16 November 2014)

4.   5 ARMED ROBBERS ARRESTED IN V/R[50]
5.   TWO FULANI ARMED ROBBERS KILLED IN SHOOT-OUT WITH POLICE[51]

Many in the interviews and FGDs claimed that Fulani herders harbour their friends from Burkina Faso or Nigeria to engage in robbery in the communities or along roads that are linked with the communities and afterwards abscond with their belongings. Fulani pastoralists are also seen as engaging in banditry activities such as cattle rustling, animal theft (sheep, fowls, goats, etc.), theft of food crops and intercepting and confiscating motorbikes.

Highways between the Gushiegu and Karaga, Bulugu and Kpatinga, Watugu and Zamashiegu, Zamashiegu and Yendi and the road linking Gushiegu and the Nalerigu Districts have seen traders from Gushiegu robbed on their way to trade. Youth farmers in an FGD stated that: "…on highways, Fulani wield guns and other weapons to rob vehicles and people of their valuables." Interestingly, one of the female victims of an alleged Fulani robbery claimed that:

> On our way to Djentiri market (in Gushiegu), our bus was intercepted by a group of robbers and they took all our money. Although the robbers disguised themselves, the scent of cow's milk on them was obvious. When we were stopped, the robbers spoke in a dialect that was Fula and the scent as they drew nearer us to take our monies was obvious they were Fulani.[52]

According to one young farmer in an FGD, these robberies by Fulani herders cause "community anger against herders which leads to attacks against them." Again, an important question is: "are armed robberies actually a major driver of violence?" This also raises questions about the framing of discourses of 'herders as robbers' and the cognitive models of community anger, agitations and mobilisations against herders they produce.

5.2. Media Discourse and Farmer-Herder Conflicts

Media discourse plays a subtle role in shaping farmer-herder conflicts in Ghana, especially in Agogo. These conflicts are reported both in print and electronic media as gory, violent and increasing. Also, media discourses in Ghana portray and frame Fulani herders as being the main cause of farmer-herder conflicts. The media has from 2006-2016 reported over hundred

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[50]Citifmonline.com (26 September 2014). *5 armed robbers arrested in V/R*. Retrieved from http://regional.citifmonline.com/2014/09/26/5-armed-robbers-arrested-in-vr/ (Accessed 16 November 2014)

[51]ModernGhana.com. (2 June 2012). *Two Fulani Armed Robbers Killed in Shoot-out with Police*. Retrieved from http://www.modernghana.com/sports/399172/1/two-fulani-armed-robbers-killed-in-shoot-out-with-.html (Accessed 16 November 2014).

[52]Interview with a female trader, Gushiegu Town, (17/12/2013).

tensed incidences of violent confrontations between farmers and herders in many parts of Ghana (based on the various media studied). Most of these reports have concentrated extensively on Agogo; in fact, Agogo is where more than half of these stories occurred. In Gushiegu, the only case covered by the media was after the August 2011 attack on Fulani. The media discourse on these conflicts is characterised by the following:

1. The media puts the blame mainly on the Fulani herders. The Fulani are seen as the ones perpetuating violence.

2. A focus on the atrocities and gory activities of the Fulani against local residents of communities rather than the atrocities of local residents against the Fulani[53].

3. The media discourse suggests that conflicts have increased between farmers and Fulani. The reports claim that the conflicts occur at a frequent rate. For instance, one of the news items reads: "There have been series of reports about Fulani herdsmen terrorizing people in some parts of the country, especially the Afram Plains in the Ashanti, Eastern and Brong Ahafo Regions."[54] A journalist told me that indeed conflicts have increased and that it is not just media hype.

The media discourse seems to contribute to the violent responses of communities to conflicts with Fulani herders. Just as Shinar (2013) and Schröder and Schmidt (2001) posit, the framing of violence discourse helps to legitimise them before it is applied, the continuous hype of these conflicts by the media contributes to the justification of violence against Fulani herders. This is because the media portrayal of Fulani pastoralists as the main perpetrators of conflict generally incites national anger against the Fulani. In many of these conflicts, it is 'us' against 'them'. When Fulani herders are blamed for their so-called destructive behaviour it is said that "they intentionally drive their cattle into peoples' farms, destroying large acres of crops and when you confront them they kill you."[55] Fulani claimed that such views were clearly biased, given the number of violent incidences against the Fulani. They recalled one case, in particular, in which fourteen Fulani were killed and their properties looted and destroyed by a group of Konkomba farmers in some communities in Gushiegu on August 6, 7 and 8, 2011 without a single person being held responsible for the killings. In some instances,

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[53]One Fulani herder remarked on January 14th, 2014 that "in t/he month of December 2013 alone, four Fulani herders have been killed. My brother, did you hear any media outlet or radio station talking about it or even mention the issue? But if it were a resident of Agogo killed, you will hear all the radio stations in Ghana talking about it for a whole week."

[54]See Myjoyonline.com (30 August 2011). *Fulani herdsmen must go - Asante Akyem North MP*. Retrieved from http://edition.myjoyonline.com/pages/news/201109/73886.php (Accessed 15 August 2014).

[55]Based on FGD in Agogo (8 July 2013).

there have been calls for actions to be taken against Fulani pastoralists[56] and, in some cases, open calls on community members to attack Fulani pastoralists in the communities.[57] Some media reports and the local discourse have portrayed Fulani pastoralists as non-citizens who are a security threat to Ghana. An opinion leader interviewed in this study stated that "they are very dangerous and a threat to our lives. These are people who carry AK-47 rifles and other weapons with them." The media discourse looks at conflicts within the framework of citizenship versus non-citizenship (Ghanaian versus non-Ghanaian) dichotomy. This is depicted by media headlines:

1. FULANI HERDSMEN OUTSTAY WELCOME IN GHANA[58]

2. A FULANI IS A FULANI, NOT A 'GHANAIAN FULANI[59]
3. THE 'GHANAIAN FULANI' I NEVER KNEW"[60]

Written accounts in the media make explicit this citizen-alien discourse. For instance, one online news source states that:

> [...] there is nothing in our official population census/records to confirm that we have an ethnic group called Ghanaian Fulanis. Identifying the Fulani elements as "Ghanaian Fulanis" is wayward; it is a mere attempt to justify a self-constituted position on this populace and to seek sympathy for a lost cause. A Fulani is a Fulani, whether he is in Ghana or not! A Fulani who has acquired Ghanaian citizenship may be a Ghanaian (and recognised as being of Fulani extraction) but no one is a "Ghanaian Fulani" […]. Fulanis have their roots elsewhere and must not hide behind our altruism to tempt us. Every historian and keen social commentator knows that the Fulanis are alien to Ghana, having all along been known as citizens spread across Northern Nigeria and its environs (cutting across Chad, Niger, etc.) as well as the Fouta Jallon mountains (especially the Sene-Gambia region) […]. *The Fulanis have never been known or recognised as part of the ethnicities constituting the Ghanaian citizenry*[61] (emphasis added).

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[56]See Citifmonline.com. (16 February 2016). *Arm yourselves against Fulanis- Kwahu Chief charges residents.* Retrieved from http://citifmonline.com/2016/02/16/arm-yourselves-against-fulanis-kwahu-chief-charges-residents/ (Accessed 17 February 2016) and Okoampa-Ahoofe, K. (February 1, 2014). *Fulani herdsmen were first to declare war*. Retrieved from http://vibeghana.com/2014/02/01/fulani-herdsmen-were-first-to-declare-war/ (Accessed 16 November 2014).

[57]The member of parliament of the Asante Akim North Constituency (Agogo) has stated that he will mobilise the people of the area to fight against the presence of cattle in the area. See Myjoyonline.com (29 January 2014). *MP declares shoot to kill in Agogo*. Retrieved from http://www.myjoyonline.com/news/2014/january-29th/mp-declares-shoot-to-kill-in-agogo.php (Accessed 15 August 2014).

[58]Kokutse, F. (3 August 2011). *Fulani herdsmen outstay welcome in Ghana*. Retrieved from http://www.africareview.com/News/Ghanaians-tire-of-hosting-Fulani-herdsmen/-/979180/1212908/-/1dqyejz/-/index.html (Accessed 15 August 2014).

[59]See Bokor, M. J. K. (8 October 2011). *A Fulani is a Fulani, not a "Ghanaian Fulani."* Retrieved from http://www.ghanaweb.com/GhanaHomePage/NewsArchive/artikel.php?ID=221015 (Accessed 15 August 2014).

[60]See Manu, Bernard. (11 October 2011). *The 'Ghanaian Fulani' I never knew."* Retrieved from http://www.ghanaweb.com/GhanaHomePage/features/artikel.php?ID=221334 (Accessed 15 August 2014).

[61]Bokor, M. J. K. (8 October 2011). *A Fulani is a Fulani, not a "Ghanaian Fulani."* Retrieved from http://www.ghanaweb.com/GhanaHomePage/NewsArchive/artikel.php?ID=221015 (Accessed 15 August 2014).

Discursive commentaries such as the one above use primordial identities to justify claims that Fulani are a non-indigenous ethnic group in Ghana and have no share in Ghanaian citizenship and that the Fulani are at fault in conflict situations against citizens. Thus, the media have constructed primordial identity and ethnicity in farmer-herder conflicts. The 'politics of othering' is succinctly portrayed in the media depicting the 'us' verses 'them' dichotomy. As a result of this discourse, and to show the general populace that it is protecting citizen interests, the state/government also reacts as though Fulani are to blame in these conflicts. This is made evident in the 1988/89, 1998/99, 2010, 2015 and 2016 expulsions of Fulani by the security forces and the Ghana Immigration Service expulsions in 2010/2011.[62]

Media discourse also fails to provide data and evidence to support claims that conflicts have increased. The media discourse of increased conflicts between farmers and Fulani herders is not new. As far back as 1988, there were media reports about increased negative activities of Fulani herders. This, and complaints from farmers, led to the establishment of the joint military-police force, Operation Cow Leg (OCL), which sought to "flush out alien Fulani herdsmen" from Ghanaian lands. Since 1988, there have been many reports from the media about increased farmer-Fulani herder conflicts from 1997 to 2016. However, there is a dearth of information on the numbers and specificities of these conflicts.

Media interpretations of conflict reflect the issue of discourse framing in conflicts. Actors involved in a conflict often make sense of it through discursive dimensions and define the conflict, its causes and their responses within the narratives selected or generated by them (Benford & Snow, 2000; Esser, 1999). Once these frames are ingrained in the minds of people (including argumentative and symbolic aspects), it enables their communicative reception by the public (Esser, 1999).

5.3. Escalation of Conflict between Farmers and Herders into Violence

Conflicts between farmers and herders usually begin at the individual level, that is, between one farmer and one herder. Depending on the cause of the conflict, these individual conflicts escalate differently. In cases of crop destruction, conflicts can be resolved through avoidance of confrontation in which the farmer completely forgives the herder (in cases where the cattle owner is known and has good relations and networks in the community); or through the pay-

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[62]These were based on interviews with Fulani who all claimed to have been questioned by emigration officials.

ment of compensation by the herder's cattle owner. When the farmer and herder cannot resolve their disagreement, the local chief or members of the Unit Committee[63] in communities like Kowereso and Nyemso in Agogo negotiate and determine the cost of payment for the farmer. When the committee is unable to settle the differences, the matter goes to the police who assess the destruction and ensure the aggrieved farmer that the cattle owner will make a compensation payment. Farmers claimed that the police are hardly able to enforce their decisions and therefore the Fulani herders and their cattle owners seldom pay. Sometimes, the elected assembly member of the area intervenes and determines the extent of destruction and the amount of compensation that must be paid to the farmer.

Besides, it is often difficult to know the particular herder whose cattle destroy a farmer's crops. As a result, farmers tend to accuse other herders for destroyed crops. Accordingly, when there is continuous destruction of farmlands, conflict can easily escalate into violent attacks. When conflicts involve issues such as cattle rustling, the rate of violent escalation remains very high. This is because both cattle-owning farmers and herders place more value on protecting their cattle than on crop destruction.

In the views of farmers and Fulani pastoralists, conflict escalation is a systematic process that develops with time and space. Their view of violent conflict escalation is briefly summarised below:

> A dormant stage where there is for instance crop destruction of an individual farm and the herder and farmer discuss peacefully how compensation should be paid to the farmer, or depending on the extent of damage and ties with the herder's cattle owner, the farmer can completely forgive. In this case, conflict is avoided. When compensation payments are supposed to be made and there is a refusal or failure of the herder to pay compensation, disagreement or open confrontation can occur. When there is continuous destruction of the farm crops by the cattle, the farmer confronts the herder leading to open violence. This could lead to reprisal attacks by Fulani herders. At this stage, there is mobilisation of groups from the community of the farmer to confront the herder if the farmer dies or is injured. At this stage there is the use of weapons such as guns or cutlass leading to death or injuries (extracted from various group discussions).

As explained above, crop damage does not just lead to violent conflict escalation; it can involve many other actors through mobilisation, non-resolution of crop damage and the non-payment of compensation. Conflicts between farmers and herders in Agogo according to the

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[63]Unit Committees are part of Ghana's decentralisation programme introduced in 1988 to bring development to the people at the grassroots level. The unit committee membership is made up of members in the community selected to help make decisions and who are at the bottom structure of the local government system. See http://library.fes.de/pdf-files/bueros/ghana/10487.pdf. In the case of Kowereso and Nyemso, the committee helps to determine compensation payments for destroyed crops and also helps to resolve issues with regard to the Fulani-farmer conflicts.

cattle owner are increasingly assuming a violent nature in many communities, which has led to the souring of relations between the two groups and ambush attacks of each other common. The nature of violence takes the form of open fights through gunshots, group violence through community mobilisation against the Fulani in particular and ambush attacks from farmers or herders.

Comparatively, the narratives of farmers and herders reveal that crop destruction is the point of reference for violent conflict escalation, but clearly the point at which violent confrontations erupt is the non-payment for the damage and the involvement of others in the conflict through mobilisation. Both the farmers and herders above emphasised the role of mobilisation of others and counter and reprisal attacks in conflict. Again, the different narrations about the point at which a farmer or herder is attacked highlights the different perceptions of the two groups. I shall discuss more into details violent conflict escalation from the cases and the specific incidence presented below. From the perspectives of the respondents, farmer-herder conflict escalation follows the general pattern discussed in the literature. Pruitt et al. (2004) expatiated on models of conflict escalation by showing that the involvement of various actors and the type of interactions they have during disagreements can lead to violent escalation.

Contextually, farmer-herder conflicts can be viewed both as a social phenomenon and a social construct. Moritz (2006a) notes that it is often difficult to determine the nature of farmer- herder conflicts since the difficulty could be whether these conflicts are about crop destruction, natural resources, competition or intertwined with other ethnic, religious or political conflicts. Moritz (2006a) sees the most common nature of farmer-herder conflicts as low-level conflicts, small-scale conflicts between herders and farmers over access to grazing lands and composites and crop damage. Following Moritz (ibid.), the nature and kinds of farmer-herder conflicts depends to a large extent on the causes of that particular conflict and its level of escalation from a non-violent form to a violent one. Every farmer-herder conflict is distinct in itself (case-specific). From my interviews and discussions with farmers and herders, conflicts are classified into the following types as illustrated in Table 5.1 below.

Table 5.1: Typology of Farmer-Herder Conflicts

Type of Conflict	Features of Conflict type
Disagreements over the payment of compensation	These usually take non-violent forms. The disagreements arise when compensation demanded by farmers after crop destruction is refused by the Fulani herder/cattle owner either when he (Fulani herder/cattle owner) thinks the amount charged by the farmer is not worth the destruction of the crops or he completely refuses to pay. These disagreements may be settled by the chief of the community or a committee.
Reprisal attacks	These are attacks from farmers on Fulani cattle after destruction of farms or reprisal attacks from Fulani when their cattle are killed. These types of conflicts are normally violent. They are seen as the main causes of violence, but triggers to violence as I shall discuss below are always go beyond them. The 'traditional causes' of farmer-herder conflicts are therefore the identifiable and immediate reasons for the violence.
Violent confrontations	These are conflicts which involve the use of arms/weapons (e.g. AK-47, single barrel guns, machetes etc.) and usually involve serious injuries and deaths. These forms of conflict are actual manifestations of the underlying issues and triggers in the conflict. They develop through the other forms of conflict and finally end up in violent attacks. During such conflicts, the state then has to provide security to end the violence.
Individual farmer-herder conflicts	This involves conflicts between a single farmer and herder. These conflicts are mainly the result of issues such as personal animosities, crop destruction or theft of entrusted cattle to herder. It is these conflicts that degenerate into group/mass conflict involving the community against the Fulani herders.
Group conflicts	Conflicts involving the entire community and the Fulani herdsmen where there is mobilisation by the community or herders to attack. This is from the community against the Fulani herders.
The State-herder/farmer conflicts	These are conflicts between the state (the Forestry Commission of Ghana) and Fulani herders or farmers. The Forestry Commission has engaged in conflicts with the Fulani herders over the destruction of protected forest reserves when herders drive cattle into the forest reserves to graze.

Source: Field Study, 2013/2014

This classification is not exhaustive, but helps us to clearly understand the nature and extent farmer-herder conflicts manifest themselves.

5.4. Cases of Farmer-Herder Conflict Escalation – Agogo and Gushiegu

The drivers of conflict escalation, as claimed by farmers and herders above, will not necessarily lead to the two engaging in violent conflict behaviour, but violence can be triggered by other interactions, including group dynamics in the community, the type of social ties or

networks that exist among various actors, power play in the society among others. The complexity of farmer-herder conflicts in Agogo and Gushiegu makes it difficult to explain their escalation with a single factor or structural factors, and needs to include both structural and processual analyses. Moritz (2006b) asserts that if farmer-herder conflicts are based on erroneous assumptions and incomplete understandings, resolving them is bound to fail. Violent behaviour is expressed by some hidden underlying factors which may not be seen or known by the conflicting parties until these underlying triggers, which already exist, come to play.

Moritz (2010) argues further that relying on one or two historical cases to illustrate observed patterns in herder-farmer relations does not capture exactly the nature of farmer-herder conflicts. A thorough analysis that requires an analytical approach to capture the dynamics of herder-farmer conflicts and to explain when, how and why some of them escalate and others do not is thus needed (cf. Moritz, 2010). Therefore, I present farmer-herder conflicts using a case study approach, as this helps to analyse their development and escalation over time. First of all, I present two extended cases of conflicts to illustrate how and why conflicts escalate into violence. I then proceed to discuss the underlying drivers and the processual extent to which they lead to violence. In presenting these two cases, I draw on specific incidents in each of the case areas to illustrate them.

5.4.1. Case 1 – Farmer-Herder Conflicts in Agogo

Farmer-herder conflicts in Agogo are illustrative of a combination of multiple factors, constellation of actors and processes. Conflicts in Agogo have changed since the 1970s, developing from loose connections between actors and non-violence to close contact between actors and, subsequently, violent conflicts. In studying farmer-herder violent conflict escalation in Agogo, it is important to look at the totality of underlying factors embedded in these conflicts. Gausset (2005), for instance, looks at farmer-herder conflicts in the Grassfields of Cameroon as resulting from both proximate and ultimate causes. He mentions proximate causes as including crop destruction, failure of herders to pay compensation for damaged fields and expansion of farming fields into pasturelands. Ultimate causes, on the other hand, include socio-political dimensions of resource access, management and ownership rights, power play in the management and ownership of resources between herders and farmers as well as the question of autochthone rights verses 'late-comer' rights in the use and ownership of resources. Gausset (2005) further notes that although proximate causes are significant triggers of violent conflicts, emphasis must be put on ultimate causes if conflicts are to be resolved. Particularly, Moritz (2006a, pp. 3–4), Turner (2004) and Turner et al. (2011) have

noted that farmer-herder conflicts across West Africa often manifest themselves as competition over natural resources, such as conflicts over crop damage or the blockage of access to water, the underlying conflicts may not be primarily about resource scarcity, although the feuding factions often publicly express them as resource-related conflicts. Subtle underlying issues could remain triggers for violent conflicts.

Farmer-Fulani pastoralist conflicts are not just events whereby a single factor such as crop destruction will lead to violence, they develop through a process. Conflicts between farmers and herders in Agogo are therefore complex in that the actors and causes are diverse. Many individuals in the community become part of these conflicts through mobilisations and other processes, such as, through biased framing of discourse and inherent power relations. Many conflicts have turned violent and involve the use of arms, which have caused death, destruction and injuries. Both farmer and herders noted that conflicts often intensify in the dry season (from October to January) when many new migrant pastoralists arrive with their cattle in search of pasture from neighbouring countries and other parts of Ghana, especially from northern Ghana.

Fulani pastoralists' historical settlements and contacts with the local people in Agogo were only visible in the 1970s. From the 1970s to the 1990s, Fulani occasionally migrated from Burkina Faso through Northern Ghana or Nigeria through Benin and Togo, then to the eastern corridor through Akosombo and made their sojourn to Agogo. They migrated to the area especially in the dry season in search of pasture, and returned when the rainy season began in their places of origin. At that time, the local people had fewer contacts and relations with the pastoralists. Conflicts during that period were also few and hardly ever violent. The first reported case of farmer-herder conflict was in 1997, when some farmers in Bebome, Abrewapong, Kowereso, Kansanso and other communities reported to the local assembly of a group of Fulani herders with 'strange' cattle numbering over 1000 on their farm lands. Following this report, the Government of Ghana dispatched a team of veterinary and security officials to 'drive' the Fulani away.[64] Tonah (2006b) reported that in 1999, young men armed with guns and machetes attempted to drive Fulbe pastoralists out of the grasslands in the Agogo area for destroying their crops. They shot and killed three Fulani pastoralists, while many others sustained gunshot wounds (Tonah, ibid.). This did not, however, stop the Fulani annual migrations to Agogo. They continued to come to the area, and their relationship with many other resource users and migrant farmers began to take shape.

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[64]Interview with veterinary official, Agogo, 13/06/2013.

The aggravation of violent conflicts between farmers and Fulani in the Agogo area since 1997, led to formal agreements between four cattle owners (two Ghanaian and two Fulani) and the Agogo Traditional Council (ATC) in 2006 to lease out lands (190 acres) to these cattle owners. The terms of the agreement according to the ATC included the confinement, ranching[65] and restricted movements of cattle in the area. Otherwise, the land was to be reverted to the ATC. After these formal agreements were concluded, the operations of these cattle owners also saw the migration of other nomadic pastoralists to the area. These nomadic pastoralists, who were mostly Fulani, did not have any formal agreements with the ATC, but entered into informal land arrangements with other usufruct landowners and others were illegal scouters. As a result, competition for space among the different resource users increased considerably. For instance, different herders, farmers and agro-companies moved to the area for land. According to the Representative of the Omanhene of Agogo,[66] between 2009 and 2012, there have been more than 50 cases of violent conflicts between farmers and herdsmen with some reported deaths. He claimed that 2012 saw the highest rise of violent confrontations between farmers and Fulani herders.

> The Fulani problem is a very complex issue here. The Fulani have been here for a long time, and in the past, there were no conflicts. Even if there were, conflicts were not violent as they are today. It was only four people who came to see *the Agogo Traditional Council for a lease contract of land to rear cattle*. However, between 2010 and 2012 the conflict became very violent and intensified. *This was because some Fulani from Niger, Mali, upper part of Nigeria and other parts of Ghana who had no agreement with the traditional council also brought their animals to graze because they saw their countrymen (fellow Fulani) grazing animals on the fertile lands. But the animals of the Fulani who had no contract with the traditional council were destroying the crops of the local people. Farmers and the local people also needed more land for cultivation* [...]. This created tension between the local folks and the herdsmen (Fulani) since we were not also able to identify the cattle that belonged to the original four cattle owners who came to the traditional council to seek land for their animals (Interview with Representative of the Omanhene of Agogo, 18/7 2013, emphasis added).

The quote above traces the history of farmer-herder conflicts in Agogo and re-echoes the fact that violence resulted from formal land agreement between the ATC and the four cattle owners in 2006. Moreover, the influx of other cattle owners who had no formal land agreement for cattle rearing in the area also tended to drive violent conflict. Many of these herders, according to the representative of the *Agogo Omanhene* (paramount chief), make

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[65]It is important to note that Ghana has no Ranching law. The law has not been passed since it was proposed in 2012.

[66]I could not talk to the *Omanhene* himself because he was indisposed and in Accra for health care.

informal land deals with individual landowners without the knowledge of the ATC. The quotation also emphasises farmers' desire for more land to increase their production as a driver of violent conflict. There is a strong local narrative shared by farmers, local residents, some politicians and local administrators that the herders' presence on community lands is responsible for violent farmer-herder conflicts in the area. The narrative holds that the migration of Fulani pastoralists and other cattle owners, as well as, other resource users, such as migrant farmers and plantation companies, into the area has largely been because of resources and suitable climatic conditions. Thus, the area has attracted various actors.

Local farmers noted that violent conflicts between them and herders have increased two-fold, which was evidenced mainly by deaths of more than 40 farmers in Agogo. Herders similarly believed that there is an increase in aggression and violence towards them. Media reports also claimed that a total of 40 farmers from Agogo have lost their lives since 2001.[67] Between January and March 2016 alone, the media has reported that more than ten people have lost their lives following violent farmer-herder conflicts. Phone interviews with farmers and herders also revealed more than 14 deaths and killing of over 600 cattle during the same period. However, police records of conflicts involving farmers and Fulani herders in Agogo from 2009 to March 2013 reveal a total of 62 cases (Table 5.1). Details of most of the conflicts involving deaths and injuries (gunshot wounds) were not sent to court for prosecution because the perpetrators had not been identified. The police noted that many more cases are not reported to them.

Table 5.2: Police Reported Cases of Farmer-Herder Conflicts from 2009 to March 2013

Cases Reported	Number
Deaths	12
Injuries (gunshot wounds)	16
Crop Damage (from January to March 2013)	35

Source: Extracted from Ghana Police Records, Agogo (August, 2013).
*Data on previous years were unavailable.
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Table 5.2 reveals that deaths, injuries and crop damages are remain low, despite claims by farmers, herders and the Ghanaian media about an increase in these numbers. Police statistics are disputed by local people. An executive member of the *Agogomann Mma Kuo* (Citizens

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[67]Ghanaweb.com. (04 February 2016). National Security invites Amakye Dede over Agogo Fulani wahala. Retrieved from http://www.ghanaweb.com/GhanaHomePage/NewsArchive/National-Security-invites-Amakye-Dede-over-Agogo-Fulani-wahala-412782?channel=A1 (Accessed 15 February 2016).

of Agogo) counted 21 farmers and residents of Agogo who had been killed as a result of attacks from Fulani herders between 2006 and 2012. Whereas official statistics of farmer-herder conflicts tend to present low numbers, farmers and herders' perceptions are that violent conflicts between have increased them that have led to numerous attacks, deaths and injuries. Indeed, there are no historical data to show that the number of violent farmer-herder conflicts, deaths, injuries and cases of property damage are on the rise. In many of the communities, especially at Abrewapong, Nyamebekyere, Bebome, Bebuso, Onyemso, Mankala, Matuka and Kansanso, the restricted movements of Fulani herders and hostility towards them are high. Thus, conflicts in Agogo developed through the 1970s to the late 1990s and escalated thereafter with the arrival of many herders and the subsequent increase in the numbers of cattle and the arrival of other resource actors.

One incident that happened in Bobeme community, which is worth noting in the discussion of farmer-herder conflicts, in Agogo, was between Jallo, a Fulani herder, and a watermelon farmer. Whilst herding his cattle on August 11, 2013, Jallo met a farmer who claimed his watermelon farm had been destroyed by cattle. According to Jallo, the farmer confronted him upon seeing him around, but Jallo explained to him that he had not destroyed his crops. Apparently, the two spoke and an amicable agreement was made between them. According to Jallo, the area where he was herding the cattle with three other herders had no farms around and so the possibility of destroying crops was very unlikely. After meeting and discussing with the farmer amicably about the destruction, Jallo thought that all had been settled peacefully. He herded his cattle to where his other three colleagues were.

The next morning, his colleagues had departed with their cattle to look for pasture. Whilst Jallo was alone preparing to also send out his cattle for grazing, he saw six people wielding two guns and machetes approach the hut. When they arrived, the six men started accusing Jallo of being among the Fulani herders who destroyed their crops and killed farmers. They confronted him and started beating him up. Jallo attempted to resist but was shot at. The shot missed him. They inflicted wounds on his head and left hand and attempted to shoot him again but he managed to escape. Jallo was chased and he ran and escaped into the bushes. When the six left, he returned to the hut and was lying in pain until his colleagues arrived and took him to the cattle owner. He was later admitted to the hospital for six days. According to Jallo, he had initially thought that it was the watermelon farmer who had organised these farmers to attack him, but the watermelon farmer was not among them since he could easily recognise him. He emphasised that if his colleagues were around when the group came, there would have been a clash that could have resulted in several deaths.

This incident illustrates that the escalation of conflicts goes beyond just one farmer or herder. We see that the conflict between Jallo and the watermelon farmer was supposedly resolved and Jallo thought that there was an understanding between them. However, the involvement of others in the conflict changed its dynamics and led to violent action. Beyond the destruction of crops, this incident shows that the two groups hold other grievances against each other. For instance, Jallo amicably resolved the claim of crop destruction with the watermelon farmer. The involvement and participation of the six farmers who attacked him is not believed to have links with the claims of crop destruction made by the watermelon farmer, who himself was not part of the six that attacked Jallo. Accordingly, the six farmers stated that they wanted all Fulani herders and their cattle out of their lands. This means that the motive for the attack is different from the alleged crop destruction. Jallo's claims that his attackers stated that *'they wanted Fulani out of their land'* brings to question the role of land in these conflicts. We also see the possibility of revenge attacks. Jallo stated that his colleagues could have revenged the attack on him if they met the six attackers. Jallo's cattle owner also helped to avert the herders from making reprisal attacks. Cattle owners stated that these kinds of attacks make them arm their herders. Importantly, the possibility of revenge is higher since Jallo and his friends felt aggrieved by the action of the six farmers. This could change the dynamics of the conflict leading to involvement of the entire community against Fulani herders. Fundamental to this is the fact that the two individuals amicably cooperated and understood each other, but the involvement of other actors led to conflict escalation (see also Moritz, 2010).

Another incident that illustrates that violent conflicts escalate not just because of structural factors occurred in the village of Onyemso. On September 20th, 2013, Yakubu had his onion and tomato farms destroyed. He claimed that a similar incident happened in 2012 when he had a fight with a Fulani herder who destroyed his farmland. According to Yakubu, when he caught the cattle destroying his crops, he confronted the herder and he promised to tell the cattle owner to pay for the damage. After several months of asking the herder to pay the compensation, Yakubu got fed up and one day demanded that the herder pay his money. The herder became furious and took out a pistol to shoot Yakubu. The people in the community came together and seized the Fulani herder and took him to the police station. The case was sent to the Juaso District Court and the herder was sentenced to 15 years imprisonment. Yakubu claimed that, after two months in jail, the herder was released and seen in the community. The entire community was furious and demanded that the jailed herder be re-arrested. The assembly member and others followed up with the police to find out how and why the

jailed herder was released. According to Yakubu, the police said the herder's brother had paid money for his release. Yakubu stated that because of this incident, community members prefer to handle conflicts on their own (mobilising for attacks) rather than reporting to the police.

The destruction of Yakubu's six-acre onion farm on September 20th, 2013 took a new turn of events. While in the house that morning, a fellow farmer came to inform Yakubu of the destruction of his farm. Accordingly, Yakubu rushed to his farm, which was about five kilometres from the village, to realise that his farm was almost entirely destroyed. He said that he became angry and decided to look for the herder involved and confront him. Members of the community also did not take kindly to it and were all alarmed at the spate of destruction on their farms by Fulani cattle. The community vowed to deal with the Fulani herders because they had too often destroyed crops and either absconded or refused to pay compensation. Some members of the community wanted an immediate attack on Fulani to flush them out of the community. Yakubu said that after searching all over the area he saw no Fulani around. I went with Yakubu to the huts of the Fulani where he warned them to take proper care of their cattle since he would kill any cattle he finds on his farm. According to Yakubu, he would deal with the situation himself and would not report to the police because the police will never take action. To him, the best solution is to kill any cattle found on his farm. He mentioned that the committee responsible for overseeing the payment of compensation has no legal power to enforce its decisions since many Fulani herders and cattle owners have often refused to pay compensation.

Yakubu's case shows frustrations arising out of continuous inaction of law enforcement agencies - in this case the police - to help farmers in the quest to avert the destruction of their crops. In addition, the quick mobilisation of some members of the community to Yakubu's farm as a result of the destruction shows that mobilisation for conflicts against Fulani herders also arises from this inaction. The release of the jailed herder further raises the suspicion of the entire community about the role of 'powerful' people behind Fulani herders and their activities. Already, the perception of farmers and local people is that the police are bribed by Fulani herders and cattle owners to protect them and so the release of the jailed herder further reinforces this perception. The community and the elected assembly members believed that 'powerful' people, including politicians, support the activities of the herders and cattle owners. Yakubu's experiences, as well as, those of the entire community's and their familiarity with the activities of Fulani herders and their refusal to pay compensation for destroyed crops, are what triggered the escalation of this conflict. The continuous

refusal to pay compensation aggravates farmers' frustrations and builds up collective action and leads to the mobilisation of shared interests (refusal to pay compensation) and identity rhetoric (Akan/Ghanaian identity against Fulani herders), both of which result in violent conflict escalation. Note that both Yakubu and the community members vowed to fight herders because their crops are being destroyed.

Moreover, the committee set up by the community, which is made up of members of the Unit Committee, for the settlement of farmer-Fulani herder disputes and the determination of compensation payment remains very unique and important for minimizing the escalation of conflicts. However, the committee lacks the power and legality to enforce its decisions. Besides, Fulani pastoralists see the work of such committees as biased against them (Fulani), since they have no representation on the committee and are constantly asked by the committee to pay compensation to farmers. Fulani are thus always seen as the antagonists. Interestingly, one observation I made when I visited the destroyed farm of Yakubu was that his farm and other farms were on pathways that led to pasturelands and water bodies for the cattle. This makes the likelihood of destroying crops along these pathways higher. The underlying reason for the conflicts is not the crop destruction per se, but the land, which is spatially relevant and needed by both farmers and herders. Fulani conception of space is different because they construct their spatial organisation and movements along pasture and migratory corridors to water sources. The Fulani see their spatial movements along these pathways as important for their cattle and therefore do not expect or see why farms are made along these cattle corridors. They see the farming along these migratory corridors as intentional; as a way to expel them from the communities or to demand higher compensation for damaged crops. Farmers, on the other hand, see land around these corridors as their allodial property and see no reason why they should not be able to farm on their own land. Thus, the issue of territoriality and legitimacy are important here (see Lund, 2011). Besides, the cultivation of some crops, such as watermelon, onion and tomatoes, along such easily accessible paths makes it easier to water these crops. It is important to note that, despite the fact that Yakubu's case was about crop damage, it also had to do with past events. First, the refusal of the herder to pay for crop damage in 2012 despite an agreed upon amount of compensation; second, the police's refusal to act when the case was reported to them; and finally, the sudden release of a herder who was imprisoned by a court for 15 years, only reinforced farmer perceptions that 'powerful' people support Fulani herders.

The last incident that I present occurred when a group of herders attempted a revenge attack on one of the farmers. On August 24th, 2013, while I was returning from my usual field

interviews in Kowereso, I met an injured herder who had been attacked by three people. The Fulani herder was on his way to Bebome and was bleeding profusely from the hand. He explained that a group of three young men ambushed him whilst he was on his way from Abrewapong to the village (Bebome) to buy food items. They beat him and inflicted multiple cutlass wounds on his left hand. While talking with this herder, six of the injured herder's colleagues arrived there and asked him what the problem was. He also explained to them and the herders decided to head towards the place where the three young men had beaten up this herder. I followed them with my assistant to look for the three attackers but the young men had apparently bolted. Instead, the herders rather met other groups of farmers who were harvesting watermelon. The farmers spoke to the herders and asked them to 'let go of the offence.' The herders stated that attacks like this end up bringing reprisal attacks and subsequent escalation of conflicts. One of them stated that:

> I am happy you are here to witness for yourself how they keep attacking us and expect us to remain quiet. If not for the fact that our brother (the injured herder) was lucky; those guys would have killed him. Even if he has done something you [the farmers] could have told him what he did wrong. If it were Fulani herders who did this to a community member, the entire community would have mobilised and attacked any Fulani herder they saw. Those three men were also lucky. If we had met them we would have dealt with them very well so that next time they don't repeat such nonsense. Anytime we meet them we will deal with them in a similar manner that they dealt with him [the injured herder].

The herders' expression of readiness to seek revenge is indicative of the role that counter or reprisal attacks play in escalating violence.

The attack on the herder indicates that in Agogo, the mobilisation for counter or reprisal attacks remains high. The ambush attack of the herder is reminiscent of planned mobilisation. As the herders went to confront the farmers, the conflict could have involved more people and even the entire community. Both herders and farmers in Agogo have sometimes mobilised to attack each other. Sometimes mobilisation for conflict is more spontaneous – when there are attacks, groups mobilise for counter attacks as seen in the reaction of the six herders when their colleague was attacked. Farmers, for instance, are able to mobilise well for conflicts at the community level. Also, reprisal attacks are carried out when deaths or injuries occur. The herders, despite the appeal to 'let go of the offence' had the potential of attacking the three men who ambushed and attacked their colleague. The incident also presents yet another situation where there is no known destruction of crops, cattle rustling or other known cause. The ambushed attack of the herder by the three men suggests that another reason was behind the attack. This case depicts that the two groups in conflict often begin to

feel mistrust and hatred towards each other and a victim mentality of past atrocities (see Richardson & Sen, 1997; Schlee, 2004). The continual feeling of farmers that Fulani herders kill their kinsmen makes them justify the attacks on the herders. Thus, violence becomes an expression of legitimacy.

Using Mitchell's (1981) four phases of conflict escalation, I summarise the development of conflict in Agogo in Table 5.3.

Table 5.3: Phases of Conflict Escalation in Agogo

Conflict Phase	Description of development of Incidence
The Isolation or Cooperation Stage	When Fulani pastoralists temporarily migrated to the Agogo area in the 1970s, there was no personal contact or land contract between them and the local farmers
Incipient conflict	As more herders arrived in the area in the 1990s, differences began coming up. Farmers began complaining about the presence of herders and strange cattle on their lands. They reported their presence to state authorities. The first of such reports was in late 1997.
Latent conflict	Farmers in Agogo began to openly complain of the activities of herders especially with regard to crop destruction when relations were formalised between the ATC and herders in 2006.
Manifest conflict	After the formalisation of relations in Agogo, conflicts became overt as various issues (such as competition for land use), actors and differences deepen between them. Violence then began to take shape, involving mobilisations for attacks, injuries and deaths.

Source: Author's Conceptualisation based on Mitchell (1981).

In sum, conflicts in Agogo involve diverse actors who range from individual to groups as well as multiple drivers. Normally in these conflicts, the role of mobilisation, where community groups, leaders and Fulani herders come together for conflict, is subtle. Mobilisation will be discussed in more detail later in this chapter. A number of these disputes have led to several protests and mass demonstrations by farmers and Agogo people against the government of Ghana and the ATC for the 'total eviction' of herders from the area.

5.4.2. Case 2 - Conflicts in Gushiegu

Unlike Agogo, there are not many violent conflicts in Gushiegu. This is because land, unlike in Agogo, is not yet in high demand in Gushiegu and therefore does not result in the same competitions between farmers and herders. Similarly, there are fewer resources users in Gushiegu, which does not lead to the same intense competition found in Agogo. The number of Fulani herders as well as cattle in Gushiegu is also comparatively lower than in Agogo. This is in consonance with Beyene's (2014) findings in Fantalle District of Ethiopia that large

livestock populations can lead to land related conflicts in pastoral societies. The background to violent herder conflicts in Gushiegu is traceable to the introduction of new actors who hitherto were not present. Since Fulani presence in Gushiegu predates colonialism, relations between them and local communities were long and enduring. Both herders and farmers noted that whilst these relations in the past have characteristically been cordial and cooperative, with fewer conflicts, this is changing and giving way to violent attacks, mistrust and community agitations against Fulani.

> When I came here over 40 years ago, although our numbers were just a few, we had very cordial relationships with the Gushiegu people. We did things together. Hardly did we have conflicts. I had cattle and took care of people and cattle as well, yet there were no conflicts between Fulani and people here. Although, we still have good relations with the people here, it is not as it used to be. Once in a while there are bitter relations between Fulani and local people. There are now more attacks on Fulani, suspicion, mistrust and cattle theft. These are leading to conflicts […] (Interview with 71-year-old Fulani cattle owner, 19/10/2013).

The dominant local narrative of farmer-herder conflicts in the area, which is the same as the general national framing and discourse on pastoralism and the Fulani ethnic group, see Fulani as responsible for violent conflicts. The Fulani's continuous presence in Gushiegu has been mainly due to established networks with fellow Fulani as well as with chiefs and local cattle owners. Notably, farming and cattle herding have co-existed in the area for centuries as many farmers keep cattle as well.[68] However, given the recent trend of an increase in the number of Fulani settling in the area with their own cattle and hiring their own herders, tensions between them have exacerbated. Consequently, tensions in some communities such as Bulugu and Kpesinga are high and agitations against the activities of Fulani herders have risen. During focus group discussions, a group of young farmers in Bulugu and Kpesinga argued that relations with Fulani herders were 'bitter' and characterised by conflicts, which are not so violent, but have the potential of becoming violent. The young farmers see the Fulani herders as being responsible for the theft of cattle and other animals and the destruction of crops, especially at night. The young farmers in Kpesinga also accused Fulani of breaking and destroying social relations and creating animosity in the community among chiefs and elders who support the herders, on the one hand, and young farmers and other community members of who are opposed to their activities, on the other hand.

> Our relationships with them are not very strong. Apart from the butchers, the chiefs and some elders who have cordial relations with them, many of us have no interactions with them. Their relations are strong with the chiefs and elders because they gave them land to settle. Fulani are difficult people. Most of them are difficult.

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[68]This narrative was from interviews with farmers.

Their animals destroy yam, rice, maize and bean farms and they refuse to pay compensation and even deny that it is them. Besides, most are thieves. I don't want to use the term armed robbery, but they engage in robbery – cattle theft and stealing of motorbikes. Most community members want them out of the community. I want to tell you something - there is a particular Fulani in this community whose coming here has broken relations between many of us and the chief. This Fulani herder is engaged in all forms of vices from crop destruction, cattle rustling, theft and gossiping. Despite persistent complaints from members of the community, he is still here and more powerful than us. Can you imagine that two brothers are not on talking terms because of him? (FGD with Youth Groups in Kpesinga, Gushiegu, 2/12/2013, emphasis added).

Thus, the youth group (young farmers) emphasised that their relation with Fulani is conflictive because of crop damage, cattle rustling, theft and petty gossiping. The quotation also reveals that Fulani, despite being in conflict, build strong social ties and cordial relations with chiefs, community elders, landowners and butchers (I will discuss this in detail in Chapter 8). Both Fulani and farmers emphasised that conflicts between them intensify in the farming (rainy) season (May to October) when it is the planting and harvesting season. A critical look at the farmer-herder conflicts in Gushiegu reveals that triggers of violent eruptions are over personal animosities, client-patron relations, citizen-stranger prejudice (where Fulani are continuously seen as strangers with no property rights and access not just to resources but even residence in communities) and the role of mobilisation. The arguments often put forward for conflicts by farmers and herders are cattle rustling, crop destruction and robberies mainly caused by Fulani herders. Also, my interviews with the DCE of the Gushiegu District Assembly (GDA), other government officials and the police revealed 'increased' conflicts to be the result of these factors. There have been occasions where Fulani herders have been killed by some community members over crop destruction, cattle rustling and robbery. According to the police, two Fulani were lynched and killed in August 2013 on accusations of robberies on the Karaga highway and many have been inflicted with cutlass wounds. Records show that no farmer or community member has been killed by Fulani herders in Gushiegu, unlike Agogo.

A major violent incident that occurred in the area was on the 6th, 7th and 8th of August 2011, when a group of Konkomba farmers attacked Fulani herders in some communities including Zamasheigu, Jingboni, Sugu, Toti, Damdaboli, Offini, Makpendanya, Zamanshagu, Lamalim, Nnagmaya and Timya in which 14 Fulani herders and their families were killed, and many others injured when their houses and properties were burnt. The proximate cause of the violent conflict was seen as a reaction and frustrations of continuous cattle rustling, robbery and crop destruction by Fulani herders. Accordingly, the Konkombas'

grievance was that for a long time the police were not dealing with Fulani 'bandits' whenever they reported cases of cattle theft, crop destruction and robberies. Their motive was therefore to expel 'Fulani bandits' from their communities. Fulani herders, however, see this as a planned mobilised attack emanating from personal animosities. The incident started in Jingboni and spread to the other communities. The group moved in the night from community to community attacking and killing any Fulani. Details of the 2011 conflict are shown in Table 5.3 and include the number of deaths, injuries and the extent of damage in the communities involved. This instance of Konkomba farmer-Fulani herder conflicts was preceded by occasional non-violent conflicts between farmers and herders and several complaints of crop destruction and cattle rustling.

Table 5.4: Statistics of August 2011 Violent Conflict in Gushiegu

Community	No of Deaths	No of Injured	Rate of Destruction
Damdaboli	1*	1	3 houses belonging to Fulani burnt
Offini	3	1	2 houses belonging to Fulani burnt
Jingboni	2	0	1 house belonging to Fulani burnt
Timya	1	1	1 house belonging to Fulani burnt
Nnagmaya	0	1	1 house belonging to Fulani burnt
Makpendanya	0	0	1 house belonging to Fulani burnt
Toti	3	2	4 houses belonging to Fulani burnt
Sugu	4	3	6 houses belonging to Fulani burnt
Total	14	9	**19**

Source: Field Study, 2013.
*One Fulani who was wounded in Damdaboli died later at the Tamale Teaching Hospital. This is not known by the Gushiegu District Assembly. It was through interviews that this information was obtained.

Prior to this particular incident, relations between Fulani herders and their 'masters' (cattle owners) in some communities had soured, which therefore had led to evictions. One such incident occurred in the village of Jingboni where a Fulani herder, after serving his Konkomba 'master' for more than four years, decided to leave him and move to another village. The Konkomba master had given a condition that before the Fulani herder left his service, he had to equally divide the maize he had harvested for that farming season between himself and the master. The Konkomba master's reason for this was because the land which the herder had cultivated and harvested the maize belonged to him. The Fulani herder refused the demands of his master and this led to a heated argument between them. It resulted in a violent fight and the Konkomba master threatened to deal severely with the herder. As a result, some community members came together to attack the Fulani herder and his family resulting in his death. It is important to note that historic patron-client relations of Fulani with

chiefs and landowners where Fulani gained land to settle and herd their cattle by paying tribute to the chiefs play a role in shaping the dynamics of conflicts. Fulani herders claimed that they are supposed to be accountable to their masters since their presence in the community and access to land are owed to them, and refusal to 'obey' the master therefore results in conflict. These relations are changing and causing tensions. Just as Turner (1999) found, changes in cattle ownership, livestock entrustment and freehold land, which had previously been part of patron-client relations, had become more widespread as a herding labour contract. This is the same as Hickey's (2007) findings of changing patron-client relationships between the Mbororo Fulani and farmers/local people in Cameroon. Hickey (2007) notes that citizenship is intricately linked with changing land use and has affected this patron-client relationship. Fulani, prejudicially, are regarded as inferior and servants to community members and breaking this dominance over them (Fulani) is often resisted (as in the case of the herder who was punished for refusing to divide the harvested maize). In addition, the land tenure regime, which is a *tutorat* arrangement (Chauveau, 2006) affects farmer-herder relations. Fulani are supposed to be loyal to their master/*tuteur* because their presence in the community and access to land is owed to them. Refusal to 'obey' the masters/*tuteur* therefore results in conflict. Fulani are now independent since many own their own cattle now. These changing dynamics in Fulani relations with their masters/*tuteur* are causing tensions. In this sense, the insecure positioning of herders to the traditional land tenure and land access system is seen within first-comer and late-comer claims as well as the *tutorat* institution (Chauveau, 2006).

Importantly, mobilisation of the Konkomba group is said to have played a role in the intensification and eruption of violence. Culture and norms of revenge that are customary for these groups are responsible for escalating cycles of violence. Leadership and ethnic identity were important in this mobilisation to attack Fulani. This is what Moritz (2010, p. 144) refers to as 'group dynamics.' He notes that "group dynamics tend to escalate conflicts for a number of reasons, including the development of group cohesiveness and militant leadership." The Konkomba group appears to have planned the attack because their killing was not limited to just one community; they moved from one community to another killing Fulani and looting their properties. The Fulani, on the other hand, could not make reprisal or defensive attacks because they were not mobilised for conflict. Accordingly, prior to the attack the community had met several times to discuss the 'menace' of the Fulani herders and how to effectively deal with it. Importantly, the police had no knowledge of the attack until the next evening when the case was reported to them by some assembly members and opinion leaders. The

local administration (GDA) set up a committee to investigate the conflict and the committee also pointed to issues of crop destruction, cattle rustling and robberies as the main causes of the attack. Interestingly, the committee mentioned the issue of 'planned mobilisation' and the inability of the police to act when conflicts related to crop destruction, cattle rustling and robberies are reported to them. A number of Konkomba suspects were arrested. Some were kept in prison for up to three months and one died in prison. However, the case was dropped and never made it to full trial in court.

Another incident worth discussing is the attempt made by the aggrieved young farmers to attack and evict herders in Kpesinga, a Dagomba community, over complaints of crop destruction, cattle theft and robberies in their community. They and other community members accused the Fulani in their community, and in other neighbouring communities, of engaging in these criminal acts. They accused in particular one Fulani cattle owner and herder Azumah, who has been in the community for 17 years. Whereas a section of the community, especially the youth, wanted the Fulani out of the community because of these criminal acts, the chief and some elders insisted that the Fulani, including Azumah, be left to stay in the community. This led to a divide in the community due to disagreements that resulted in flare-ups and soured intra-community relationships.

In 2011, the youth gave Azumah a three-day ultimatum to pack up and leave the community. The chief of Kpesinga was informed and he advised the youth to wait until the end of the harvest season before Azumah could leave. Two days later, a team of policemen arrived in the village and warned the youth that Azumah was not leaving the community and that none of them should fight with him. According to Azumah, he is not the one engaged in cattle stealing, crop damage and robberies and that he had always paid for crop damage whenever his cattle were involved. At the end of the farming season, the youth mobilised and went to Azumah's house to burn it and to force him out of the community. This led to serious confrontation between the young farmers and some elders in the community. The police were then called in and the situation was calmed down. Since then, there continue to be agitations from the youth to get Azumah to leave the community. One of the youth states:

> As people keep on complaining and the leaders in the community do not listen, one day we will rise up against them (Fulani) and him in particular [Azumah] such that something disastrous will happen. I hope you've read the book *Animal Farm*. When the animals became annoyed with humans [their leaders], they came out and fought the man overthrew him. If you are a chief, it is the people who made you chief. You have to listen to the peoples' complaints. If you don't want to listen to them, one day you won't find it easy. For me the future will not be easy for the Fulani. I have been advising them not to do anything that will bring conflict or war, or else the consequences will be grave for them. As for the community, when people get to their

farms and find out that their crops have been destroyed and they know the particular Fulani whose cattle have done the destruction, or they meet them on the farm, the likelihood of attacking the Fulani is very high. What happened in the Konkomba communities in 2011 may happen here because we are getting fed up with the Fulani behaviour. It will even be worse (FGD, Youth Group, Kpesinga, 2/12/2013).

Obviously, the perceived strong support of chiefs, elders and the police for Fulani has aggravated the desire of the young farmers to resort to conflict. The reference to George Orwell's *Animal Farm* and the 2011 conflict between the Konkomba farmers and the herders in the quote above will continue to be used to justify the attack on the Fulani if their grievances remain unresolved. This particular case illustrates the buildup of tensions which have the potential to escalate into violent conflict. The outbreak of violence in August 2011 and the subsequent attack of Fulani herders leading to the 14 deaths arose out of similar agitations that were never unresolved. The perception of the agitated youth and some community members that Azumah and other Fulani herders are supported by chiefs, powerful people in the community and the police makes violent escalation more imminent. The failure to properly resolve agitations by the chiefs, police and government officials accounts partly for violent conflict escalation. Again, we see in this incident the diminishing power of chiefs and their role in farmer-herder conflicts. The agitated youth accused chiefs of supporting Fulani because of bribes from the Fulani and that the chief failed to bring Azumah to justice, despite popular consensus for his eviction from the community. The youth believed that the chief lacks the power to control the Fulani and that accounts for Fulani disobedience of community rules and youth.

5.5. Drivers of Conflict Escalation from the Two Extended Cases

A focus on processual political ecology will help us to look critically at individual behaviour and actions of the actors in the conflicts. From a political ecology perspective, there are several underpinning factors in the escalation of conflicts. First, power relations and the unequal power between farmers and herders because of citizen versus non-citizen status. Second, the different actors, apart from farmers and herders who become involved in the conflict process. Third, the land/resource conundrum intricately linked with citizenship and belonging and, fourth, the perceived involvement of powerful forces like chiefs, community elders and the state itself, either through its handling of conflict or perceived support of Fulani herders and cattle owners. Similarly, a processual analysis of the cases shows that the conflicts generally follow the same patterns and stages described in conflict theory. That is, each conflict escalates as a result of a different sets of factors since conflicts as are processes and not events.

As farmers argue, the destruction of a single crop will not necessarily lead to violence, but will involve a series of actions by the parties involved, as seen in the case of Jallo. This is why Bassett (1988, p. 455) claims that:

> Although it can be argued that the stress of crop damage alone is a sufficient condition for tensions between the two groups, it cannot by itself explain why the Senufo are driven to murder Fulani herders. Determining what motivates individuals and groups of households to rise up against the Fulani (and by extension the state) is more complex. It requires an analysis of peasant-state relations and the dynamics of land use competition as much as crop damage

Also, when looking at the phases of conflict escalation advanced by processualists, and general conflict theory in comparison to the cases above, a major driver of violent escalation of farmer-herder conflicts is during the crisis phase (as described by Swartz et al., 1966) where there are external support and mobilisation of groups/forces to attack. In the case of Konkomba farmers attacking Fulani herders, and the conflict between Jallo and the watermelon farmer, there was mobilisation of others, including youth and the six farmers respectively. The sequences of interactions in these conflicts are key to their escalation. Again, looking at the incidence of Konkomba farmers and their attack on Fulani herders, for example, violent eruption took place at the manifest stage (see Mitchell, 1981) where supposedly complaints were made and nothing happened.

Moritz (2010, p. 141), therefore, notes that general patterns in how conflicts metamorphose into widespread: "violent transformation can be found in who or what groups of people are involved, in the actions they take, and in the stakes they hold or the goals they pursue during the conflict." Furthermore, when processualists focus on political processes in conflict, they see the individual actors with power such as chiefs, community leaders, government officials and politicians through their actions and the various roles they playing in escalating the conflicts. Bierschenk and Olivier de Sardan (2003, p. 160) note that such societies, like the communities discussed in the two cases above, are 'face-to-face or back-to-back societies' marked by 'multiplex' social relations in which almost all inhabitants know each other personally and are pervaded by conflicts which are not immediately seen. For example, crop damage, cattle rustling and armed robbery are facades behind the real escalators of violent conflicts. Conflicts fester behind such facades and occur in a way that their open expressions can be triggered by any little confrontation leading to violence. I now take some major issues in farmer-herder conflict escalation and discuss them into details.

5.5.1. The Role of Group Mobilisation

Conflicts between individual farmers and herders hardly escalate into full-scale violence until they are mobilised. Reasons for such mobilisation are based on identity/citizenship, resource and social/political needs of various groups. As Gurr (1993) espouses, communal groups, which are made up of members of a similar identity and share a distinctive collective identity based on cultural (ethnicity) and ascriptive traits, will mobilise in defence or promotion of their self-defined interests. Farmers especially have always mobilised at the communal level against herders to defend natural resources and land they claim ownership of. This mobilisation is often based on identity derived mainly from both a primordial and instrumental perceptive (Yang, 2000). An individual farmer who engages in a conflict with a herder is able to resolve this difference between them without resorting to violence. However, continuous problems with cattle theft by farmers or crop destruction by herders motivate collective action against one another. This collective action is based on the shared interest of farmers stemming from their identity as Akan, Komkomba or Dagomba as well as parallel distribution of power, vested interests, social habits and ideological (political in this study) underpinnings to maximise support of their interest as Etzioni (1968) puts it. Besides, increased participation in farmer-herder conflicts escalates them (cf. Moritz, 2010).

In the case of Jallo, the mobilisation of the other six farmers led to a violent attack on Jallo and news of this spread to the community. Just as Schröder and Schmidt (2001) argue, the group feels legitimised to use violence in defence of their interests. Moreover, the group uses historicity (past violence) of violence against them to legitimise violence, in this case, against herders. In interviews with farmers, they have cited examples of past killings against members of their groups and therefore see violence as a means to defend themselves and their interests. The incident of the herders attempted revenge attack for the attack of one of them on August 24, 2013 also illustrates that the increase in the number of herders and meeting the three young men could have led to violent attacks and counter attacks from the community.

I draw on similar complaints by both Dagomba farmers and Konkomba farmers of cattle theft, crop destruction, robberies and resource depletion by herders in Gushiegu to further illustrate mobilisation tactics in farmer-herder conflicts. Whilst Dagomba farmers did not resort to violence based on these complaints, Konkomba farmers, as seen in the second case, attacked and killed 14 Fulani herders in an attempt to end the 'nuisance' caused by Fulani herders. An important question in all this is: were theses real reasons why Konkomba

farmers attacked the Fulani herders? As Stewart (2009) posits, while the root causes of violent conflicts could emanate from economic and political factors (such as complaints of cattle theft, crop destruction, robberies and resource depletion), mobilisation by identities, particularly ethnic, political or religious ones remain important in exacerbating violent conflicts. The Fulani in Gushiegu point to the role of planned and systematic mobilisation of the Konkomba group to attack them. The argument is that the attack on the Fulani pastoralists took place in more than ten communities including Toti, Sugu, Damdaboli, Offini, Timya, Nnagmaya and Makpedanya rather than only Jingboni,[69] where the immediate conflict started, suggesting a planned attack against Fulani. Fulani see the role of leadership, that is, opinion leaders including elected assembly members, elders and some chiefs of the Konkomba, in the attack. The Fulani believed it was the leadership of the Konkomba that gave support to the mobilised group to attack and kill them. One victim of the conflict stated that an elected assembly member refused to protect him and other Fulani from attack until he was paid. Even after payment for protection, the said leader was still willing to identify him to the group, which later attacked him.

On the one hand, the Konkomba see the attack as a frustration from the continuous cattle rustling and crop destruction. The Konkomba argued that the attack never had the support of the entire community. Some Konkomba chiefs and leaders claimed to have protected and hidden the Fulani living in their communities to prevent them from the attackers. The community chairman at Damdaboli states that:

> We had to fight back in our community here to prevent the Fulani from being killed. We took them to my house where we gave them shelter and food. So how could we have planned with others to attack them [Fulani]? (Interview with community chairman, Damdaboli, 07/10/2013).

In Nnagmaya, a cattle owner narrates how he protected his Fulani from attack:

> When the group came to this community to attack our Fulani, I came out with my single-barrel gun and shot at them and they all ran away. We exchanged fire for close to thirty minutes and they finally ran away. We brought the Fulani to my house here and they stayed for three good days. One of them who was wounded was cared for by me and all the hospital bills paid for by me. So how could we have attacked people who took care of our cattle? (Interview with cattle owner, Nnagmaya, 29/11/2013).

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[69]Respondents at Jingboni denied that the 2011 violence started there. Fulani and some victims of the attack, however, maintained that it was in Jingboni that the mobilisation started.

Respondents at Sugu and Toti (two Dagomba communities where six Fulani were killed) also believed that the attack was planned and mobilised by some leaders and members of the Konkomba communities in Gushiegu. The chief of Sugu said:

> We were all ambushed and the attack took place. Many of us in these communities had to run for our dear lives since we could not predict the nature of the attack. It was well planned, orchestrated and executed. Initially, we (Dagomba) all thought we were being attacked (Group interview with Chief of Sugu and his elders, Sugu, 24/10/2013).

Equally relevant here is the type of leadership that exists among both groups, which is key in mobilising for conflict (see Stewart, 2009). Historically, Dagomba, unlike Konkomba, have a very strong chieftaincy system with allodial land tenure system and centralised hierarchical chieftaincy and high respect for the position of chief. Consequently, the power of chiefs and their support for Fulani pastoralists (thus leadership) account partly for the reasons why Dagomba Farmers are not using violent attacks on Fulani herders. In the second case between the aggrieved youth farmers and Fulani herders in Kpesinga, we see that the aggrieved youth have been restrained from attacking Fulani mainly because the 'powerful' elders and chiefs do not support their action. Leadership support for this could have led to attacks on the Fulani. Even the system of landownership in Konkomba communities in Gushiegu is such that there are no clear-cut allodial titles, but individual family ownership.

In the case of Agogo, the role of groups and political parties is even more important in mobilisation for conflict. Groups such as the *Agogomann Mma Kuo* (Citizens of Agogo), Farmer Associations and local politicians remain crucial in mobilising farmers and communities for conflict. The primordial construction of identity not only based on ethnicity of members of these groups but along political power and social mobilisations that classify them as bona fide owners of land and other resources as well as having citizenship rights as against Fulani herders, Fulani cattle owners and cattle owners from other parts of Ghana escalate conflicts and justify violence. Primordial identity has been particularly very strong in motivating people to fight for resources they claim are theirs. Issues of local citizenship rights of Fulani herders and cattle owners from other parts of Ghana owing cattle in Agogo and the question of who has the right to resources is a point of mobilisation of farmers for conflict. Farmers mobilise for ethnic boundary maintenance (in primordial and instrumental sense). The "strangeness" of Fulani as well as their cattle owners is seen as a basis for their limited or denial of resources and land use and rights and hence conflicts against them.

The *Agogomann Mma Kuo* is seen as the official mouthpiece of the 'indigenous' citizenry of Agogo whose membership is made of citizens worldwide. The group's presence at the local level influences decision-making both at the traditional level and local political scene. The group has led demonstrations and court actions against the ATC and government on the Fulani issue and wants in the words of one of its leaders, "Fulani pastoralists and cattle 'flushed' out of Agogo lands". The group has remained at the forefront of mobilisation of all citizens of the area against the presence of Fulani pastoralists. The group and others see mobilisation as a response to 'strangers' obstructing their rights and use of land and natural resources. Characteristically, the group and its leadership comprise Akan citizenship of Agogo. The *Agogomann Mma Kuo* and other groups are seen to be providing weapons and mobilising groups to attack and kill Fulani herders. A cattle owner claimed that the group had purchased weapons for young men in Matuka and Kansanso to kill Fulani herders and had been behind the deaths of many Fulani herders. Despite denials from leadership of the group, Fulani herders claimed that the group plays an important role in mobilising people for attacks against them.

The group equally believes the present government supports some cattle owners for political opportunism. Therefore, underlying these mobilisations are undercover power struggles in both traditional control and party politics. Local politicians[70] have played a role in discourses of conflict and mobilising groups against Fulani herders. Many cattle owners including both local and Fulani cattle owners see politics as an important factor for mobilisation and conflict against Fulani pastoralists. One cattle owners revealed that: "but for my support for the New Patriotic Party (NPP),[71] I would not have been able to rear my cattle here in Agogo. The local people and farmers would have been up in arms against me. Politics and type of relations you have in this society are important for cattle rearing." Even the perception by the community members that Fulani cattle owners as well as others coming especially from Northern Ghana are politically opposed to them remains an important factor for escalating violent conflict. The group dynamics and the type of social ties built between herders' cattle owners and the community leadership and farmers are equally important in escalating conflicts between herders and farmers. These group dynamics are influenced by the group

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[70]The member of parliament of the area has stated that he will mobilise the people of the area to fight against the presence of cattle in the area. See Myjoyonline.com. (29 January 2014). *MP declares shoot to kill in Agogo*. Retrieved from http://www.myjoyonline.com/news/2014/january-29th/mp-declares-shoot-to-kill-in-agogo.php. (Accessed 15 August 2014)

[71]The New Patriotic Party (NPP) is the main opposition party in Ghana. It gets much of its support from the Ashanti Region where Agogo is located. Support for the party is very high in the area.

cohesiveness and type of leadership in the community or existing within the group (cf. Moritz, 2010). Social networks among groups (for instance between farmers, indigene youth groups, politicians, the *Agogomann Mma Kuo* and community elders) in Agogo determine group mobilisation for conflict or cooperation. Farmers admittedly will not attack herders of some cattle owners even if their cattle destroy their crops. They would 'let go the offence.' Farmers will rather demand compensation payment or physically attack other herders not just because they feel hurt by the destruction of their crops, but because of their networks, social ties and interactions with the cattle owners and their herders (see chapter 8 for a thorough discussion of this). Thus, mobilisations are not just primordial but also political.

The question to ask basically is how mobilisations are done? Appadurai (1996, p. 147) notes that mobilisation by ethnicities through social movements:

> […] take a variety of forms: they can be directed primarily toward self-expression, autonomy, and efforts at cultural survival, or they can be principally negative in form, characterised largely by hate, racism, and the desire to dominate or eliminate other groups.

The mobilisation of the six farmers in Agogo and that of the Konkomba group in Gushiegu, for instance was based on framing the situation as a threat from the Fulani herders and 'defence' of their rights for survival. Local discourse and the framing of herders as 'violent and killers' and therefore a threat enabled significant mobilisation of conflicts by local people. This has been heightened by past memories of violence and killing of local people. Framing of conflicts by 'mobilisers' produces meanings to the 'mobilised' and guide the actions of actors in conflict processes (Benford & Snow, 2000). These frames such as 'Fulani are killing farmers' resonates with the group to take action. Mobilisations for violent attacks are mostly done by informal groups. Mobilisation for violent attacks was done through informal meetings, gatherings and planning with support of community leaders and groups. Once the farmers or herders have grievances, it becomes a 'rallying ground' for them to come together to fight a common cause.

One aspect of the mobilisation is through the group formation process which is built around identity/citizenship and politics (party politics) as already mentioned. Just like Stewart (2009) and Appadurai (1996) note, there is increase in the consciousness of group identities into Konkomba versus Fulani and Akan versus Fulani. Farmers or Fulani herders who are already aggrieved respond to these mobilisations, and as Stewart (2009, p. 16) puts it, "effective mobilisation for conflict requires organisation, training and support" motivated and generated by both ethnic organisations (such as youth groups, associations) and given political support (cf. Appadurai, 1996). In the instance of the destruction of Yakubu's farm

and the subsequent reaction of the village in *Case 1*, it is interesting how the destruction of Yakubu's farm quickly spread around the community to warrant a gathering of few farmers and community members. The particular status of Yakubu himself as a group leader motivated the gathering of other farmers to vow to attack herders. Yakubu is a Unit Committee leader and a member of the compensation committee. Thus, there is participation of other actors and mobilisation of groups both primordially (also instrumentally) and politically to attack others. Richardson and Sen (1997) also note that leadership roles through ethnic bashing of group identities are a mobilising factor for conflicts. This is clearly illustrated in the alleged support by community leaders for the Konkomba group in the attack. In what Moritz (2006b) described as politics of permanent conflicts in a study of farmer-herder conflicts in northern Cameroon, authorities comprising community leaders and politicians perpetuate conflicts to maximise their interest and take advantage of opportunities.

Thus the 'politics of othering'('us' against 'them'), past memories of violence and killings, grievances, blame displacement and victim mentality embedded in narratives and local discourse and framing enable mobilisation for conflicts.

5.5.2. The Politics of Farmer-Herder Conflicts (Power Play)

It is worth discussing the issue of power play and the role of politics in the conflicts. National, local politics and traditional power struggles remain influential in conflict escalation in Agogo. Schlee (2010, p. 9) has already observed that patterns of conflict in pastoralist areas are increasingly influenced by national politics, where the notion has gained ground that "every group had a homeland and the right to expel minorities by force." The assumption must be made that individuals are rational actors who are motivated by self-interest, perfectly informed, always calculating costs and benefits, and maximizing their way through life (Ensminger, 1992) and will take advantage of farmer-herder conflicts to get opportunities (gain wealth, win political office and maintain their power and control). Farmers argued that cattle owners are politically connected and are protected by powerful people and politicians to go about their activities as exemplified in both the incidences of the destruction of Yakubu's farm and the reaction of the village and the conflict between the aggrieved farmers and Fulani herders in Kpesinga in *cases 1 and 2*. They maintained that most of the cattle owners who are not residents of Agogo are politically connected to high level government officials. They alleged that these cattle owners have funded these politicians in their bid to run for political positions. In the views of farmers, this explains why the current government is not willing to help end their impasse with the herders. One of the farmers alleged that:

> My brother, this continuous stay of the Fulani on our lands and their refusal to leave is backed by government politicians. If not how can a Kumasi High Court rule on 20th January 2012 that the REGSEC (Ashanti Regional Security Council) must take decisive action to flush out all cattle in villages on Agogo land and yet the cattle are still everywhere unrestrained? Is the REGSEC not appointed by the government? We have yet to see an enforcement of the court ruling. In fact, I am reliably informed that the Fulani cattle owners and other cattle owners gave the National Democratic Congress [NDC, the ruling party] GH¢ 60, 000 (13, 953 euros) for its campaign in the 2012 elections in Ghana. And surprisingly, when this government won the 2012 election, Fulani herders jubilated and shot sporadically into the air, dancing and saying their party has won. That is why the government is not willing to help deal with the situation. When farmers attack Fulani, they are arrested and jailed but if Fulani kill people, no one arrests them. Even if the police arrest them, they are freed because of the support of politicians (Interview with farmer, Agogo, 5/7/2013).

Thus to farmers and community members, the court order[72] to flush out the Fulani herders and their cattle has never been implemented due to the machinations of powerful lobbyists and politicians in government. These perceptions highlighted in the interview above produced through local actor discourse have become embedded in the whole community. Moritz's (2006b) study of farmer-herder conflicts in northern Cameron also showed that migrant Tupuri affiliations with the MDR (Movement for the Defence of the Republic) party is perceived to bolster their grab for disputed land with Fulani. Further, farmers claimed that the presence of the joint military task force (Operation Cow Leg) protects the interest of the cattle owners who have political connections to both local and national politicians. In 2010, following the intensification of violence, the government of Ghana deployed a peace-keeping force known as Operation Cow Leg (OCL) to prevent further escalation. The OCL was made up of 30 security personnel drawn from the police and military and stationed in Agogo. Farmers claimed that the OCL task force was purposely stationed to protect the interests of the cattle owners and not to resolve the issue. For instance, the chairman of the Agogo Youth Association claimed that:

> The security men have not been professional in enforcing the court order as expected, which demands that all cattle that are not currently ranched should be captured. They're going round with a list and not touching some animals. We hear the DCE has given them a list of certain cattle belonging to some Ghanaians that are not supposed to be touched in their operation. The natives, who should be protected, are now being pursued leaving the nomads and their grazing cattle to destroy our farmlands, when they are supposed to flush out the herdsmen troubling the residents in the area.[73]

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[72]The details of this court order are discussed in Chapter 6.

[73]Ghanaweb.com. (17 February 2016). *Security officers have turned against us – Agogo Youth*. Retrieved from http://www.ghanaweb.com/GhanaHomePage/NewsArchive/Security-officers-have-turned-against-us-Agogo-Youth-decry-416288?channel=A1 (Accessed 17 February 2016).

My respondents stated that one clear example of political interference was the dismissal of the former DCE of the area in 2011, Thomas Osei Bonsu, for intervening and supporting the residents of Agogo in their conflicts against the Fulani herders.[74] Admittedly, the Agogo Youth Association agrees that the issue is political. They stated that:

> We have realised that the course to flushing out the Fulani herdsmen is becoming political and some politicians are mischievously making ill-comments and downplaying the effort of the ring leaders. Therefore, we ban all political activities, be it fun fares, campaigns or rallies until the last cattle leave Agogo land.[75]

The perception of Agogo farmers is that cattle owners are protected by politicians who have a vested interest in the whole issue of cattle rearing. There have also been accusations by some local people in Agogo that the current Ghanaian president's (John Dramani Mahama) brother[76] owns herds of cattle in the area, hence the president's inability to deal with the 'Fulani menace.' The MP of the Asante Akim North Constituency (Agogo) noted that there is 'political support for the Fulani.' The MP stated that conflicts with herders is and has been a major campaign issue in any election in the area. According to him, during the 2012 electioneering campaign, farmers in the area were concerned about how elected officials would help them deal with the Fulani 'menace.' The NDC in their 2012 election manifesto made similar promises to evict so-called 'alien' Fulani herdsmen and to resolve the 'Fulani herdsmen issue:'

> The National Disaster Management Organisation (NADMO) will organise training for at least 2000 rapid response personnel at the national and regional and district levels and take appropriate steps in conjunction with the National Security Council and the Ministry of Food and Agriculture *to address comprehensively, and in a sustainable manner, the menace posed by alien herdsmen especially the Fulani herdsmen* within the framework of the ECOWAS protocol (National Democratic Congress [NDC], 2012, p. 72, emphasis added).

Chiefs, community leaders, government officials and the police in particular are also accused of tacit support (taking bribes) from Fulani in order to protect them from community evictions. This is in consonance with Hagberg's (1998) findings in the northeast of Burkina Faso where Karaboro farmers accuse state officials of taking bribes and supporting the Fulbe against local farmers. Similarly, Fulani cattle owners and herders believe that politicians are

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[74]See also Kwabena's Blog. (15 November 2011). *Agogo Youth protest Removal of Asante Akyem North Municipal Chief Executive*. Retrieved from https://ampresss.wordpress.com/2011/11/15/agogo-youth-protest-removal-of-asante-akyem-north-municipal-chief-executive/ (Accessed 13 February 2015).

[75]Citifmonline.com. (23 February 2016). *Agogo ban political activities over Fulani crisis*. Retrieved from http://citifmonline.com/2016/02/23/agogo-citizens-ban-political-activities-over-fulani-crisis/ (Accessed 23 February 2016).

[76]Topfmonline.com. (28 January 2016). *Mahama's brother owns cattle at Agogo- MP*. Retrieved from http://topfmonline.com/mahamas-brother-owns-cattle-at-agogo-mp/ (Accessed 23 February 2016).

also making capital out of their conflicts with the local farmers to gain or hinge onto power. A Fulani cattle owner claimed that:

> This whole issue of farmer-Fulani conflicts is political. We Fulani have always been accused by the people here of supporting NDC when many of us are not even registered voters. There are a number of NPP politicians who are just bent on making this whole issue political. Because of that perception, we are not welcomed at all in this community. Meanwhile, you have a number of people who are rearing cattle around. Their cattle destroy crops yet no one complains or even attacks them because they are NPP supporters. But if my cattle destroy a single crop and you will see the whole community come out against me (Interview with Fulani cattle owner, Agogo, 23/7/2013).

The actions of some cattle owners give room for politicisation of farmer-herder conflicts. Some of them threatened to use government machinery to deal with farmers during conflicts. A farmer at Nyembekyere claimed that a cattle owner who lives in Accra came in the company of some 'security' men to destroy his crops on a disputed piece of land because the cattle owner claimed to have legally acquired it from the chief.

Comparatively, in Gushiegu the influence of politicians in farmer-herder conflicts is seen more from the perspective of citizenry discrimination against 'strangers.' Fulani and some of their cattle owners, for instance, believed that the perpetuators of the murder of 14 Fulani herders and their families were freed because of the influence of the Member of Parliament of Gushiegu (who himself is a Konkomba). Chiefs and community leaders are also seen as influencing conflicts by supporting herders, as is evident in Kpesinga and Bulugu. Thus, the politicisation of conflicts in Ghana, whether chieftaincy or ethnic, is often perceived as reality. Whilst interpretations of some actions in farmer-herder conflicts can be interpreted from a political angle, these actions may implicitly not be so. The ECOWAS[77] International Transhumance Certificate (ITC, and also the ECOWAS Protocol on Free Movement of Persons), which basically allows pastoralists from West African countries to obtain permission to move with their cattle and reside in neighbouring countries for grazing pastures, has been seen by farmers and community members as politically allowing 'strangers' (Fulani) entry into their area, thereby resulting in offences against farmers, which escalate conflicts. Farmers argue that the government is 'hiding' behind the law to protect and support Fulani herders. A leading member of the Plantain Growers Association stated that:

> Government always uses ECOWAS Protocol as basis to shield Fulani herders even if they commit crimes against your own citizens. Can we (as Ghanaians) go to Burkina Faso, Nigeria or Mali to take over peoples' lands, destroy their crops, rape

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[77]ECOWAS is the Economic Community of West African States formed in 1975 to foster social and economic development among the member states of West Africa. The protocol was enacted in 1979 and ratified in 1980 by all member countries.

women and engage in robbery and be left free? Even if the protocol says 90 days stay, Fulani are always here for more than a year. We need to act to deal with the Fulani issue and stop hiding under ECOWAS Protocol (Interview with farmer, Agogo, 6/7/2013).

Thus, the farmer thinks that the government is not enforcing the protocol code of 90 days. Government officials, on the other hand, opined that due to the irregular nature of Fulani migration, porous borders and lack of adequate security at border posts, it is difficult to check and ensure that the ECOWAS ITC is fully observed. The number of Fulani pastoralists entering into Ghana is not known, as statistics of their population are virtually non-existent.

Also, the politics of land control and traditional political power struggles are subtly seen in Fulani-farmer conflicts in Agogo. Just as Peluso and Lund (2011) and Wehrmann (2008) argue about structures of power play in land conflicts, the need for power and influence also underpin farmer-Fulani conflicts. As there are already underlying dormant struggles for land in the area, granting land to 'strangers' tends to awaken these struggles. The power to lease out community lands lies in the hands of chiefs and, given that community lands are held in trust by chiefs, leasing communal land could ignite competition between various local political actors. This 'land lease' power of chiefs in Agogo, especially the paramount chief, Nana Akuako Sarpong, is opposed by others due to political and traditional power rivalry. I was informed of the challenge[78] to his ascendency of the Agogo stool in 1975. In Agogo for example, opposition to the lease of land by the paramount chief to cattle owners and Fulani is deeply embedded in traditional power politics.[79] Those who were opposed to him becoming chief in 1975 saw his power to lease land, especially in the midst of wider agitations against Fulani, as 'arbitrary and abusive' and as a way to reignite power plays. The lease of land to four cattle owners in 2006 was seen as inappropriate and an abuse of the chief's power. Besides, as one of the chiefs in Ghana who is a known stalwart of the ruling NDC, opposition to him in Agogo has often remained high. Nana Akuako Sarpong served as the PNDC secretary for Health in 1988 and, later, in chieftaincy affairs and then as

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[78]As the Asante run a matrilineal system of inheritance, ascendency to the stool is also matrilineal. There is often the possibility of two or more nephews of the family to be interested in the stool. This was the case at the time of Nana Akuako Sarpong's ascendency to the stool in 1975. A demonstration was staged and a petition presented the *Asantehene* to destool him. See Myjoyonline.com. (7 August 2011). *Agogo residents want Nana Akuoko Sarpong destooled.* Retrieved from http://edition.myjoyonline.com/pages/news/201112/77828.php (Accessed 15 August 2014).

[79]This is what an informant told me about traditional power play in the area.

Minister of State in the first civilian NDC government under President Rawlings.[80] He again served as a member of the Council of State[81] from 2009 to 2013. Politically, therefore, many people in the area who are NPP oppose him and see this as part of government political support for Fulani herders. These perceptions, whether real or imagined, have influenced and escalated farmer-herder conflicts.

As noted by Stewart and Strathern (2002), perceptions of conflict can help trigger the escalation of violence as violence is reflective of the subjective preferences or perceptions of dominant classes in society and so are the perceptions of actors in farmer-Fulani conflicts. Also, farmers and herders use the political discourse (e.g. of community leaders and politicians) for framing conflicts and it is within this arena that they confront each other.

5.5.3. State Weakness/Failure

Violent farmer-herder conflicts are seen as a consequence of state weakness as seen in the lack of security that has resulted in the flourishing of illegal arms use, lack of enforcement of property rights laws and the inability to resolve these conflicts. Both Butler and Gates (2012) and Rice and Patrick (2008) look at state weakness as resulting from the failure of the state to secure its population from violent conflict and to resolve such conflict. Rice and Patrick (2008, p. 3) define weak states as:

> […] countries that lack the essential capacity and/or will to fulfill four sets of critical government responsibilities: fostering an environment conducive to sustainable and equitable economic growth; establishing and maintaining legitimate, transparent, and accountable political institutions; securing their populations from violent conflict and controlling their territory; and meeting the basic human needs of their population.

The Ghanaian Government argues that none of the criteria above fits into the case of Ghana given that the Ghanaian state has remained very democratic and is pursuing economic development to fulfill the needs of its people and has not had any conflict of any national scale. However, the continuous violent and unresolved nature of farmer-herder conflicts with devastating consequences for the livelihoods of both farmers and herders and question the ability of the Ghanaian state to protect people from these violence. Butler and Gates' (2012) model, Contest Success Functions (CSF), is useful for understanding how state failure can result in violent conflict of pastoral groups within shared commons. The authors argue that the histor-

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[80]Jerry John Rawlings came to power as a military ruler twice, in 1979, and, again, from 1981 to 1992 and ruled from 1993 to 2000.
[81]The Council of State is made up of senior Ghanaian citizens who advise the president on national issues.

ical marginalisation of various groups and the lack of interest and action of the state in enforcing property rights protection make pastoralists resort to acquiring guns/weapons. In Ghana, pastoralists have no access or property rights and are not regarded as citizens. They are not really protected by the state and have remained marginalised (Bukari & Schareika, 2015). Many land acts/laws in Ghana, for instance, do not make provision for pastoralism since it is seen as primitive and outmoded.

Farmers believe that the Ghanaian government has failed to resolve conflicts and does not have any policy or plan towards the full resolution of the conflicts. According to farmers, the resurgence of violent conflicts between the two across the country in 1988/89 and 1998/99 has not been met with any policy to deal with farmer-herder conflicts. The state deploys security/peacekeeping personnel whenever violence occurs in any part of the country. In Agogo, deployment of the Operation Cow Leg (OCL) police/army peacekeeping force since 2010 has not stopped the escalation of violence. In the case of Gushiegu, after the deployment of army and police officials to calm down the spate of violence in August 2011, the underlying causes of the conflict have yet to be resolved. Farmers and local communities believe that the attitude of the Ghanaian government is due to the fact that these conflicts are not national issues that warrant their attention, despite deaths and the destruction of crops. Fulani herders also think that the Ghanaian state is not protecting them from attacks. A Fulani asserted "the Ghanaian government does not care because it is mostly us Fulani who are regarded as non-Ghanaians [and] are killed?"

Besides, farmers and government officials stated that there is no comprehensive policy or law regulating the rearing of animals and, for that matter, cattle in Ghana. The only existing law is the Criminal Code of 1960 (ACT 29, Section 300 - Stray Cattle) on the straying of cattle/animals into public places, homes and property, which only imposes fines without clear directions on the proper confinement of cattle (Republic of Ghana, 1961). The long awaited passage of comprehensive ranching laws has also been seen as a major reason for this. The issue has widely been reported in the Ghanaian media.[82] Ghana remains one of the few countries in the sub-region without a ranching law. The current method of cattle rearing in Ghana is the extensive/open range system. Comprehensive policies and laws on the confinement and rearing of cattle are non-existent, hence the straying of cattle into peoples'

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[82]Ghanaweb.com. (05 February 2016). *Agogo clashes 'revive' ranching law*. Retrieved from http://www.ghanaweb.com/GhanaHomePage/NewsArchive/Agogo-clashes-revive-ranching-law-413138?channel=A1   (Accessed 28 February 2016).

farms without legal repercussions. The Minister of Agriculture[83] agrees that there is no comprehensive law on animal rearing in Ghana and that the state is currently revising that aspect of the act and passing it onto parliament for approval. Thus, farmers and herders see state failure in terms of the lack of comprehensive laws on cattle rearing and also the lack of adequate measures for preventing and resolving violent farmer-herder conflicts.

5.5.4. Diminishing Power of Local Chiefs

Traditionally, chiefs have power and influence in communities as managers of common property (land and resources) and settlers of disputes. They also enforce and impose sanctions on community members. These powers of local chiefs, however, have diminished, even at the community level. Chiefs in many communities now lack the power to settle disputes, enforce orders and find amicable agreements in the community. Especially with regard to Fulani issues in the community, farmers and community members hardly comply with the orders and decisions of chiefs. A Fulani cattle owner in Agogo remarked that: "It is the chiefs who gave the lands to us to rear our cattle, but the lands are confiscated by the local people and the chiefs often become powerless. The youth in particular hardly obey and respect their chiefs". Community members and farmers, on the other hand, see corruption and connivance of local chiefs to give out lands to Fulani to settle in the community and the refusal to act when Fulani herders commit crimes as reasons for the diminishing power of chiefs. Besides, local users of community land or landowners are by-passed by Fulani who visit chiefs in order to acquire and allocate lands to Fulani without consulting the landowners or the ones farming the land.

With respect to disputes and disagreements between Fulani herders and farmers in Bulugu, Yawungu, Kpesinga, Kpatinga and Zamanshagu over the destruction of crops and theft of cattle, farmers blame chiefs and community elders for conflicts with the Fulani. One of the farmers in Bulugu opined that:

> We are disappointed in our chiefs because they have been dealing leniently with the Fulani in this community. These Fulani destroy our crops which are the only source of livelihood for us and yet the elders and chief protect them because they get something from them (FGD with young farmers in Bulugu, 16/10/2013).

Thus local farmers see chiefs as corrupt and not giving them full access to land or acknowledging them as autochthonous users of the land. They also accused the chiefs of complacency

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[83]I had an interview with the Deputy Minister of Agriculture, Dr. Alhassan Yakubu, who was then acting Minister of Agriculture on 31/01/2014.

in conflicts between herders and farmers and, therefore, unable to effectively mediate in conflict situations (Chapter 8 revisits this issue in detail).

5.5.5. *"...who own the stocks?"*

In the midst of violent farmer-herder conflicts and agitations against Fulani pastoralists, a question worth asking is: 'who really owns the stocks and who bears the brunt of the violent attacks?' The perception of local people and farmers have always been that very high ranking people in Ghana, including businessmen, politicians, chiefs, community elders, the local people themselves and farmers are the real owners of the cattle. They contend that the Fulani are just 'caretakers' who raise the cattle daily as a source of employment. Although some Fulani own the stocks, the majority of those who own the cattle are Ghanaian citizens. In the case of Agogo, many of the cattle owners are located in Accra and Kumasi and employ Fulani as caretakers and herdsmen. In Gushiegu, many of the owners are farmers who live in the communities with the Fulani whilst a few of them live in Gushiegu town and Tamale. In the words of one herder:

> Only few Fulani here in Ghana have their own cattle. We the Fulani are just herdsmen employed to take care of Ghanaian cattle. And it is us that are killed daily by the local people. So that intense hatred for us is unjustified. Why not direct the hatred towards the real cattle owners? (Interview with Fulani herder, 18/08/2013).

Stock ownership itself is a political issue and embedded in the political and economic interest of so-called aristocrats. These 'big men' are hardly included in the discourse of farmer-herder conflicts. The social networks of these stockowners are made up of chiefs, state officials and politicians who give them protection and leverage in conflicts with farmers (see Chapter 8 for a detailed discussion of actor networks in farmer-herder conflicts).

5.6. Conceptualising Farmer-Herder Conflict Escalation

Following from the discussions above, I diagrammatically conceptualise farmer-herder conflict escalation in Figure 5.1. The argument presented in Figure 5.1 is that before conflicts become violent, a plethora of drivers come into play and develop through complex processes. These processes involve group dynamics, the formation of collective action through mobilisations, the emphasis of differences such as through 'politics of othering' involving ethnic and political differences and a series of interactions between different actors. Also, the aftermath of non-violent confrontations is important. This includes the nature of discussions that take place in the community, the involvement of other actors and past grievances that groups

hold against each other. It is worth stating that the main factors that lead to mobilisations (politics and power, actor constellations and the type of social ties that exist) trigger pre-existing issues of crop destruction, cattle rustling, etc. These are always the most visible, but they are not the real escalators/triggers of violence

I also conceptualise the actors as being involved in conflict within an arena. I use the arena in the sense of Bailey (1969), Swartz (1968) and Bourdieu (1984), where the actors in farmer-herder conflicts confront each other. The arena in my cases involved the social networks/ties used by the actors (as discussed in chapter eight); the politics and institutions such as the chieftaincy institution and political system; and the resources available to them to mobilise for conflict. The arena is also the cooperative environment within which the actors build everyday peace, negotiate and resolve conflicts (see Chapter 7 for a discussion of co-operation).
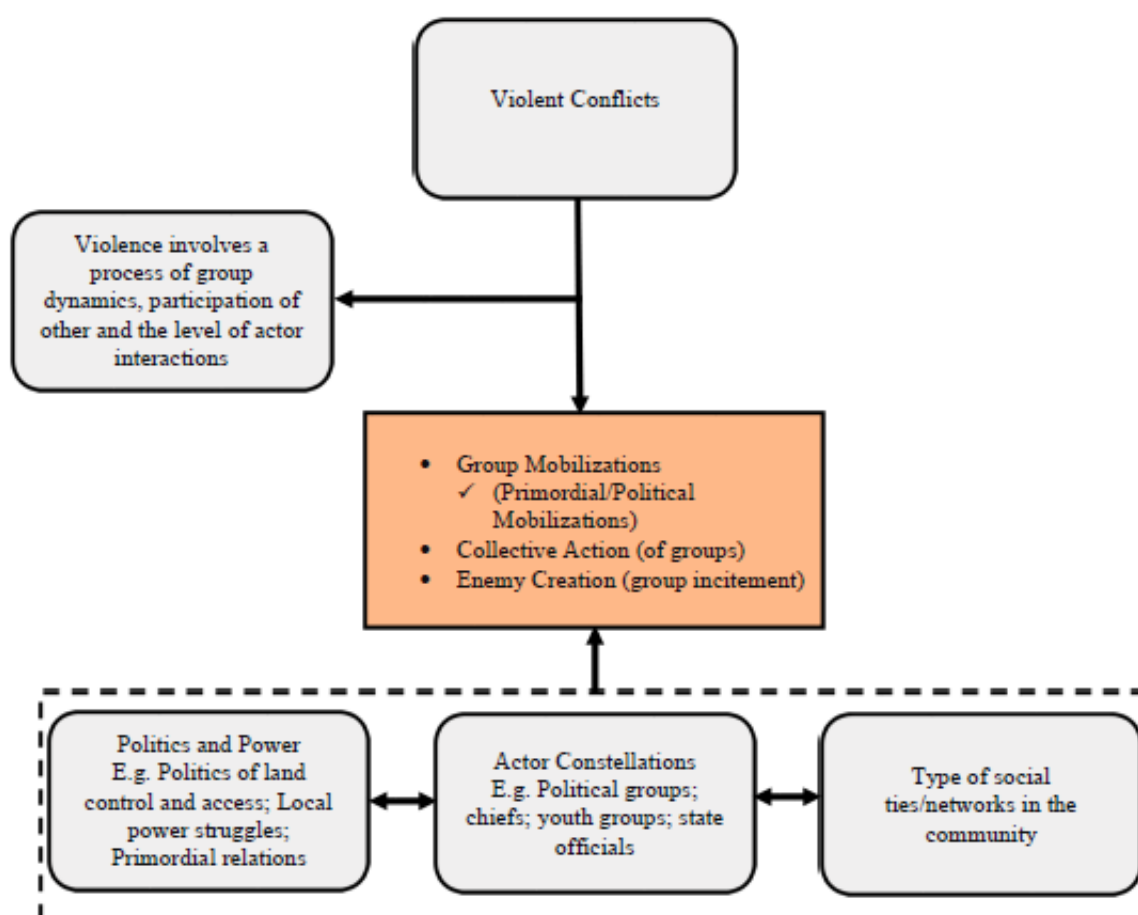
Figure 5.2: The Process of Farmer-Herder Conflict Escalation
Source: Author's Construct, 2015

5.7. Conclusion

This chapter examined violent conflicts in farmer-herder relations and how these conflicts escalate. The chapter used cases to support the discussions of the issues in farmer-herder conflicts. Whilst the chapter discussed structural factors for the escalation of conflict, emphasis was put on processual factors for conflict escalation between farmers and herders. The cases presented have demonstrated that the causes and development of farmer-herder conflicts are more complex than just looking at them in terms of crop destruction, cattle rustling and resource scarcity. Whilst crop destruction, cattle rustling and resource scarcity/environmental change are important reasons for conflicts between farmers and herders, they themselves are not sufficient reasons for explaining the escalation of violence. The role of mobilisation, increase in the participation of actors in the conflict, group dynamics (type of social ties and networks), changing dynamics of land use, power relations and political infiltrations and dominance of 'master/citizen/patron' over 'servant/stranger/client' (particularly in Gushiegu) remain the major processual factors for the escalation of violent farmer-herder conflicts. I must also mention the role of the different actors in contributing to violent escalation, which I discuss in Chapter 8. Interestingly, the neighbouring districts of the two study areas, Sekyere Kumawu and Karaga Districts have no reported incidences of violent attacks between farmers and herders. This is because the numbers of Fulani herders and cattle in these two districts, as compared to Agogo and Gushiegu, were less, hence the non-violent conflicts in these areas.

Conflicts continue to have negative ramifications for the community, social relations and co-existence. Apart from deaths, injuries and the destruction of property, both pastoralists and farmers' livelihoods are affected. As both farmers and Fulani herders fear for their security in the areas, many are afraid to go to their farms and pasturelands, which are located at the outskirts of the communities. Due to increased attacks, some Fulani herders claimed that they were relocating to other parts of Ghana or returning to other West African countries. Some farmers, especially female farmers are limiting or abandoning farming altogether. Akosua Lardi Bila, a 46-year-old female farmer, whose husband, Kojo Bila, was killed on January 14th, 2012 on their farm cottage near Mankala, had to abandon her farm there and relocate to Agogo town following the death of her husband. She said that after her husband was killed, she felt too insecure to go back to the farm and this has affected her livelihood.

Instructively, more arms are being acquired by both farmers and herders to protect themselves.[84] That these weapons are ultimately used for killing, raises issues of the Ghanaian state's ability to ensure security in these areas and to prevent the movement of illegal arms.[85]

The conflicts also affect the opportunity for cooperative and trusting relations between the two groups. Even in cases where Fulani herders take care of the entrusted cattle of farmers, suspicion and distrust characterises their relations. Equally important is distrust among the local people themselves. Distrust for the Agogo Traditional Council[86] and the continuous agitation for the *distoolement* of the *Agogomanhene* and other chiefs by the people who accuse them of accepting bribes and illegally leasing out lands to the Fulani and their cattle owners is on the rise. There are similar accusations in Gushiegu. In addition, continuous hatred and antipathy towards the Fulani herders and their activities affect cooperative opportunities. There is a stigmatisation of the herders in the society as violent, armed robbers and rapists. This makes their integration into the Ghanaian society more difficult as such stereotypes only reinforce the "strangers/aliens" label.

This chapter therefore calls for a processual theorisation and analysis of farmer-herder conflicts where multi-dimensional factors, the series of interactions of various actors and an extended case analysis of each conflict must be examined in order to find the right solutions to the conflict. In the next chapter, another important driver of farmer-farmer conflicts that is intricately linked to resources and land, will be discussed. I show how access and contestations for land contributes to an overall understanding of farmer-herder relations and conflict. I examine this from the perspective of resource access and conceptualisations of belonging and legitimacy in the use and access to resources and land in farmer-herder relations.

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[84]See Ghanaweb.com. (03 February 2016). *Agogo farmers, youth stockpile arms against Fulanis*. Retrieved from http://www.ghanaweb.com/GhanaHomePage/NewsArchive/Agogo-farmers-youth-stockpile-arms-against-Fulanis-412753 (Accessed 28 February 2016).

[85]According to the Ghana National Commission of Small Arms (GNACSA), there were 2.3 million small arms in the hands of Ghanaian civilians as of 2015 and 1.1 million of these are illegally possessed. See http://ultimatefmonline.com/2016/05/30/2-3-million-weapons-with-civilians-in-ghana-commission-of-small-arms/?utm_source=dlvr.it&utm_medium=facebook (Accessed 10 February 2016).

[86]See Kwabena's Blog. (28 September 2011). *Agogo residents impose ban on funerals in protest over Fulani 'menace*. Retrieved from https://ampresss.wordpress.com/2011/09/28/agogo-residents-impose-ban-on-funeralsin-protest-over-fulani-menace/ (Accessed 25 February 2015).

6. THE LAND QUESTION IN FARMER-HERDER RELATIONS[87]

Limited access to adequate and secure land is a major problem for sustainable agricultural production in Africa, especially for smallholders, migrant farmers and pastoralists. This has been heightened by the commoditisation, commercialisation, competition and the high demand for land by other stakeholders (Flintan, 2012; Peters, 2004). Land remains at the heart of farmer-herder conflicts in many countries across West Africa. With changing land systems and land use, conflicts between farmers and Fulani herders have escalated (see Benjaminsen et al., 2012; Dosu, 2011; Oyama, 2014). In Chapter 5, the land issues contributing to farmer-herder violence in Ghana was briefly stated. In this chapter, I elaborate how access and use of land escalate conflicts between farmers and Fulani herders. This chapter addresses the specific research question "how does land (access to land and resources) influence conflicts and relations between farmers and herders?" I come from a resource access perspective where issues such as the mode of landownership and land tenure in the study sites, Fulani land access and rights in Ghana (which borders on belonging/citizenship and legitimacy) and how land tenure and land tenure insecurity affect relations between farmers and Fulani herders in terms of conflicts and cooperation are discussed. The issue of large-scale land acquisition by agro- companies and how these contribute to farmer-herder conflicts are discussed. Three specific incidents are presented to illustrate conflicts related to herder land access.

6.1. Landownership and Land Tenure in the Study Sites

6.1.1. Landownership and Tenure in Agogo

Most land in Agogo is held and managed under common property arrangements. Land is managed by traditional authorities (stools) and the Ghanaian Government in trust for the people (cf. Kasanga, 1998; Kasanga & Kotey, 2001). About 70% of the land in Agogo is held and managed by chiefs. The Agogo stool owns the allodial title and administers land according to customary law pertaining to the area. The traditional council has the power to

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[87]Part of this chapter has been published as "Kuusaana, E. D. and Bukari, K. N. (2015). Land conflicts between smallholders and Fulani pastoralists in Ghana: Evidence from the Asante Akim North District (AAND). *Journal of rural studies*, 42 (2): 52-62." Another part of it was presented at TROPENTAG 2015 and published as a four-page paper entitled: "Bukari, K. N. (2015). *Impact of large-scale land holdings on Fulani pastoralists' livelihoods in Agogo traditional area of Ghana*. TROPENTAG 2015. See http://www.tropentag.de/2015/abstracts/full/223.pdf.

lease land to large agro-investors, herders and smallholders. Autochthonous community members have the right to use land for farming activities, when they apply to the traditional council through their respective *Odikro* (community chief) and use it as usufructuary holders. Although community chiefs oversee lands in their communities and can make land allocations of up to five hectares, it is only the *Agogo Omanhene* who has the powers to lease out land. Some families in Agogo also own usufruct titles granted by the stool to engage in agricultural activities. This land is held in trust for the families by their respective family heads. The families manage family lands and, through their heads, they may lease or sublet such land to any other party in consultation with the stool, but not necessarily with the stool's consent. The Government of Ghana has also acquired some lands in the Agogo area for Afforestation Programmes to reclaim degraded lands after the bush fires of 1983, which destroyed large tracts of hitherto cocoa farms and turned the land into savannah land.[88] The Forestry Commission (FC) of Ghana manages this land on behalf of the State.

Fulani cattle owners and herders acquire their land through lease arrangements either directly with the Agogo Traditional Council (ATC) or from family usufructs depending on the size of land required. For example, 190 acres of land for the rearing of cattle in 2006, mentioned in Chapter 5, was acquired from the ATC. Since after this contract, herders have resorted to acquiring land from individual family usufruct holders. During the field interviews with cattle owners in Nyinatokrom, Abrewapong, Bebome and Nyamebekyere, they all reported that they acquired their lands from families and not the stool. Despite the recent rise in violent farmer-herder conflicts in the Agogo area, some families are still leasing out family lands to the Fulani herders. One of the lessors stated that:

> Although there is strong opposition here for us to lease out any piece of land to the Fulani, I do so because the land is mine and that of my family. So the right to lease lies with me. You know, this is business and we need the money. Leasing land to Fulani is much more profitable than giving it out to farmers who pay nothing on it. The ATC has leased many acres of land to several companies including ScanFarm (Gh.) Ltd and who is challenging them on that? The Fulani pay much for the lease. These leases are just for shorter periods of five to seven years and we always agree that the Fulani will be careful not to destroy peoples' crops. As far as there are no problems with the land, I will lease out land to the Fulani (Interview with Landowner, Agogo, 22/01/2014).

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[88]Obtained through interviews with farmers and forestry officials.

Thus, landowners prefer to lease out lands to Fulani cattle owners because they pay a lot for the land. Landowners stated that these leases were done on an informal basis without documented contracts and for shorter periods spanning one to seven years. The reasons given for the short periods of contract were the rise in farmer-herder conflicts and community resistance to Fulani staying in the area. Beside Fulani herders, land is leased to settler farmers by family landowners and by the stool through the Odikro. These lands are leased to agro-companies and settler farmers on shared contract tenancies (*abunu* or *abusa* shared tenancies) or informal cash-based agreements.

During the study, groups like the *Agogomann Mma Kuo* and Farmers Associations in Agogo criticised the land tenure arrangement in the area. The forms of land tenure systems reflect common property theory and point out the weaknesses of such arrangements where land is put in the hands of chiefs, state institutions and individual family heads who allocate and lease out lands of their own free will. Particularly intriguing is stool land where chiefs are accused of giving out land to 'strangers' without recourse to the general community. Runge (1986) describes such situations as serious misuse of resources of traditional common property institutions. Also, in the case of state administered land, forestry officials allocate lands to Fulani herders as well as timber chain operators without recourse to the traditional council and forestry commission. The customary and state systems of managing common property require proper institutional arrangements in what German and Keeler (2010) called "hybrid institutions." German and Keeler (2010) note that common property approaches to managing resources eventually fails to contribute towards socially optimal ("just") and economically logical ("efficient") arrangements. Despite Juul and Lund (2002) argument that customary land institutions are very fluid and adjustable to changing conditions, they have failed to deal completely with land tenure insecurity in Africa and to satisfy the multiplicity of overlapping rights and interests, especially between crop producers and pastoralists. Also, the system is a neo-customary land regime (Boone, 2014), in which first-comer farmers have access and rights to use land and resources, and local chiefs have the authority justified by Ghana's constitution to be in charge of land management.

6.1.2. Landownership and Tenure in Gushiegu

Landownership in most communities in Gushiegu is similar to Agogo and also based on common property arrangement. In Dagomba communities, Chiefs are custodians of the land in trust for the people. Among the Dogambas, the land is owned by the *Ya Naa* represented by the *Gushie Naa* down the hierarchy to the village chiefs. Individual landownership, except

for residential purposes, does not exist. The only form of land owned by individuals is the land they have been farming on, or on which they have built their houses. The *Gushie Naa* explained landownership in the area:

> For us Dagombas, land belongs to the chiefs who oversee its uses and acquisition. The chief performs sacrifices on the land and has authority over all its resources. This includes land that families have built on and farm on. The only exception is that these families have used this land for long that it is has become theirs. However, they cannot pass the land to any stranger without consulting the chief. The chief has the power to admit or evict anyone from the land. So cattle owners who employ Fulani herders cannot just give them land to settle and rear the cattle without informing the chief of it. For Fulani cattle owners who wish to settle down in a community, they must come to see the chief who should agree and give them some conditions before they settle. Again, if community members wish to expand their farming land to say any unused land, the chief can agree or disagree. Land is not sold except in the main town where people have been selling land for residential purposes (Interview with *Gushie Naa*, Gushiegu Town Centre, 4/10/2013).

While individual family landownership is absent at the community/village level, in urban communities like the Gushiegu main town, individuals own land and can sell it for residential purposes. Unlike the Dogomba, where chiefs have the sole power and authority over land, among the Konkomba, it is individual families who have the usufruct power over the use of the land. These two different systems of landownership by the two main ethnic groups in Gushiegu have implications for conflicts and patron-client relations with Fulani herders, as land tenancy was an important factor in the 2011 conflict between Konkomba farmers and Fulani herders.

Land in Gushiegu is acquired through both the customary system and state regulation. Thus an individual who acquires land from the chief must also register it with the lands commission. Fulani herders' land acquisition in Gushiegu is based on free leasehold. When Fulani herders arrive in a community, the cattle owner in the case of the Dogamba consult the chief of the community who allocates land to the Fulani, normally on the outskirts of the village. With the Konkomba on the other hand, an individual allocates land to the Fulani without necessarily consulting the chief, but more often than not the chief of the community is consulted.

Aside from customary landownership, the Ghanaian state also owns forest reserves at Bulugu, Yawungu, Kpugi and Yeshi, which are managed by the Ghana Forestry Commission as part of Ghana's Afforestation Programmes. Despite the Forestry Commission's efforts for the protection of forest reserves, they are frequently burnt down by both herders and farmers. It is interesting to point out here that there are emerging conflicts between the Forestry Commission and local people over the latter's lack of farming land, which according to

respondents, is partly responsible for competition and conflicts between farmers and herders. Farmers at Bulugu, Kpugi and Yawungu complained of having little land to farm because of the acquisition of their lands by the state for forest reserves. A farmer at Bulugu stated that:

> Due to the large tracts of land used as forest reserves, we have little land here to farm. If you wish to expand your farmland, there is no land unless the Forestry Commission grants you the permission, but most often they refuse. I even understand most of our farmland is owned by the Forestry Commission and, in the future, we stand to lose it. Land in this community is a serious issue. So when Fulani cattle destroy your crops, it is very annoying because of the little land we have to grow our crops for our sustenance (Interview with 36-year-old farmer at Bulugu, 23/11/2013).

The claim of the interviewee in the quote is that there is a vast amount of land in many communities in Gushiegu, but there are no resources for cattle. Accordingly, this results in conflicts between farmers and herders. Communities with sources of water such as Bulugu, which has the largest dam in the district, experiences competitions for water from households and farmers, for domestic and dry season farming, on the one hand, and herders from other parts of the district and neighbouring countries during the dry season, on the other hand.

In sum, herders' presence is secured locally by inter-personal relationships, which is linked to the fact that some farmers entrust their cattle to them. Boone (2014, pp. 107–108) states that herders in a context of neo-customary land tenure regime (NCLTR) benefit from "*de jure* or *de facto*" regime, in what she calls "statist land tenure regime." The NCLTR in Gushiegu is seen in social solidarity which characterises relations between the *tuteur* (land-lord/farmer) who is the 'master' and the herder.

6.1.3. Processes and Actors of Land Acquisition and Management

Several institutions[89] and actors are important if one's wishes to access and use land in both Agogo and Gushiegu. A person desiring agricultural land in Agogo must first approach the chief or other customary custodians including family/clan heads or their representatives and make a request for a specific parcel or any suitable unoccupied land. The chief is then allowed considerable time to consult with his council of elders to discuss the availability of suitable land for the particular farmer's needs. It may take a meeting or several meetings to arrive at a decision on an alienable location, after which an elder is nominated to take the leasee to the parcel. The lessee is allowed time to examine the site and decide if they would like the land.

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[89]The term institution used in this study includes North's (1990) definition as formal and informal rules that organise social, political and economic relations and also practical understanding of the word itself.

The next stage involves the negotiation of a price (*drink money*) between the stool/family/clan and the lessee. If a purchase/rental price is agreed upon, payments are made to the stool and in exchange the lessee is offered an allocation note subject to the payment of administrative fees to the Stool's land secretariat. Where the parcel is located in the vicinity of a sub-chief (*Odikro*), the lessee will have to approach the particular *Odikro* to have his grant approved and publicised. The customary process is concluded with the cutting of the *tramma/guaha*[90].

I illustrate, for example, in Figure 6.1 how a migrant farmer/herder acquires land in Agogo. In Figure 6.1, the process begins with the farmer/herder approaching the chief for land and he only gets a lease over the land after registering with the land secretariat. The cutting of the *tramma/guaha* signifies that the vendor/lessor has finally cut off the land is vesting it to the purchaser/lessee. The *guaha* cutting involves both parties and their witnesses cutting a twig or a leaf at both ends into halves (see Ollennu, 1962, pp. 115–116). Typically, the purchaser/lessee and grantor each provide a younger representative to cut the *guaha* to keep the event longer in the memory of younger people. This is followed by the performance of libation and invocation of the spirits of their gods and ancestors to seal the deal and strip the Stool of all interest in the said land for the entire sale or lease period. Since writing is considered alien in the customary land system in Ghana, the cutting of the *guaha*, according to the respondents, sealed the grant. However, with the insurgence of land conflicts and further steps towards land securitisation, many buyers of customary lands proceed to translate the oral grant into written deeds. For prudence in business credit access, written leases and title certificates are more preferable.

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[90]According to Allott (1960, p. 243), some of the Akan customary laws provide for the sale of land through the *guaha* ceremony. After the agreement to purchase has been reached, the land has been inspected, the price fixed, the boundaries cut and marked with special trees (themselves as evidence of the extent of land conveyed), the parties return from the forest within doors. The *guaha* ceremony then takes place before many witnesses for both parties. The vendor and purchaser each provide a representative usually a young boy to cut *guaha*. The vendor provides a piece of fiber on which are threaded six cowry shells. The two persons cutting *guaha* then squat down; each passes his left hand under his right leg and grasps one end of the string of cowries, holding the three cowries nearest to him. The respective parties keep the cowries used in the ceremony forever, in order that in case of dispute between them over the sale, the cowries may be produced as evidence. In fact the production of the cowries is an essential piece of evidence as to the sale. After the ceremony the purchaser offers drink and sheep to the vendor as an *aseda (thank you)*. This may vary significantly across the country. In the Northern regions of Ghana, a typical *'guaha'* will involve the breaking of kola-nuts, the sharing of tobacco or the sacrificing of a ram (cf. Ollennu ,1962, pp. 115–121).

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                              ┌──────────────────────────┐
                              │ A farmer/herder proceeds to │
                              │ pay for a title certificate/lease │
                              └──────────────────────────┘
           ↙                                              ↖
┌──────────────────────┐                      ┌──────────────────────┐
│ Farmer/herder approaches │                    │ Register parcel with the cus- │
│ Chief and Request for Land │                   │ tomary lands secretariat │
└──────────────────────┘                      │ (CLS) │
           │                                  └──────────────────────┘
           ↓                                              ↑
┌──────────────────────┐                      ┌──────────────────────┐
│ Chief consults his council of │    Agricultural  │ Goes to the site to have a │
│ elders for vacant land │         Land Acquisition │ 'guaha' cut with witnesses to │
└──────────────────────┘         Processes in     │ close deal │
           │                        Ghana          └──────────────────────┘
           ↓                                              ↑
┌──────────────────────┐                      ┌──────────────────────┐
│ An elder or representative │                  │ Approach village chief to │
│ shows farmer/herder vacant │                  │ confirm allocation │
│ land │                                        └──────────────────────┘
└──────────────────────┘                                  ↑
           │                                  ┌──────────────────────┐
           ↓                                  │ Farmer/herder is offered an │
┌──────────────────────┐                      │ allocation note at an adminis- │
│ Farmer/herder is allowed │                   │ trative fee │
│ sometime to accept the offer │               └──────────────────────┘
└──────────────────────┘                                  ↑
           ↘         ┌──────────────────────┐         ↗
                     │ Agreed price is paid for the │
                     │ land use period │
                     └──────────────────────┘
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Figure 6.1: Processes of Agricultural Land Acquisition in Ghana
Source: Kuusaana and Bukari (2015, p. 58).

However, the majority of land granted to smallholders and herders is still on oral, negotiable, flexible, and yet complex terms, as also noted by Udry (2011), and, as summarised in Figure 6, which invariably leads to claims of legitimacy. About 95% of the smallholders operating in the study areas are operating on oral leases, sharecropping and seasonal licenses. This is because the procedures of acquiring secure title to land through long term leasing are both cumbersome and expensive. Thus, most smallholders do not obtain them – leaving them vulnerable to dispossession when chiefs receive lucrative offers from large agro-enterprises. Following these customary processes of land acquisition, the stakeholders involved in customary land administration in the study area were identified to be the paramount chief (*Omanhene*), his council of elders, the *Odikros*, family usufruct holders using customary land and the Customary Land Secretariat (CLS). Institutions responsible for land management are therefore limited to chieftaincy and the family, but may extend to the Lands Commission and Customary Land Secretariat (CLS) where land rights are formalised.

The institutions and actors in land management and acquisition, as well as, the process, are similar in Gushiegu to that of Agogo. In brief, the Gushiegu traditional council, led by the paramount chief manages customary lands on behalf of the *Ya Naa,* while land title

registrations are administered by the Lands Commission located in Yendi (the traditional capital of all Dagomba). A Fulani herder desiring to settle down comes with his host (who is a community member) to the chief. The chief and his elders assess the herder and through an informal (oral) contract lays down a set of rules the herder has to obey before giving out the land. The herder is then shown a piece of land, normally at the outskirts on the community.

The processes of acquiring land has been fraught with conflicts especially in Agogo, where there are challenges to the leasing authority of chiefs over communal land to Fulani pastoralists. These conflicts inherent in property regimes are not over who has the bundle of rights and authority over common land/property, but rather over the arbitrary use of the authority to transfer common land/property to a second user, or in the words of farmers, 'strangers' (cf. Lentz, 2005; Peluso & Lund, 2011), where only chiefs benefit economically from these land deals. Besides, the case of Agogo reinforces Peluso and Lund's (2011) argument that underlying land conflicts are the institutions and processes of managing and acquiring control (power/authority over land).

6.2. Belonging, Fulani Pastoralists' Rights (Legitimacy) and Access to Land in Ghana

Lund (2011, p. 72) states that land rights and "property, is about relationships among social actors with regard to objects of value" and this is defined by social identity. Land rights in Africa have largely been the inalienable preserve of autochthonous groups (Barume, 2014). Apart from women, settler groups and other strangers with limited land rights and access, Fulani have largely been a landless group with virtually limited or no access and rights to land (cf. Diallo, 2009). In the two study sites, pastoralists' rights to landownership are limited and conceived within the realm of belonging/citizenship and legitimacy. Comparatively, whilst others such as settler farmers, agro-investor companies and tree plantation companies have access to land leases, sales and land resources, Fulani pastoralists' access, even if they can afford to buy land on a lease basis, is limited and in some cases denied. The relation between Fulani herders/cattle owners and other groups with regard to land rights and access is summarised in Table 6.1.

Table 6.1 shows the rights and access of herders to land and resources within the context of citizenship, belonging (autochthony), power and legitimacy. It also shows that land access and rights are largely seen within 'politics of first-comer versus late-comer claims" (Lentz, 2005) and what Boone (2014) calls landlord-stranger relationships in which

land is the inalienable preserve of first-comers. For pastoralists, access to natural resources such as pasture and water is as well contested and seen within recognition of legitimacy and authority to access these resources (Lund, 2009, 2013). The 'power' in terms of the influence (with support of their governments and Ghanaian government officials) of agro-investors makes it easy for them to access land, and, therefore, difficult for local farmers to evict them or challenge their claims to the land as they can do to pastoralists. This has given them some sort of legitimacy and tenure security (which I shall discuss later in this chapter).

Farmers in both Agogo and Gushiegu classify themselves as "landed people" who claim ownership over the land, its usage, and exert political control over it whilst describing Fulani pastoralists as 'landless people' who do not own the land they are settled on and its usage. This is in consonance with Dafinger and Pelican's (2002, p. 8) argument that:

> Land rights could, instead, be seen as the structuring centre of social systems: the core around which social relations are built. 'Landed' and 'landless' in this perspective are primarily social markers which structure religious, economic and political hierarchies. This change of perspective allows us to depart from the dichotomy of landowners versus non-landowners and to look at land rights in terms of social relations.

Table 6.1: Fulani Rights and Access to Land and Natural Resources vis-à-vis Other Groups

Group	Access to Land	Right to Landownership	Access and Use of Other Natural resources (water, trees, pasture, etc.)
The Autochthonous People	Full access	Full rights	Full access and unrestricted usage
Settler Farmers (from other parts of Ghana)	Have access	Some rights and some have even become landowners after many years of using the land	Full access and unrestricted usage
Agro-Investors and Tree plantation Companies (E.g. ScanFarm (Gh.) Ltd, Nicol-Miro Forestry)	Have access to buy/lease land	No landownership Have rights to land leases	Have unrestricted access (in the case of ScanFarm (Gh.) Ltd, they had unrestricted access and rights to water of the Afram River)
Fulani Cattle Owners/Herders	Limited access to land leases and in some cases not at all	No landownership Have limited right to land leases	Partial access and restricted usage

Source: Author's Conception Based on FGDs and Interviews, 2013/2014.

According to proponents of *resource access theory*, access and rights to resources and property are based on both *rights-based access and structural and relational access*

mechanisms which give both autochthonous, settler groups and 'strangers' access to these resources based on law, conventions, customs, markets, labour, social relations, etc. Just like Ribot and Peluso (2003) conceive of access, Fulani pastoralists conceptualise land and natural resource access as their ability to use and benefit from resources in the community through leases, sale or through community agreements. However, farmers and community members conceptualise access to land and natural access as a natural right, which is linked to one's citizenship/belonging and not just the ability to use these resources. They see Fulani as being excluded from this access and therefore with no right to these resources. These different conceptions of access affect relations between the two and have implications for starting conflict. Fulani pastoralists have thus clearly come to accept this notion and current discourse on their land rights – or lack thereof - as conceived by farmers. One Fulani cattle owner lamented that:

> We are virtually a landless people in Ghana here. Nowhere in Ghana will you ever hear of Fulani owning land unless they have bought[91] it. Our right to own land, even as second generation Fulani, is absent. In Nigeria, Cameroon, Burkina Faso, Niger or Mali, I know Fulani have land and can engage in farming activities as well, but that is not the case in Ghana. Even those Fulani with money to buy land are often denied. The people in Ghana will ask you when you want to buy land if you are a Ghanaian as if it is only Ghanaians we see buying land. What makes it more difficult for us Fulani to own land in Ghana here is basically our citizenship – the continuous prejudice that we are strangers. However, other strangers own land and are building on them. I hope you know that big company [ScanFarm (Gh.) Ltd] that grows maize at Dukusen and Afrisire? Are they not from the white man's land? Look at the quantity of land they own, yet we have been here without any land tenure rights and access (Interview with Fulani Cattle Owner, Agogo, 13/07/2013).

The statement is reminiscent of Sikor and Lund (2009) conceptualisation of legitimacy and access of land and resources. The legitimacy of herder's access is therefore contested in the interview above. Farmers' understanding and conception of Fulani access and rights to own land is explicitly explained in this interviewer with young farmer in Agogo.

> Is our land in Agogo for Fulani, for them to have ownership rights? What rights have they to own our land? You (referring to me), in your hometown, can any stranger just come and own land like that while you, the indigenous people, have little? You see, this issue was caused by our paramount when he virtually leased out our lands to them and that gave them the impetus to destroy crops and sometimes ask farmers of Agogo not to plant crops on lands that they own, as if the land is theirs. We are for the land and we don't need Fulani on it. Land and all resources in Agogo are our birthright. Fulani are excluded from that right so they should go back to their countries with their cattle or else we will force them out of our land (Interview with a farmer, Agogo, 13/01/2014).

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[91]Note that, according to Ghanaian law land, land is not bought, but leased. However, respondents often use "buy/sell" interchangeably with land leases.

The interview clearly depicts a kind of 'legitimacy discourse' where farmers' land use and access are based on their autochthonous status as landowners. It is because of these bundles of rights to land (Lund, 2009) that farmer-herder relations and access to resources are regulated in general.

In Gushiegu, community evictions of Fulani pastoralists from their land are common. When community members convince chiefs and elders that the Fulani herders are 'a nuisance' (used directly in the language of respondents), the Fulani herders are evicted from the lands since the argument is made that the land is not sold or leased to them, but given to them freehold to settle and rear their cattle. In Konkomba communities, when Fulani are being evicted from the land, they are made to give half of their total harvest to their 'masters' (owners of the cattle and land). This, according to Fulani, was part of the reason for the August 2011 attack on Fulani when one of them refused to give part of his harvest for payment. Thus, patron-client relations in terms of using land played a role in the conflict. A community member at Lamalim explained that when a Fulani herder settles in a community, the cattle owner gives him maize and other food items to feed on as well as land to farm and build his hut. When the herder is moving out of the community, the cattle owner expects him to leave the same quantity of maize he (the cattle owner) had given him so that the next Fulani herder coming to take over would feed on that food before he starts cultivating.

Although most Fulani herders in Gushiegu, unlike Agogo, are agro-pastoralists, their farming activities are limited to only their settlements due to their limited land rights. While community members farm around their houses as well as having big farms on the outskirts of the community and can acquire as much free land as they can, Fulani's access to farming land is limited. In Agogo, herders and cattle owners were only engaged in cattle rearing as lands acquired by them is only meant for cattle rearing. Land they legally acquired from chiefs and landowners to rear their cattle are often confiscated from them by some of these same chiefs, landowners and local farmers. Interestingly, Fulani in the Adamawa and Western Grassfields of Cameroon have become well-established, with land rights and power (Pelican, 2008; Gausset, 2005), whereas in Ghana they do not have landownership rights.

In addition, Fulani pastoralists' access to land use in Gushiegu is more accepted than it is in Agogo. This explains why they engage in limited farming while Fulani in Agogo cannot. Although Fulani pastoralists do not own land in Gushiegu, they are able to access and purchase land in Gushiegu Town. More than 11 Fulani have legally bought lands in Gushiegu town, around Bandaya, in accordance with the land Administration Act of Ghana

and Dabgon Customary Land Practice.[92] The *Gushie Naa* states that Fulani can buy and own land if the sub-chief of the area and the elders agree. He noted that there is no tradition or policy in Gushiegu restricting Fulani access to buy land. However, there are still some challenges to their rights to own land in both Gushiegu and Agogo. In group discussions with Fulani, for instance, in Gushiegu, they claimed that their right to own land is limited by:

1. The issue of citizenship. The Fulani are not considered citizens of Ghana or autochthonous in Gushiegu and are denied access to buying land to put up buildings or rearing their cattle. This reflects the access and legitimacy argument advanced by Sikor and Lund (2009), in which inherent relation between citizenship and social identity is seen.

2. Refusal or discrimination by members of the community to accept and integrate them. When pastoralists want to buy land and the landowner even agrees, community members are against it. Eight out of the eleven Fulani who bought lands in Bandaya noted that in their bid to buy land, some community members openly opposed it because they are Fulani. One of them claimed: "when some people realised that it was a Fulani buying land around them, they began complaining that I was going to make the environment dirty with my cattle and also destroy their crops. Others even argued that Fulani are not people you should stay with since they (Fulani) are very unpredictable. I also heard the chief was told not to agree to the land sale."

3. Fear of losing lands they have bought. Fulani are afraid of having their lands and houses confiscated when a conflict occurs. Some made reference to the expulsion of Fulani in 1989 and 1998 by the Ghanaian government where many lost their properties and possessions following their forced relocation to other countries.

4. Acquiring land in the hinterlands/villages/countryside is impossible in the case of Gushiegu. This is usually where most Fulani would prefer to buy land since there is the availability of vast areas of land for pasture and water for rearing cattle. However, chiefs in many villages/hinterlands say land is not sold and is strictly held in trust for the community.

Thus, in the hinterlands/rural areas, land is not sold to Fulani, and their access to it in these rural communities is limited. Land is only given to them at the discretion of the community

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[92]I have seen and read the land documents of Fulani signed by the *Gushie Naa*.

chief who is the custodian of the land. Therefore, Fulani wishing to own lands, expand their cattle business and engage in farming activities are unable to do so.

6.3. Land Tenure Insecurity and Conflicts between Farmers and Fulani Herders

Land-related conflicts abound in Ghana, and so are the conflicts between farmers and Fulani herders. There were over 600 land disputes in Ghana as of 2006 (Abotchie, 2006). The conflicts between farmers and Fulani herders in Agogo are due to the expansion of both crop farming and cattle rearing. Land disputes in Ghana have also been due to land sales, indeterminate boundaries of customary-owned land resulting from the lack of reliable maps and plans and conflict of interest between and within land-owning groups and the state (Government of Ghana, 1999). Whereas farmers have individual rights and access to land, it is only through communal ownership that pastoralists can get access to land leases (cf. Tenga, 1992). Land tenure insecurity for Fulani pastoralists is very high especially in Agogo. A few pastoralists who have been able to acquire land for cattle rearing claim the tenure was insecure. Land acquired by Fulani is continuously confiscated by local farmers who claim ownership rights to these lands. One of the herders in Agogo reiterated the feeling of insecurity:

> You see this land where my cattle are, we acquired it two weeks ago. If you come back here in two weeks, you will see that we have been evicted from it. Even a week ago, some young men arrived here challenging us and asking us to leave until the landowner came to stop them (Interview with Fulani herder, Bebome-Agogo, 14/07/2013)

Indeed, when I met the herder, he stated that the chief of the village had previously evicted them from land that they had acquired from someone. I now illustrate Fulani land tenure insecurity with three specific incidences:

6.3.1. Incident 1: Anti-Fulani Land Demonstrations and Court Ruling of 20th January 2012 -Agogo[93]

Anti-Fulani agitations in Agogo have mainly been due to the presence of Fulani on community lands. This is mainly because of the emerging interest and competitions for land by various actors including smallholder farmers who require more land to expand their farming

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[93]The narrative of this incident is mainly based on *An update on the Security Situation in the Asante Akim North Municipality* (Asante Akim North Municipal Assembly, 2011). Note that the whole Agogo area was part of it until it was given full district status in 2012.

activities and the Fulani pastoralists who find the AAND extremely attractive because of abundant pastureland for cattle rearing. After six years of land lease agreements between the ATC and the four cattle owners, farmers and community members began agitations against the ATC and cattle owners after what they described as "blatant killing of farmers, destruction of crops and possession of their land by strangers." This led to 'Anti-Fulani' demonstrations asking for the eviction of Fulani herders and their cattle from the land.

The peak of the 'Anti-Fulani' demonstrations occurred on September 15th, 2011, when a group of citizens from three groups - the Concerned Agogo Citizens Association, *Agogomann Mma Kuo* and the Agogo Youth Association - demonstrated throughout the area asking for the eviction of Fulani from their lands. During the demonstrations, a Fulani herder was killed and his body dumped at the paramount chief's palace to protest and express their anger towards the Fulani. Subsequently, these groups boycotted and prevented the observance of funerals, festivals and other traditional celebrations in the area until the Fulani were evicted and their lands returned to them. Despite several meetings to lift the boycott on these important traditional activities, the protests went on unabated for almost a year.

As the anti-Fulani demonstrations continued, antipathy towards Fulani intensified and many Fulani were attacked. According to the Asante Akim North Municipal Assembly (2011), three Fulani herders were attacked by some youth groups on October 8th, 2011, while in a taxi. The youths apparently attacked the herders and inflicted cutlass wounds. The herders managed to escape and were sent by the police to the First Klass Hospital at Konongo instead of the Agogo Hospital for fear of a further attack from the youth groups there. The main Agogo town and some villages became a 'no go zone' for Fulani as they could easily be attacked when cited in these communities. At another anti-Fulani demonstration, 13 demonstrators were hit by bullets from the police, which angered the local people and further aggravated the perception that the Fulani herders and their cattle owners were supported by the police, the ATC and government officials. Also, petitions were sent to the *Asantehene* asking for the *distoolment* of the paramount chief of Agogo, Nana Akuako Sarpong for granting and leasing lands to the Fulani without recourse to the welfare of the people. Despite efforts by the *Agogomanhene* to meet with the farmers and groups in the area on October 7th, 2011 to find solutions to the impasse, it failed to resolve it.

Subsequently, representatives from the Concerned Agogo Citizens Association, *Agogomann Mma Kuo*, Agogo Farmers Association and the Agogo Youth Association filed a motion (Oduro, Tweneboah, Obeng, Akyaamah, Boamah, Anokye, Nyame and Danquah v.

Attorney-General's Department, Kumasi and Agogo Traditional Council, 2012) at the Kumasi High Court on 26th October 2011 against the ATC and Government of Ghana, imploring the court to fully evict all Fulani and cattle from Bebome, Abrewapong, Matuka, Bebuso, Mankala, Kwame Addo, Nyemso, Kansanso, Kowereso and Nyamebekyere lands. The substantive issues raised in the court were the wanton destruction of farms and the illegal lease of land to the herders. The court granted their request and ruled on January 20th, 2012 that:

> […] the court hereby issues mandatory injunction directed at the REGSEC, Ashanti Region, (and by implication the Regional coordinating Council and the Executive branch of Ghana) to take immediate, decisive efficacious and efficient action to flush out all cattle in the following villages and localities in the Agogo Traditional Area in the Asante Akim north Municipality: Abrewapong, Mankala, Nyamebekyere, Kowereso, Adoniemu, Bebuso and Brahabebome. The only exceptions are cattle that have been properly confined in a permitted locality […] (*Oduro, Tweneboah, Obeng, Akyaamah, Boamah, Anokye, Nyame and Danquah v. Attorney-General's Department, Kumasi and Agogo Traditional Council*, 2012, p. 19).

Thus, the court action was meant to move the herders from communal lands that were leased to cattle owners. The ruling was welcomed by the locals and the ATC revoked the lease contract with the four cattle owners. However, some of these cattle owners, and other cattle owners without formal agreements with the ATC, continue to rear their cattle in the area since they have informally agreed on land leases with individual landowners.

Following the court ruling and the continuous agitation for the eviction of the Fulani herders, the Ashanti Regional Security Council (REGSEC) and the Ashanti Regional coordinating Council set up an eleven member committee on February 7th, 2012 to oversee the evacuation of cattle in the area. The committee which was known as the Agogo Fulani Cattle Evacuation Plan Committee,[94] was mainly to work towards the evacuation of all cattle from the villages mentioned in the court ruling. After meeting with various stakeholders including chiefs, cattle owners, Fulani herders, youth groups and farmer associations, the committee had two alternative plans for the evacuation of the cattle: voluntary exit by cattle owners and Fulani herders with their cattle from the area and forceful ejection of the cattle and Fulani herders after 30th April 2012. According to the findings of the committee, there were about 10,000 cattle in the said villages which needed to be evacuated. At the time of the deadline agreed by all stakeholders that all cattle be evacuated voluntarily, only two cattle owners had voluntarily taken their cattle out. Despite the possibility of the second alternative (forceful

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[94] See also Kwabena's Blog. (07 February 2012). *FULANI IMPASSE: Ashanti Regional Security Council Inaugurates Fulani Eviction Plan Committee.* Retrieved from https://ampresss.wordpress.com/2012/02/07/fulani-impasse-ashanti-regional-security-council-inaugurated-fulani-evacuation-plan-committee/ (Accessed 25 February 2015)

eviction), it was never applied. According to two members of the committee, they believed the executive and government officials stopped the decision to use force to evacuate the cattle from the area. Due to this 'failure' of the committee to evict Fulani herders and cattle owners from the area, farmers and the various groups have continued their agitations and anti-Fulani sentiments.

6.3.2. Incident 2: Fulani Cattle Owner in Conflict over Land

Following the Kumasi High Court Ruling in January 2012 that all cattle be moved out of Agogo lands, Ahmed (not his real name), a Fulani cattle owner had to move his cattle to a protected forest reserve given to him by the Ghana Forestry Commission. Ahmed was one of the four cattle owners who had acquired leased land from the Agogo Traditional Council (ATC) in 2006 to rear cattle. He had acquired 50.2 acres of land from the ATC for a lease period of 50 years and renewable for another 25 years upon expiry. At the peak of the agitations and conflicts with farmers in 2009/2010, attacks on Ahmed's herders became rampant and local farmers kept cultivating around the land he had acquired for his cattle. Persistent agitations arose against him because he was a stranger and therefore had no right over the land on which he was rearing his cattle. In 2012, Ahmed's son was killed in one of the villages when he went out to graze the cattle. Ahmed's cattle were killed either by physical attacks or chemical poisoning and, according to him, two of his herders were also killed and several others injured.

The agitations and attacks on Ahmed's herders and cattle intensified when the Kumasi High Court gave its ruling for the evacuation of all cattle on Agogo lands. The land he had acquired in 2006 for rearing his cattle was turned into crop farms. He therefore went to the Ghana Forestry Commission and was given land to rear his cattle.[95] According to Ahmed, the land given to him by the forestry Commission was an unused forest reserve. Ahmed moved all his cattle to that portion of land given to him by the FC. After a few months on the land, members of the community began moving closer to the land claiming that the land was theirs and that Ahmed should move his cattle off of it. Several of his cattle were again killed and confrontations with farmers became regular. On one occasion, whilst I was with him and his herders, a man came spraying weedicides on the land near his cattle apparently to cultivate

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[95]Some farmers believe that being able to get forest reserves meant only for afforestation projects justifies the claim that Fulani are supported by high government officials. When I asked one of the Ghana Forestry Commission's officers about Ahmed's use of land on forest reserves, he said the directive for his use came 'from above', which means from superior officials, and he had no power over that.

that land. A heated argument ensued between Ahmed and his herders on the one hand and between him and the farmer on the other hand. The farmer intimated that the land on which the cattle were belonged to his fathers who cultivated it, and, therefore, Ahmed had no right over the land. Ahmed explained to the farmer that the land in question was given to him by the Forestry Commission. Despite Ahmed's explanation, the farmer insisted that he was the rightful owner of this land. Ahmed then called a forestry officer who arrived hours later to inform the farmer that the land was the property of the Ghana Forestry Commission and that they gave out the land to Ahmed for rearing cattle. The farmer left, though not satisfied, and promised to inform the chief about it. Two weeks after this incident, another farmer cultivated plantain hundred metres away from Ahmed's cattle. One of Ahmed's herder then called the forestry officer who came and uprooted all the crops on the land. The forestry officer explained in an interview that the cultivated land was given to Ahmed purposely for rearing cattle and so all those cultivating the land were acting illegally. However, Ahmed believed that the agitations against him on the land would continue unabated.

It is worth observing that land is central to farmer-herder conflicts in Agogo. Since farmers are expanding agricultural activities and need more land to cultivate, they see herders and Fulani cattle owners as having no rights over the land even if they legally acquire it. Farmers thus claim primordial rights over land and do everything to confiscate them once "strangers" are using this land. Herders claimed they were being pushed out of several plots they had acquired. This case raises issues of Fulani land rights and access in Ghana and the fact that they remain among the biggest groups who suffer from land tenure insecurity. Having acquired legal rights (I have seen and read the legal lease contracts between the ATC and the cattle owners in 2006) over the land, they lost rights over that land after the ruling by the high court. According to pastoralists, other groups and agro-companies who similarly acquired lease contracts such as ScanFarm Ghana Limited (herein ScanFarm (Gh.) Ltd., a Norwegian Company), enjoy unlimited tenure security in comparison to them. The argument is often given that the Fulani are destructive, and for that reason cannot be given land. With land assuming commercial status, the rights and security of tenure of land leasers, including Fulani, must be protected.

6.3.3. Incident 3: Gariba Moves his Cattle from Agogo Lands to Samsu

Gariba Abdullai is a 53-year-old Fulani cattle owner who migrated to Agogo with cattle in search of pasture, but had to move to Samsu in the Sekyere Kumawu District after several attacks and conflicts in Agogo. Gariba moved with his father from Sokoto in northern Nigeria

when he was 33 years old with the intention of finding pasture and water for their cattle. According to Gariba, it was not that there was no pasture in Nigeria, but the number of cattle there was so high that the competition for the pasture was high. Gariba and his family then decided to move. They first stayed in Gomparou in Benin for about two years but did not find enough pasture for their cattle. They then proceeded to Togo, but did not stay there for long because, according to him, the people were very hostile and conflicts were frequent. They got information from other Fulani from Nigeria who were already staying in Ghana that there were not many cattle in Ghana and, therefore, pasture was abundant. Another reason that motivated their migration to Ghana was the lower number of conflicts. They came to Ghana through the Northern Region, first to Yendi and then to Yeji, in the middle Volta Basin of Ghana. Their relocation to Yeji was because of established relations with Fulani who were already living there. After a few years in Yeji, Gariba and his family relocated to Begro in the Eastern Region of Ghana, and finally to Agogo. Similarly, their reason for leaving Yeji was because of the inadequacy of pasture, which became scarce in the dry season.

Gariba relocated to Agogo in 2008 because the area had enough pasture for the nutritional requirements of his cattle. After five years, Agogo was considered very 'dangerous' by Gariba because of continuous conflicts and attacks on Fulani herders. Gariba claimed that any time they acquired land, it was confiscated and used for crop farming. They kept competing with farmers for land, which resulted in crop destruction and degenerated into conflicts. Gariba noted that this competition for land increased the violent conflicts with farmers and, as a result, they acquired land in Samsu in January 2013, to where they finally moved their cattle. Gariba stated that although Agogo had rich pasture for the nutritional requirement of their cattle, they had to move for their safety and peace. He contended that in Samsu, there were not so many farms, and, therefore, they have no problem with crop destruction and conflict.

Gariba's case again illustrates the land tenure insecurity that Fulani suffer due to what Lund (2011) described as land tenure connectedness to citizenship and social identity. Fulani, in particular, suffer land tenure insecurity in times of conflict with farmers who use it (conflict) as basis to take back land they deem common property which they have usufruct and inalienable rights over. Again, the case shows that a major reason for Fulani migration out of some communities is conflict, as it clear that Gariba migrated out of Agogo to another district because of protracted conflicts which endangered his life and that of his herders. Also, whilst the presence of pasture determines pastoralists' migration, networks with other Fulani

in communities in Ghana were the facilitating factor in Gariba's migration. Therefore, pastoralists will migrate to places where their kinsmen are located.

6.4. Discussions of the Role of Land in Farmer-Herder Conflicts from Incidents

Incident 1 presents the activities leading to the Kumasi High Court decision to evict cattle from Agogo land and its aftermath. The incident emphasises that land plays a significant role for conflicts in Agogo. Also, it is evident from the incident that groups are united and resort to the courts in their quest to get herders out of their lands. The agitations for land have subsequently led to violent confrontations and several demonstrations against the herders. Besides, this incident shows that informal land leases are prevalent in the area and that the presence of herders on the land is supported, and seemingly sanctioned, by some of the local landowners who lease out lands to them. Moreover, the incident shows that there is strong suspicion of government involvement as well as the involvement of, chiefs and other 'powerful' people in support of the Fulani herders. Proof of this, according to farmers, is the inability of government to enforce the court ruling to evict the herders. Despite the committee's decision to use force to get the herders out when they refused to abide by the voluntary eviction, the cattle evacuation committee failed to enforce its decisions. Again, *incident 1* indicates the role of mobilisation in farmer-herder conflicts. The groups' mobilisations (collective action) to seek redress in courts and hold demonstrations against the herders have heightened violent conflicts in the area.

In *Incident 2*, Ahmed is forced to move his cattle off the land he acquired in 2006 to protected forest land acquired by the Ghana Forestry Commission due to the high court ruling. Despite the fact that the protected lands are not contested lands, agitations and contestations against Ahmed on that land still persist. Some farmers claimed to own the land that Ahmed presently has his cattle on. Farmers' allegations of corruption during the re-lease of protected land to a Fulani raises issues of the involvement and support of government officials in land conflicts. *Incidences 2* and *3* clearly illustrate typical cases of land tenure insecurity of Fulani herders in communities around Agogo. Most of these herders acquire land from individual landowners and the lands are taken away after a short stay on the land. In *Incident 2*, Ahmed, despite formally signing agreements with the ATC, still has his land lease contract revoked. The land agreement signed between Ahmed and three other cattle owners and the ATC was witnessed by an attorney and an amount of GH¢4,000 (1,000 euros) paid

as customary fee for the lease.[96] After the court ruling and the agitations by farmers and various groups, the ATC revoked the contract. Ahmed noted that: "by the basic laws of contract, you don't just wake up and revoke a contract without proper recourse to the law." However, the Secretary of the ATC disputes this:

> Per the agreements signed with the cattle owners, should they (the cattle owners) not abide by the rules set out in our land agreement that they should confine their cattle and provide drinking water for them within the area of confinement to avoid crop destruction, we can revoke the contract. So we did exactly that. And the Kumasi High Court charged us GH¢500 (40 Euros) for the abrogation of the lease agreement (Interview with Secretary of the ATC, Agogo, 18/06/2013).

Fulani pastoralists' land tenure insecurity has intensified the violent confrontations. Fulani herder migrations in search of pasture lands for their cattle is a continuous process and, as with the incidence of Gariba, involves a gradual process that is in line with Stenning (1957) migratory drift model illustrated by his (Gariba) migration from Nigeria to Benin, then to Togo and Ghana. In Ghana, his migration involved moving from Northern Ghana (Yendi) to the middle belt (Yeji) then east (Begoro) and then to the middle of the south (Agogo). Importantly, this shows that all of Gariba's land leases are informal agreements and the main form of land acquisition by Fulani cattle owners in Agogo, which remain susceptible to confiscations and evictions.

From the incidents above and my interviews, Fulani land conflicts with farmers have been over:

- High level of land tenure insecurity/confiscation of pasturelands acquired by Fulani pastoralists for agricultural activities due to the expansion of farming activities. These expansions and competitions for land are used to justify confiscations of Fulani lands, which are hinged on primordial and constructed identity (citizenship and belonging).

- Lack of property rights (land) and limited Fulani pastoralists' access to land: Lund (2011) has argued that lack of property rights including that of land is a major reason for conflict. Fulani lack of land rights makes their use of land resources seem 'illegal' in the eyes of farmers. Therefore, when Fulani are in possession of land, their 'illegal' status in using the land is challenged resulting in conflicts. Fulani lack of property rights gives rise to the confiscation of lands that are leased to them. This clearly reinforces Lund's (2011) conceptualisation of legitimacy of access.

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[96]During my study, I had the opportunity to get copies of the lease agreements witnessed by a solicitor of the Supreme Court of Ghana (E. A. Ashley Eso.) and the Registrar of Lands of Ghana.

- Failure by Fulani to regularise their land acquisition titles and properly register them with land titles: Gariba in incident 3 above keeps getting short-term leases from individual landowners without legitimising these lease contracts. Many Fulani pastoralists acquire land leases informally without properly going through the legal process of land tenure acquisition. Farmers have accused some chiefs of illegally allotting lands to Fulani and taking monies from them without any recourse to the ATC and the law.[97] In Gushiegu, Fulani herders move around from one community to another due to lack of land rights and land tenure insecurity. Ali, who is a 26-year-old Fulani victim of the August 2011 attack, claimed that his family had to move more than 10 times in Gushiegu mainly because they were a 'landless' people.

Just as Aryeetey, Alhassan, Assuming-Brempong, and Twerefou (2007) have identified, the nature of Fulani land conflicts with communities involve government, chiefs (stools/skins), family heads, individuals and other groups in various permutations such as:

a) between Fulani and farmers over lands farmers claim to own or community land they have been farming on for long;

b) between chiefs and their people over giving out lands to Fulani. This is the commonest form conflicts take;

c) government and Fulani over the destruction of protected forest reserves; and

d) between individuals, who may not have ownership rights, but recognised derivative rights to land as strangers, tenants and migrant farmers. This has mainly to do with migrant farmers or some farmers with agro-companies.

6.4.1. Changing Dynamics of Land Use, Increased Agricultural Production and Resource Abundance

Yaro (2010) notes that land is gaining economic value in Ghana since there are increased investments in its usage for commercial, housing and agricultural purposes due to demographic pressures and increased agriculture. At the same time, farmers are equally seeing value in agriculture and are making strides to increase their production by acquiring more land run through common property management. More interesting is the fact that many cattle owners and pastoralists acquired lands in Agogo for large-scale cattle production due to the

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[97]This issue has often been raised by the *Agogomann Mma Kuo* in several petitions they wrote with regard to land leases to Fulani in the area. The *Agogomann Mma Kuo* has specifically accused the *Gyaasehene* (the chief in charge of land and financial matters) of allotting lands illegally to Fulani herders.

conducive climatic conditions and lush green vegetation of the area for mass ruminant production. Similarly, local people perceived that the emergence of the phenomenon of *land grabbing* in the Agogo area is due to the potential for large-scale agricultural activities and tree plantations. Unlike Gushiegu, land in Agogo has a high economic value. Many companies are engaged in tree plantation and crop cultivation in the area. Such companies include Bernard Kojo Offori Teak Plantation Ltd., Nicol-Miro Forestry Ltd. (formerly Bunfuom Teak Plantation Ltd.), Afram Plantations Ltd. and ScanFarm (Gh) Ltd.

This increase in the value of land resulting from rising agricultural production has led to competitions for land for both pasture and farming at the same time. What compounds the problem is the confiscations of pastoralists' leased lands. As Flintan (2012) notes, increased competition over land makes conflict between pastoralists and farmers inevitable. Land hitherto used as pastureland is being converted into crop farming land and plantations as seen in Ahmed's incident. Since pastoralists continue to have limited access to land, and as more crops are grown on pasture lands and along pathways, the damaging of crops by cattle has increased. This destruction tends to fuel conflicts with farmers who do not take kindly to the destruction of their source of livelihood. Also, the seizure of Fulani pastoralists' land by some farmers has led to conflicts. Lands in areas like Bebome, Abrawapong and Nyamebekyere, which Fulani herders acquired for grazing, have been seized. This land has now been converted into farms, making it difficult to get land for grazing pasture. The Fulani herders claimed they were being pushed almost to the Kwahu Mountains in the Eastern Region of Ghana to search for pasture. Various actor constellations in land acquisitions are major drivers of conflicts. These actors include farmers seeking more land for crop expansion, new people engaging in farming, pastoralists seeking pastureland and agro-companies scouting for land.

Explicitly, farmers and herders see crop destruction as the main cause of conflicts between them. However, it is the issue of land which is actually driving crop destruction and subsequently leading to conflicts. It is the quest and competition for land by both groups that result in the destruction of farms, hence the intense conflicts. Moreover, abundant resources in Agogo in the form of fertile lands for increased agricultural production, pasture and the availability of water are attracting both farmers and pastoralists to the area. Thus, the potential value of these resources explains the reasons for increased conflicts between the two. Just as Greiner (2012) notes that the potential value of a resource can be a major driver of conflicts in pastoralists' communities, these abundant resources and their value are attracting farmers and pastoralists alike to the Agogo area.

Both farmers and Fulani herders admit that the potential for crop production and cattle production in the area is high. Farmers agree that they have seen increased yields and ready markets for the production of plantain, watermelon and maize, and therefore require more land to increase their production. Pastoralists and cattle owners on the other hand stated that Agogo is endowed with rich natural pasture suitable for large cattle production. They argued that the high quality of pasture and sources of water throughout the year, and even in the dry season, attract more cattle to the area. Consequently, the value of these resources breeds competition, which invariably results in violent conflicts.

6.4.2. Land Acquisition by ScanFarm (Gh.) Ltd. and Conflicts in Agogo

One specific case study that illustrates conflict over land between large companies and farmers and Fulani pastoralists is the acquisition of land by ScanFarm (Gh.) Ltd. ScanFarm (Gh.) Ltd., formally ScanFuel (Gh)[98] Ltd., is a Norwegian company which came to Ghana in 2008 to obtain about 400,000ha[99] of *'idle'* and *'underutilised'* farmland from the *Agogomanhene* for the commercial production of jatropha. However, after completing the negotiations, 19,058ha was granted through a Memorandum of Understanding (MoU). At the commencement of registration of the lease agreement in 2010 at the Lands Commission, ScanFarm's (Gh.) Ltd. concession was reduced to 13,058ha. The company entered Ghana to produce jatropha, but after one year into cultivation, the company diverted into maize production, soybeans, sorghum and with plans to add upland rice production and teak. The registration of the company's lease with the Lands Commission is for 50 years[100] in two streams of 25 years each, with the second part subject to renegotiation and renewal. A lump sum of $23,000[101] was paid to the ATC for the land, subject to annual ground rent payment of $1 per acre per annum with an annual upward review by $0.50 to a maximum of $3 in 2014. Other issues included in the lease are unrestricted access to any water on the land for agricultural

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[98]The name was changed from ScanFuel (Gh.) Ltd. to ScanFarm (Gh.) Ltd. in 2010 following a shift of company focus from jatropha production in 2009 to food crops.

[99]This amount of money was hugely reported by the media and variously described as *land grabbing* by foreigners accompanied by displacements and evictions with no compensation. However, on the ground, this planned acquisition never materialised. Earlier upheavals against agro-investments were largely due to these sensationalised reportage by the media and spearheaded by some few but prominent groups. See http://bit.ly/1a3KPg2 and http://bit.ly/9dZ09p (Accessed 14 July 2014)

[100]According to Article 266 (4) of the 1992 Republican Constitution of Ghana, no interest in, or right over any land shall be created which vests in a person who is not a citizen of Ghana leasehold for a term of more than fifty years at any time (Republic of Ghana, 1992). It is also generally the rule that agricultural leases should not exceed 50 years at any time.

[101]Implying an average of $1.75 per ha based on the lump sum payment and the size of plot that was rented-out. This amount is not different from reported averages of $1 to $ 2 per ha of agricultural land rentals globally.

production and the agreement that land disputes resolution are to be first done by the ATC. Also, the investors are obliged to promote and provide development, including employment in the communities around their concession (interview with ScanFarm (Gh.) Ltd., 2013). The acquisition of the land by ScanFarm (Gh.) Ltd. was viewed by some community members and the larger Ghanaian media as constituting *land grabbing*, following which there were some agitations against its acquisition.

Since taking their lease, ScanFarm (Gh.) Ltd. and the other tree plantation companies (such as Nicol-Miro Plantation Ltd., and Bernard Kojo Offori Teak Plantation Ltd.) have enjoyed security of tenure of their acquired land without major challenge or confiscation of their land as compared to Fulani pastoralists. Also, the large-scale acquisition of land and other plantation concession of ScanFarm (Gh.) Ltd. and other plantation companies brought to the fore the issue of *land grabbing* in developing regions in general and Agogo in particular. Cotula, Toulmin, and Hesse (2004) note that the low dearth of information on large-scale land acquisition is attributable to limited involvement of local governments and people in negotiating and concluding land deals. In this case, the deal and dearth of information regarding the deal were mainly responsible for labelling it land grabbing. ScanFarm (Gh.) Ltd. argued that disposed usufructs were compensated for and no crops of settler farmers were reportedly destroyed, and, therefore, this could not be constituted as *land grabbing*. Importantly, however, land negotiations are handled by chiefs and the ATC and there was limited participation of the communities regarding ScanFarm's (Gh.) Ltd. concession. Also, future problems of land and water rights are likely to emerge from these concessions since ScanFarm (Gh.) Ltd. has been granted unrestricted access to water essential for agricultural production in the vicinity. Just like community agitations against Fulani land acquisition from 2009 intensified, which led to the Kumasi High Court ruling for the revocation of their land lease agreements, agitations are likely to also emerge from community members over these acquisitions by agro-investors as their (community members) demand for land is also increasing. According to farmers and herders, large-scale land acquisition of ScanFarm (Gh.) Ltd. and other agro- companies negatively impacted them in the forms of loss of lands, land tenure insecurity for pastoralists and pastoralists' limited access to resources.

Acheampong and Campion's (2014) study of large-scale land acquisition for commercial production of biofuel crops in 11 communities in Ghana, including Agogo, found that the land acquisitions have led, in some cases, to violent conflicts between biofuel inves-

tors, traditional authorities and the local communities, and loss of livelihoods for local farmers due to expropriation. This, in their view, has affected households' food production and land tenure insecurity of households. The authors for instance found that:

> […] In Agogo in the Ashanti Region of Ghana, most farmers reported that, contrary to the belief that Jatropha does well on marginal lands, the land given to the Jatropha Company (formerly ScanFuel Ltd., now ScanFarm Ghana Ltd., Agogo, Ghana) by the chief was a productive or fertile land which was being used to cultivate crops such as maize, yam, plantain, and cocoa. The farmers claim that this has forced them to move to marginal lands which are unproductive or infertile. The size of land lost to Jatropha cultivation by 109 respondents who were able to provide this information ranged from 1 to 1000 acres. The majority (69.7%) of the 109 respondents reported that they lost up to 10 acres, 7.3% lost between 11 and 20 acres while another 7.3% lost more than 100 acres […] (Acheampong & Campion, 2014, p. 4592).

Wisborg's (2012) study of the ScanFarm (Gh) Ltd. trans-national land deal in Agogo found similar results in which the production shift from biofuel production to large scale mechanised food production triggered community agitations and resistance over loss of farming land and environmental impact. Households, for instance, that depended on charcoal production were affected by the land deal due to the reduction in tree cover cleared for ScanFuel/ScanFarm production and thereby lost their income. Similarly, Campion and Acheampong's (2014) study of the chiefs' role in fueling conflicts in industrial jatropha investments are mainly seen in the chiefs' arbitrary lease of communal lands to agro-investors without transparent disclosure about money received, the acreage of land leased and the displacement of farmers.

The field data revealed that the landholding system in the AAND allows the stool to make various land allocations to various land users in areas that are not under usufruct rights. In instances where such usufruct rights are infringed upon, the owners are offered alternative land or compensated promptly, adequately and fairly. Article 36 (8) of the *1992 Republican Constitution of Ghana* (Republic of Ghana, 1992) stipulates that stools administer stool land as fiduciaries for the entire community, and use the proceeds from land transactions for benefit of the entire community. However, in reality, this is not always the case and this has been one source of farmer agitations and conflict with traditional authorities and the agro-companies. Ubink and Quan (2008) have emphasised that some chiefs have administered stool land as though it were their private property and have benefited unilaterally from such proceeds. These allegations were made against the *Agogomanhene* with regard to the sale of land.[102]

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[102]In one of the petitions of the *Agogomann Mma Kuo* they accused thee *Agogomanhene* of lying about the amount he collected from the cattle owners during the 2006 lease agreements.

Also, interviews in communities such as Dukusen, Afrisire, Nyantokrom and Nsonyameye, where large lands were allocated for large-scale farming, herding revealed that community members had no information on the transaction amounts and could not point to any recent benefits in the form of projects emanating from the management of stool land revenue. For example, with the ScanFarm (Gh.) Ltd. concession, some 75 usufructs were reportedly displaced together with some settler farmers (Wisborg, 2012). This subsequently raised concerns about compensation payments and demonstrations in Agogo in 2010 against the acquisition of land by ScanFarm (Gh.) Ltd. According to the farmers, cash compensation paid to them was inadequate as compared to their productive lands acquired by ScanFarm (Gh.) Ltd. ScanFarm (Gh.) Ltd., however, argued that the compensation was paid[103] according to international standards, and, therefore, was not inadequate as farmers had claimed.

According to the farmers and local groups, the acquisition of land by ScanFarm (Gh.) Ltd. was purely top-managed by the *Agogomanhene* and the ATC, with limited involvement of community chiefs and village leaders. There was generally limited information flow and community involvement throughout the acquisition process. For example, the household interviews confirmed that over 90% of households in the area had no idea about the price paid for the land, the term of the lease, the boundaries of the parcel and terms and conditions under which the transaction was completed. By and large, there remains a wide disconnect between the expectations of surrounding communities in terms of social infrastructural developments, employment and other actual benefits of the land acquisition in the communities. According to German et al. (2010), many of the purported ecological and rural livelihood benefits from commercial agricultural projects especially jatropha *curcas* have not materialised and many companies are yet to fulfil their promises, especially on employment and social infrastructure. These lapses (in information flow and accountability of traditional authorities for revenues accruing from customary land transactions) emanate from customary land administration in the AAND to the nature of land tenure, which empowers the chief to negotiate land prices, collect land revenue and to use such revenue for the *"maintenance of the stool in keeping to its status"* according to Article 271 of the Constitution of Ghana (Republic of Ghana, 1992).

According to the Civil Society Coalition on Land [CICOL] (2008), the boom in commercial agriculture, especially for biofuel feedstock in Ghana, has led to the alienation of

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[103]In an interview with the manager of ScanFarm (Gh.) Ltd., he stated that the compensation was paid at GH¢33/US$22 per acre or GH¢74/US$49 per hectare.

some autochthonous communities from their communal lands. According to farmers, the ac-
quisition of 13,058ha of land by ScanFarm (Gh.) Ltd. for a 50-year period greatly influenced
land tenure in the AAND. A farmer interviewed for this study noted that the acquisition led
to a scramble to acquire land by both 'foreigners' and local people in the area. He maintained
that more land is now needed for tree plantations, crop farming and cattle rearing. Even
though it was reported that the company has been operating since 2008, it has only 10% of
the land acquired in cultivation. Also, after switching production focus from jatropha in 2008
to food crops (maize, sorghum and soybeans) in 2010, its relationship with smallholders and
herders has changed tremendously. Areas that were reportedly used for commercial farming
or cattle herding, were characterised by access to water and low-lying of savannah grazing
land. Water became an issue because ScanFarm (Gh.) Ltd. in their lease agreement were
granted uninterrupted access to water for their farm production. This included access to the
Afram and Oweri Rivers which drain the area, which are sources of water supply for both
farmers and herders. Competing access to water and variations in the nature of water use
among the stakeholders is a potential source of conflict.

Conflicts were also reported regarding strayed cattle into ScanFarm's (Gh.) Ltd.
maize field. In August 2013, while this field study was being conducted, there were reports
that some cattle belonging to unidentified Fulani herders had strayed onto ScanFarm (Gh.)
Ltd.'s maize farm destroying the crops. The Company resolved to kill such animals subse-
quently and surcharge the animal owners. The land acquisition has compelled smallholders
and herders to compete for productive lands outside the concession of ScanFarm (Gh.) Ltd.
Even though ScanFarm (Gh.) Ltd. is currently not growing crops on about 90% of their con-
cession, all this area is protected from intrusion by smallholders and headers. Similarly, tree
plantation companies have had conflicts with Fulani pastoralists over the destruction of their
tree seedlings. Nicol-Miro Plantation Ltd[104] for instance claimed that between 2009 and
2011, almost all seedlings sown by the company on its acquired land were destroyed by cattle.
They stated that attempts to drive away the pastoralists from trespassing onto their plantations
were always met with violent resistance. Pastoralists, on the other hand, claimed that these

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[104]Nicol-Miro plantation was established in 2008. Boumfum is the name of the forest reserve in which the
company operates and commonly known by the local people. The company initially adopted the name
Boumfum Plantation Ltd. before changing to Nicol-Miro. It is joint South African and British venture. The
company works in the Boumfum forest reserve and works in close cooperation with the Ghana Forestry
Commission. According to the company, in partnership with the forestry commission, their tree programme
will help green the environment and reclaim the degraded forest. The percentage share after harvesting of the
trees is 90% - 10% in favour of the developer (company). The company has 60 compartments for now and the
total allocated land is 5,002.28ha. Only 1, 467.62ha is currently planted.

plantations are cultivated on land hitherto used as grazing areas for their cattle, and because of this, it is difficult to find new pasturelands to graze their cattle. Nicol-Miro Plantation Ltd, however, maintained that their land is part of a forestry concession, and, therefore, was never pastureland for cattle grazing. The official interviewed stated that:

> […] the lands were acquired legally from both the Lands Commission and Agogo Stool. So farmers and herders have no business entering into the reserves. We have had serious confrontations with the local farmers and herdsmen. The claim that they have lost their lands is because they have illegally entered the forest to farm and graze [...]. All they were doing was against the law. We tried the taungy system where we could engage the local people, but they didn't cooperate because they were too interested in their crops. Hence, the conflicts (Interview with Official of Bunfuom Teak Plantation Ltd, Agogo, 21/09/2013).

The official of Nicol-Miro Plantation Ltd interviewed claimed that, sometimes, workers of the plantations were violently attacked and they had to call on the officials of the Ghana Forestry Commission and security agencies to protect their concessions. Similar conflicts have occurred between pastoralists and the Bernard Kojo Offori Teak Plantation Ltd over cattle straying into their concessions and destroying the plantations.

For pastoralists, the large-scale land acquisition has further reduced their access to land and resources (fresh pasture and water), increased their tenure insecurity and escalated conflicts with farmers. Pastoralists claimed that before the large-scale land acquisitions, they grazed their cattle freely because of the availability of 'idle' and unused lands. Concessions that they acquired were also closer to this land where they went to graze freely. According to Fulani, after most of the land deals, areas that they grazed were either turned into farms or plantations, making it difficult to find grazing land.[105] Aside from this, some of their land concessions were added to the land acquired by the companies. Like crop farmers, pastoralists with lands in Dukusun, Affrisire and Kwame Addo claimed they were displaced after the ScanFarm Ltd. acquisition. They then had to move to other villages or relocate out of the Agogo area. Also, the loss of farmers' lands intensified agitations mainly against Fulani pastoralists occupying community lands. Farmers openly complained that "we cannot have our own land and strangers will have enough land while we do not have land to farm." This was compounded after the court ruling in 2012 that pastoralists move out of all lands. The confiscation of Fulani acquired land by farmers has led to resistance by them and their cattle owners due to difficulty in getting grazing land.

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[105] Officials of ScanFarm (Gh.) Ltd., Nicol-Miro Forestry Ltd and Bernard Kojo Offori Teak Plantation Ltd maintained that the lands they acquired were never part of pastoralists' lands.

Generally, in the midst of scarcity of land, fears of land grabbing and land use conflicts, pastoralism is gradually coming under serious threat as pastoralists do not have land to support their activities. They are being pushed away and some are relocating to areas where land resources are scarce in most parts of the year. As Flintan (2012) notes, pastoralists usually suffer land insecurity in times of agricultural diversification and expansion, conflicts and land grabbing. In the midst of commercialisation, privatisation and commoditisation of land and intense competitions for it in Africa, pastoralists are unable to get access to land (Flintan, 2012). That is why Besley (1995) states that land markets move land tenure from communal towards individualised rights. The individualisation of land rights, however, limits livestock mobility and creates tensions between nomads and smallholders. Besides, Tsikata and Yaro (2011) have argued that transnational land transactions are causing conflicts among farmers and pastoralists, and leading to potential loss of arable land by smallholders in Ghana.

6.5. Farmers' and Herders' Conception of Space and Conflict

Conflicts over land between herders and farmers are sometimes spatial where space is constructed by both groups as geographical, cultural and economic. The two conceptualise land space differently. To Fulani herders, any uninhabited geographical unit is empty and available for their use whilst community members and farmers say that there is no empty space or free land (cf. Barre, 2012). Fulani herders' migratory corridors to pasturelands are always closer to sources of water, especially during the dry season where pasture is scarce. Besides, the pathways to pasturelands and sources of water are the spatial movements of herders to graze the cattle. Adriansen (2008) states that Fulani pastoralists' mobility is influenced by availability of resources such as sources of water around pastures. The author found in Ferlo in Senegal that often, pastoralists would move into the *rumaano* (a constructed camp) which is located near a pond making water available to the livestock. Adriansen (ibid.) observes that the herders' mobility is intensified in the dry season where finding water and pasture is difficult, and this might take them to boreholes or crossings into neighbouring pastoral unit for water. Mobility of pastoralists, according to Adriansen (2008, p. 215), is found where "key resources or 'wet-lands in dry-lands' are highly productive in low-lying areas, along rivers or lakes."

Spatially, herders' movements are conceptually 'constructed' such that they routinely move along these constructed spaces. Instructively, herders culturally conceptualised any space of land that has pasture on it as naturally given to them and is therefore suitable for use

by their cattle. They, therefore, do not see why farms should be made on lands with rich pasture and pasture pathways. Thus the cultural conception of Fulani that any piece of land that is unoccupied is no man's land tends to influence their grazing on pasturelands. A Fulani cattle owner believed that:

> Pastoralists everywhere in this world require much land to graze their animals. This requires effective demarcation of land for farming and grazing of cattle. Lands need to be separately demarcated for cattle grazing and for farming to prevent cattle from entering into peoples' farms. But here, you have farms made everywhere and even on pathways that should be left for cattle. How do you go to grow crops on a river bank? Where do you expect cattle to move to drink water? This will clearly bring conflicts because the cattle will definitely step on your crops leading to their destruction. So I believe that part of the reason for our conflicts has to do with spatial land distribution where zoning of land separately for crop farming on one the hand and cattle rearing on the other hand are not done (Interview with Fulani cattle Owner, Kowereja, 19/08/2013).

Importantly, space is culturally constructed by Fulani within the milieu of their understanding of their cattle mobility (see Unwin, 2000). Farmers, however, see this differently. Farmers politically and culturally construct space with the conception that all lands have an owner and to own land and access resources from it, one must belong to the autochthon group. Geographically, they think that fertile lands are only meant for crop cultivation and not for animals. They therefore construct fields near these pasture pathways and water sources in order to maximise the water available in these areas. Watermelon and vegetable farmers, for instance, like to grow crops near the riverbanks for easy access to water. These different conceptions of land space are a source of conflict because herders' cattle mobility, for instance, to farms on banks of water bodies leads to crop destruction and violent confrontations. Adriansen (2008) discusses a similar situation in Senegal where land along the Senegal River has served as a key resource area for pastoralists, but the area has been converted into large irrigated fields with little space for pastoral activities. Space here is important for control of land and resources by farmers and Fulani herders. This is why Lefebvre (1991) argues that space is a means of establishing and maintaining control, power and domination. Farmers, in particular, use space and territoriality to assert their power and rights over land and resources.

The spatial conception of land also needs to be understood within belonging/autochthonous rights over land and territorisation of land which is important in understanding conflicts. This explains Peluso and Lund (2011) treatise that territorisation and space making enable spatial enclosures which result in land conflicts and increase land tenure insecurity.

6.6. Land, Farmer-Herder Conflicts and Social Relations

The discussion of land and farmer-herder conflicts above reveals that social relations are mediated, contested and interacted through resources. Whereas there is cooperation among some groups and herders over land use (through land leases for example), there are conflicts with other actors over the use of land. This relationship between land and social relations in this case is theorised and situated within social construction of belonging, citizenship and legitimacy (Peters, 2004). Figure 6.2 argues that, in the use of resources/land, various actors comprising local farmers, migrant farmers, herders, traditional authorities, agro-companies, government and state officials and local associations engage in various interactions. These actors socially construct the use and access to resources and land within the concepts of belonging, legitimacy and space and place-making (cf. Lentz, 2005). These social constructions become the basis of relations between various actors. Social relations are then acted out through agitations against Fulani herders, for instance, through forceful evictions and, eventually, violent attacks. Another form of representation of these social relations is through negotiations and cooperation over the use of resources through land deals and leases. Conflicts also arise between traditional authorities/chiefs and local people who challenge the authority of chiefs over leasing wholly-owned communal lands to Fulani herders in particular. The discussion also reveals that governance of common resources such as land is contested and institutions for the management of these resources have their authority challenged, and this interlocks power relations/struggles in society.
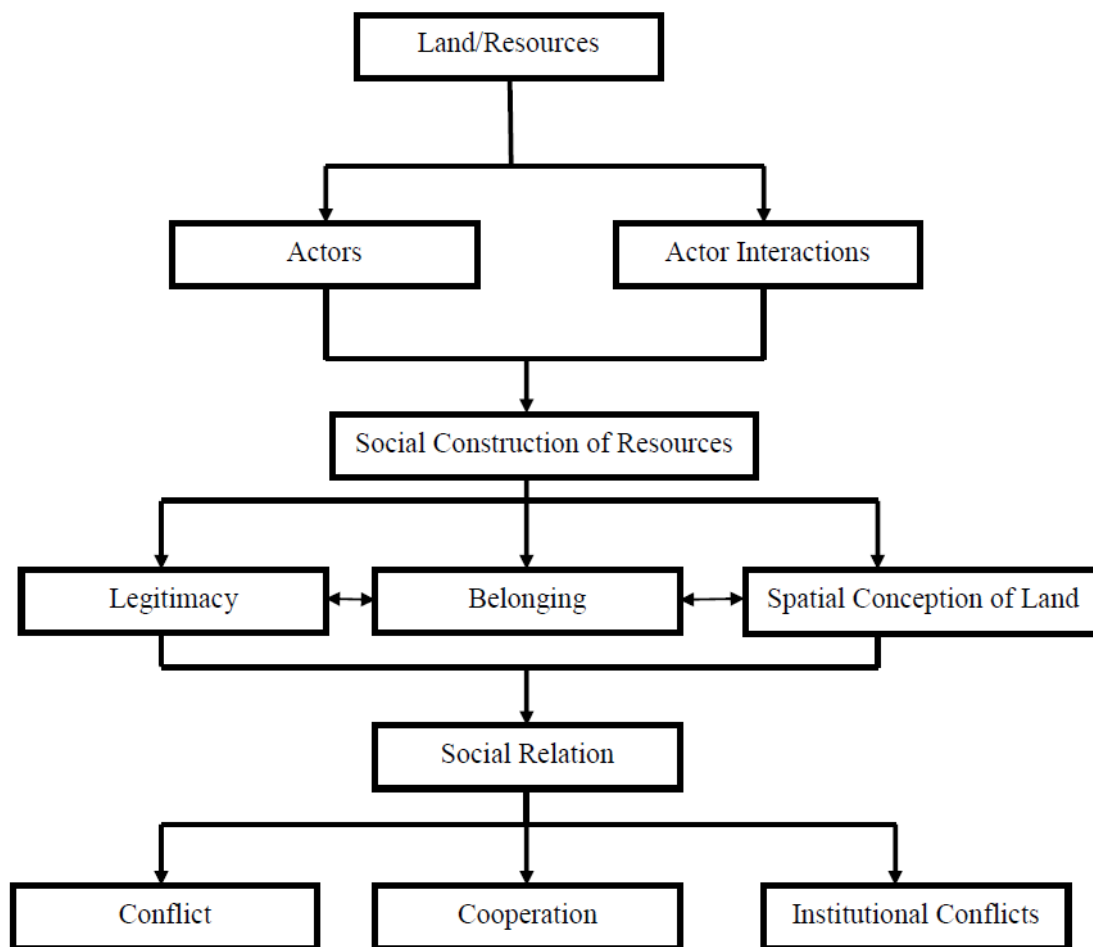
Figure 6.2: Conceptualising Land and Farmer-Herder Relations
Source: Author's Construct, 2014.

6.7. Conclusion

Fulani pastoralists generally have no rights to land tenure and natural resources in Ghana. The issues of legitimacy and belonging/citizenship – primordial and constructed identity is tangential in one's access to land rights in Ghana. Whilst this is largely not the same for settler farmers, agro-investor and tree plantation companies (as in the case of ScanFarm (Gh.) Ltd.) in Agogo, Fulani pastoralists' access to land is conceptualised from citizenship/belonging and legitimacy of resource/land claims. Agro-investor and tree plantation companies have more guaranteed land tenure security and legitimacy than Fulani pastoralists. In times of conflicts with local farmers, Fulani are evicted from lands, and lands leased to them are confiscated. As landless people (in the sense of belonging), Fulani

pastoralists' quest to graze their cattle on lands deemed 'wholly owned' has put them in conflict with farmers. Lentz (2005) conceptualises this as the 'politics of first-comer claims."

A main driver of farmer-herder conflicts in both Agogo and Gushiegu, therefore, hinges on land – whether it is about crop destruction, resource scarcity or abundance, herder migration or power dynamics - land is central in these conflicts. These conflicts are mainly heightened by pastoralists' land tenure insecurity through continual confiscations of their lands, evictions by landowners in times of conflicts, history of expulsions (especially in 1989 and 1998 by the Ghanaian government), Fulani's continuous migration and informal land contracts. Small-holder farmers have also suffered loss of their lands from large-scale land deals as well as competitions from pastoralists in their desire to increase their land size to produce more.

This chapter has thus argued that the use of resources and land between farmers and herders are contested, sometimes negotiated and constantly interpreted within the realms of legitimacy, belonging, space making/land territorisation, and the economics and value of land.

7. COOPERATION IN FARMER-HERDER RELATIONS

While conflict is seen as rampant and often violent, and conflictual relations are the most visible form of relations that exist between farmers and Fulani herders in many parts of Ghana, as seen in previous chapters, there are everyday cooperative relations between the two that remain strong. The two are 'cultural neighbours' (Gabbert, 2010) who cooperate both in times of violent conflict and periods when there is no conflict. Cooperation between the two is expressed through everyday peace, interactions, cattle entrustment, resource sharing, trade, friendship, visitations, exchanges, communal labour and social solidarity. In the midst of violent conflicts, there are situations where the two are still cooperative and live peacefully. The objective of this chapter is to examine the cooperative relations that exist between farmers and herders and how these relations are expressed. Borrowing from theorisations of *cultural neighbourhood* (Gabbert, 2014; Gabbert & Thubauville, 2010) and *everyday peace* (Mac Ginty, 2014; Mac Ginty & Richmond, 2013), I used one community from each of the two study sites to illustrate how cooperation exists between herders and farmers in the midst of conflict. I first explore how the two cooperate and also present views from farmers and herders on what they propose in terms of how cooperation can be reached by both in order to resolve and prevent violent conflicts.

7.1. Everyday Peace and Cooperation between Farmers and Fulani Herders

My presentation of everyday peace and cooperation between farmers and herders is based on conceptualisation of *everyday peace* from the works of Mac Ginty (2010, 2012, 2014). This is because farmers and herders are engaged in everyday routinised forms of peace and cooperation, which includes avoidance of confrontations, reciprocity, ensuring social order and cultural norms of peacemaking and cooperation (such as showing respect; e.g. greetings, social ceremonies and social solidarity). For the purposes of this discussion, I used everyday peace and everyday cooperation interchangeably.

Cooperation between farmers and herders is an everyday affair as the two cooperate more than they actually engage in violent conflicts. However, conflict is more frequently

reported on and discussed in the media and by the general populace.[106] Cooperation between the two has been long-lasting, particularly in Northern Ghana, where historical cooperative relations have existed for over a century when transhumant Fulani occasionally migrated to Northern Ghana in search of resources. As the migrations continued, relations and interactions between the two grew stronger when cattle were entrusted to herders and, when other Fulani with their own cattle sought permanent residence in communities. Many scholars have underscored that cooperative relations between the two have always been characterised by friendships, exchanges, entrustment of cattle, complementarity and personal relations (Abubakari & Tonah, 2009; Davidheiser & Luna, 2008; Hagberg, 1998; Pelican, 2012). Meier, Bond, and Bond (2007) note that pastoral interaction occurs at multiple geographical and temporal scales with the interplay between endogenous and exogenous factors adding complexity to the dynamics that is punctuated by both cooperation and violent conflict. These forms of cooperation are seen in everyday mutually beneficial cooperative relations between the two and are present during times of conflicts, including violent ones. In fact, cordial cooperative relations between herders and farmers are widespread across West Africa (Waters-Bayer & Bayer, 1994).

From the interviews conducted, farmers and herders conceptualise cooperation as:

- peaceful co-existence and everyday interactions that are mutually beneficial and involve symbiotic relations. This conception of cooperation is used in the sense of the absence of violent conflicts where co-dependence exists between them in a community. This kind of cooperation involves cross-cutting ties and routinised processes of social interactions among actors that are regularly repeated (see Mac Ginty, 2014);

- peaceful resolution and settlements of conflicts are seen as a process of negotiations and conflict mediation where a third party intervenes in cases of conflicts through actors and institutions. Mac Ginty's (2014) three premises of everyday peace (hybridity, the heterogeneity of groups in peacemaking and the prevailing conditions/environmental factors in peace) are important here;

- social order, which refers to stability, normalcy and the absence of violence in the community. Beyond this normative assumption, social order is seen as a structuring characteristic of social interactions (cooperation and peaceful coexistence) (see

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[106] This came up in various interviews in Gushiegu.

Mielke, Schetter, & Wilde, 2011). Therefore, institutions (in this case formal and informal localised ones) are necessary for social order since they are in charge of laws which regulate behaviour.

Thus the respondents' conceptualisation of cooperation reflects social interactions in everyday practices and actions of co-existence in the community between them (Mac Ginty, 2014).

As noted earlier, the historical rendering of services by Fulani herders to local cattle owners and farmers developed in Ghana over time as a result of the permanent migrations of Fulani. These services they render include entrustment of cattle to Fulani; Fulani using bullocks to plough farmers land for planting; and helping with farm labour have been essential for building up everyday cooperative interactions between Fulani and communities. The entrustment of cattle to Fulani developed because of their skill and ability to herd cattle and also the lack of herding labour within Ghana. The introduction of Free Compulsory Basic Education (FCUBE)[107] by the Ghanaian Government made it compulsory for every child to be in school, and, therefore, parents whose children hitherto herded the cattle were put in school. This made the services of migrant Fulani herders attractive.

Besides, cattle rearing is an old tradition in Northern Ghana and therefore is well-suited to the cultural milieu of the Fulani. This common interest in cattle rearing has helped to build strong relations with cattle businessmen, local chiefs and farmers who own cattle. Thus, the ability of local actors to maintain forms of peacemaking through cultural behiviours and practices of the local population remains crucial in everyday peace (see Mac Ginty, 2014). Exchanges and resource sharing between the two are also common forms of cooperative interaction. The two have cooperated largely in the use of resources, particularly, land and water. There are usually freeholds of land given to Fulani by communities for settlement and farming in Gushiegu. The cattle are allowed to feed on leftovers (crop residues) from the farmland in many communities in Gushiegu and also to drink from water bodies such as rivers, streams, dams and even boreholes. It is not uncommon to see Fulani cattle drinking from boreholes used by communities. These forms of sharing and exchanges are more visible in Gushiegu rather than in Agogo, although in parts of Agogo, especially Kowerese, there are exchanges in the form of farmers giving food crops like plantain, watermelon and vegetables to herders, and herders sharing milk with farmers and community members.

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[107]FCUBE – Free Compulsory Universal Basic Education is a constitutional provision in Ghana that makes it compulsory for all school-going children to be in school. Since its introduction, enrolment has risen at the basic level more than 90%.

Economic relations between farmers and Fulani herders are also strong. The two share markets, where they buy and sell from each other. Women traders, in particular, have very good relations with herders since herders buy basic food items such as salt, sugar and bread from them, whilst Fulani herders or their wives sell milk, eggs and fowls to market women and community members (cf. Waters-Bayer & Bayer, 1994). Women traders therefore feel affected when violence between farmers and herders soars. A trader whom I observed selling bowls of maize and salt to one of my Fulani informants remarked that:

> In fact the Fulani herders have always bought things from us traders and they really do buy many things. I have befriended many of them and they often come here to buy from me. When the violence broke out last year (2012) and Fulani could not come into the town centre, it really affected me because most of those who buy from me are the Fulani herders. A good number of them are very sociable and often joke with me here. Like this guy who just finished joking with me; and that is how it is with many of them and us (Interview with Trader, Agogo Town Centre, 22/09/2013).

Obviously from the quotation above, violence hinders everyday peaceful relations, which is clearly seen in trade, between the community and Fulani, since trade is mutually beneficial to both. In fact, many of these relations are characterised as joking relationships. I observed the term *aboach*, meaning 'my good friend,' which was frequently used by traders and some community members for the Fulani. In the Gushiegu Cattle Market (see Figure 7.1), Fulani often constitute half of the traders present at the market and interactions with others (e.g. butchers and businessmen) remained highly cordial. Trade relations are even built at the homes of Fulani where butchers come to buy cattle. Community members also regularly go to their homes to buy milk, eggs and fowl. Fulani settlements within Ghanaian communities help to build relationships with different kinds of people. Frequent visits help to build personal friendships with butchers, chiefs, elders and farmers with whom gifts are exchanged on a regular basis. Accordingly, Fulani argued that their generosity and willingness to offer gifts to their hosts enable them to build friendships with people. These friendships are often characterised by visitations, involvement in communal labour, material support and social solidarity towards their host communities. On several occasions, I met butchers and other people at the homes of Fulani in Bulugu eating, chatting and sharing jokes together.

Other economic cooperative relations involve material support, loaning of money and food (cf. Pelican, 2012) between community members and the herders. Fulani in Bulugu and Kowereso stated that some community members would often loan cash to them during the lean season and whenever they were in need. Intra-Fulani friendship, solidarity and economic

support are also important. They support each other during violent confrontations with communities by providing shelter and stock replenishment and fighting a common 'enemy' (cf. Pelican, 2012 and Bollig, 2006), as well as, sharing food, resources and loaning money.

Figure 7.1: Fulani and Local People trading at the Gushiegu Cattle Market
Source: Field Data, 2013/2014

Social solidarity between Fulani and members of the communities in Zanteli, Kpatinga and Bulugu is strong and involves reciprocal participation in naming ceremonies, funerals, weddings and festivals (Breusers et al., 1998 found similar relations between Mossi farmers and Fulani herders in Burkina Faso). By attending these ceremonies, Fulani contribute both financially and socially to their performance. The two also pray together in the same mosques. There are also few marriage ties between Fulani pastoralists and non-Fulani community members. For instance, a Fulani, Musah Makere, is married to an Asante from Agogo and this is well known by many in the Agogo Township. Other hidden sexual relations, according to Fulani, exist between local people and Fulani herders, although some indigenous ethnic groups claim marriage or sexual relations between them and Fulani are traditionally forbidden. The Dogomba, Konkomba and even Asante (in some areas) have no marriage

relations with Fulani. The Dagomba in particular see it as 'waywardness' for any member of their ethnic group to have sexual relationships with Fulani. A Dagomba man stated that anyone from his ethnic group who has sexual or marriage relation with a Fulani is "a completely useless human." The reason I conjecture is because of the inferior status given to the Fulani, who, in the past, herded Dagomba kings' cattle and were slaves of the Dagomba kings and the aristocratic class.

The foregoing forms of cooperative relations provide mutual benefits to both Fulani and local people. Absence of cordial relations with Fulani herders made community members in Toti and Sugu lament about the forced movement of Fulani from their communities when the Fulani were attacked in 2011. An elderly man lamented that:

> […] Now that the Fulani are gone, if you buy cattle it becomes difficult to keep them since our children are all in school and there is no one to herd them. When they were here we benefited greatly. If you wanted a fowl to welcome a visitor, to buy a goat or sheep and you went to them, you get it to buy. When one buys anything from them you will realise that it was given out at a token price. Their moving away from the community is a disadvantage to us […] (Group Interview with Elders of Sugu, 24/10/2013).

The transcript above shows that both herders and farmers benefit symbiotically from cooperation. The entrustment of cattle, sharing and trade reiterated by the elder in the interview above indicate that there are negative effects on their cooperative relations when violent conflict breaks out, hence farmers and herders' conceptualisation of cooperation as social order and mutually beneficial interactions.

Comparatively, cooperative interactions between local communities and Fulani are stronger in Gushiegu than they are in Agogo. Relationships that exist between farmers and Fulani herders in Agogo exist mainly at the individual level between farmers and a few local cattle owners and their herders rather than with farmers and many Fulani cattle owners and their herders. In FGDs, farmers in Agogo claimed that they did not want to be 'friends or have any interactive relations' with Fulani herders nor their cattle owners, because befriending them is dangerous. According to them:

> When you befriend them, they get the opportunity to bring their cattle on your land or graze on your farm and subsequently shoot you when there is a misunderstanding between you and them. The case of Kojo Bila is an example. He was on friendly terms with the Fulani herdsmen and often hosted them in his house. After a little disagreement with him, the herdsmen killed him and ran away[108].

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[108] FGD with farmers in Bebuso (16/09/2013)

Thus, past killings of several local people like Kojo Bila explain their limited interactions and the avoidance of close contacts with Fulani. This is particularly important in the midst of cooperative relations and co-existence between Fulani and farmers in Kowereso, which is also in Agogo (discussed later in this chapter). Following from these arguments raised by some farmers that they have little or no level of cooperation with Fulani herders, the local dynamics of cooperation becomes important and needs discussion. Importantly, cooperation between farmers and herders is dependent on the types of networks, social interactions and social ties built between farmers, community leaders and community residents, on the one hand, and herders' cattle owners, on the other hand (see Chapter 8).

Diagramatically, I represent everyday forms of peace and cooperation between farmers and herders in Figure 7.2, where I illustrate with examples such as trade, cattle entrustment and land leases/releases. In Figure 7.2, I categorise the nature of everyday cooperation between the two into three types: social, economic and resource cooperations. Social cooperation denotes cooperation in inter-personal relations such as friendships and exchange, visitations, social solidarity; economic cooperation deals with coopration in matters relating to production, goods and services like trade, payment of compensation, material support, loaning of money, labour (employment of herders to herd cattle). Resource cooperation, on the other hand, relates to cooperation in the use of natural resources such as sharing of resources including land leases and deals. The intersection in all three types of cooperation is social ties/networks, as I shall explain in Chapter 8, influence and provide the impetus for cooperation, since the patterns of relations among actors define economic, political and social structures and facilitate actions between them (Wasserman & Faust, 1994). Since actors' political, social or economic relationships are a mosaic of ties based on indirect and direct interactions (Bandyopadhyay et al., 2011), social networks need to be built to facilitate these types of interactions and gain social capital.

In Figure 7.2, trade, for instance, intersects with both social and economic cooperation since interpersonal relations are embedded in and needed to build economic ties. Cattle entrustment enables farmers and Fulani pastoralists to cooperate socially through daily interactions, visitations and by showing social solidarity to each other. The land used for rearing cattle is also a form of resource cooperation which is leased out or given to herders on freehold to settle, farm and rear their cattle. This is an important example of economic cooperation for Fulani herders who get their source of labour (employment) from this entrustment of the farmer's cattle and by economic payment to landowners and chiefs.

Trade

Social Cooperation   Economic cooperation

Social
Ties/Network

Cattle Entrustment   Land Leases/Release

Resource Cooperation
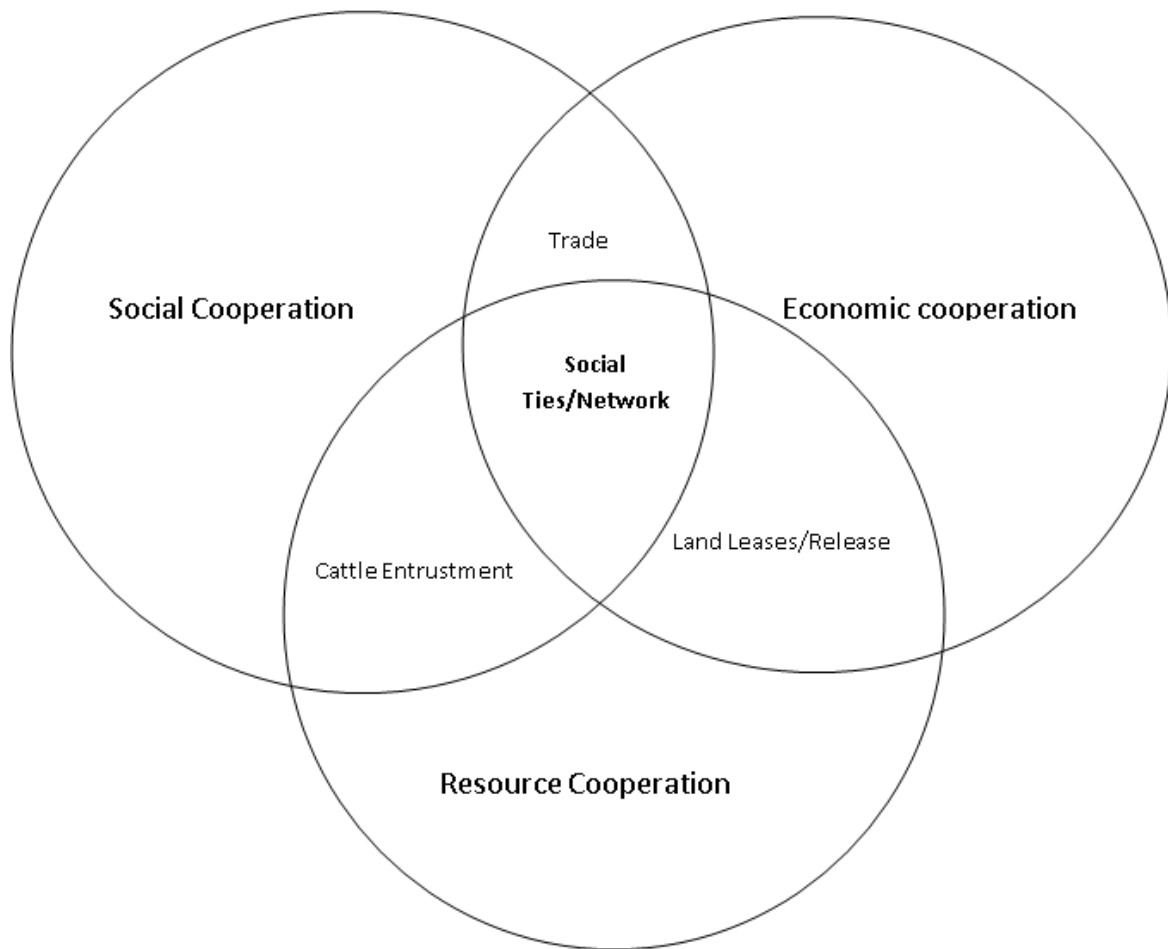
Figure 7.2: Linkages of Farmer-Herder Cooperation
Source: Author's Construct, 2014.

In a nutshell, everyday cooperation between farmers and herders, as Mac Ginty's (2014) treatise of *everyday peace* shows, is present in everyday interactions and life, even in times of violence between individuals and groups Their cooperation is bottom-up and localised peace and cooperation mechanisms, which stands in contrast to top-down, standardised, technocratic and institutionalised approaches to peace, (see Mac Ginty & Richmond, 2013). In everyday forms of co-existence between herders and farmers, many forms of peace-making are built both in the absence of conflict and during conflict (where there are settlements of disputes and reconciliation).

7.2. Cooperation in the Midst of Conflict

Axelrod (1984) notes that cooperation does occur in the midst of conflict, since it exists within an interacting system of relationships (see also Rogers, 1999). In many instances, Fulani herders are cultural neighbours who are friends, enemies and allies to their host communities and with whom they cooperate in peaceful ways. As friends, herders and local farmers respect each other for their strength and virility and, at the same time, engage in conflicts over several issues such as crop destruction. Despite the violent conflict they engage in, they have productive cooperative relations and build strong social ties. As cultural neighbours, farmers and herders know each other; they know cattle owners and their herders; they interact with each other and live side by side in the same communities. Farmers and herders are also ethnically and culturally different and are aware of the each other's differences through ethnic boundary maintenance (knowledge of their ethnic differences). In Gushiegu, cross-cutting ties are conspicuous between the two – both are Muslims and have similar customs of cattle rearing, which is seen as a measure of wealth and prestige in their societies. Besides, farmers and pastoralists engage in effective modes of communication in the process of conflict resolution and mediation.

In two communities in both study sites, Kowereso (Agogo) and Zanteli (Gushiegu), elements of cultural neighbourhood are obvious. In Zanteli, for instance, while herders have engaged in conflict with farmers, they cooperate with the community, live side by side with local farmers and negotiate compensation payments. In these interactions, the involvement of chiefs, elders and police are important for maintaining cooperation during the outbreak of violence. According to Breusers et al. (1998), certain local settings that show that relations between Mossi and Fulbe are strained do not necessarily mean that in all cases relations between the two are conflict-ridden. The authors maintain that there are other settings where these tensions seem almost absent. Thus, despite violent conflicts, there exist cordial, cooperative interactions between Fulani and their neighbours in Agogo and Gushiegu.

7.2.1. Case 1 - Kowereso in Agogo: No Violence in the Midst of a Violent Bloodbath

Kowereso remains a unique case of cooperation in the midst of violence between farmers and Fulani herders in Agogo. Kowereso is a farming community that has vast and fertile lands comprising forest and savannah woodland vegetation and several bodies of water, including the big Kowere River. These natural conditions make this area suitable for both agriculture and animal rearing and, therefore, attract a high migrant population of both farmers

and Fulani herders. About 90%[109] of the inhabitants are migrants from Northern Ghana who came to the area in the early 1970s to engage in farming. Fulani herders are found on the fringes of the community with their cattle. The community is thus ethnically diverse and has two chiefs – the main chief of the community (*Odikro*), installed by the *Agogomanhene,* and the *Zongo*[110] chief representing the migrants. Many of the migrants farm in the area based on short-time lease agreements with the owners of the land or the first settlers who initially farmed on the lands and/or on a shared cropping basis. With the lease agreements, migrant farmers pay a yearly fee to the owners of the land. Fulani herders also get land leases from landowners on a short-term basis for rearing cattle. According to the community chief, some are illegal squatters.

In almost all of the communities studied in Agogo, the people's attitude towards the Fulani was negative and antipathetic. However, in the case of Kowereso, the farmers that I interviewed emphasised that cordial relationships and friendships existed with the Fulani herders. They noted that, unlike other communities, where farmers and herders attacked and killed each other, there was never a single violent conflict in the community and no reports of death. A farmer stated that:

> […] actually, in our community we have not had violent confrontation with the Fulani. We hear stories of them killing other people in some communities, but we have had no single death here […]. The reason is that we do not want any trouble with them and so they respect us and we also do. […]. In case of crop damage, the committee helps negotiate a settlement. And here, we know all the Fulani grazing their cattle (Interview with 39-year-old farmer at Kowereso, 23/06/2013).

While I was in Kowereso, I observed that a few Fulani herdsmen came to the village to purchase items like sugar, bread, food and sat in the community for a while and then left. The herders chatted heartily with some community members. Two female traders stated that it was not uncommon for Fulani herders to come to buy things from them and sit down to have conversations. There also exists sharing between the community and the herdsmen.

I also observed that the herders and their cattle were located not very far from the farms of local farmers - about two hundred metres away from the farms. Three farmers whose farms were closer to the cattle noted that damage to their farmland by the cattle was rare. For instance, one of the farmers explained that:

> When the Fulani initially arrived here with their cattle, we were all worried that there would be similar violent conflicts as in the other communities. We complained several times to the community chief and *Zongo* chief about this. We also told the

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[109]This figure was provided during interviews with both the Assembly member of the community and the ANNDA Deputy Coordinating Director.

[110]The term is used in Ghana to refer to settlements of people from Northern Ghana or Muslims from other African countries.

cattle owners that because the cattle were closer to us would lead to them straying into our farms. The herders themselves were warned several times and they promised to watch over the animals carefully. I must confess that there have only been few stray cattle that have moved into our farms to destroy crops. In fact, relations with us here so far have been cordial. Sometimes, the herders come over here to collect cassava, yam, vegetables and fresh maize from us. We have also gotten milk and sometimes meat from them during the Muslim festivals. We talk regularly – daily greetings, talk about our various jobs and personal conversations. I can say that so far our relations are going on well and I have not heard or seen any violence here […]. One nasty thing happened some time ago. One of the 'strange' Fulani whose cattle strayed and destroyed one of my colleague's farm almost destroyed our relations. Fortunately, all the Fulani here supported us and the problem was resolved. You know the *Yalingonji* Fulani are normally the problem and for the Fulani here they are just very friendly […].[111]

The transcript above shows that farmers and herders have established personal relations and understandings that bind their relationship and prevent violence even on grievances that they have. The destruction of the farm by the temporary migrant herders, which almost destroyed their peaceful co-existence, was resolved when both the sedentary herders and farmers understood and agreed that the settled herders were not the cause of destruction. This is what cultural neighbours are. They transverse ethnic boundaries and understand each other's mode of communication, develop intimate contact with each other and understand each other's differences and communicate in times of disagreements to reach an understanding (Gabbert, 2014).

Avoidance of violence is another common feature of building cooperation in Kowereso. As Mac Ginty (2014) espouses, actors in everyday peace in the community have adopted escapism, which involves displaying less interest in the ongoing farmer-herder violence. Farmers see their relations with herders as better than it is in other places in the AANDA. They maintained that they never wanted any violence in the community. One farmer narrates how they avoid violence and co-exist with Fulani herders:

In Kowereso here, we cannot say that there are no conflicts with the Fulani, but there has not been any violence here. We do have problems of crop destruction, but we try to manage them and avoid confrontation with the Fulani. Generally, the relations between us and the herders have been cordial to a large extent. The herders in passing by our farms are given foodstuff such as plantain, pepper and tomatoes when they ask us. Some even come into the community to drink the local gin (*akpeteshie*) or buy cigarettes and in the process interact with members of the community. As I live in the fringes of the community, in my farm house here, I am surrounded by Fulani herders and I meet and interact with them on a daily basis. They are always in my house to ask for fresh water to drink and sometimes share meals with me. Due to the

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[111] Interview with Farmer at Kowereso, 20/06/2013.

> rate of violent conflicts between them and the other communities, I have been advised several times against interacting with them and even living around them. Initially, I was really afraid, but I think most of them are normal and good friends. We meet and talk and exchange greetings daily. For some of them when the cattle stray into my farm, they come here to inform me of it and we talk about it peacefully. I just let go of the issue and they promise not to allow the cattle into the farm. We have never argued nor had any problems. We pray that the violent conflicts in the other communities do not happen here because we do not want conflict (Interview with farmer at Kowereso, 26/07/2013).

This particular situation narrated by the farmer is in contrast to that of other communities in Agogo where conflicts are violent and relations are antagonistic. The ability to "let go" of the destruction of his crops raises questions of whether crop destruction will immediately lead to violent confrontation. The principle of avoidance/escapism, as noted by Mac Ginty (2012), is also seen in the transcript where the farmer avoids violent confrontations despite obvious cases of confrontational tendencies. The farmer's relations with the herders are reminiscent of cultural neighbours who are ready to tolerate and negotiate with each other despite overlapping differences between them.

Whenever conflicts arise between the herders and famers, routinised forms of negotiations and reconciliation are initiated to promote and preserve cordial relations. One form of this is the payment of compensation equivalent to that of the damaged crops. Both farmers and herders noted that they were able to reach a compromise and resolve contentions over crop destruction. When the farmer and herdsmen/cattle owners are unable to resolve the conflict between them, the Unit Committee members come in to settle the issue. My interview with a Unit Committee member, who himself is a farmer, revealed that members of the community knew the herdsmen and their cattle owners and therefore it was easy for the amicable settlement of disputes that arise as a result of the destruction of crops. As Davidheiser and Luna (2008), Cleaver (2001) and Leach et al. (1997) emphasise the role of institutions in resolving farmer-herder conflicts, the unit committee is a strong institution for the negotiation and preservation of the overall harmony between farmers and herders. Although, membership of the unit committee is comprised of elected community members who are part of the local government structure, the unit committee in the case of Kowereso has also become an important institution in resolving farmer-herder conflicts. However, some farmers claimed that the committee was not effective in helping them to get compensation for crops damaged by Fulani herdsmen. In Onyemso for example, the committee was unable to enforce its decisions in relation to compensation payments.

Other farmers see the cooperative relations between farmers/local community and Fulani herders in Kowereso differently. Two elders in Agogo claimed that the case of Kowereso was so because community members, farmers and landowners took money (bribes) from the Fulani herders and cattle owners, hence their support for the herdsmen and good relations with the community. However, this was vehemently refuted by respondents in Kowereso and the *Zongo* chief. The chief maintained that it was mainly due to compromise and better understanding between them and the herders. He stated further that, since individual relations were built between community members and Fulani herders, it was up to those individuals to decide how they want to maintain their relations.

In a nutshell, elements of cultural neighbourhood include the fact that Kowereso compromise Akan and Kassena-Nakan ethnicities as farmers and the Fulani as herders. Besides, Fulani herders have lived in the community since the 1970s. Formal relations developed in 2006 and since then herders have been living in the community and daily interact with community members. Also, conflicts are common between the two, yet they have found ways to resolve and avoid conflicts. Good relations are seen in Kowereso as the ability to share food, trade together and negotiate over crop destruction through the Unit Committee and avoid violence (escapism). While part of the community complains about crop damage, such complaints do not degenerate into violent confrontations. They take the form of farmers not willing to confront herders and negotiate for peaceful settlement of conflicts. Thus, farmers and herders in Kowereso live ambivalently between peace and conflict (cf. Roth, 2001)

7.2.2. Case 2 - Zanteli in Gushiegu: Farmers and Fulani Herders Co-exist Peacefully

Zanteli is the capital of one of the eight Area Councils[112] of the Gushiegu District Assembly. It is about seven kilometres from the district capital, Gushiegu, and remains a major link to important towns, villages and other districts east of the GDA. The community is a Dagomba settlement and almost all households are engaged in farming. Crops commonly grown are yam, maize, millet and groundnuts. Land in Zanteli, like in all Dagomba settlements, is owned by chiefs in trust for the people. According to farmers and Fulani, the community has been an attractive area for many Fulani herders and cattle owners primarily because of its

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[112]Area/Town Councils are sub-units of the district/municipal/metropolitan assemblies in Ghana which consist of a number of villages/settlements grouped together but whose individual settlements have populations of less than 5000. Area/Town councils perform important roles of education, organisation of communal labour, raising revenue and ensuring environmental cleanliness, registration of births and deaths, implementation and monitoring of self-help projects, among others. Retrieved from http://ghanadistricts.com/home/?_=13&sa=3621&ssa=128 (Accessed 21 December 2014).

peaceful nature and high level of acceptance and respect for Fulani. Also, the area has vast land and relatively fertile lands for cattle as compared to other communities in the GDA. Fulani and farmers said they have lived peacefully together for many years. Fulani have friendship bonds and daily interactions with the local people. Cooperative relations are stronger in the community based on the acceptance and respect accorded to Fulani by members of the community.

The four Fulani households interviewed maintained that, having stayed in other communities before, Zanteli was unique in the sense that there were no violent attacks on them, harassment from community members and peaceful co-existence between Fulani and the community had spanned over years. Farmers in a group discussion also believed that cooperative relations with the Fulani were because of the successful mode of communication between them. One of the farmers[113] noted:

> We learnt a lot of lessons from the previous Fulani who were here. After they left, we resolved that when a Fulani arrives in the community, proper channel of communication between us was going to be established whereby issues are made very clear to them. For instance, there will not be any 'criminal' Fulani behaviour in relations to cattle rustling, destruction of crops and that there will be acceptance of responsibility for paying compensation in case of destruction. We both (Fulani and farmers) understand this and this has largely guided our relations. The Fulani are very understanding and do not engage in any nefarious activities. Many of them are friends with community members and in a short while, you will see them around here chatting and joking with us (Interview with farmer, Zanteli, 04/10/2014).

In the description above, establishing informal rules and guidelines for regulating community-Fulani relations are important for ensuring peaceful co-existence and social interaction. The community's 'laws' for regulating the conduct of the Fulani herders have played a role in maintaining the level of cooperation that exists between the two in contrast to the previous Fulani herders who were not regulated by any conventions or rules. This is what Mac Ginty (2014) and Papacharissi (2004) describe as 'an unspoken pact whereby actors agree to abide by the same ground rules' in *everyday peace* societies. These unspoken packs in Zanteli include no movements of cattle in the night to prevent cattle theft and herders and second, herders must accept responsibility for crop damage and pay compensation for damage. Chiefs have played an important role in maintaining cooperative interactions in the community. The elected assembly member of the area argued that the historical development of peaceful relations with Fulani involved the brokerage role of the chiefs.

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[113] Interview on (9/10/2013).

We have had long relations with the Fulani even before I was born. A number of Fulani had settled in our community and left. Many of them were engaged in criminal and conflictive behaviour that threatened the peace and harmony in the community. There were four groups of Fulani who were engaged in these criminal activities. First of all they were engaged in cattle rustling. They were stealing cattle belonging to community members and also went to the Konkomba communities to steal cattle and then ran back to this community. Whenever the cattle were traced, they were found in this community. This was sort of creating tensions between us and the Konkomba communities because you know historically we and Konkomba have had a war in 1995. Secondly, this group of Fulani had problems of destroying people's crops without paying compensation. And thirdly, they never respected anybody in the community nor obeyed the community's laws. This created lots of conflicts with the community, especially the youth. The youth protested for their eviction from the community and this nearly resulted in violence. Some elders were supporting the Fulani and never wanted them to leave, which angered the youth. The GDA and the police got involved and the Fulani finally left. This was ten years ago. Currently, we have four Fulani households who herd community members' cattle as well as their own cattle. Their relations with the community are excellent. Even when conflicts occur, which are always over crop destruction, we resolve them amicably between us. You know in our tradition when conflicts occur, the chief is the one who settles them and everyone respects that. Once it is reported to the chief, he and his elders settle the conflict and if there is the need to pay compensation to the farmer, the chief asks the Fulani to do so. The Fulani in the community all obey this and so we have no problems with them. Our community is one of the most peaceful with Fulani (Interview with Zanteli Assembly member, 2013/2014).

In the interview above, the role of chiefs in helping build cooperative relations between farmers and herders is emphasised. Chieftaincy thus remains an important traditional institution for fostering and maintaining social interactions, harmony and societal order in Zanteli. The role of traditional/local chiefs in managing and resolving farmer-herder conflicts includes:

- the final say in acquiring, distributing and settling land disputes in the community, since traditional chiefs are the managers of all land issues in the community;

- the power to mediate and determine the final payment of compensation by herders or cattle owners to farmers. Their decisions on the final compensation is agreed on by all community members and herders;

- the power to mediate and mitigate conflicts between farmers and herders. Many Fulani herders/cattle owners and farmers resort to traditional chiefs rather than the police and government officials for resolving their conflicts.

The roles of chiefs are akin to Mac Ginty's (2014) description of social mechanisms of control in *everyday peace* societies through negotiations, sanctions or incentive acts. Unlike other communities, where chiefs themselves are seen as a source of conflict, both herders

and farmers in Zanteli emphasised that the chief was the main person who resolved conflicts between them and that they had trust in his ability to do so and respected his decisions.

Fulani herders in the community equally see relationships as mutually beneficial and symbiotic. A Fulani herder[114] describes the relationships in the community:

> I was born in Burkina Faso, all of my children were born in Ghana. I left Burkina Faso with my wife, without cattle, to look for a herding job in Ghana […]. For the 21 years that I have lived here in Zanteli, I have had no problems with the community. I take care of their cattle as well as my own cattle. Before coming here, I was with the Chekosi (a tribe), but did not like my relations with them because they never valued me as a human being. So I moved to this community. When I arrived in this community to settle, I met other Fulani here but they were later expelled from the community because of cattle rustling and continuous conflicts with the community [...]. For my past 21 years here, I have peace and cooperative relations with the community mainly because I do what the community wants. I obey community laws, respect them and we live as human beings should live. These include not engaging in crop destruction, cattle rustling and lying about their cattle numbers. I have become part of the community and engage in communal labour, pray with the local people in the mosque, share water with them at the boreholes and trade with them. It is same with the other three groups of Fulani in the community. We have resolved together to obey laws of the community and not engage in what the previous Fulani were doing. You see during both *Eid al-Fitr* and *Eid Ul-Adha*, we, and the local people, celebrate together and exchange food and meat. There is reciprocity in our relations as gifts are exchanged between us. My wives trade with the community women and go to help them during funerals, naming ceremonies and weddings. We are like a family here. Fundamentally, the community values the relations between us, respects us as humans and, overall, trusts us [...]. And both of us being Muslims have made this easy" (Interview with Fulani cattle owner, Zanteli, 4/10/ 2013).

Religious bonds are very important in cooperative interactions between the two (cf. De Bruijn, 2000, who also found that religious bonds in central Mali have helped to forge peaceful co-existence between local farmers and Fulani herders). The Fulani herder in the interview above stressed the role of religion in helping to maintain cooperation in the community. Thus, their belief in the same religion (Islam) is an important cross-cutting tie for forging cooperation and co-existence since that is what cultural neighbours share. The two worship regularly together in the same mosques and have a feeling of 'religious brotherhood,' which Stewart (2009) notes is important in mobilising people for violent conflicts or cooperation. Islam thus contributes to peaceful relation between farmers and herders in Zanteli. However, in the case of Kowereso, religion did not feature as a reason for conflict or cooperation. The religious background of Akan and some migrant farmers in Agogo in general is Christian. Although some migrant farmers and all the Fulani herders are Muslims, religion was not a

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[114] Interview on 13/10/2013.

factor in cooperation unlike Agogo. What rather migrant farmers emphasised was important was cultural bonds such as their similar rearing of cattle and northern background.

In sum, Zanteli clearly show elements of cultural neighbourhood. Firstly, whereas farmers belong to the Dagomba ethnic group, the herders are ethnically Fulani. They have lived together for over 20years. While the community is predominately Dagomba, there are four Fulani houses (one house has a number of households) in the community. Secondly, the two live side by side (cohabitation) in the community with daily visitations. The Fulani live in the community and are part of the community set up. Thirdly, they communicate daily, share water bodies, markets, have daily interactions, trade, exchange commodities such as land, cattle entrustment and share cultural similarities. Both ethnicities are united by Islam, which plays a role in their relations of maintaining cohesion. Finally, the two groups know of their differences – they have conflicts over cattle theft and crop destructions; they know clear cultural differences; and in the past ten years had violent conflicts over cattle theft.

7.3. Discussion of Co-existence and Cooperation from the Cases

The two cases in Agogo and Gushiegu clearly demonstrate that, despite the spate of violence and subsequent deaths and injuries among farmers and herders, peace and cooperation exist in some communities. Whereas farmers and Fulani herders have been engaged in violent attacks in some communities, Kowereso and Zanteli have both remained peaceful. Farmers and herders cooperate in several ways, as summarised in Table **7.**1. Fulani herders for instance claimed that they could not live in Abrewapong (in Agogo) and Jingboni (in Gushiegu) due to the lack of cooperation with farmers and community members. The building of trust, shared values (such as religion and some socio-cultural norms) and the respect for each other, accordingly, have helped to sustain the cooperative relations between the two. The cases also indicate that effective communication is key in helping to build effective cooperative relations between the two. Reciprocal relations (exchange, friendship, visitations) are important in communication between the two. As the two communicate daily, their relations are maintained and a common understanding between them is found. This is why Deutsch (2006) espouses that effective communication is necessary for openness, building trust and friendly attitudes, sensitivity, common interests and mutual benefits in cooperation between two opposing parties.

Table 7.1: Summary of Farmer-Fulani Cooperative Relationships

Form of co-operation	Specificities
Sharing of resources	– Cooperate with chiefs in giving out land to herders to settle and rear their cattle (mostly in Gushiegu where land is given on freehold basis to herders) – Cooperate with landowners in land leases, despite community evictions, refusal and opposition to land leases – Allow cattle to drink from boreholes (which are the main sources of drinking water in communities) – Allow cattle to eat crop residues from the farms after harvest
Friendships and exchange	– Visit each other's homes – Everyday greetings (very important in building closeness and respect) – Conversations – Sharing jokes – Sharing gifts – Eating and sharing meals together (e.g. in Bulugu) – Exchange of food items – milk, meat, vegetables and other food items – Material support – Loaning of money to each other – Entrustment of cattle to herders and the provision of food items, clothing and money for the upkeep of herders
Communal labour	– Helping in community activities and projects – Contributing financially towards community projects like borehole projects and their repair – Helping in farm labour like ploughing and harvesting
Payment of compensation	– The most effective mechanism for reaching compromise after crop destruction
Unit Committee and conflict resolution	– Help mediate conflicts between the two – Determines the payment and amount of compensation (in Kowereso and Nyemso in Agogo)
The institution of chieftaincy	– The highest authority for building cooperative relations between the two – Settles and adjudicates disputes between the two – Determines the payment and amount of compensation
Worshipping together	– Praying in the mosque together – Cooking and sharing food during religious festivities – Travelling together to bigger towns (e.g. from Zanteli to Gushiegu town for Friday prayers))
Social Solidarity	– Attending each other's funerals, naming ceremony, weddings and festivities – Contributing financially towards social Gatherings
Trade	– Petty trading, sale of food items to herders – Sale of milk to farmers – Sale of animals such as cattle, sheep, fowl and eggs

Source: Field Study, 2013/2014

A prominent elder in Gushiegu aptly summarises cooperative relations between farmers and herders as follows:

> […] Fulani have been with us for a long time before the colonialists arrived. Our relations with them are reciprocal: we depend on them for important services and

> they also depend on us for many things such as the use of natural resources, land for settlements and rearing their cattle, farming and we trade together. Now we are able to send our children to school because the Fulani are there to take care of the cattle […] (Interview with a 54-year-old farmer, 5/10/2013, Gushiegu Town).

The two cases show that despite obvious ethnic, cultural and personal differences between local farmers and herders, the two have forged relations that transcend these differences. Rather, the two have used these differences as grounds for forging economic, social and religious relations. Mac Ginty (2014) describes this 'use of ambiguity' as a core activity of everyday peace. As cultural neighbours farmers and herders co-exist and, recognise their differences and sublimate them. Toru's (2010) study of trans-ethnic cross-cutting ties between the Daasanech of Ethiopia and their neighbours like the Turkana, Hmar, Nyangatom, Kara and Arbore reflects trans-ethnic cross-cutting ties similar to those found in Kowereso and Zanteli, namely, co-existence, trade, friendship bonds, culture of keeping cattle, religion and exchange between local farmers and herders. Overall, cross-cutting ties help to prevent the escalation of conflicts and ensure that social order is preserved (Bates, 1983; Toru, 2010).

Fulani-farmer cooperative relations are characterised by effective communication and reciprocal relationships of sharing, friendship and co-habitation. The cooperation between farmers and herders in Kowereso and Zanteli is possible because of effective communication, building a level of intimacy, acceptability of Fulani, social recognition and the ability to use collaborative efforts to have problems solved mutually (which are all an important part of *everyday peace* between groups).

It is worth noting that cooperative relations between farmers and herders in the study areas, just like Pelican (2012) found in the Grassfields of Cameroon, are not institutionalised. Their relations are built mainly individually and informally. Even in situations, like the case of Zanteli, where relations appear to be communal, cooperative interactions are not institutionalised. Also, trust is needed to maintain cooperative relations between the two. This, however, is very difficult because of conflicts in other areas and the stereotypes and prejudices that exist about Fulani, especially with regard to cattle theft and robbery (see Bukari & Schareika, 2015). This resonates with Rogers (1999, p. 270) observation that "cooperation is difficult to achieve because it is a behaviour as well as a process which requires a series of actions that most individuals have not learned" and that it "requires perception, high-quality communication, trust and time." It is also possible for the outbreak of violence and erosion of the peaceful co-existence in these two communities, especially Kowereso where the general atmosphere of farmer-herder antipathy in Agogo could soon catch up in Kowereso. I

now discuss two important issues raised in the cases: cooperation through the use of resources and compensation payments.

7.3.1. Farmers and Fulani Herders' Cooperation through the Use of Resources

One area of cooperation between farmers and herders is through the use of resources, especially land and water. Land leases to Fulani pastoralists is the most common form of resource cooperation, especially in communities that have cattle and entrust them to the Fulani. Particularly in Gushiegu, as seen in *Case 2*, herders are given land on a freehold basis to settle, herd their cattle and farm. This cooperative form of giving out lands to herders has a long history and goes back to when herders began to move and settle in the community. Before Fulani herders/cattle owners arrive in a community to settle, they already have links/ties with a member of the community or a cattle owner in the community. When they arrive, the cattle owner takes them to the chief who is already informed about the herder. Land is then allotted to them for settlement and rearing of their cattle. The herder is also allowed to farm on the land around his settlement. The Fulani reciprocally send gifts to the community through the chief and occasionally give cattle for community sacrifices and festivities.

In the case of Agogo, cooperation in relation to land is more at the individual level rather than the communal level. Following community agitations against land leases, chiefs no longer lease out lands to herders. Rather, Fulani herders cooperate with individual landowners for land deals. These individual cooperative interactions are informally built and are in 'secrecy' as one landowner put it. A landowner who refused to be recorded for this study stated that: "Our cordiality with the Fulani and the cattle owners is solely based on our lease of land to them. I have few Fulani herders/cattle owners whom I have leased my land to." Without these individual leases of land, the herders' access to land would be difficult. These individual land deals are also economic, benefiting individual landowners. The role of local cattle owners in helping to build cooperative land deals is worth mentioning. Local cattle owners usually lead the negotiations in cases that involve Fulani access to land. Before agreeing to a land deal, the cattle owner first goes to see the land. After agreeing with the cattle owner, a set of rules and regulations concerning the use of the land is informally (orally) shared with the herder. The landowner then emphasises the need to prevent the cattle from straying into farms. During a meeting that I attended between a local cattle owner, a Fulani cattle owner and a landowner, the local cattle owner was the one who negotiated the lease of the land to the Fulani cattle owner. In this meeting, the three agreed on the terms of their deal

and understood each other. Maintaining cordial relations and friendship with the landowner is important for the herder's stay on the land, since it is the individual landowner who protects the Fulani herder from the community confiscating his land. Cooperative relations with land-owners are therefore tangential for Fulani land acquisitions and their peaceful existence in the community. Besides, cattle are allowed by communities to graze on pasturelands that are unused. In Zanteli, and some parts of Kowereso, lands which are 'idle' have been designated as pasturelands for the passage and grazing of cattle. Community members in Zanteli, Bulugu and Kpesinga showed me designated pasturelands for cattle and stated that this had largely helped to prevent crop damage.

Another area of resource cooperation is the use of water. There are many grounds for the sharing of water by both farmers and herders. Rivers, streams, lakes and dams are used by both farmers and herders for domestic chores, dry season farming and also used by the cattle for drinking. Although, these water bodies are owned by the community, herders are given access to use them. Cattle are always present at the Bulugu Dam to drink, whilst community members also come to fetch water for drinking, washing and other domestic chores. Uniquely, boreholes are even shared by both the community and the herders. In *Case 1* (in Zanteli), during the dry season in particular, the herders' cattle are allowed to drink from the boreholes. I observed that community members pump out water from the boreholes for the cattle when herders come with them. The practice is embraced by the whole community since the dry season always presents challenges to herders in terms of finding water. Herders there-fore resort to the boreholes to provide water for their cattle. Bollig (2008) mentions similar reciprocal exchanges during drought among the Pokot pastoralists of northern Kenya in which strong customary exchanges of livestock, pasture fields, water, the transfers of other commodities and strong emotional ties have helped to maintain relations during these droughts and hostilities with other pastoral groups.

Similarly, in Agogo, despite many farmers growing crops near water sources, some have allowed herders to allow their cattle to drink at water sources near the farms. Kwabena, a watermelon farmer in Mankala, grows his crops near a water source which herders regularly use to water their cattle. He constructed a pathway to the river from his farm for the cattle to pass to the river. Kwabena maintains that:

> […] I have shown those Fulani herders you saw over there the pathway to use to the river when their cattle are to be watered. As I have done this, it prevents the cattle from destroying and stepping on my farm […]. This is well understood by them and it hardly brings destruction of the crops. I have warned the Fulani against straying [from] the pathway […] (06/07/2013).

Kwabena's case shows that when cooperative avenues are reached, it prevents crop destruction and, eventually, conflict. Also, the example shows that there exists some level of cooperation in the use of water by herders and farmers, despite Mankala being one of the areas of violent conflicts between the two. Thus, grounds for sharing resources, such as land and water, represent the tenets of cultural neighbourhood – the ability to reach compromising grounds in giving land/resources to herders and sharing resources despite clear differences between farmers/community members and herders.

7.3.2. The Role of Compensation in Cooperation

The payment of compensation by herders and their cattle owners for destroyed crops has remained an important way of enhancing cooperative interactions between herders and local farmers. As seen in *Case 1* (in Kowereso), compensation helps maintain peaceful relations. This is done in Kowereso through the negotiation of the Unit Committee for the payment to the farmer. Compensations are basically cash payments made to farmers for the destruction of their crops by cattle. Depending on the level of destruction, the cash payment could be valued very high such that a cattle owner bargains with the farmer to reach a price that he can afford to pay. Compensation reinforces cooperation between farmers and herders by preventing violent conflicts. In cases where cooperative avenues between the two remain non-existent, conflicts are prevented from escalating. In most communities in Agogo (Abrewapong, Mankala, Matuka, Kasanso, Onyemso and Bebuso) where violence between farmers and herders is high, compensation is important for the de-escalation of violence and helping to build dialogue. One farmer at Bebuso succinctly put it as "the only level of cooperation is the payment of compensation to us which they (the herders) often renege on." Generally, compensation is both an escalation and de-escalation 'tool' in farmer-herder relations in that its payment helps to bring dialogue while refusal/failure to pay it can escalate conflicts. There are four main ways through which cooperation through the payment of compensation is reached (Table 7.2).

Table 7.2: Modes of Compensation Payments

Form of Compensation Payment	Description of mode of payment
1.Compensation through self-negotiation	This is between the farmer and cattle owner/Fulani herder who dialogue and come to an agreement as to how much compensation is to be paid. When a farmer sees cattle destroying his crops, he talks with the herder who informs the cattle owner about the destruction. The cattle owner and the farmer then discuss the extent of destruction and bargain on the price to be paid.
2. Compensation through mediation by a committee	As seen in *Case 1* (Kowereso), and also in Onyemso, the Unit Committee initiates dialogue between the farmer and the Fulani herder/cattle owner and determines the appropriate compensation to be paid and settle the conflict in order to prevent it from turning violent.
3. Compensation through adjudication by community chief	This involves adjudication and determination of the payment by chiefs and elders of the community.
4. Compensation through determination by the police	The police also mediate between the two and ensure that herders/cattle owners pay for the destruction of crops.

Source: Field Study, 2013/2014

The second, third and fourth forms of compensation payments found in Table 7.2 are usually through third party mediation and are done when the two parties cannot reach a compromise on the amount of compensation to be paid, or when the herder/cattle owner refuses to pay. The police are drawn into the issue of compensation payments when a conflict escalates beyond what the Unit Committee or the chief of the community are able to mediate (or even after their mediation), or when the herder/cattle owners refuse to abide by the compensation agreement reached. Many farmers in Agogo, Kpesinga and Bulugu do not believe that the police are able to enforce their decisions to 'force' herders to pay the compensation and, therefore, do not report to them when the herder/cattle owner refuses to pay.

To reiterate specifically how compensation negotiations are reached, a farmer in Kowereso (Case 1) explained the process of negotiation as follows:

> When conflict involves crop destruction, the farmer needs evidence of the specific Fulani herder whose cattle destroyed the farm. Without the farmer or others in the community to physically see the herder, he cannot lay claim to crop damage payments (in fact, farmers not catching herders 'red-handed' has been one major escalator of violence). Should the farmer be able to identify the herder, he contacts the cattle owner. When the cattle owner accepts responsibility, negotiation starts. In the process of negotiation, the farmer and cattle owner do an assessment of the damage. The farmer then gives the cost of the crop damage and the two bargain to come to compromise (cattle owners complained that farmers deliberately inflate the costs of crop damage in order to get more money). If there is a deadlock in their negotiations (which is not uncommon), the case is taken to the unit committee to mediate and

> determine a cost to be paid to the farmer (Interview with farmer, Kowereso, 20/07/2013)

The process of negotiation itself is fraught with disputing claims and counter-claims. In a recorded conversation between a Fulani herder and a tomato farmer in Onyemso, the two argued strongly over the destruction of his farm and the decision of the Unit Committee for him (the Fulani herder) to call the cattle owner to inform him about the damage in order to pay compensation. In the ensuing arguments, a member of the Unit Committee was called and he mediated for a truce and asked the farmer to exercise patience until the cattle owner comes to pay for the destruction.

In case the conflict is taken to the chief, he adjudicates for the Fulani herder to pay for the cost of the damage. The senior elder (*Wulaana*) to the chief of Zamashagu narrates how a conflict involving crop damage reported to the chief was settled:

> Just this farming season [of 2013], a Komkomba farmer in the community reported to the chief that Fulani cattle destroyed his maize farm and didn't want to take responsibility for the damage. When the chief was informed, he sent for the Fulani and asked him about the damage. According to the Fulani, it was a small boy herding the cattle but the boy denied that their cattle destroyed the crops. Other farmers, however, said it was the boy and therefore the Fulani man's cattle. He finally accepted responsibility and I and two other elders went to assess the farm and reported to chief. The farmer was then asked about the cost of the crops damaged and he stated it was a two and half acre maize farm. The farmer said the damage was GH₵ 700 (175 Euros). The Fulani asked that the amount be reduced for him and it was finally agreed that he paid GH₵ 400 [100 Euros]. Up till date, he has yet to pay. He promised to give the money, but has not yet. We are still waiting. If he doesn't pay and the chief comes back [accordingly the chief was not around], we will summon him again" (interview with Wulaana Zamashagu, 26/11.2013).

Thus, compensation payment involves processes of negotiations and re-negotiations that comprise a number of institutions such as the traditional system (made up of the chief), the community (Unit Committee) and formal state institutions (the police). These actors form a kind of control of local social order that is shaped by interrelations and interdependencies. Actors position themselves in order to gain favourable benefits from the negotiation process. Overall, the successful negotiation of compensation helps prevent the escalation of conflict.

7.4. Measures of achieving Cooperative Interactions during Violent Conflicts

I now present various mechanisms that farmers and herders use to build cooperation, manage and resolve conflicts between them. As farmers and herders conceptualise cooperation as

embodying resolution and settlement of conflicts, they manage and resolve conflicts amicably whenever conflicts occur. Besides, when violent conflicts occur, measures are taken to achieve peace and cooperative interactions. Many scholars have discussed both traditional methods and other modern methods of achieving peace and cooperative interactions between farmers and herders (e.g. Cleaver, 2001; Krätli & Swift, 1999; Muwonge, 2009). Cleaver (2001), for instance, emphasises the role of institutions in resolving violent conflicts and achieving cooperation. Some scholars have also pointed out the role of external actors to attain peace between conflicting parties (Blench, 2004; Glowacki & Gönc, 2013). Glowacki and Gönc (2013) mention the signing of peace accords, the engagement of elders in conflict resolution, changing cultural norms and the rhetoric of violence through education as methods of managing and resolving violent cattle raids and conflicts among pastoralist groups in Kenya and Ethiopia.

In the case of the study areas, farmers and herders position themselves in ways that enable them to resolve and manage conflicts between them, whether violent or non-violent conflicts. Thus, farmer-herder conflict resolution mechanisms include:

- the use of actors;
- the involvement of institutions; and
- payment of compensation

Various actors become involved in settling conflicts between farmers and herders. These actors include, chiefs, community elders, opinion leaders and government officials (the police, assembly members and agricultural officials). Chiefs, community elders and assembly members, through negotiations and mediations, have brokered peace between farmers and have also prevented the escalation of violent conflicts. As discussed earlier, payment of compensation has mainly been useful in settling conflicts between the two. Various actors such as community elders and assembly members are also involved in ensuring peace through negotiation, mediation and conflict avoidance.

Also, institutions are involved in reaching cooperation between farmers and herders through conflict resolution. The roles of central government institutions, decentralised local authorities, traditional authorities, security agencies, local committees, farmer associations and local groups are crucial in ensuring peace in farmer-herder violent conflict de-escalation and resolution. The Ghanaian government in general continues to play the lead role in managing and helping to end violent farmer-herder conflicts through the security agencies (police and army) using the OCL. Whenever conflicts occur, the state uses peacekeeping operations

through police and military deployment to evict Fulani herders and prevent violent attacks. Local administrations (district assemblies), through the DISECs, are responsible for security in their areas of decentralised administration. Therefore, the AANDA liaises with the central government for the deployment of security forces (OCL) to help end the violence in the area.

Thus, the main mechanism for resolving farmer-herder conflicts by the Ghanaian government and local administrations is the use of Operation Cow Leg (OCL). The OCL was first used in April 1988 when conflicts between farmers and Fulani herders in many parts of Ghana escalated (see Tonah, 1993, 2000, 2002b, 2003). Since then several OCLs have been undertaken across the country (in 1989, July 1999, June 2000 and between 2010 and 2016) in order to end the violence by expelling and evicting all illegal herders from Ghanaian land. For example, in 2011, the National Security Council deployed a team of 65 security personnel from Kumasi and Accra to Agogo. This team was made up of 22 soldiers, 33 policemen and 10 others in a bid to curb violent escalation by flushing out Fulani herders. Similarly, security personnel comprising the police and military were deployed to end the violence in Gushiegu following the August 2011 violent attack. During my interviews with the army commander of OCL in Agogo as to whether the OCL has been successful in resolving the violent confrontations and keeping the peace, he noted that:

> The OCL has helped to prevent further killings and violence. If not for the OCL, many people would have been killed. Now, both farmers and herders are able to go about their duties because we are able to respond rapidly to attacks and make arrests of any troublemakers. […] I think that many underlying issues are making it difficult for us to achieve full-time peace […] (Interview with army commander of OCL, Agogo 18/06/2013).

He stated further that, apart from evicting 'alien Fulani herders,' the OCL also adopted a 'Buffer Zone System' as a means to stop direct violent confrontation. According to him, the Buffer Zone System separates the two groups by demarcating boundaries as to where the groups should be stationed while the OCL taskforce monitor and enforce the buffer zone. As part of the Buffer Zone System, the Fulani herders and their cattle were relocated to Lugua and the Kyekyepong Mountains (in Abrewapong).

However, interviews with herders and farmers show that both of them had no idea about these boundaries and never knew anything about the 'Buffer Zone System.' The continuous flaring up of violent confrontations, despite the use of security agencies, the OCL, evictions and forced removal of Fulani herders bring to question the effectiveness of these

methods. The OCL has become a yearly[115] tool used to end violence, but has so far failed to resolve violent farmer-herder conflicts. The OCL as a method of ending farmer-herder violence in Ghana has not been effective since its introduction. Tonah (2002b) in particular notes that the expulsion of Fulani through the OCL has exacerbated farmer-herder conflicts more than it has resolved them. The author notes that the OCL is not always effective when it comes to 'flushing' out the herders, as many of them return a few months after the operation. Many of the respondents believed that the measures adopted to resolve conflict and improve cooperation between them were not effective as violence kept recurring. Youth farmers in particular see the highest possibility of recurrence of conflict because the issues (destruction of crops and competition for land) are still simmering. As previously alluded to in Chapter 5, many of the cattle are owned by Ghanaian businessmen who have vested interests and often seek to protect their Fulani herders from expulsions, thereby rendering the OCL futile (cf. Tonah, 2005b).

I summarise the various actors and institutions involved in farmer-herder conflicts resolution and management and description of their particular involvement in Table 7.3 below:

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[115] See Myjoyonline.com. (03 February 2016). *Ashanti REGSEC begins plans to flush out Fulani herdsmen from Agogo*. Retrieved from http://m.myjoyonline.com/marticles/news/ashanti-regsec-begins-plans-to-flush-out-fulani-herdsmen-from-agogo (Accessed 03 February 2016) and Myjoyonline.com. (15 January 2015). *Operation Cowleg re-introduced in Agogo to curb Fulani menace*. Retrieved from http://www.myjoyonline.com/news/2015/January-15th/operation-cowleg-re-introduced-in-agogo-to-curb-fulani-menace.php (Accessed 27 January 2015).

Table 7.3: Nature of Actor Involvement in Resolving Farmer-Herder Conflicts

Actors managing and resolving conflicts	Description of involvement in conflict management and resolution
Self-negotiation by farmers and herders	Always used as the first step towards resolving the issue. Most frequently used.
Mediation and adjudication by local chief	Very common in many communities and used after self-negotiation fails between the two. Increasingly used less frequently.
Mediation by Unit Committee (for some villages)	The most common way of resolving conflicts locally between the two groups in some communities.
Elected Assembly members[116]	They mediate in conflicts and are seen as major stakeholders in preventing violent attacks.
The police	Involved in peacekeeping and prevention of violence.
Local Authorities (through DISEC)	Ensure the maintenance of security and responsible for planning and the coordination of security forces in the district.
Central Government (through deployment of security personal)	Used when violence becomes common. The Ghana National Security Council gets involved through the deployment of OCL.
Adjudication by the Law Courts	Law court prosecutes. Used less frequently, as only few cases are adjudicated.

Source: Field Study, 2013/2014

The top-down approach to resolving farmer-herder conflicts, which involves the national government initiating conflict resolution, is problematic. The role of the state as an actor and mediator in farmer-herder conflicts is seen by local people (farmers and community members) with suspicion because of the perceived political support for cattle owners and Fulani herders. Elfversson (2013, p. 4) argues that the state is not often trusted as a mediator and third party in conflict resolution in communal conflicts:

> […] the fact that the government may be seen as a direct or indirect cause of local communal conflict, and may be actively or passively supporting one side in the conflict, appears to create significant obstacles for its potential to serve as a third party and help resolve the conflict […].

Thus, Elfversson's (2013) argument of lack of neutrality of the state in conflict management and resolution was also emphasised in FGDs in Agogo and Gushiegu with elderly farmers and the Kpesinga Youth respectively. They, therefore, proposed that, instead, the central government should strengthen the capacities of local institutions like chiefs, herders, farmer associations and NGOs to negotiate and build consensus. Insights can be gained from the work of various commissions responsible for the resolution of farmer-herder conflicts in various

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[116] They could also remain a source of mobilisation for violent conflicts.

regions in Cameroon called *Commissions Consultative de Règlement des Conflits Agro-Pastoraux* (Commissions for Resolving Agro-Pastoral Conflicts, see Pelican, 2012 and USAID, 2011), which could be established in various areas in Ghana to resolve conflicts. According to the USAID (2011), the Commissions for Resolving Agro-Pastoral Conflicts apply both formal and customary law in its resolution of farmer-herder conflicts. The commissions are backed by Decree No. 78/263 of 1978 of Cameroon (USAID, 2011). Moreover, the involvement of local NGOs in mediating farmer-herder conflicts can also remain helpful in resolving the conflicts and building consensus. Both the heads of WANEP-Ghana and World Vision-Agogo believed that local CSOs can complement local actors' efforts by bringing expert knowledge to bear on the conflicts. They argued that CSOs and NGOs are neutral parties in conflict resolution and can help design solutions through a joint-problem solving approach to the conflicts because of the perceived bias of government in these conflicts.

Traditional methods of handling farmer-herder conflicts where traditional chiefs, elders, cattle owners, farmer associations, local influential opinion leaders, elected assembly members and local committees are involved have remained very useful in managing conflicts. Traditional chiefs and elders play more vibrant roles in Gushiegu where they help avert attacks of herders by youth groups and farmers. As already discussed, chiefs in some communities mediate in conflict situations and are able to avert violent confrontations. With the diminishing powers of chiefs, their role in farmer-herder conflict resolution has also diminished due to perceived networks with herders and support for them. Aside from negotiations and mediations, the adjudication of conflicts by the law courts also takes place in some cases of farmer-herder conflicts. The police in both Agogo and Gushiegu reported, however, that few cases were being prosecuted in court (though the police could not give me any documents of the cases being prosecuted). The Agogo Magistrate Court Registrar also mentioned that only six cases of farmer-herder conflicts had been brought to the court. Two major cases were adjudicated by the Kumasi High Court. The first case involved the evacuation of Fulani herders and their cattle from Agogo lands in 2012 and, the second case, involved the sentencing of a 45-year-old man for the murder of a Fulani herder in Mankala in 2013. While these prosecutions are able to deal with criminal aspects of the conflict, they fail to actually bring real resolution to the conflicts. Adjudication by courts does not fit into the bottom-up approach to building peace and consensus between farmers and herders (cf. Boege, 2011; Mac Ginty, 2008).

As part of a bottom-up approach, respondents noted that communities must begin to have formal and documented agreements with Fulani pastoralists before they settle down in the community. Proper rules and regulations governing pastoralists' activities must be explained and documented to them so that if there is a problem or breach of the agreement, proper sanctions can be applied. These agreements should be witnessed by the police and possibly an attorney. Many of the chiefs, cattle owners and Fulani herders do not appear to know the rules or the contract of their settlements in communities. They only employed the services of herders to take care of the cattle or lease out lands without any formal contract. Respondents also reiterated the need for education and sensitisation of farmers and Fulani herders on the effects of conflict and the misuse of resources. According to them, MMDAs, the police and local chiefs must educate farmers and herders on the need to mutually co-exist and share resources like pastureland, water bodies and trees (like the Shea).

The role of the police in farmer-herder conflicts is worth discussing. According to the police, their role in farmer-herder conflicts is not only prosecution, but also opening up opportunities for the two to dialogue and negotiate. The Gushiegu Police, for instance, maintain that they are taking measures to intervene and respond timely to prevent violence as it happened in 2011 in some communities. According to the police, they adopt education of farmers and herders to avert further clashes rather than the routinised way of only being reactive through police reinforcement whenever violence breaks out.

> When we receive reports from both farmers and herders alike on crop damage, murder, cutlass-inflicted wounds on Fulani and forced community evictions of Fulani, we quickly move into the communities to prevent attacks and also settle these conflicts amicably. We also educate to learn to report such cases for peaceful resolutions. Normally in the farming (planting) season, the reports are less. It is only when the crops begin to grow that the reports of crop damage come. This season have had so many cases reported. We also advise the Fulani on how to care for their cattle during such periods. We have also asked the Fulani chief to advise his people on this. About one month ago, an incident happened in Galwei. A farm was destroyed and the people traced the cattle, but did not get the Fulani herder himself. When they heard voices of some Fulani boys about 300 metres away, they brought the boys and asked them to identify the cattle. The boys identified the cattle to be that of a Fulani in the community. The boys then took the farmer to the Fulani's house and he (farmer) had the Fulani's wife arrested and kept at the chief's Palace until the next day. We heard about the issue and quickly followed up. We sat both of them down and resolved the case amicably. Their mistake was that instead of impounding the cattle, they left them and were chasing somebody. Sometimes, farmers expect that all cases they report must be taken to court for prosecution. But we tell them that resolving conflicts by peaceful negotiations, mediation and consensus is better. Many of them are coming to appreciate this. As security personnel, we are taking measures in place so as to be proactive in dealing with these issues. We try to resolve most cases peacefully and, in fact, up to 75% of cases are settled peacefully because our main task is to ensure that the Fulani and communities co-exist peacefully. Our

current strategy is to organise community sensitizations and intensive education, together with the local administration, for both the Fulani and farmers so as to prevent the occurrence of violence (Interview with Gushiegu District Police Crime Officer, 12/12/2013).

The concession by the police that the use of the law courts and formal structures do not actually resolve farmer-herder conflict confirms what some farmers and herders stated. This is why Ellickson (1991) in a study of dispute settlements in rural Shasta County notes that norms and not legal rules are the basic sources of entitlements and dispute settlements. Ellickson (1991, pp. 52–53) states:

> In rural Shasta County, where transaction costs are assuredly not zero, trespass conflicts are generally resolved not *in* 'the shadow of the law' but, rather, *beyond* that shadow. Most rural residents are consciously committed to an overarching norm of cooperation among neighbours.

Farmers and herders advocate a bottom-up peace approach and hybrid peace as theoretically advanced by Mac Ginty (2010), Richmond (2015) and Mac Ginty and Richmond (2013) where local people/actors in farmer-herder conflicts themselves are at the centre of building peace. This also requires hybrid peace. Hybrid peace, according to Mac Ginty (2010, p. 397) involves a process "whereby different actors coalesce and cooperate on different issues to produce a fusion peace."

7.5. Conclusion

This chapter discussed cooperative relations that exist between herders and farmers. The chapter has demonstrated that despite violent conflict, Fulani herders and farmers are cultural neighbours who interact daily, build friendships, share resources (land and water) and trade together. In other words, not all situations between farmers and herders involve conflict. In the case studies discussed in the chapter, the role of informal local institutions (e.g. the Unit Committee) and traditional rulers are important for ensuring cooperation between farmers and herders, especially when conflicts break out between them. An important way to maintain cooperative relations in the midst of conflict is through compensation payments, which help to appease farmers when their crops are destroyed. The chapter also discussed the mechanisms that are used by various actors and institutions to resolve and manage violent conflicts.

Theoretically, this chapter has argued that farmer-herder cooperative relations and everyday peace are common within cultural neighbourhoods, where the routinised practices of actors add to peacemaking and cooperation in communities. The theoretical approach adds

to a better understanding of the dialectical nature of farmer-herder relations, where conflict and cooperation are not just inherent in their relations, but that conflict and peace/cooperation shape their relations either for better or worst. Besides, the theory adds to our understanding of peace and conflict studies in which two feuding parties are constantly engaged in different levels of interactions that are either of amity or hostility. The theoretical approach calls for a "hybridity of peace" which is built through intra-group negotiations, avoidance, reciprocity, adaptation, recognition of differences and reconciliation. A bottom-up approach to cooperative peacebuilding, as proposed by respondents, is important for resolving violent farmer-herder conflicts. This also requires a hybrid peace approach where different actors and processes cooperate and compete for different agendas (Mac Ginty, 2010; Richmond, 2015). These agendas include, for example, local forms of dispute resolution and reconciliation, building proper communication among actors in farmer-herder conflicts and the introduction of informal localised norms/rules in settlement agreements and resource/land use.

The findings in this chapter show that conflict and cooperation should not be conceptualised as completely dichotomous or opposing processes. This is because cooperation in the case of farmer-herder relations does not exist independent of conflict, since both also cooperate during times of violent conflict. Conflict and cooperation interact differently in every society. For instance, the existence of cooperative relations between two groups does not necessarily mean that they are on good terms and do not have conflictual relations (Rogers, 1999). This is why farmer-herder relations need to be conceptualised and understood through the lens of cultural neighbourhood and everyday peace. This dialectical/ dichotomous nature of conflict and cooperation contrasts with Breusers et al.'s (1998) argument that farmer-herder relations cannot be seen as dichotomous relationships between two bounded ethnic groups and that relations between Mossi farmers and Fulani herders are multi-stranded, not just that they meet in multiple settings. My theoretical analysis and cases, however, show that farmers and herder exhibit strands of hostility and amity where interdependence on each other makes it plausible, beneficial and necessary for them to cooperate and build peace. At the same time, as two opposing cultures and there are packets of conflicts that occasionally occur. These conflicts do not in any way stop interactions between them.

This chapter has shown that we should approach relations between the two groups (farmers and herders) by moving beyond the discourse of only violence, since evidence abounds that cross-cutting ties and mechanisms of co-existence and peace exist between them in the midst of violence. Therefore, we should look beyond the dichotomy of conflict and

cooperation in order to better understand the processes and dynamics involved in violent conflict between these two groups. Equally important is an analysis of the range of social ties/networks that the two build and maintain. The next chapter will therefore look in more detail at the social networks in farmer-herder relations, which helps in our overall understanding of conflict and cooperation between farmers and herders.

8. SOCIAL NETWORKS IN FARMER-HERDER RELATIONS

The previous chapter looked at the type of cooperative relations that exist between farmers and herders, and how everyday peace and cooperation are achieved. The chapter had underscored that social networks intersect with various forms of cooperative (and also conflictual) relations between farmers and herders. Cooperation and conflict between the two are to some extent dependent on the types of networks, interactions and social ties built among different actors - farmers, community leaders including both traditional and political leaders and community residents, on the one hand, and herders and cattle owners, on the other hand. As Hennig, Brandes, Borgatti, Pfeffer, and Mergel (2012) explain, network ties can both facilitate and constrain the actions of social actors who are interacting and can thus be an avenue for energy in conflict behaviour or cooperation relations. In this chapter, I examine social networks in farmer-herder relations and how these networks influence conflicts or cooperation between farmers and herders. The chapter begins with a discussion of the actors in farmer-herder relations, followed by a discussion of social ties/networks in farmer-herder conflicts and then social ties/networks in farmer-herder cooperation.

8.1. Actors in Farmer-Herder Relations

In any conflict situation, how the actors or stakeholders[117] interact, interrelate and build social relationships are important for understanding a particular conflict, as well as, the level of cooperation and resolution mechanisms to adopt. To this end, a stakeholder analysis using a stakeholder approach is important. A stakeholder approach[118]examines individual preferences and attempts to satisfy as many of those preferences as possible, with the understanding that these individuals, and the groups they form, have particular relationships with each other (Burton & Dunn, 1996). The concept of *stakeholder analysis* in conflict studies refers to an analysis of all the people, actors or groups who influence a conflict; those who are key players in a conflict; those who are affected by the conflict; and those who have interest in the conflict (cf. Scheffran, 2006). In any conflict, the stakeholders determine the cause and course, the

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[117]I have used actors and stakeholders interchangeably here although I am aware of the technical distinction between the two.

[118]For more details about the concept of stakeholder, see Freeman (1984) and Friedman and Miles (2006).

source of and resource for managing and resolving the conflict (Ramírez, 1999). The *stake-holder analysis* is also a tool to predict conflict (Ramírez, 1999). Stakeholders in any conflict can be:

1. Primary stakeholders (the conflicting parties)
2. Secondary stakeholders (those who are indirectly affecting or affected by the conflict)
3. Interested/external stakeholders (they are shadow people who have an interest in the conflict and tend to support one group against the other) (Department for International Development [DFID], 1995).

The primary stakeholders in my study comprise farmers and herders who are often engaged in direct conflicts; secondary stakeholders comprise youth groups, local associations, chiefs, Fulani elders, cattle owners and community elders; and external stakeholders include politicians, government officials, butchers and cattle dealers who have an interest in the conflicts because of the benefits they stand to gain (and whose role and influence are presented in Table 8.1). Freeman (1984) maintains that stakeholder analysis seeks to look at the relative power and interest of each stakeholder and the networks and coalitions to which they belong. In a conflict, the relationships between the parties and how they mobilise for conflicts are the result of individual interests and networks. Therefore, identification and analysis of the stakeholders and actors in farmer-herder relations help us to identify those who are affecting and are affected by the issues and to understand the relations and networks between the various actors.

In addition, it is important to understand how "the behaviour of an individual is affected by the configurations of relationships among other individuals both within the situation and external to it" (Garbett, 1970, p. 222; see also Mitchell, 1969, p. 47). An actor-oriented approach allows for the abstraction of the networks in individual relationships rather than groups, organisations and institutions (Garbett, 1970). Garbett (1970, p. 215) notes that the actor-oriented approach "lay stress on the flux and change of day-to-day life and give central importance to the individual who, as manipulator and innovator, creates, in varying degrees, the social world around him." Individuals are linked to others by bonds of common membership through social relationships (Breiger, 1974). Similarly, Moritz (2006b) asks for methodological individualism where the actions and behaviour of the individual actors are analysed in farmer-herder conflict situations. For Long (2001), an actor-oriented perspective explores how social actors (both 'local' and 'external' to particular arenas) are locked into a series of intertwined battles over resources, meaning and institutional legitimacy and control.

As actors in farmer-herder relations play within an arena to confront each other, they build both informal and formal networks in collective groupings or individually.

A number of studies (e.g. Glowacki & Gönc, 2013; Le Meur & Hochet, 2010; Krätli & Swift, 1999; Hagberg, 1998) have identified various actors whose actions and inactions interplay to shape farmer-herder conflicts and cooperation. In the case of the study areas in Ghana, these actors, their composition, which indicates the specific actor, and their level of influence are shown in Table 8.1.

Table 8.1: Actors in Farmer-Herder Relations

Actors	Composition	Level of influence/Role
Youth Groups	Agogo Youth Association Bulugu Youth Kpesinga Youth Other community youth groups	They comprise both formal and informal youth groups who informally mobilise together and are at the forefront of conflicts (through agitations, demonstrations and organised attacks). They are key in cooperation processes in that their involvement can lead to the cessation of violence.
Traditional Authorities	Paramount Chiefs Sub-Chiefs Village/Community Chiefs Elders Of The Chief Council/Court	They are custodians of resources. They serve as a link between the conflicting parties. In many cases, they lead negotiation efforts.
Politicians	Local Politicians National Politicians Members Of Parliament (MPs) District Chief Executives (DCEs) Elected Assembly Members Political Party Officials	They have the ability to influence their supporters and incite conflicts They have an interest to win the support of the people by supporting them. Most of their support is hidden. They also initiate mediation.
Farmer Associations	Agogo Plantain Growers Association Agogo Concerned Farmers Association Agogo Cattle Owners Association (made of only local autochthonous cattle owners and not Fulani) Kpesinga Youth Farmers Association	They are primary stakeholders who are engaged in conflicts with herders and are directly affected when their crops are destroyed. There are other informal farmer associations found in various communities. Their consent is important in the settlement of conflicts without which no negotiation is possible.
Local Associations	*Agogomann Mma Kuo* Agogo Concerned Citizens Association	They have also protested against the presence of herders and cattle on their lands. They give support to farmers in some instances have been accused of providing money and arms to youth to fight herders. There are many other informal local groupings in various communities.

Security Agencies	The Police Army National Security Officials Members of The Operation Cow Leg (OCL)	They have state power to enforce laws and therefore keep peace in communities (peacekeeping). Often, cases of conflict are made known to them and they enforce laws.
Community Elders/Opinion Leaders	Elderly People in the Community Family Heads Clan Heads Influential People	They exert influence over youth groups and are key in negotiating the settlement of conflicts.
State/Government Officials	Agriculture Extension Officers Veterinary Services Officials Forestry Service Officials District Assembly Officials	They deal directly with farmers and herders in terms of animal health and plant diseases. They contribute to peace through the advice they offer the conflicting parties. They are part of peace plans initiated by the state.
Fulani leaders/Opinion leaders	Fulani Chiefs Fulani Cattle Owners Fulani Herders Other Fulani (e.g. enlightened people) Fulani Association	They exert influence over Fulani pastoralists and herders. They are accused of supplying arms to herders to kill farmers. The herders are primary in the conflict without whom cooperation cannot be reached.
Cattle Dealers	Cattle Owners Local Butchers Meat Sellers Cattle Businessmen	They have economic interest in maintaining contacts with herders and cattle owners. They protect and support them in their quest to settle in communities.

Source: Field Study, 2013/2014.

The table was generated based on the list obtained from the name generator exercises. It is not in itself exhaustive, as I shall elaborate when I discuss the networks amongst various actors. These actors may overlap since some may assume multiple roles in the conflict or cooperative situation (cf. Krätli & Swift, 1999). To this end, Bierschenk and Olivier de Sardan (1997, p. 240) observe that each actor in a conflict "'belongs' to more than one structure and has more than one role to play, or more than one identity to cope with." Generally, human social relations (ties, bonds or links) are not fixed but coalesce, shift and change (Emirbayer, 1997), hence the different hidden roles that actors in farmer-herder conflicts can assume. Besides, actors build social ties, bonds and networks to gain social capital to enable them to accomplish their goals and extend their influence (see Giddens, 2013; Portes & Sensenbrenner, 1993; Putnam, 2001; Burt, 1995; Bourdieu, 1986). To illustrate this further, various groups, chiefs, community leaders, politicians, Fulani leaders, leaders of local associations and community elders have 'vested' interests in conflict. They are involved in sup-

porting certain factions and have power to influence conflicts or cooperative relations be-
tween farmers and herders. Politicians, for instance, as I frequently heard from farmers and
herders as supporting violent attacks because "some own cattle while others use conflicts for
political capital." Also, Fulani cattle owners and other cattle owners are suspected by farmer
communities of arming their herders to attack farmers. Groups like the *Agogomann Mma*
Kuo and farmer associations are also suspected of providing arms to attack Fulani herders,
while the Kpesinga Youth are also accused of inciting agitation in the community and hatred
towards Fulani. In Kansanso and Mateku (in Agogo), cattle owners and Fulani herders
claimed that attacks on them by farmers had been encouraged and that they were supported
by arms from the *Agogomann Mma* Kuo and other politicians in the area. Security agencies
are also accused of supporting cattle owners and Fulani herders.

Political ecologists have also emphasised the various networks of actors who play
important roles in conflicts like those between farmers and pastoralists (see Turner, 2004;
Bryant & Bailey, 1997; Bassett, 1988). Bryant and Bailey (1997), for example, emphasise
that the role of power relations of various actors, particularly unequal power relations is key
in explaining the so-called environmental conflicts. They note further that the extent of power
that each actor possesses influences the outcome of resource conflicts. Bryant and Bailey
(1997) categorise the different actors as state/government officials, grassroots actors (farm-
ers, migrant farmers and nomadic pastoralists), businesses and NGOs, who are prominent in
a 'politicised environment'. Within such an environment resource struggles and environmen-
tal issues intertwine with politics. Put in another way, power networks add to the overall
setting of farmer-herder conflicts (e.g. through mobilisation) and also influence relations be-
tween herders and farmers. Politicians and youth leaders, for instance, use their power to
influence government to evict herders from communal lands. Also, the legitimate power of
local farmers to land and resource ownership is used to collectively come together (as in
mobilisation) to defend themselves against 'strangers' from using their legitimate resource.
Cattle owners also exercise their power through networks with top officials in order to gain
access to land and extend their stay in communities.

Bryant and Bailey (1997) observe that the state and other powerful actors enhance
their power through the control of resources and conflicts. In this study such powerful actors
include, politicians, leaders of groups and associations, Fulani leaders and cattle owners.
These power relations tend to marginalise the use of resources for some actors, such as, local
farmers who claimed that chiefs were using their power as custodians of the land to under-
mine them and lease out lands to cattle owners without their knowledge or consent. Also,

herders stated that their marginalised status (as non-autochthons) had been used to prevent them from accessing resources or evictions from the land they acquired. The state as an actor itself can be a source of these conflicts. Bryant and Bailey (1997) contend that the state as an actor has an interest, which is revealed through its policies in environmental issues and land control. For example, through the control of forest resources state officials become embroiled in conflicts between farmers and Fulani pastoralists. Ahmed's case, in Chapter 6, revealed that the social network that Ahmed has established with high ranking GFC officers has given him access to unused forest land, however, these social ties have also put him and the GFC in conflict with local resource users and farmers. In trying to understand these actors' behaviour, their influence and how they interrelate in the conflict and cooperation process, Ramírez (1999) proposes social network analysis to see what coalitions stakeholders join in the conflict process and how they are also cooperate to resolve the conflict. Thus, a multi-actor analysis is needed to understand the web of ties in farmer-herder relations.

8.2. Social Ties/Networks in Farmer-Herder Conflicts

The process of violent conflict escalation involves many actors who interconnect to build alliances and ties. The ability of these groups (actors) to efficiently initiate and mobilise for violence is also important in terms of strengthening social networks (Cox, 2010). Conflicts make the maintenance of social bonds possible since they provide the impetus for various people to interact and come together (Gluckman, 1956). Bierschenk and Olivier de Sardan (1997, p. 239) also maintain that "a conflict is the effect of personal strategies, more or less linked to networks and organised in the form of alliances." Violent farmer-herder attacks take place through various actors building political and primordial ties. Farmers, for instance, link the social networks of pastoralists and cattle owners' networks to those of chiefs, community leaders, politicians, security agencies and government/state officials who are believed to support pastoralists in clandestine ways, especially when it comes to accessing resources, arms and general protection.

Networks among local groups, farmer associations and politicians are seen by Fulani herders as inciting, supporting and mobilising violence against them. Relational sociology has helped to demystify the deterministic view of social relations and argues that human actions unfold as part of relations among many actors and not as independent, self-contained, interacting individuals (Ramirez-Sanchez, 2007). The deterministic view assumes that social

relations are mysteriously pre-given and are the source, rather than the outcome, of behavioural conformity of shared viewpoints (Saunders, 2007). Farmer-herder relations are not pre-determined, but develop through interactions with various actors. Through these interactions they build networks, which become the basis for conflict or cooperation.

Farmers and Fulani herders are the primary actors who initially engage in conflictive behaviour, which escalates and involves other actors. The process of violent attack will then involve the mobilisation of others such as community elders/leaders, local politicians, local associations (for example, in the case of Agogo, the *Agogomann Mma Kuo* is important for influencing whether or not these conflicts develop into violence), community members, among others. The sociograph (sociogram)[119] in Figure 8.1 shows all of the important actors in farmer-herder conflicts in the study areas and the ties/linkages between them in the conflict process. Political ties were seen as the most influential in conflicts and therefore ties with politicians are important in conflict. The discourse of politicians during conflicts is seen to carry 'weight' and lead to potential conflict escalation. Because of their personal interests or desire to gain political support, politicians take positions in support of others. Accordingly, cattle owners are connected with these politicians and use their networks with them (politicians) to get protection and support from community evictions and attacks. Local farmers in Nyamebekyere claimed that a cattle owner who had a land dispute with them came in the company of police officers and armed guards to destroy their crops on the disputed land and to forcibly take back the land. The local farmers argued that it was due to the cattle owner's strong connections (networks) with politicians and government officials that gave him and his herders' police/security protection. One of the farmers remarked that:

> If not for support from powerful people, how did he (the cattle owner) come with police to protect him and escort him to destroy our crops on the land? It was the decision of the Kumasi High Court that all cattle owners and their cattle be moved out of Agogo lands. Yet you have that man (cattle owner) defying this with impunity and still hinging on to our land because some power somewhere is backing him [...]. He was even bold to tell us to take him anywhere in Ghana […]. This is what all along we have been saying […] that the cattle owners and the Fulani are well connected and protected (Interview with Farmer, Nyamebekyere, 11/07/2013).

The role of powerful, political connections are emphasised in the interview above. The farmer's perception of political support is justified by the presence of the police and armed men and the cattle owner's alleged bragging that "no one could do anything to him."

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[119]The Sociographs or sociograms are graphs showing nodes/actors and their relations.

Respondents in Gushiegu also emphasised that cattle owners and herders' powerful connections and alliances with chiefs, government officials, security agencies (police), community elders, local politicians and key community members help them to penetrate communities in the midst of conflict, ensure the security of their settlements and give them opportunities to access land and resources (see also Yembilah & Grant, 2014). Because cattle owners and herders offer gifts and care for the cattle of politicians, community leaders, chiefs and some government officials, it creates ties and connections that help to position them in the community against attacks. This is in consonance with Yembilah and Grant's (2014) study of conflicts between Fulani herders and local farmers in the Tallensi-Nabdam District of the Upper East Region of Ghana. They highlight relationships and networks between herders and various actors and their usefulness to herders in particular:

> […] Herders' alliances with chiefs and landowners where they make payments of one or two cows annually to leaders on whose land they reside, not only legitimises them but also pays forward in protection from groups who oppose their settlement. These relationships also influence leaders to demarcate pastures for the herders' exclusive use, constituting an indirect form of territoriality […]. Through the networks of cattle owners and livestock traders, herders receive information on eviction and return to preferred areas, thus their allies orchestrate their access to those areas […] (Yembilah & Grant, 2014, pp. 390–391).

The authors explain that through Fulani pastoralists' alliances and networks with individuals and community leaders, herders influence their access to resources and offer them protection from evictions and conflicts. Yembilah and Grant (2014) argue that, whilst herders' networks with community leaders give them access to pastureland, it draws the ire of local youth and officials who want them expelled because they (local youth and officials) argue that the herders are a destabilizing force in the community. Also, chiefs and community leaders who have lost out on the rent of herders' settlement instigated negative sentiments that led to their expulsion, and farmers used overt aggression to maximise farming opportunities (Yembilah & Grant, 2014). Similarly, Tonah (2002b, 2005b, 2006a, 2008) notes that in farmer-herder conflicts in Ghana's Volta basin, chiefs, landowners, cattle owners and livestock traders have formed strong networks with herders, on the one hand, whilst farmers, youth, community members and government officials are networked in opposition to them, on the other hand, thus escalating violent conflicts.

Further evidence of the strong networks of Fulani with chiefs, landowners, local stockowners, cattle dealers, government officials, butchers and traders is found in the various strategies attempted by the Ghanaian Government to expel Fulani herders. Due to the strong

networks of the Fulani with various stakeholders, many of these attempts have been unsuccessful. Chiefs, landowners, local stockowners, cattle dealers, butchers and traders protect the Fulani from being expelled. Expulsion exercises in 1988/89, 1998/99 (Tonah, 2002b, 2005b), 2010 and 2012-2016, and those carried out by the Ghana Immigration Service in 2010/2011, all failed to achieve their aim because of Fulani connections with many local actors in the cattle business. Tonah (2002b, pp. 18–23) clearly states how the expulsion exercises of 1999 failed due to the vast array of Fulani social ties with various actors:

> […] Landlords, cattle-owning farmers, livestock owners, livestock traders and veterinary officials were amongst those who did not agree with the decision to expel the Fulbe. Some of these groups actually undermined the expulsion actions […]. Central government pronouncements expelling Fulbe pastoralists may satisfy some interest groups within the country but this does not take account of the realities on the local level. Chiefs, landowners, local stockowners, cattle dealers, pastoralists, butchers and traders are powerful interest groups on the local level, whose economic survival depends on the activities of Fulbe pastoralists. They are therefore unlikely to comply with any directive that does not take their interests into account […].

Thus, networks protect Fulani because of their special relations with chiefs, community cattle owners and other important actors at the local level.

In order to show the social networks of actors in conflicts (how people network to engage in conflicts), a sociograph was generated using the name "generator exercise" of all actors (see Table 8.1) as shown in Figure 8.1. This figure shows that the calculated overall network density is 0.3625 (see Table 1 of Appendix III for the full calculated graph metrics), which indicates that the proportion of ties is quite low and that most of the actors are not directly connected in conflict. As Prell, Hubacek, and Reed (2009) have stated, actors showing weak ties have less frequent communication, and, therefore, lack the trust and understanding needed for in-depth dialogue over issues. This is important for explaining the high frequency of violent conflicts between farmers and herders. The theory of weak ties in social network analysis also helps to explain the frequent conflicts between farmers and herders in Nyamebekyere, Bebome, Abrewapong, Bebuso, Kwame Addo, Onyemso, Mankala, Matuka and Kansanso in Agogo and Kpesinga in Gushiegu.

It is important to emphasise that, although some actors, such as, politicians, traditional authorities, cattle owners and community elders/opinion leaders (as seen in Figure 8.1), are not directly connected in conflict (since they are not directly involved in the violent attacks), they play various roles leading to the mobilisation of conflicts. Overtly, they influence conflicts. For instance, security agencies have been perceived, especially by local people, farmers, youth groups, some politicians, local associations and farmer associations as supporting

cattle owners and Fulani herders for not arresting, killing or evicting them from their communities and, in their words, "looking on when the herders unlash pain and terror on the communities." In Figure 8.1, farmers, Fulani herders, youth groups, local associations, community elders/opinion leaders, community members and politicians occupy the central position in conflict and, therefore, are more visible, have the highest degree of ties and are involved centrally in conflict. This is seen in the calculated betweenness scores in Table 1 of Appendix III, which indicates the calculated betweenness scores and indicate that the network influence of the central actors (farmers, Fulani herders, youth groups, local associations, community elders/opinion leaders, community members and politicians) is 6.81, 4.96, 3.23, 3.23, 2.91, 3.23 and 17.69 respectively. Their nodes are connected to the other actors, which mean they have substantial connections (positive or negative) with the other actors. This also means that they are at the centre of violent conflicts and use their ties to draw others into the conflict either in support of them or against them. Notably, the betweenness score of politicians is very high indicating their central role in conflict (although subtle) and reaffirming the argument in this study that politicisation of farmer-herder conflicts are major drivers of violent escalation. The high score also shows that the power that they possess is attracting others to build ties with them. The rest of the actors (see Table 1 of Appendix III) have lesser betweenness scores and, thus, theoretically have a small influence on conflicts.
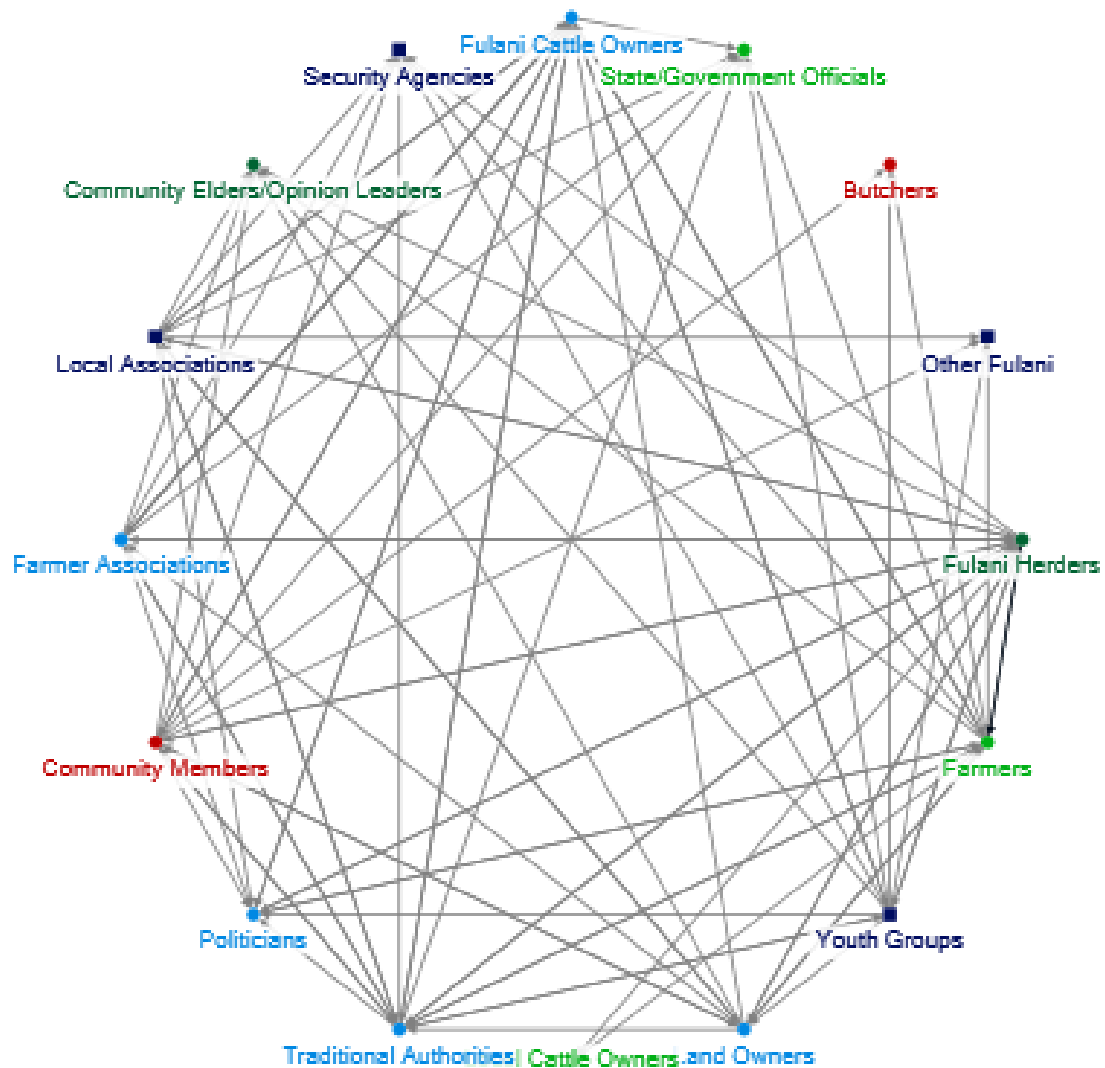
Figure 8.1: Sociograph illustrating Ties/Networks in Farmer-Herder Conflicts

A closer look at specific cases of conflict helps to enhance our understanding of the social networks of conflict development. Jallo's incidence, discussed in Chapter 5, and diagrammatically presented in Figure 8.2, shows the involvement of 15 actors and over 30 individuals (see the full graph metrics in Table 3 of Appendix III) and how his subsequent altercation with a watermelon farmer over alleged crop destruction escalated into violence. In the case of Jallo, the six farmers moved from being secondary actors to becoming the focus of the conflict (primary stakeholders). That is, they became engaged in the attack, despite the fact that the latent conflict started between the watermelon farmer and Jallo. This is why actors in social relations coalesce and assume other roles. Other actors, such as the Local Community Association and Farmer Associations (see Figure 8.2), were also part of the mobilisation process to attack Jallo (as noted by the herders). Jallo's fellow herders, Jallo's cattle owner and other Fulani herders (as shown in Figure 8.2) also joined the conflict, supposedly,

to protect Jallo and to avenge farmers' attack on him. This depicts the importance of primordial networks in intra-Fulani social ties/networks, which help Fulani to come together as a social group to defend themselves against attacks and sometimes to mobilise to attack others. The case of the Fulani herders who attempted to take a revenge attack on the farmers (see Chapter 5) clearly illustrates this role of intra-Fulani networks in conflict escalation. This also confirms Ramirez-Sanchez's (2007, pp. 15–16) assertion that "social networks transcend social affiliations (economic, political, and cultural) and geopolitical boundaries, supporting the contention that social life is organised through social categories but motivated by the social relations in which actors are embedded."

In Figure 8.2, the calculated betweenness scores, (see Table 3, Appendix III), indicate that the central actors in Jallo's conflict include: Jallo (Fulani herder), the Agogo Traditional Council, Jallo's cattle owner, Jallo's fellow herders, the police, landowner and Fulani group secretary. The same table indicates that they each have a calculated betweenness score of 4.00, while the rest of the actors have a calculated betweenness score of 2.50. What this means is that the central actors used their ties to draw others into the conflict. Figure 8.2 also shows that primordial networks motivated by ethnicity, from both farmers and Fulani herders, played a role in mobilisations for conflicts. This draws parallels with Osei's (2015) findings of the role of ethnic networks in facilitating cohesion among Ghana's MPs.
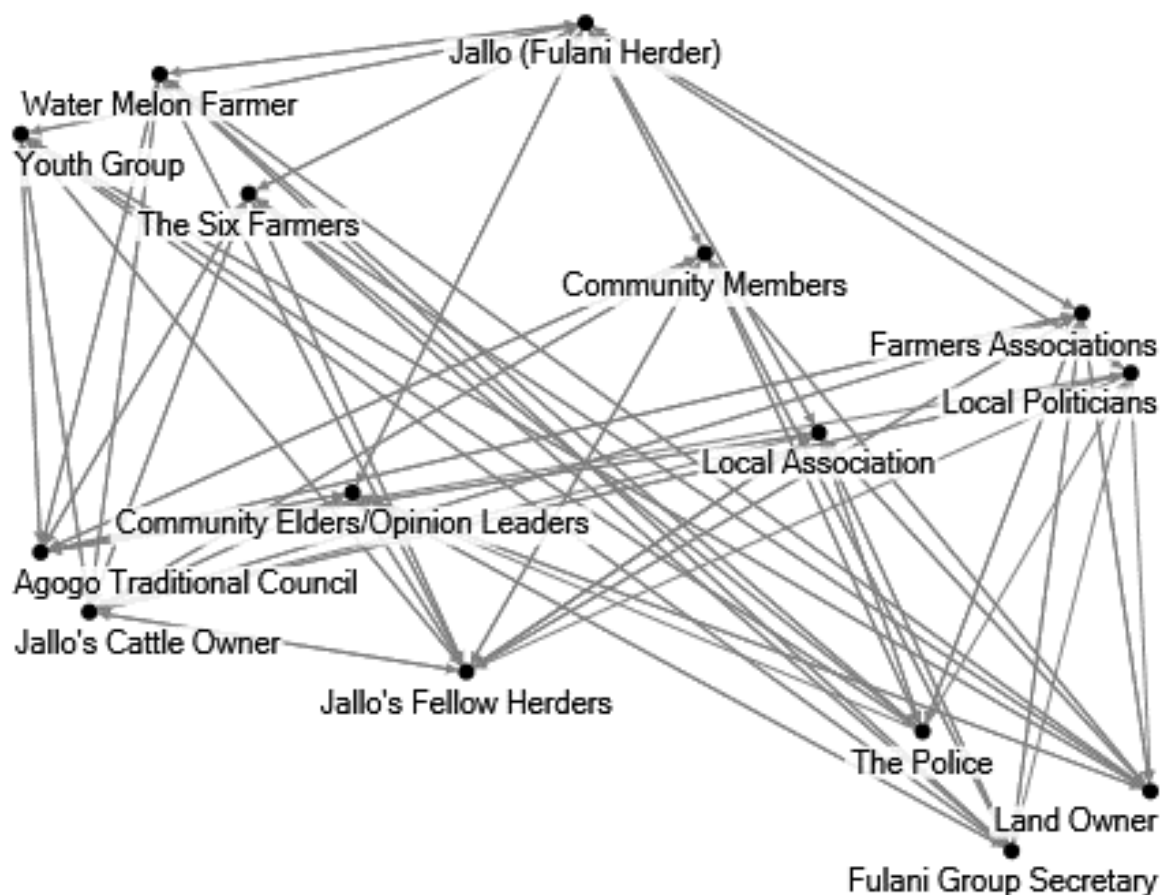
Figure 8.2: Sociograph illustrating Ties/Networks in a Conflict Case in Agogo

In discussing further the role of intra-Fulani networks in conflict mobilisations, primordial identity and the notion of a 'minority' and 'vulnerable' group has helped Fulani come together for conflict (counter or revenge attacks). Fulani collective identity, based on cultural and ascriptive traits and a notion of marginalisation (e.g. seen in patron-client relations), have helped them to mobilise and build strong herder ties for collective action. Fulani built intra-networks in conflicts to mobilise in response to threats and attacks from other groups (based on Gurr's, 1993 conception of primordial mobilisation). The Fulani Secretary (spokesperson) argued this out in an interview:

> FULANI SECRETARY: […] what would you do when people keep attacking you? Do you expect us to sit by and watch us being killed every now and then? I tell you if Jallo's colleagues were around, they would have attacked too and we would have had much bloodshed or deaths […]. Group attacks like this against us are common. In Kansanso and Matuka in particular, groups have given weapons to young people to attack and kill Fulani. We will also come together to fight anyone who tries to kill us. Jallo is lucky to be alive, but others who weren't lucky have died.
> RESEARCHER: Who are these groups who gave the weapons?
> FULANI SECRETARY: They include many people like that *Agogomann Mma Kuo*, NPP politicians and others.
> RESEARCHER: Are you sure? What evidence do you have?

> FULANI SECRETARY: […] I have been told by my Fulani collogues and also some communities members of Kansanso. An important person told one of our Fulani cattle owners about this. I get this information several times from the community members.
> RESEARCHER: What are you going to do to fight back as you said?
> FULANI SECRETARY: I am telling you we will also fight back. Just wait and see […]. I won't talk much (Interview with Fulani Group Secretary, 20/08/2013).

Thus, the Fulani Secretary reiterates the fact that herders would mobilise in defence of attacks against them. Herders are armed and move in groups to defend themselves. A local cattle owner stated that many of the attacks and deaths, especially of local farmers are planned and done in groups by the Fulani herders. The killings of Kwesi Abu in 2011 in Abrewapong and that of Kojo Billa in 2012 in Matuka were supposedly planned and carried out in groups.

Similarly, Jallo's cattle owner, the Fulani Group Secretary and Jallo's fellow herders claimed in interviews that the community held meetings to plan attacks on herders. According to them, as illustrated in Table 3 of Appendix III, in the process of mobilising, Community Opinion Leaders, Farmers, Community Members, Local Politicians (Assembly Members and leaders of political parties), Youth Groups, the Local Community Association and Farmer Associations were all part of the planning and processes that led to the attacks. What this discourse points to is the role of primordial networks in conflict, an issue that I return to later in the chapter.

In the case of Gushiegu, I used Azumah's conflict with the Kpesinga Youth in Chapter 5, in which 18 actors and more than 40 individuals became part of the conflict. In this particular case, a section of the community backed Azumah because of strong ties with him and because he cares for their cattle, has personal friendship bonds with them and offers them gifts. This case is illustrated in Figure 8.3, which includes Farmers 1[120], Community Elders 1, the Police, Butchers, Other Fulani (made up of Fulani Herders, the Fulani Chief and other Fulani Opinion Leaders) and the Kpesinga Chief in strong ties with Azumah, on the one hand, and Farmers 2, Community Elders 2, Community Members, the Assembly Member, the Kpesinga Youth, Local Cattle Owners and State/Government Officials who are in opposition to Azumah, on the other hand. At the centre of this linkage are the Kpesinga Youth and Azumah who are directly connected to conflict. The sociograph has a network density of 0.5165, which indicates that the proportion of ties is relatively high, and, therefore, the actors are connected in conflict. The calculated betweenness scores in Figure 8.3, as seen in Table 4 of Appendix III, indicate that the central actors of conflict in Kpesinga are Farmers 2,

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[120]Farmers 1 and Community Elders 1 are those actors who support Azumah while Farmers 2 and Community Elders 2 are those actors against him. The numbers are used to show the divide in the community.

Kpesinga Youth, Local Cattle Owners, Community Members, Assembly Man and Community Elders 2. Table 4 of Appendix III shows that the calculated betweenness scores of Farmers 2, Kpesinga Youth, Local Cattle Owners, Community Members, Assembly Man and Community Elders 2 are 4.77, 4.77, 4.77, 4.77, 3.17 and 4.77 respectively. What this means is that the central actors occupy the central position in conflict and use their highest degree of ties to draw others into the conflict.
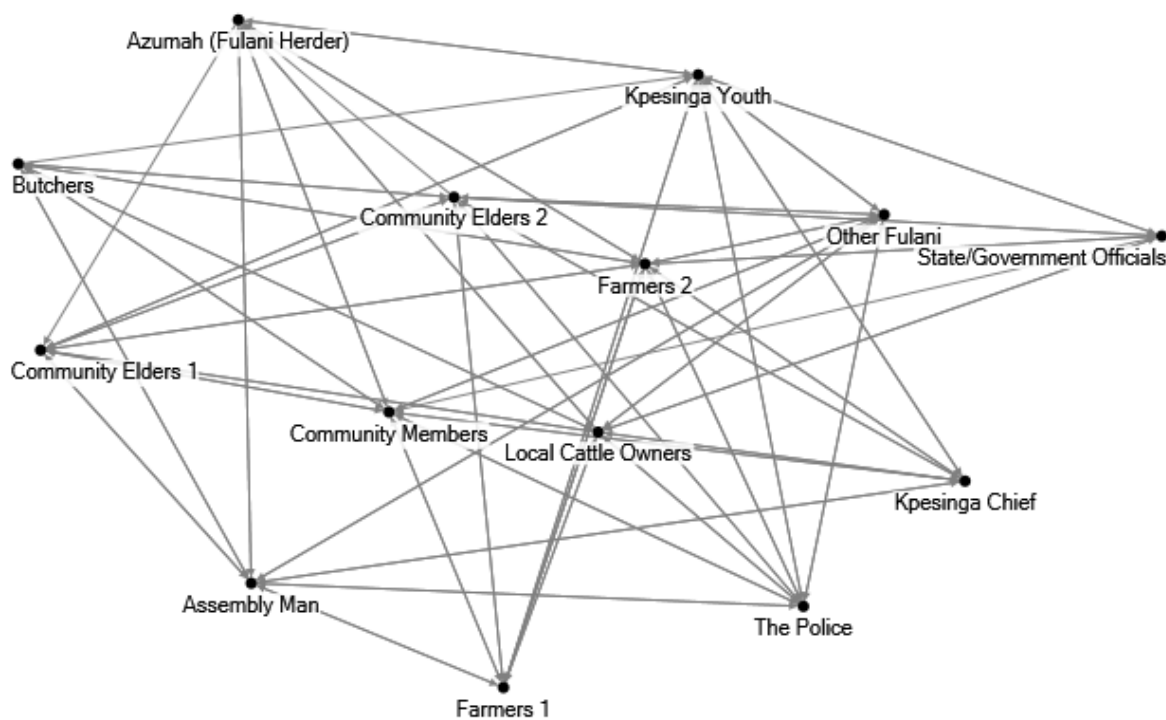
Figure: 8.3: Sociograph illustrating Ties/Networks in Conflict in Kpesinga (Gushiegu)

In the discussion of the networks shown in Figure 8.3, it remains of interest how local cattle owners and farmers hardly engage in violent conflict behaviour, even if their crops have been destroyed. Farmers would often see the herders as 'being one of our own' and, therefore, would not attack them. Azumah, for instance, claimed that herders paid for any damage to crops, and had good relations with many members of the community. The Kpesinga Youth also believed that Azumah's array of networks helped protect him against community evictions and conflicts. Again, the role of power is reiterated as important for enhancing herders' networks. The Youth of Kpesinga claimed that:

> The Fulani are more powerful than us. We are powerless on our own land. They have bought and paid the police and chiefs. Wherever we send him (Azumah), whether the chief's palace or police station, he wins. He has succeeded in breaking the ranks of

> the entire community into rival camps. We are often afraid because of the activities of the Fulani if we are to travel. They have made us fight against each other. We nearly slaughtered one another because of the Fulani. This particular Fulani (Azumah) is their chief, captain and MP. His issues cannot be told in a day. Some community members have revealed all the secrets of the community to him and others beg things from him. We all know that Fulani do not farm anywhere in Ghana. The Fulani do not do any work apart from taking care of people's cattle, but they are now the richest people in our community. They often use the money from the sale of their cattle to twist matters or subvert justice. They are richer than us and control us all. He has a lot of people both within and outside this community backing him […] (FGD with Kpesinga Youth, Gushiegu, 2/12/2013).

From the quote above, herders' ties with the police, in particular, are seen as a source of security for them. According to the youth, when they mobilised to evict Azumah from the community in 2012, the police moved into the community to protect him and his property from destruction. They claimed that Azumah was well connected and that he could not be sent to the law court, despite several reports of engaging in cattle theft. Similarly, in the FGD with youth farmers of Bulugu, one of them emphasised that:

> The Fulani have strong relationship with the chiefs and community leaders […]. The opinion leaders and the chief support them because of what they get. At several community forums we have asked for the expulsion of the Fulani from the community but in the whole community, there are one or two people whose words are final, no matter the grievances of the entire community […]. When we even went to the DCE to inform him about the harmful activities of the Fulani, the DCE told us that the Fulani are foreigners and cannot be sacked at an official level because there are some Ghanaians who are also in those countries the Fulani came from. So if there is any problem with them, we can solve it at the community level. This tells you how powerful these Fulani are (FGD with Bulugu youth farmers, 16/10/2013).

Thus, the perception is that Fulani social networks and power connections help them to avoid community agitations and evictions; protect them from conflict; and determine their relations in the community. Therefore, two important propositions are worth making with regard to networks/ties in farmer-herder conflicts:

Proposition 1: Cattle owners/herders with strong social networks/ties in the community tend to have cooperative relations in the community and avoid violent conflicts with farmers.

Proposition 2: Social networks with landowners, traditional authorities and other major actors are important for cattle owners and herders to access resources

In the following section, I examine these two propositions in detail.

8.2.1. Proposition 1

The nature of networks in Agogo is quite complex. As indicated earlier, social networks involve primordial ties and political ones of different actors, as seen in Table 8.1 The type of relationships that exists between farmers and herders, whether it is based on exchange, friendship, 'herding an indigene's cattle' or 'herding a stranger's cattle,' determines a conflictual or cooperative relation between farmers and herders. For instance, destroying a farmer's crops while 'herding an indigene's cattle' would likely not lead to conflict, whereas herders 'herding a stranger's cattle' would. This is revealed in the long title of an extract found below: "*Cattle Owners with Social Ties in the Community Cooperate Well with Herders.*" Not every cattle owner in the community is seen favourably by community members or farmers, as this is dependent, to a large extent, on social ties and the range of social networks that a cattle owner has built with members of the community and 'powerful' people. This cattle owner could be a Fulani, autochthonous cattle owner or Ghanaian cattle owner.[121] Therefore, if a cattle owner has social ties, friendships and everyday interactions with key stakeholders in the community, farmers and groups and is seen as a member of the 'social and political community,' his cooperation with the entire community is high. Fulani herders who are well connected in the community are seldom attacked, even when there is destruction of farmlands. I concretise this in the following extract taken from discussions with a cattle owner:

Cattle Owners with Social Ties in the Community Cooperate Well with Herders

A farmer had arrived at a cattle owner's house to inform him of the destruction of his plantain farm when I was with the cattle discussing issues of my research with him. According to the farmer, "the Fulani had driven the cattle into the farm destroying the entire farm. I met the Fulani and they were apparently careless because they were not around when the cattle went into the farm. In fact, if it were not because of the relations that existed between you, Alhaji, [cattle owner] and I, it wouldn't have been good for us at all. The Fulani would have suffered for destroying my crops. You [Alhaji] are our own – you are part of this society and we have lived with you for a long time. We have a lot of respect for you and will not do anything that will hurt or harm you. Every one of us in this community knows you to be a good and kind-hearted man. As for the Fulani, most of them are careless and intentionally drive cattle into farms. These are the reasons why people attack them and this definitely starts the violence we are having." The cattle owner was apologetic and full of praises for the farmer: "I want to thank you very much for your patience and for coming to me to report this incident. I have on several occasions warned my Fulani herders about allowing the cattle to stray into farms but they don't listen. If not for our relations [ties], you wouldn't have taken it kindly. I praise you for respecting me and I pray our relations continue to be this. I will come to your farm to

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[121] These categorisations of cattle owners were provided by the local farmers and community members. An autochthonous (local) cattle owner is the one who comes from the community, has roots there and has unlimited access to land. A Ghanaian cattle owner is a cattle owner who has Ghanaian citizenship and comes from other parts of Ghana, but rear cattle in the Agogo area, which are taken care of by Fulani herders. These are mainly absentee owners. Fulani cattle owners are those who are ethnically Fulani.

assess the destruction and pay for everything. Tomorrow I will be at the farm and we will resolve this. Thank you very much for understanding."

After the farmer left, the cattle owner stated that "if you respect the Agogo people, they also respect you and understand when the cattle even destroy their crops. But when you don't respect them – you never greet them, behave as though you are not part of them and empathise with them when cattle destroy their crops, then you have problems with them. In effect, good neighbourliness and building social ties here are important. Let me tell you if not for our relations and support for them both politically and socially, they would have been serious conflicts between us and them. We would have been forced to move our cattle out of here (Based on discussions with a cattle owner, Agogo Town, 02/08/2013).

In the extract above, the farmer emphasised that the cattle owner had very good ties and interactions with the community. The basis for not attacking the Fulani herders after the cattle had destroyed the crops was because the cattle owner was known to be on good terms with the community, and, therefore, his good relations with the farmer were extended to his herders. Being part of both the political and social community where the cattle owner gives them political support, social solidarity, respect and empathy for crop destruction have helped to maintain peaceful relations and avoid conflicts. Cox (2010, p. 1) notes that "interpersonal trust, institutional confidence and associational membership may foster cooperation or impede security." Bierschenk and Olivier de Sardan (2003, p. 160) expound that in such societies as Agogo:

People are linked by multiple relational ties: my neighbour is also a close relative, our fields are situated next to each other, we are both members of the same self-help group, he is the scout master in the church of which I am the deacon, on Sundays we meet to drink beer in the same bar, which is tended by a mutual cousin […].

These sorts of relations guide the farmer and cattle owner described in the extract above. Bierschenk and Olivier de Sardan (2003, p. 161) further expatiate that because "conflict entails the risk of destroying the various social relations" that an individual may also happen to share with others, and "whose help he may need in another situation," an open expression of conflict is avoided. The farmer and cattle owner are linked by multiple social ties, which help to maintain peace and avoid conflict. On the other hand, cattle owners who have no social networks are seen as not belonging to the 'social and political' society. They are considered to be the ones in conflict with farmers and it is their herders who are attacked, even in situations where there is very little damage to crops.

In Gushiegu, social networks between Fulani and local people are even stronger. This is visible in the close interactions between herders and farmers in Gushiegu and an acceptance of Fulani that is much greater here than in Agogo. The level of interactions of Fulani with the communities in Gushiegu is appreciably friendly and is evidenced by a strong network

of friendship bonds between Fulani and local people, despite conflicts and complaints from members of the community. Social networks in Gushiegu, in relation to conflicts, can also be seen in the light of 'who owns the cattle taken care of by the Fulani herder.' This remains important in the types of relations that herders build in the community. Farmers are more tolerant of herders who take care of cattle that belong to the members of the community, especially when it comes to issues related to crop damage. They are more cooperative with them than herders who take care of cattle belonging to other Fulani. Farmers become networked with these herders because of their relations with the cattle owner, who are members of the community. The least crop destruction leads to conflict, which is either settled through the payment of compensation by the Fulani cattle owner, violent attack or eviction from the community. In Bulugu, Fulani cattle owners complained about the negative reaction of farmers towards them when their crops are destroyed by Fulani cattle, yet when the cattle of farmers and community members destroy crops seldom are they attacked. Interestingly, farmers stated that Fulani cattle destroy their farm crops more frequently than cattle owned by community members. A farmer observed that:

> […] it is the cattle of the Fulani which often destroy our crops, hence our conflicts with them. Herders who care for Fulani cattle do not supervise them. They intentionally drive the cattle into our farms destroying both planted and harvested crops, which are our main source of livelihood. They graze the cattle in the night and, when you go to your farm the next morning, all your crops are completely destroyed. […]. You think grazing at night is not intentional? Our own herders never graze at night. They are careful because we have warned them several times and when they do, we sack them outright. *Even if a community member's cattle destroy my farm we are related by blood and I cannot ask him to pay. That one is difficult because we maintain a cordial relationship* […]. One other thing is that our own herders are willing to admit to the destruction of crops but the herders of the Fulani never admit that their cattle destroy crops neither do their owners pay compensation when you even catch them red-handed (Interview with 49 year Farmer, Bulugu, 9/12/2013, emphasis added).

Obviously, the farmer emphasised that they attacked the herders of Fulani cattle owners because it was their cattle that destroyed their crops and not their own cattle. He reiterates the fact that good relations, primordial relations in particular, are an important determinant for conflicts because community members are ethnically and socially identifiable with them (farmers) and an open conflict with them will break up cordial relations. Thus, the presence or absence of primordial ties/connections is important in avoiding or escalating conflicts. Primordial ties, as Geertz (1994) notes, enable close affinity of natural flow of attachment. This again reinforces Bierschenk and Olivier de Sardan's (2003) argument that individual social relations in 'face-to-face' or 'back-to-back' societies help avoid open conflicts.

Also, the case of social ties in Kpesinga illustrates that Fulani networks protect them from conflicts and community agitations and evictions. In the case of Azumah in Kpesinga, youth farmers and other community actors have cut ties with him and have attempted to force him out of the community, whilst, at the same time, another Fulani cattle owner is seen positively by these groups. This Fulani is never attacked by the community, neither is there any attempt to evict him. This is largely because of the good relations and ties he has built with them and, in the words of a youth farmer, "is not a nuisance to the community." Azumah is highly connected with chiefs, government officials and security forces as well as other powerful community members who are seen as protecting him from evictions and attacks.

Overall the range, of social networks, political or primordial ties, is crucial to farmer-herder conflicts and/or cooperation. It is through these conflicts that multiple actors relate to each other.

8.2.2. Proposition 2

Access to resources, especially land, are redefined and negotiated through social relations, ties and networks (Amanor & Ubink, 2008; Berry, 1993, 2001). Berry (1993), for instance, argues that customary relations are seen as being perpetually negotiated by various actors who use their social networks to redefine and renegotiate customary relations. Thus, people use their networks with the managers of customary resources to gain access. To this end, Amanor and Ubink (2008, p. 11) state that "people invest in social status and networks of community and kin and use their social status to make claims on resources including access to land." Similarly, Goldstein and Udry (2008) notes that people who are 'politically powerful' (within the traditional political set up) in Ghana have more secure tenure to land, and hence, invest more in soil fertility and have substantially higher outputs. I have already briefly mentioned that cattle owners use their social networks with traditional authorities and landowners to gain access to resources. I now want to elaborate on this. It is worth reiterating that cattle owners' social ties are strongly built with traditional authorities and landowners. Chiefs, especially, build strong individual social ties with Fulani pastoralists and are seen by farmers and community members to be "blatantly supporting Fulani herders in their conflicts with farmers because of the benefits they stand to gain from the pastoralists." One farmer explicitly explained that:

> Fulani networks with the traditional leaders and elders of our societies are stronger than us members of the community. The chiefs have very good relations with the Fulani that you will at once think they are kinsmen. Chiefs are regularly visited by Fulani cattle owners and all sort of gifts exchanged between them. So when you have

a problem with a Fulani, the chief supports them against you the local resident […]. Huh! As for the power of the Fulani, they are really powerful and connected (Interview with farmer at Bulugu, 4/12/2013).

Mauss (1966) has argued that gift exchange creates and maintains social relationships in small-scale societies. As evident from the interview above, gift exchange plays an important role in fostering ties between traditional rulers, community leaders and government officials, on the one hand, and Fulani pastoralists, on the other hand. Fulani exchange of gifts with community leaders is regarded as creating and maintaining their social ties so that they gain access to land and resources. Therefore, their access and use of land and resources are influenced by networks built with these 'powers.' Again, since Fulani herders offer chiefs and cattle owners' resources (work production), farmers claimed that chiefs and cattle owners supported Fulani in case of troubles because they (chiefs and the herd owners) were defending their economic interests and thus creating a homophily (strong ties) between chiefs and community leaders and Fulani pastoralists.

Chiefs' social ties with pastoralists are mainly a 'gateway' to their (chiefs) prosperity and money. Chiefs, Tonah (2002b, 2005b) notes, prefer to give land to migrants, especially the pastoralists who are rich in cattle and can afford to make substantial payments as settlement fees. Similarly in Agogo, Fulani cattle owners bonds of networks give access to protected forest lands to rear their cattle as seen in the incident of Ahmed, described in Chapter 6. According to farmers and community members, there are instances when they see Fulani herders and cattle on community lands without them knowing how the herders gained access to the land. Community members and farmers described this relationship between Fulani pastoralists and paramount chiefs and government officials as "a strong alliance that cannot be broken." Alliance is used here to include a coalition in which people coordinate strategies to realise some outcome (Pressman, 2008; Niou & Odershook, 1994).

Kurtz (2001, p. 87) stresses the importance of alliances, especially political ones, among potential enemies since alliances "unite potential enemies and provide leaders with strategies by which to acquire human and tangible resources in the form of allies and material goods." Farmers and local cattle owners in Gushiegu described another form of alliances between Fulani herders and butchers as 'thievery alliances' in which herders and butchers collide to engage in rustling cattle of local cattle owners, which is seen as a major driver of violent conflict. Also, alliances among Konkomba communities were an important basis of mobilisation for conflict against the Fulani in the August 2011 attack described in Chapter 5. The literature on mobilisation has emphasised that mobilisation for conflicts can be done

through primordial (and also instrumental) ties through identity and/or ethnicity (see Jenkins, 1983; Gurr, 1993 Stewart, 2009). Some respondents in Sugu, Toti, Bulugu, Zanteli and Zamashiegu believed that primordial networks and alliances among local groups, especially the Konkomba, enable them to easily mobilise for conflict. The 2011 attack discussed earlier is a clear example. The argument by Fulani herders and that of the police and other Dagomba respondents was that the alliances between the various Konkomba communities facilitated the attack. A Fulani herder who was attacked along with his family noted that:

> […] when the group arrived in our community, it was some community elders and an assembly member who showed them where we, Fulani, were and they [the Konkomba group] moved to our huts to attack us. […]. The community knew about this attack and even facilitated it […] (Interview with a Fulani herder, Gushiegu, 21/12/2013).

Thus, primordial mobilisation and alliances among the group were important in organised attacks. Turton (1994), for instance, state that networks among the Nyangatom of Southern Ethiopia and the Toposa who are a fellow member of the Karamojong cluster living in Sudan, have facilitated the easy flow of arms to the Nyangatom to fight their enemies in times of violence. In effect, networks (primordial ties) are important in spurring pastoral violence.

In sum, the two propositions have shown that networks and alliances are important in the escalation or de-escalation of farmer-herder conflicts and pastoralists' access to resources. Groups with primordial, political or economic networks are able to get together for conflict or cooperation. It is also worth emphasising that social networks do not exist in a vacuum, but interact with processual drivers of conflict, and, particularly the actions of the actors.

8.3. Social Networks in Cooperation and Conflict Resolution

I mentioned earlier that cattle owners' range of networks/ties in the community help them to build cooperative relations and to avoid violent conflicts with farmers. Van Vugt, Synder, Tyler, and Biel (2000, p. 22) argument that "positive social connections make it more likely that people will do something for the collective welfare, whereas negative social connections will make it more likely that people act for their personal welfare" is relevant in the discussions of cooperative networks in farmer-herder relations. Thus, circles of positive social connections and ties enhance cooperation. It is also important to emphasise that Simmel (1955) pictured society as a web of interactions between people through which they build relationships and cooperate. According to Simmel (1955), actors in interactions agree on their goals,

negotiate and exchange and distribute resources. Also, Ngaruiya and Scheffran (2016) found that diversification in conflict resolution actors and networks are important in cooperation especially in the use of resources.

I present how actors are connected in cooperation based on the name generator exercises in Figure 8.4. The sociograph (Figure 8.4) has a network density of 0.9412, which indicates that the proportion of ties is relatively high and therefore the actors are connected in cooperation. Again, the sociograph shows that many actors need to get involved in cooperation because of the role these actors play in the conflict process. For instance, in attempting to arrive at a cooperative solution to conflict between a farmer and a herder in Bulugu (Gushiegu), there was the core involvement of the community chief/traditional authorities, youth farmers/youth group, local farmers/community members, local cattle owners, Fulani cattle owners and community elders/opinion leaders before resolution could be arrived at.

In Figure 8.4, Fulani Herders, Farmers, Local Cattle Owners, Traditional Authorities, Fulani Chief, Farmer Associations, Local Associations, Security Agencies, Fulani Cattle Owners and Youth Groups hold the central position in cooperation and therefore are more visible and have the highest degree of ties. This is seen in the calculated betweenness scores seen in Table 2 of Appendix III, which shows that the calculated betweenness scores, which indicate the network influence of the central actors, are 0.68, 0.68, 0.54, 0.68, 0.68, 0.68, 0.68, 0.68, 0.68 and 0.68 respectively. This presupposes that all these actors are significant if cooperative relations are to be built. The rest of the actors (seen in Table 2 of Appendix III) have lesser betweenness scores of 0.07, 0.15 and 0.22 and thus have a small influence on cooperation.
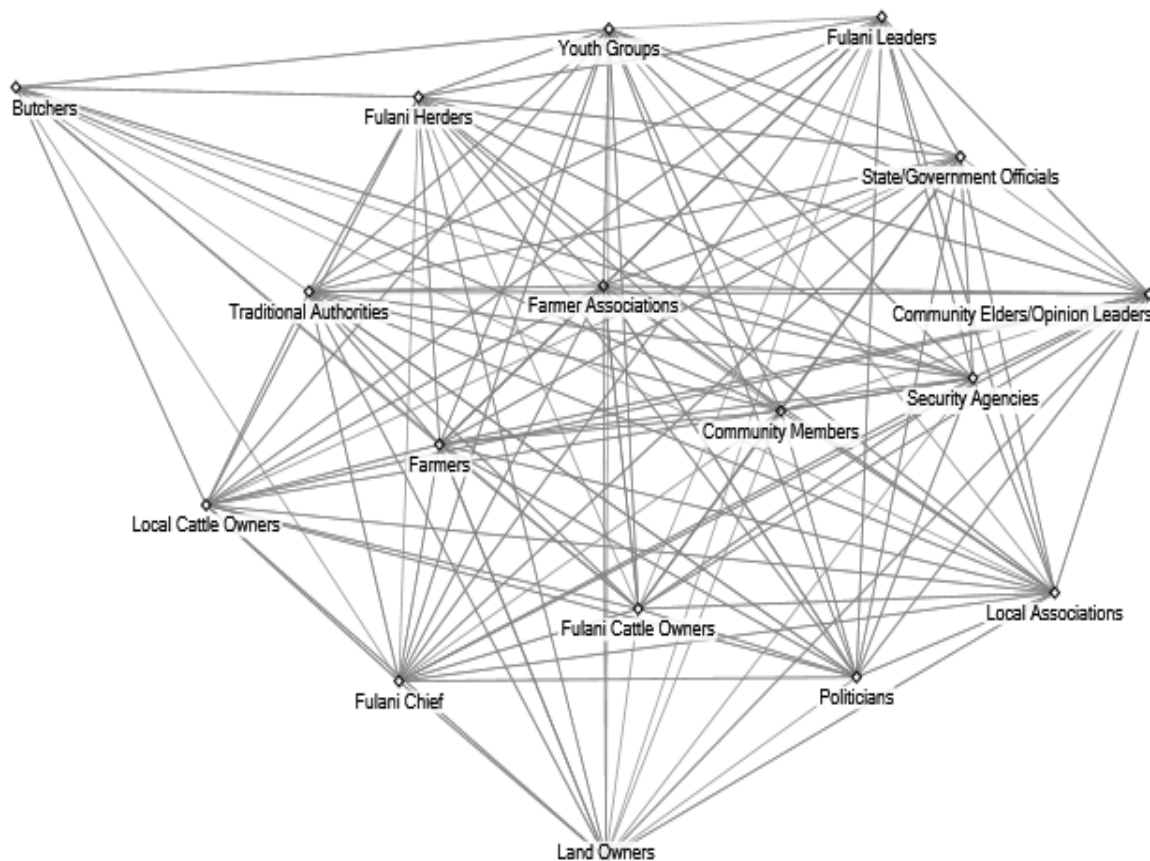
Figure 8.3: Sociograph illustrating Actor Linkages in Cooperation

Reciporicity, as mentioned in Chapter 7, is important for ensuring cooperation among Fulani pastoralists and farmer communities. Reciporicity ensures the building of strong cooperative networks among Fulani pastoralists, cattle owners and community leaders, who, as seen in Figure 8.4, are central in the cooperation processes, especially in many communities in Gushiegu. Fulani pastoralists and cattle owners' gift relations with community leaders induces reciporical protection, continuous support from chiefs and committed resolution of their conflicts with farmers. As explicated in Polanyi's (1957) use of the embeddedness principal, reciporicity is embedded in long-range relations which imply trust and confidence. This, however, remains the problem of farmers and herders in cooperative relations because of a deep-seated history of conflicts, stereotypes and local prejudices. Beckert (2006) notes that social networks, clientelistic relationships, reputation systems, formal warranties and branding, trust, social norms, power, network closure and emotions are important for cooperation.

Economic exchanges are particularly important for pastoralists in building cooperative networks. Fulani engagement in economic trade relations with various people already discussed in Chapter 7 adds to their cooperative networks. These actors, including

local autochtonous cattle owners, Ghanaian businessmen, butchers, government officials (particularly vertinary officials and local revenue collectors), community members and food and restaurant owners, build strong networks with pastoralists. Through these economic exchanges, relations are formed, social ties strengthened, alliances built and favours are given. This is why in herders' conflicts with farmers, Fulani relations with these people are seen by farmers and community members as supporting and protecting Fulani. Through economic ties, these actors become important in resolving conflicts between farmers and herders. For instance, some local cattle owners in both Agogo and Gushiegu help to settle conflicts between the two. Some members of the Agogo Local Cattle Owners Association in particular have strong ties with Fulani cattle owners and, when in conflict with farmers, they step in to mediate and negotiate between the two.

Social capital, an essentail part of social networks, facilitates cooperation for mutually beneficial collective action and helps to resolve conflicts (Bourdieu, 1986; Woolcock & Narayan, 2000). Bowles and Gintis (2002) see social capital as informal values or norms which are shared among members of a group that enables cooperation with one another. The work of Bourdieu (1986) on the forms of capital is relevant here because social capital is viewed in the same way. Pastoralists' informal relations with landowners facilitate mutual cooperation in pastoralists' access to land, in particular, and their use of resources. As a result of these relations, pastoralists have cooperative avenues with some community members. Social capital, among various actors in farmer-herder relations, is seen through social solidarity, cattle entrustment, economic trade and resource sharing. Thus, individuals are more likely to have a connection, friendship or association if they have common attributes including social capital, as cooperation is more likely between homophilous ties and actors. Also, since social capital produces consensus building (Arefi, 2003), pastoralists and farmers in these communities have tended to cooperate with one another (as the case studies of Zanteli and Kowereso showed in Chapter 7).

8.4. Conclusion

This chapter sought to discuss the role of social networks and social ties in farmer-herder conflicts and cooperation in Ghana. The chapter revealed that through social networks with community leaders, chiefs, security agencies, politicians, government officials, some local cattle owners and butchers, Fulani pastoralists are protected from community attacks, evictions/expulsions, and are able to gain access to the use of resources, particularly land. At the

same time, community alliances (especially primordial ones) with various actors are used to mobilise attacks and oppose Fulani settlements and use of resources in the community. It is worth reiterating the observations of Leeuwis, Long, and Villarreal (1990) that networks extend through time and space, and so particular interactions can be understood against the context of a 'network' or chain of previous and future interactions and in different spatial locations. Primordial alliances and networks are used especially as mobilising tools to attack each other. The Konkomba attack, for instance, largely succeeded because of kinship ties and primordial relations.

Similarly, attacks and killings of both farmers and Fulani pastoralists in Agogo are successful because they are done through deep-rooted primordial and kinship ties embedded in political support. Also, cattle owners with good connections and ties in the community can avoid conflicts and attack of their herders and thereby guarantee their continuous stay and access to resources in the community. Therefore, farmer-herder conflicts are constellations of actors through which they build ties, networks and alliances to achieve their agenda and interests. From a consensus perspective, Larson and Wikstrom (2001) maintain that processes within networks are predominantly based on either a consensus or a conflict perspective. According to them, actors use different strategies to manage political processes, aiming at building either legitimacy or mutual commitment.

In sum, discussions of the social networks show that:

1. interactions and relations between actors are built on social ties;
2. the more networked a herder is with chiefs, community leaders/elders, government officials and politicians, the more he is protected and therefore less likely to be involved in violent conflicts with farmer communities;
3. political/power networks enable pastoralists' access to land and resources; and
4. primordial ties (motivated by ethnicity) provide homophilous ties that are used in the mobilisation for conflict.

I am not oblivious of the limitations of social network analysis as it is not in all cases that ties/relations exist between actors in farmer-herder relations are as simplistic as those illustrated in the sociographs. Ngaruiya, Scheffran, and Yang (2015) have noted that in real-life network nodes are not always connected to each other, and that not every actor is connected with each other or have homophilous ties. This is why emphasis should be put on the qualitative discussions of the ties to highlight the role that social, political and community networks play in farmer-herder conflicts, access to resources and cooperation, rather than

only on the sociographs. The sociographs nonetheless help to give a visual understanding of the networks.

Also, since the dichotomy of conflict and cooperation are not exclusive and independent of each other in some instances, a critical analysis of various actors and how they are interacting should be conceptualised. This chapter has, therefore, contributed theoretically to discussions on actor constellations and networks in farmer-herder relations by emphasising the need to go beyond fuzzy identification of just the actors/stakeholders in farmer-herder relations to an in-depth analysis of the processes of actor build-up, configurations and connections in conflictual or cooperative relations among farmer and herder communities.

9. CONCLUSION: FARMER-HERDER RELATIONS - CON-STELLATIONS OF DIVERSE FACTORS

The overall objective of this study is to analyse farmer-herder relations and how these relations are generally expressed, acted out and conceptualised. The study has shown that there are multiple sets of interrelated factors that come into play when observing, conceptualising and analyzing farmer-herder relations. Factors contributing to these relations include conflict, resource use and access, historical interactions and experiences, migration, cooperation, social networks/ties and a constellation of actors. Conflicts and cooperation are both understood from the perspective of social ties/networks existing among various actors, the power relations between the actors, the historical interactions between farmers and herders and the use of resources in terms of their access and ownership among them. This chapter contextualises the key issues of my research findings, draws a general conclusion and makes recommendations. I also summarise the key issues from a comparative perspective.

9.1. The Complexity of Farmer-Herder Relations

Throughout this book, I have emphasised and, in fact, shown that a plethora of complex processes and factors that go beyond conflicts (violent conflict) ought to be considered in discussing farmer-herder relations and interactions. Different interests, power relations, social networks and diverse actors play important roles in the determination of conflict and cooperation between farmers and herders. There are configurations of various actors whose actions and inactions add to the bulk of relations that the two build. Besides, power play and state politics, both at the local and national levels and the diverse actors, are part of the understanding of the relations. Importantly, Toulmin (1983) calls for a critical look at the historical experience and the socio-cultural complexities of African rural societies in order to understand the complexities of pastoralist-farmer relations. Babiker (2001, pp. 135–137) comments on the complexity of farmer-herder relations as follows:

> The interaction between pastoralism and agriculture in African drylands is an extremely complex issue. Despite the considerable amount of literature which has been accumulating on the subject, there is still very little agreement as to the nature, the forms and the outcomes of that interaction [...]. Social reality is far more complex and the interaction between pastoralism and farming involves complex relations of competition, cooperation and complementarity within each, as well as between them all […].

Thus, despite much literature on farmer-herder relations, there are few studies on the level, nature, form, extent and implications of these relations as there are complex sets of actors involved in the process of interacting and relating. This is why this study has examined these issues as broadly and multi-dimensional as possible.

Conflict has continued to dominate farmer-herder relations not just in the two study areas and Ghana, but across West Africa. Again, the complexity of conflict itself is perfectly conceptualised in a convoluted process (cf. Gausset, 2005; Moritz, 2010), not just in a simple linear explanation such as the environmental/climate and resource scarcity discourse or in local discourses of crop damage, armed robbery, cattle rustling and rape. Farmer-herder conflict escalation takes a processual rather than linear development. I re-emphasise that actor relations are rather at the core of violent conflict escalations. These actor relations are comprised of social bonds/networks and actor mobilisations (whether built primordially or instrumentally). They also include political tactics and power play both in the access and management of land (and resources). Further, the politicisation of farmer-herder conflicts, where local and national politicians use community agitations to gain political ends, adds to the conflict. Finally, an increase in the value of land, which has led to the emergence of diverse actors in its usage, equally plays an important role in influencing farmer-herder conflicts.

Aside from the conflict conundrum and its negativity, bonds of close relations between farmers and herders, friendships, exchanges, networks, entrustments, resource interdependence and economic ties have been part and parcel of the social organisation of the two (cf. Pelican, 2012). The two cases of Kowereso (Agogo) and Zanteli (Gushiegu) show that farmers and pastoralists can co-exist and negotiate over the use and access to resources to avoid violence, as also reiterated by Waters-Bayer and Bayer (1994) in their study of Abet in Nigeria's sub-humid zone. Cooperation is embedded theoretically in cultural neighbourhood, where despite conflicts, there are everyday peacemaking mechanisms, bonds of crosscutting ties and avenues of co-existence between farmers and herders. This study has argued for the conceptualisation of farmer-herder cooperation within an understanding of conflict where conflictual and cooperative relations overlap and 'perfectly' fit together; because farmers and herders are both involved in conflict and cooperation. Thus, in terms of theory, the study has shown that conflict and cooperation are not completely dialectical and this is shown through the lens of cultural neighbourhood.

Herders' range of social networks/ties with important actors, as I have emphasised in Chapter 8 are equally significant. While these social networks/ties with chiefs, community

leaders, the police and politicians have produced strings of protection for them against community attacks and violence, and have given them access to land and resources, they have nonetheless incurred the wrath of farmers, youth groups and associations. This has reproduced a new array of intra-community conflicts and agitations against chiefs and community leaders. These new conflicts reignite power plays and political rivalry in communities. Social networks help herders deepen and broaden their access to resources and also extend their settlements in communities (cf. Yembilah & Grant, 2014).

Also, resources, migration and the environment influence relations between farmers and herders (Dyson-Hudson & Dyson-Hudson, 1980; Kuznar & Sedlmeyer, 2005). Environmental fluctuations influence herders' mobility, which, as respondents in this study as well as the theoretical literature have shown, induces migrations in order to find pasture and water for their cattle. Besides, lands are leased out or given on a freehold basis to pastoralists and this requires interactions and negotiations with farmers over the use and access of these lands. Kuznar and Sedlmeyer (2005) emphasise the fact that farmer-pastoralist interactions are based on varied contextual factors such as local government, environmental differences, migration and resource relations (see also Dyson-Hudson & Dyson-Hudson, 1980; Goldschmidt, 1979). The authors maintain in their study of relations between pastoralists and agriculturists in Darfur that environmental fluctuations (and resources) influence production and herd maximisation, and, therefore, need attention when discussing interactions between pastoralists and agriculturalists. Babiker (2001, pp. 136–137) similarly notes that:

> […] claims for access and control of resources are usually contested, negotiated and settled at different levels (for example, household, village, region, nation) whereby individuals and groups may be directly or indirectly involved in one or more level […]. It would be insufficient to treat the question of herder differentiation on the basis of livestock ownership alone. Access and control of land, the degree of involvement in trade, etc. ..., might be equally important […]. The nature, the forms and the outcomes of resource competition and conflict, at any point in the history of any group, are invariably the product of the total system in which they live, rather than of any particular aspect of it […].

Thus, claims to access, control and use of resources constitute an essential part of farmer-herder interactions (relations) and these are acted out in the realm of both conflict and cooperation.

Therefore, my conceptualisation of farmer-herder relations (presented in Figure 9.1) focuses on the processes and factors that lead to either violent conflicts or cooperation between farmers and herders. The diagram presented in Figure 9.1 argues that the process of

conflict escalation or cooperative relations are shaped through the types of social net-works/ties a herder/farmer builds, the various actors involved, the power play between these actors, the use and access to resources, particularly land, and the historical perspectives and experiences of herder migrations, settlement and integration. As seen in the discussion chap-ters, the networks that a herder builds in the community are determining factors for conflicts or cooperation – positive networks result in cooperation whereas negative networks result in conflictual relations. Therefore, actors are involved in multi-networks, which are shaped and developed within processes of interactions. These networks develop into both positive and negative ones resulting in tensions/conflicts or cooperation. Also significant are constellation of actors, their responses, interactions and collectivities (seen here as mobilisation).
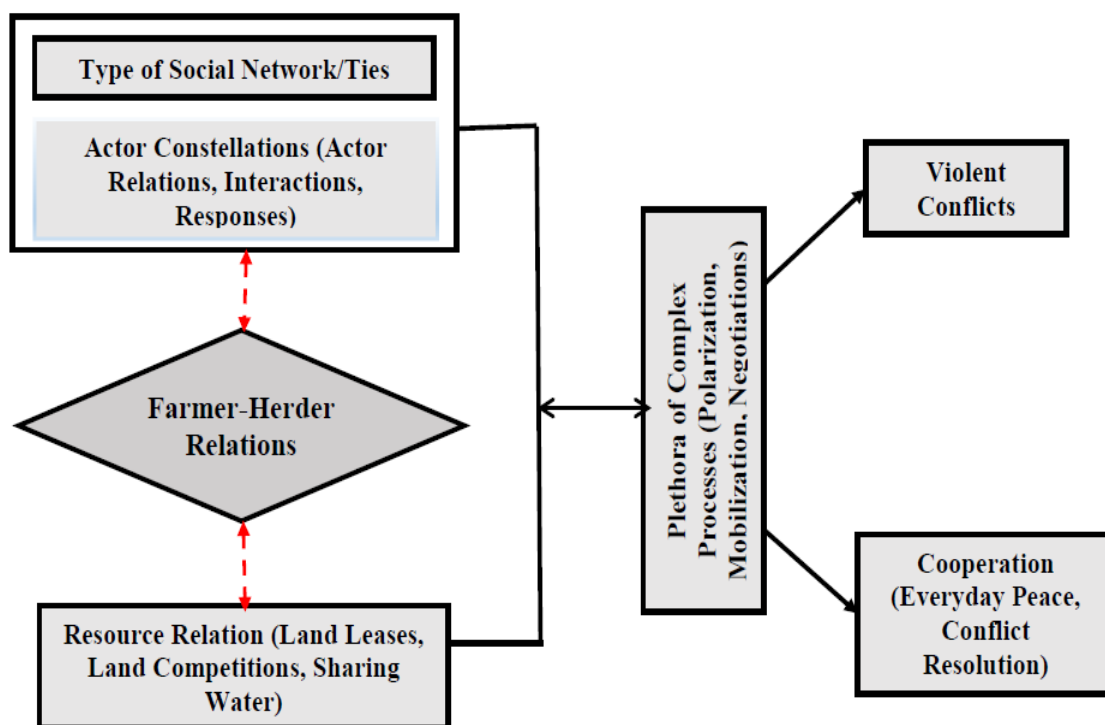

Figure 9.1: Nature of Farmer-Herder Relations
Source: Author's Conceptualisation, 2014.

In Figure 9.1, diverse actor relations and social networks go beyond the farmer and herder. Figure 9.1 expatiates that a combination of social networks, actors and resource relations are negotiated and contested and have roles to play in either conflictive or cooperative relations

between farmers and herders. The development of cooperative or conflictual relations involves a plethora of complex processes and issues such as actor mobilisations, polarisation and politicisation of the issues and negotiations.

An important observation by Babiker (2001, p. 141) is worth stating:

> Issues of resource competition and conflict are better analysed and adequately comprehended in the context of distinctions categorised on an economic-sector basis such as pastoralism and agriculture, rather than on occupational labels such as herder and farmer or trader and administrator. This is perhaps the main reason why Fredrik Barth, more than a quarter of a century ago, called for 'a general perspective on nomad-sedentary relations', whereby the focus should be, at least initially, on types of activity rather than on groups of people […].

Babiker (2001) reference to the work of Fredrik Barth (1973) emphasises the constellations of complex issues involved in nomad-sedentary relations and, thus, calls for broader understanding of farmer-herder relations. Barth (1973) looks at a plethora of issues in pastoralist-sedentary relations such as power relations, economic relations/capital flows and external influences. He maintains that analyzing farmer-herder (nomad-sedentary relations) relations requires a model that exhibits the crucial features of these relations such that:

> 1. We can depict nomadic society in its relations in its total environment. Sedentary peoples and societies are part of this total environment, and the nomads' relations to them are revealed as part of an ecologic, economic, or political analysis […]. 2. We can take a more explicitly symbiotic view, and seek to analyse the inter-connections of nomads and sedentary as prerequisites for the persistence of each in their present form […] (Barth, 1973, p. 11).

This explains why the entirety of this study has not concentrated on just one aspect of farmer-herder relations, particularly conflict and resource access and use, but the totality of them as Barth's model proposes.

Babiker (2001) also acknowledges that the real distinction between 'Herder and farmer or Pastoralism and Agriculture' lies in the sort of relations that are built and not just in resource competition or conflict. As he succinctly puts it, "the complexity of interaction between pastoralism and farming cannot be adequately understood by basing one's enquiry on a herder/farmer dichotomy" (2001, p. 136). Similarly, Kuznar and Sedlmeyer (2005) note that generalising pastoralist-farmer relations on just raiding, violence and conflict do not sufficiently explain them. They contend that instances of violence such as raiding, homicide and rape are not necessarily conclusions that pastoralist-farmer relations are conflictual. To them, symbiotic trade and other relations between pastoral and agricultural populations have been longstanding and continue to thrive between the two populations.

Moreover, farmer-herder relations are dynamic and not a uni-directional thing as observed in Berntsen's (1976) study of the Maasai and their neighbours.

> The relations between the pastoralists, farmers, and hunters was not static but dynamic; individuals moved between these three modes of subsistence according to their economic status at a given time. An agriculturalist or hunter who obtained several cattle found it an advantage, and in some cases a necessity, to form a bond of friendship with a pastoralist or even to become a Maasai pastoralist, the better to herd and protect his cattle […] (Berntsen, 1976, pp. 1–3).

The author notes that relations between the Maasai pastoralists and their agricultural neighbours show greater variations despite the wide range of environments occupied by various groups of agriculturalists and the different cultural backgrounds of the various groups. He stated that trade relations, intermarriages and exchanges have helped to maintain peaceful relations between the Maasai pastoralists and their agricultural neighbours. Berntsen (1976), thus, reiterates the fact that conflicts (raiding), differences in environment, basic economy, language and culture between the Maasai and their neighbours were not an absolute barrier to peaceful contact and exchange, and relations between them are so complex that they develop through time and space. This is the same with Fulani herders and their neighbours who, despite violent attacks, cultivate peaceful relations. As this study found, they, in many instances, cooperate and co-exist peacefully and are, thus, cultural neighbours.

9.2. Comparative Analysis

As a part of the study, I have employed a comparative approach to summarise and highlight the interactions of farmer-herder relations. I have already highlighted many of these in the discussions of my field results. It is, however, necessary to summarise the two case sites by way of comparative analyses of, the actors and issues discussed in the study. I must state that, although the two sites present similarities in relation to the issues discussed, there are some differences that are worth highlighting – differences in terms of the nature of conflicts; the roles of politics, social networks built and power play in conflicts and cooperation; the role of primordial mobilisations (ethnicity); and differing causative drivers and responses to conflicts.

9.2.1. The Nature of Conflicts

I have noted in Chapter 5 the widespread assumption that farmer-herder conflicts in Ghana are violent, notwithstanding the dearth of statistics. Narratives and local discourse have tended to highlight this violent trend. The two major cases of Agogo and Gushiegu, respectively, show this. However, the levels of violence in both sites differ. Agogo has seen a recurrence of more violent attacks than in Gushiegu as I found from both my field study and

national discourse (of both government officials and media reports). In Agogo, local farmers, Fulani herders, cattle owners, chiefs, government officials, among others, agree unanimously that violent conflicts have 'increased.' In Gushiegu the most violent incident has been the 2011 attack of Fulani that killed 14 herders and their families. Respondents in Gushiegu indicated that violence was not prominent in the area, but added that many simmering issues, when not resolved, could escalate into violence. Thus, the narrative and perceptions about the nature of conflicts differ in the two sites.

In terms of numbers, there have been 14 official reports of deaths involving pastoralists and famers between 2006 and 2013 in Agogo, while crop destruction cases reported are over 300. On the other hand, local discourse in Agogo puts the numbers at more than 40 deaths. Conversely, the numbers in Gushiegu are 16 deaths with the major event being the August 2011 attacks in some communities. The general narrative in the media, and by many of the respondents, including government officials, is that Agogo is the 'hub' of violent farmer-herder conflicts in Ghana. Even some of my interviews outside of the two study areas, in places like Karaga, Sekyere Kumawu, Tamale, Kumasi and Accra, showed that many people believe that violent farmer-herder conflicts are more rampant in Agogo than in Gushiegu or any other part of Ghana. Theoretically, what this tells us is to move away from assumptions that all farmer-herder conflicts escalate as a result of similar causes, and to examine the specificities of each conflict case. Thus, there is a tendency to analyse conflicts at the state level, rather than at the individual level (methodological individualism).

9.2.2. The Role of Social Ties and Politics (Power Play) in Conflicts and Cooperation

This study found that the role of politics in influencing conflicts was more pronounced in Agogo. Actors generally perceived national and local party politics to be subtly influencing the nature of conflicts in the area. From interviews during the field study, respondents perceived other actors, including government officials, local and national politicians, chiefs and community leaders to be playing surreptitious roles due to networks with Fulani pastoralists. Even the roles of different actors differ in both sites. Agogo has seen the involvement of more actors in the whole interaction process. Almost all groups of people in communities are involved in conflict relations in the area. On the other hand, conspicuous state interventions, local and national politics in conflicts in Gushiegu are not visible and much discoursed. Although these are subtle, much of the discussions on the role of politics in Gushiegu are focused on the role that chiefs and community leaders play in supporting herders in particular. In Agogo, just like Bourdieu's (1986) conceptualisation of his "habitus" and "field", which help

to analyse power relations in a social system, peoples' perceptions and understanding of their environment shape understandings of power relations. As Bourdieu (1986) conceptualises 'fields' as the values, acceptable behaviour, assets (capital) and that which generates power in a relationship, actors involved in farmer-herder relations constantly adopt strategies such as social networks with the 'powers that be' or form alliances (whether ethnically or politically) in the "fields" of interaction in order to maximise their interest.

Besides, the interpretations of the drivers of conflict in the two areas are different. While national and local discourse, as I have emphasised in Chapter 5, tend to look at the structural reasons for violent conflict and blamed violent conflicts mainly on Fulani herders, the role of the increase in the value of land/resource and the struggles of different actors interested in accessing resources in Agogo have particularly shaped farmer-herder relations. The Agogo area, according to national climatic data and from my interviews with agriculturists and government officials, has seen a tremendous influx of different resource users who are all interested in the area. Different actors, including agro-investors (e.g. ScanFarm (Gh.) Ltd.), migrant farmers, more local people engaging in farming, Fulani herders and both local and foreign cattle owners, have all become part of resource utilisation in the area. Gushiegu, however, has seen little involvement of other actors in the use of resources/lands except for the continuous migration of Fulani pastoralists to the area. Interestingly, the different resource actor struggles in Agogo, unlike in Gushiegu, are due to conducive climatic conditions, resource abundance and fertile land. These conditions contrast sharply with Gushiegu and have contributed to tense relations between farmers and herders. Whilst Agogo has seen resource abundance (especially the fertility of land and quality of pasture) as a major driver of conflict, in the case of Gushiegu, it is not about resource abundance, but the perception of farmers and herders that resource scarcity and the changing climate resulting from herder migrations from the Sahelian region contribute to conflicts between them.

In essence, the environment interacts with the processes of farmer-herder relations. The environment does shape the process of conflict or cooperation because the perceptions of farmers and herders about resource scarcity and herder migrations, whether real or imagined, are seen as causing violence.

9.2.3. The Role of Primordial and Instrumental Mobilisations

I have previously discussed the role that mobilisation, primordially and instrumentally built, has played in people's conceptualisations of resource access and rights and conflicts. It is

worth emphasising the different conceptualisations of mobilisations in farmer-herder relations in the two study sites. The complicated nature of different ethnicities in Gushiegu, or what I would call the 'Dagomba and Konkomba ethnicities', have played important roles in shaping relations between farmers and herders. Konkomba primordial ties and identity have remained important in their resistance and conflicts with other groups[122] (Mahama, 2003; Talton, 2010), and this is same with their conflicts with Fulani herders. Even their voting patterns in Gushiegu have often been primordially inclined by overwhelmingly supporting candidates from their ethnic groups[123] rather than the 'majority' Dagomba. This is why Talton (2010) states that the political currency of autochthony and claims of "belonging" have shifted in meaning with varying political significance. Normally, the initial start of a single conflict is not hinged on ethnicity, but as the conflict escalates to a manifest stage (Mitchell, 1981), ethnic mobilisations based on, say Akan, Konkomba, Dagomba, Fulani or 'Ghanaian versus non-Ghanaian (Fulani)' begin to increase, which help to fuel violence. Gurr's (1993) theoretical treatise on mobilisation shows that in Gushiegu, Konkomba ethnic identity, shared interests and grievances helped in the collective mobilisation to attack Fulani in 2011. Thus, in Gushiegu, mobilisations are primordially based and ethnicity plays a role in resource/land access, conflicts and cooperation.

Conversely, instrumental political mobilisations mainly drive conflicts, cooperation and resource use and access in Agogo. This is not to say that primordial mobilisations do not play roles in resource access and conflicts. They do, but in comparison to Gushiegu, farmer-herder conflicts are tied to power relations both over the control and access to resources. Respondents believed that political ties were important for gaining access to resources and facilitating conflicts or cooperation. Farmers' claimed that Fulani political networks with chiefs, community leaders, politicians, the police and government officials give them physical protection and access to land to rear their cattle, which reinforces of Bourdieu's (1986) conceptualisations of 'field.' Farmers conceptualise relationships of the Fulani pastoralists with these actors in 'possession of power' as providing them access to the specific profits that are at stake in the 'field.' Their perceptions also reiterate Bates' (1971, p. 127) argument

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[122]The 1994/95 Dagomba/Numaba-Konkomba Conflict reignites important issues of primordial identity. Dogomba respondents of this study drew parallels of this conflict with the 2011 attack of the Fulani to emphasise the Konkomba's strong primordial identity and mobilisation.

[123]This is not peculiar to the Konkomba as many ethnic groups in Ghana support political parties based on primordial identity (ethnicity). Dagomba respondents, however, claimed political contests in the area are primordially based since Konkombas support mainly candidates from their ethnic group. The point being made here is to emphasise the role of strong primordial mobilisations and ties amongst the Konkombas.

that "the extent to which exchange is phrased in equivalent value depends on a balance of power."

9.2.4. The Nature of Cooperation

Elements of cultural neighbourhood are more pronounced in Zanteli than in Kowereso. This is due to the historical relations/contacts of farmers and herders in northern Ghana which began many years than in southern Ghana. This long years of contacts have helped to build strong relations and thus present them as typical cultural neighbours. In addition, cooperative interactions with herders are stronger in Gushiegu than they are in Agogo. In Agogo, individual relationships between farmers and Fulani herders are more pronounced such as between farmers and few local cattle owners and their herders rather than with whole community. In Gushiegu, however, whole communities build relations with herders such that one herder takes care of a whole community's cattle. Moreover, actor roles in cooperation in the two cases differ. Gushiegu (e.g. Zanteli) has seen the active involvement of all the actors, including the chief, elders, farmers, cattle owners, the assemblyman and the residents, in helping build and maintain everyday relations between farmers and herders. On the other hand in Agogo (e.g. Kowereso), a few actors are involved in cooperation with herders. Some actors have been sceptical of relations with the Fulani because of their violent conflicts in other communities. They reiterate that Fulani herders cannot be trusted to be friendly due to the past history of farmers who befriended them but later got killed (such as the killing of Kojo Bila). Finally, while the unit committee was an important part of the structures for farmer-herder conflict resolution and cooperation in in some parts of Agogo, in the case of Gushiegu, the unit committee was not used to resolve farmer-herder matters.

9.3. General Conclusions and Recommendations

Several overarching conclusions can be drawn from my field findings and analyses. First of all, the complex relations between farmers and Fulani herders go beyond just conflicts and for that matter violent conflict. There are other constituents that add up to farmer-herder interactions and relations, such as cooperation which is often hardly emphasised as well as issues of resource access and use. Cooperation is conceptualised by farmers and herders not just as interactions and co-existence, but also as everyday peace, social order and peaceful resolution of conflict. In other words, cooperation occurs not only after violence (conflict resolution), but in everyday interactions such as friendships, social solidarity, entrustment

and resource/land exchange. Consequently, only focusing on the negativity of their relations and farmer-herder violent conflicts add up to negative stereotypes, prejudices and practices of exclusion, especially of Fulani herders in terms of their access to resources, land, belonging and settlements in local communities in the general Ghanaian society. These also add to the antagonistic attitude of Fulani herders towards farmers and, thus, create a cycle of violence and national/community antipathy. This results in less chances of pastoralists' cooperation with local people, as well as Fulani integration into society; rather, these attitudes contribute to the escalation of violent conflicts.

Secondly, conflicts between farmers and Fulani pastoralists are not only over scarce resources, environmental/climate change or structural factors, but develop processually with a multitude of complex drivers and causes. Therefore, any attempts to find solutions to farmer-herder conflicts need to address the 'real processual' causes and the specific issues of each individual conflict cases, since many conflicts escalate differently in different parts of Ghana. This study has clearly shown this. Although there are similarities, the cases in Northern Ghana (Gushiegu) and southern Ghana (Agogo) showed strikingly different drivers of individual case conflicts that require local-level solutions (Bottom-up Peace Approach). Thirdly, in farmer-herder relations, this study has demonstrated that the type of social ties/networks that are built with 'powerful' actors determine herders' conflictive or cooperative relations with farmers and local people. Thus, the constellations of different actors aside the two are also significant - chiefs, community leaders, politicians, ordinary community members, elders, youth groups, associations and local groups, the police and government officials all play important roles in either conflict escalation, cooperation or resource access and use. To reiterate the specific contributions of this research, the study has gone beyond the long-held structural approaches to farmer-herder conflicts in Ghana, to provide a deeper understanding of multiple and processual drivers and other aspects of farmer-herder relations. Methodologically, the study advances a deeper extended case study approach to farmer-herder conflicts in order to follow a processual development of the escalation of each case. Theoretically, studying farmer-herder relations needs multiple theories to comprehensively capture the core issues.

With the use of the processual approach, this study has emphasised that finding solutions to farmer-herder violent conflicts (and all violent conflicts) demands analyses of the complex processes such as ecological (environment and resource access and use), political (power play, conflict framing, primordial ties and mobilisation), economic (interest of cattle owners to maximise profits through the provision of arms to their herders) and the inherent

social networks/ties between actors. Also, the study has shown that a multi-actor approach and analysis are needed to better understand farmer-herder relations. This study generally advocates that peoples' relations and interactions are not fixed and are subject to change. This is based on the earlier argument that conflict and cooperation in society are not completely dichotomous/dialectical.

Generally, policy recommendations to be considered will include, first, addressing the issue of cattle rearing and pastoralism in general in Ghana. The Ghanaian state and local administrators must acknowledge that pastoralism is a productive and well-suited livelihood for local people and not just Fulani pastoralists. Research processes are required on cattle rearing such as modern agriculture systems and guidelines of rearing cattle (fencing and housing cattle). Most cattle in Ghana are reared on the extensive system, where cattle are unfenced and move openly to graze. This requires policy (law) reform and enforcement such as the promulgation of a ranching law to regulate the activities of cattle rearing. Secondly, clear demarcation/zoning of lands for farming activities and animal rearing could also be considered. Also, there is the need for education of farmers, herders and local people on approaches to co-existence and amicable resolution of differences, as well as education on the economic benefits of cattle to the entire community to build coexistence between farmer communities and the herders and their cattle. The enactment of the ECOWAS International Transhumance Certificate (ITC) in 1998 was supposed to facilitate cross-border livestock mobility to West African states. After almost two decades of promulgation, implementation of the law is very difficult. The law requires revision to ensure its proper operation. This includes addressing the issues of farmer-herder conflicts, land access and forceful evictions of pastoralists in various West African countries.

Besides, the recurring violent attacks need to be addressed from a local-level perspective (Bottom-up Peace Approach) rather than the top-down approach. Measures such as the deployment of state security through the use of Operation Cow Leg (OCL) by the National Security and the formation of national based committees to investigate and resolve violent attacks have apparently failed to curb violence. Instead, decentralizing conflict management and resolution at the local level as well as integrating local administrations, farmer associations, pastoralists, local groups and traditional institutions into conflict resolution will help. This is because people at the local level know the issues of common cooperation and cross-cutting ties between them and the pastoralists which can be enhanced and encouraged. Therefore, it is important to emphasise these cross-cutting ties, everyday peacebuilding mechanisms and co-existence among them. One way to resolve violent conflicts is to emulate the

example of the Republic of Cameroon where local-based organisations/commissions/institutions are key in the resolution of farmer-herder conflicts. The politicisation of farmer-herder conflicts in particular is hurting efforts at forging cooperation and resolution of the conflicts. This politicisation by local actors, government officials, local politicians, cattle owners and community members has polarised differences. De-politicising farmer-herder conflicts would require the involvement of local institutions, local CSOs (NGOs, CBOs and FBOs) and actors in conflict resolution and peacebuilding efforts since trust of local and national government in resolving the conflict is low. These local institutions and actors can serve as neutral brokerage in negotiating peaceful co-existence.

Despite a strong land tenure regime in the Ghanaian society, there is the need for more clarity in common property laws with regard to land. The widespread perception by community members that chiefs sell lands indiscriminately and are corrupt has had implications for farmer-herder conflicts. Farmers in the study areas feel that land as communal property should be available for their use instead of selling it to 'rich-strangers' and this has particularly influenced conflicts with Fulani pastoralists. It is therefore necessary to regulate and make clearer issues with regard to common property management. While large agro-investments are needed to enhance development in the AAND, the ATC and the Lands Commission must make efforts to protect the interest of smallholders to sustain their livelihoods since perceived '*land grabbing*' can further escalate conflicts. The new Land Administration Project III (LAP), which will soon come into force, must make provision for pastoralists' land access and their co-existence with crop farming.

Last but not least, I have pointed out in this study that there are unavailable data on important issues such as trends of pastoralists' migration, conflict, census data of Fulani pastoralists, land size required for both farming and cattle keeping and climatic data. This essentially affects planning on key issues such as conflicts, land use and access and ensuring peaceful co-existence between farmers and pastoralists. Local administrations must, in this regard, begin to document these important data and information. Census, for example, on the number of cattle and Fulani pastoralists would help regulate the activities of herders.

Three important recommendations for future research are worth stating. First of all, there is the need to study further the environment-conflict nexus in other parts of Ghana where conflicts between farmers and herders are commonplace, especially the Brong-Ahafo and Eastern Regions. This can be done with different methodologies such as using statistical modelling of large respondents' views and rainfall. This also requires a broader research that traces the reasons and routes of herders from their countries of origin into communities in

Ghana, as well as understanding conditions for increasing or decreasing environmental drivers in changing climate and how this affects farmer-herder relations. Secondly, an important aspect worth researching into is the use of arms[124] in farmer-herder violence and how this contributes to escalation. Many illicit arms are used in farmer-herder conflicts, and their sources remain problematic. Therefore, it would be worth studying the use and sources of illicit arms in farmer-herder conflicts in Ghana and their overall implications for security in Ghana. Lastly, an important area of study is historical economic cooperation and ties between farmers and Fulani herders and how these have evolved over the years. It would require an in-depth study of this economic relation and how they are contributing to the overall relations between farmers and herders in Ghana.

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APPENDIX I

SEMI-STRUCTURED INTERVIEW GUIDE

Background Information

- Are there Fulani herders in this community?

- Where do they come from?

- What is the relation between you (the community) and Fulani herders? List these relations?

- Trace history of farmer-herder relations in the community?

Migration of Fulani Herders

- Are Fulani herders in your community sedentary or nomadic (mobile) herders?

- How and why are they in your community?

- How frequent are Fulani herders' migrations? To where?

- What are the migratory routes of the Fulani herders?

- Is this migration forced, voluntary or induced? How?

- What are the reasons for Fulani herders' migration?

Drivers of (increased) Farmer-Herder Conflicts

- What types of conflicts occur between farmers and Fulani herders?

- Trace history of conflicts

- Are conflicts increasing between famers and Fulani herders?

- How frequent are conflicts between farmers and Fulani herders?

- What accounts for the frequencies?

- Do you know any number that has occurred over the last five years? (Probe for the numbers and years of occurrence).

- What are the reasons for the conflicts? (Probe how these reasons have caused or cause the conflicts).

- Which reasons for the conflicts are more frequent? How?

Escalation of Farmer-Herder Conflicts into Violence

- What is the nature of conflicts between farmers and Fulani herders? (Is this in relation to violent or non-violent confrontation?)

- What is your understanding (conceptualisation) of violence between you?

- What are the stages of conflict between farmers and Fulani herders?

- At which stage does conflict between farmers and Fulani herders develop into violence? (Explain in detail).

- How does the conflict between farmers and Fulani herders escalate into violence?

- How are actor constellations important in these conflicts? Discuss the role of various actors

- What are the roles of groups in conflict? Discuss the role that mobilisations in conflicts.

- How do group mobilisations for violence happen?

- What role do local politics play in conflicts? How do they contribute to conflicts?

- What is the role of the Ghanaian state in these conflicts? (Examine how state policies, governance or politics influence these conflicts).

Environmental Changes and Conflicts between Farmers and Fulani Herders

- What is environmental change to you? How do you determine environmental change?

- What are the recent environmental changes that you have noticed in your community in recent times? (Probe for these environmental changes and why/how they are changes).

- How have these recent environmental changes affected the community? (Probe how these particularly affected farmers and herders).

- What differences do the recent environmental changes have over those of the past?

- How are the recent environmental changes affecting the use of resources such as land, water and pasture?

- Is resource scarcity/environmental change a cause of conflict between you? What are the links between environmental changes and 'increased' conflicts between farmers and Fulani herders? How are they responsible for these conflicts? (Probe how these environmental changes cause the conflicts).

- How are farmers and herders adapting to these environmental changes? (Probe how adaptation to environmental changes are the influencing conflicts).

Effects of Farmer-Herder Conflicts on Agricultural Activities and Security

- Do you feel secure? How/why do you feel in insecure?
- How does the conflict affect the larger community?
- How does the conflict affect agricultural/ herding activities?
- How does conflict affect security at local and national levels?

Land Use and Access and Conflicts between Farmers and Fulani Herders

- Who has the right/access to landownership in your area?
- What is the mode of landownership in your area?
- What types of land related conflicts exist in this area?
- How does land tenure/ land security affect relations between farmers/Fulani herders? (Thus, conflicts, friendships and cooperation).
- What are the linkages between land access and farmer-herder conflicts? And farmer-herder relations in general?

Cooperation between Farmers and Fulani herders

- What is level of cooperation between farmers and Fulani herders in the community? (How?)
- What is your understanding of cooperation between? (How do you measure it? Any indicators?)
- What is the nature/ways of the cooperation between farmers and Fulani herders? How is everyday peace built in the community?
- What are the reasons of cooperation between farmers and Fulani herders?
- How are farmers and Fulani herders cooperating in the use of resources (water, land and pasture)?
- Is there cooperation between farmers and Fulani herders during conflicts, including violent conflict? How and why is there cooperation in times of conflict? What are the differences in cooperation between farmers and herders in peaceful areas as compared to farmers and herders in conflict/violent areas?
- Identify elements of cultural neighbourhood in communities.

Conflict Resolution, Management and Cooperation between Farmers and Fulani Herders

- What have been the modes/measures of resolution of conflicts between farmers and herders? (Examine the role of the Ghanaian state in resolving these conflicts).

- How effective are these measures?

- Why is there continuous conflict despite these measures?

- How do the two groups deal with conflict deal with conflicts?

- What national policy/policies exist in the Ghanaian society to deal with the issue of farmer-Fulani conflicts?

- What do you think can be done to effectively resolve conflicts between farmers and herders and promote cooperation among them?

Social Networks and Farmer-Herder Conflicts/Cooperation

- How are the actors connected in conflict/cooperation? Who is connected to who and how?

- What type of social ties are built between various actors?

- What are the nature of social ties that are built between farmers and herders? Discuss the nature of social networks in conflict and cooperation.

- How do social ties generally affect influence farmer-herder relations in the community? What are the roles of these social ties in social relations?

THANK YOU FOR YOUR PARTICIPATION.

APPENDIX II

FOCUS GROUP DISCUSSION GUIDE

- What are the relations between farmers and herders in the community (Trace history of relations, type of relations, nature of relations, actor connections).

- What drive conflicts between farmers and herders? (Type of conflicts, numbers/frequencies, levels of conflict, roles of actors, effects of conflicts).

- How are resources (water, land access, pasture, etc.) related to conflicts?

- What are migration/mobility levels of the Fulani herders (reasons for their migration, type of migration Fulani herders undertake, routes of their migration?)

- What are the environmental changes that you have seen in your community over the last few years and how have these changes influence conflicts between farmers and Fulani herders? (Their conceptualisation of environmental change, what determines it?)

- How does conflict between farmers and Fulani herders escalate into violence? (Discuss in detail the processes/stages involved, how violence develops, the role of groups and mobilisations, politics, role of actors, role of the state/government).

- What is the nature/ways of cooperation between farmers and Fulani herders? (Discuss these with regard to resource uses, ethnic differences, mitigation of violence, etc.). How is everyday peace built in the community? Identify elements of cultural neighbourhood in the community.

- What are the reasons for cooperation between farmers and Fulani herders?

- What are the differences in cooperation between farmers and herders in peaceful areas as compared to farmers and herders in conflict/violent areas?

- How does land tenure/ land security affect conflicts between farmers and Fulani herders? (Discuss in relation to landownership, right and access).

- How can these conflicts be resolved? What modes of cooperation exist and how can this cooperation be sustained? (Discuss how the groups deal with conflicts, local/national policies towards resolving the problem, their role in resolving the conflict, new mechanisms and how cooperation can be promoted).

APPENDIX III

CALCULATED GRAPH METRICS/VALUES FOR SOCIAL NETWORKS USING NODE XL

Table 1: Calculated Graph Metrics for Actor connections in Farmer-Herder Conflicts in Study Areas

Actors	Degree	Betweenness Centrality	Closeness Centrality	Eigenvector Centrality	PageRank	Clustering Coefficient
Fulani Herders	12	4.96	0.05	0.07	1.23	0.65
Farmers	11	6.81	0.05	0.07	1.16	0.53
Youth Groups	10	3.23	0.05	0.06	1.05	0.58
Landowners	10	1.23	0.04	0.07	1.03	0.73
Local Cattle Owners	4	0.29	0.03	0.02	0.51	0.67
Traditional Authorities	12	4.96	0.05	0.07	1.23	0.65
Politicians	13	17.69	0.05	0.08	1.42	0.60
Community Members	10	3.23	0.05	0.06	1.05	0.58
Farmer Associations	9	1.91	0.04	0.06	0.95	0.67
Local Associations	10	3.23	0.05	0.06	1.05	0.58
Community Elders/ Opinion Leaders	12	2.91	0.05	0.07	1.22	0.70
Security Agencies	12	2.55	0.05	0.08	1.22	0.71
Fulani Cattle Owners	11	1.55	0.05	0.07	1.13	0.75
State/Government Officials	10	1.23	0.05	0.07	1.04	0.73
Butchers	7	2.63	0.04	0.04	0.79	0.29
Other Fulani	6	0.60	0.04	0.04	0.69	0.60
Traditional Leaders	1	0.00	0.03	0.01	0.24	0.00

Table 2: Calculated Graph Metrics for Actor Networks in Cooperation in Study Areas

Actors	Degree	Betweenness Centrality	Closeness Centrality	Eigenvector Centrality	PageRank	Clustering Coefficient
Fulani Herders	16	0.68	0.06	0.06	1.05	0.93
Farmers	16	0.68	0.06	0.06	1.05	0.93
State/Government Officials	14	0.15	0.06	0.06	0.94	0.98
Landowners	14	0.15	0.06	0.06	0.94	0.98
Local Cattle Owners	15	0.54	0.06	0.06	1.00	0.94
Traditional Authorities	16	0.68	0.06	0.06	1.05	0.93
Fulani Chief	16	0.68	0.06	0.06	1.05	0.93
Community Members	14	0.44	0.06	0.05	0.94	0.95
Farmer Associations	16	0.68	0.06	0.06	1.05	0.93
Local Associations	16	0.68	0.06	0.06	1.05	0.93
Community Elders/Opinion Leaders	15	0.22	0.06	0.06	0.99	0.97
Butchers	11	0.07	0.05	0.04	0.77	0.98
Fulani Leaders	14	0.07	0.06	0.06	0.94	0.99
Security Agencies	16	0.68	0.06	0.06	1.05	0.93
Politicians	15	0.22	0.06	0.06	0.99	0.97
Fulani Cattle Owners	16	0.68	0.06	0.06	1.05	0.93
Youth Groups	16	0.68	0.06	0.06	1.05	0.93

Table 3: Calculated Graph Metrics illustrating Actor Networks in one Conflict Case in Agogo

Actors	Degree	Betweenness Centrality	Closeness Centrality	Eigenvector Centrality	Pag-eRank	Clustering Coefficient
Jallo (Fulani Herder)	8	4.00	0.05	0.07	1.05	0.00
Watermelon Farmer	7	2.50	0.05	0.06	0.93	0.05
Youth Group	7	2.50	0.05	0.06	0.93	0.05
The Six Farmers	7	2.50	0.05	0.06	0.93	0.05
Community Members	7	2.50	0.05	0.06	0.93	0.05
Farmers Associations	7	2.50	0.05	0.06	0.93	0.05
Local Politicians	7	2.50	0.05	0.06	0.93	0.05
Local Association	7	2.50	0.05	0.06	0.93	0.05
Community Elders/Opinion Leaders	7	2.50	0.05	0.06	0.93	0.05
Agogo Traditional Council	8	4.00	0.05	0.07	1.05	0.00
Jallo's Cattle Owner	9	4.00	0.05	0.08	1.16	0.22
Jallo's Fellow Herders	9	4.00	0.05	0.08	1.16	0.22
The Police	8	4.00	0.05	0.07	1.05	0.00
Landowner	8	4.00	0.05	0.07	1.05	0.00
Fulani Group Secretary	8	4.00	0.05	0.07	1.05	0.00

Table 4: Calculated Graph Metrics illustrating Actor Networks in One Conflict Case in Gushiegu

Actor	Degree	Betweenness Centrality	Closeness Centrality	Eigenvector Centrality	PageRank	Clustering Coefficient
Azumah (Fulani Herder)	7	2.10	0.05	0.08	0.99	0.29
Farmers 2	8	4.77	0.06	0.08	1.13	0.07
Kpesinga Youth	8	4.77	0.06	0.08	1.13	0.07
Local Cattle Owners	8	4.77	0.06	0.08	1.13	0.07
Community Members	8	4.77	0.06	0.08	1.13	0.07
Community Elders 1	7	2.11	0.05	0.08	0.99	0.29
Assembly Man	7	3.17	0.05	0.07	1.00	0.10
Farmers 1	6	2.11	0.05	0.06	0.87	0.00
Community Elders 2	8	4.77	0.06	0.08	1.13	0.07
The Police	7	2.11	0.05	0.08	0.99	0.29
Kpesinga Chief	6	2.11	0.05	0.06	0.87	0.00
Butchers	6	2.11	0.05	0.06	0.87	0.00
Other Fulani	7	2.11	0.05	0.08	0.99	0.29
State/Government Officials	5	1.25	0.05	0.05	0.75	0.00