

UNIVERSITY OF CAPE COAST

LAND-USE CONFLICTS AND PSYCHOSOCIAL WELL-BEING: A STUDY  
OF FARMER-HERDER CONFLICT IN ASANTE AKYEM NORTH DISTRICT  
OF GHANA

SABINA APPIAH-BOATENG

2020

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OF GHANA

BY

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Degree in Development Studies

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## **DECLARATION**

### **Candidate's Declaration**

I hereby declare that this thesis is the result of my own original research and that no part of it has been presented for another degree in this University or elsewhere.

Candidate's Signature.....Date.....

Name: Sabina Appiah-Boateng

### **Supervisors' Declaration**

We hereby declare that the preparation and presentation of the thesis were supervised in accordance with the guidelines on the supervision of the thesis laid down by the University of Cape Coast.

Principal Supervisor's Signature.....Date.....

Name: Prof. Stephen B. Kendie.

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## **ABSTRACT**

Over the past two decades, the Asante Akyem North District of Ghana has had limited peace and stability which are prerequisites for sustainable development due to protracted farmer-herder conflicts. This study provides an alternative perspective to the underlying causes of this resource conflict by arguing that mental constructions based on the formation of frames are the precursor as argued by the framing theory. The study further investigated the psychosocial implications of the conflict on the well-being of the farmers and herders. The resources that the actors employed to cope with the stressful event were also investigated. Using a mixed-method but a qualitatively driven approach, the study used interviews, focus group discussion and observation guides for the data collection. The empirical analyses revealed that actors formed frames such as split identity, enemy-enemy relationship, a culture of work, power, and characterization are the drivers of the farmer-herder conflict. It is further observed that the mental construction and its attendant hostile reaction between actors of the conflict, usually lead to symptoms and levels of psychological disturbances, emotional distress, and diagnosable mental health problems. It is evident from the findings that in the face of these undesirable outcomes, actors of both factions adopted varied coping strategies religion, voluntary migration, working harder, and resorting to socio-cultural support, and avoidance. There is the need for a community-level education that emphasizes constructive framing relationships between the transmigrant pastoralists and the host farming populace to ensure their peaceful coexistence and minimize conflict eruptions.

## **KEYWORDS**

Coping

Farmer-Herder

Land-use conflict

Psychosocial

Well-being

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## **DEDICATION**

To my scarce treasure and lovely mother, Felicia Appiah



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## LIST OF ACRONYMS

AAND	Asante Akyem North District
APA	American Psychological Association
BDI	Beck Depression Inventory
CSOs	Civic Society Organisations
DISEC	District Security Council
ECOWAS	Economic Community of West Africa States
EOCS	Emotion-Oriented Coping Strategies
FGD	Focus Group Discussion
GAD	Generalized Anxiety Disorder
GAF	Ghana Armed Forces
GCRP	Ghana Cattle Ranching Project
GDP	gross domestic product
GHQ	General Health Questionnaire
GSS	Ghana Statistical Service
HSCL	Hopkins's Symptoms Checklist
IEP	Institute for Economics and Peace
IES-R	Impact of Event Scale Revised Edition
IRB	Institutional Review Board
KMO	Kaiser-Meyer-Olkin
LDPs	Local Development Plans
LGA	Local Government Area
MPhil	Master of Philosophy
NGOs	Non-governmental Organizations
ODI	Overseas Development Institute Organization
POCS	Problem-Oriented Coping Strategies Preventive Action

PTSD	Post-Traumatic Stress Disorder
REGSEC	Regional Security Council
RPC	Regional Peace Council
SD	Standard Deviation
SPSS	Statistical Product and Service Solutions
SSCS	Social-Support Coping Strategies
SWB	Subjective Well-being
UNESCO	United Nations Educational, Scientific, and Cultural
UNICEF	United Nations Children's Fund
UNIFTPA	United Nations Interagency Framework Team for
WB	Well-being
WHO	World Health Organization

## **CHAPTER ONE**

### **INTRODUCTION**

The concept of conflict and well-being in the development discourse are a global concern and Ghana is not an exception. Conflicts have a disastrous impact on the well-being of people, hence, the well-being of people in conflict settings is a topical issue that needs to be addressed in research. The availability of fertile land, abundant pasture, as well as reliable rainfall in the Asante Akyem North District (AAND) has attracted both farmers and herders for the use of these resources (Asamoah, 2014; Tonah, 2006). This engagement between the two groups results in conflict. The communities in these areas suffer protracted farmer-herder conflicts (Ofuoku & Isife, 2009; Opoku, 2015; Shettima & Tar, 2008; Baidoo, 2014; Agyeman, 2017; Olaniyan, Francis & Okeke-Uzodike, 2015) and the situation poses a huge threat to the psychosocial well-being of farmers and herders, hence, a concern for conflict researchers.

During post conflicts analysis in Ghana, researchers pay greater attention to the socio-economic dimension while few consider the psychological effects (Aganah, 2008; Amu, 2015; Appiah-Boateng, 2014; Asamoah, 2014; Opoku, 2015). Nonetheless, there is the need for conflict researchers to delve into how conflicts affect the subjective (feelings, thoughts, and life satisfaction) and objective (work and social lives) well-being of the people using the complete mental health model.

Knowing the protracted and violent nature of the farmer-herder conflicts in AAND, some residents get displaced and return later, whilst others continue to

reside in this District despite the heats of the conflicts. The study further sought to assess the coping strategies actors adopt to adjust and cope with the effects of the conflicts.

### **Background of the Study**

This study focused on land-use conflicts between crop farmers and herders. Keen attention was paid to how the frames developed about each group influences conflict, thereby assessing the impacts of the conflicts on their psychosocial well-being and the coping strategies used by these conflict victims. Land-use conflicts are a widespread phenomenon which can occur at any time or place among different stakeholders with varied interest in land use (Torre, *et al.*, 2014; Wehrmann, 2008). In Africa and most West African countries, land resource has become the most enviable and influential asset as a result of its high demand rate in all aspects of development. It forms the major source of wealth for every country, city/town, village, clan, or family (Anon, 2006). Due to these functions, conflicts over land resources have become inescapable (Blench, 1996).

Land, which is a natural resource, is considered to be the most fundamental resource to residents' living conditions, economic empowerment, and to some extent, a reason for man's struggle for equity and equality. All human livelihoods and activities are directly or indirectly dependent on land at varying thresholds. In Ghana's chieftaincy or customary institution, a chief's land size determines his power and authority (Gyamera, Duncan, Kuma, & Arko-Adjei, 2018). Again, land is closely linked to community identity, history, and culture UNESCO (2013). The priorities, which one places upon these uses of land, and indeed towards the

ownership of land and land-based resources, are conditional on the cultural perspectives of Ghanaian society. There are, however, many perspectives that have shaped the attitudes of society, and these change with time. Communities, therefore, can readily mobilize around land issues, making land a central object of conflict.

A UNESCO report, published in 2013, mentioned that land constitutes tangible and intangible aspects. The tangible cultural heritage today is no longer limited to great monuments and iconic archaeological sites, but also encompasses a much larger array of culturally significant places, such as historic cities, living rural areas and seascapes, gardens or sacred forests and mountains, industrial areas, and even sites associated with painful memories and war. Similarly, the intangible cultural heritage of land, which gained greater recognition and a more formal status includes oral traditions, the performing arts, social practices, rituals, festive events, and knowledge and practices concerning nature and the universe or the knowledge and skills to produce traditional crafts (UNESCO, 2013). It is for this reason that land researchers in Ghana have stated that land belongs to the living, ancestors/dead and future generations - a call to safeguarding this property (Abotchie, 2006).

Land issues are almost never the sole cause of conflict, however, land and conflict are often inextricably linked. In most communal conflicts, land issues are said to be major underlining factors (UNIFTPA, 2012). Land conflicts are also precipitated by a number of factors namely chieftaincy disputes, changing demographic conditions, agricultural and pastoral encroachment, availability of natural resources and land alienation (Shettima & Tar, 2008).

Land conflicts commonly become violent when linked to wider processes of political exclusion, deprivation, social discrimination, economic marginalization, and a perception that peaceful action is no longer a viable strategy for change. That notwithstanding, land connotes different meanings to the various user groups. For instance, builders, manufacturers, fishermen, miners, herders, hunters, and farmers have different specifications in their requirement for land for their production/services. Out of all user groups, agricultural production perhaps exhibits the highest form of sophistication in its use of land. This reflects enormous conflicts between pastoralists and farmers in the African continent (Adisa, 2011).

Nura (1996) and Shettima and Tar (2008) recount that while more than 12 million people in West Africa depend on livestock as their primary source of revenue, over 70 million people, on the other hand, in the same region also depend on livestock and livestock-related enterprises for their livelihood. The livestock industry requires the services of both mobile and non-mobile pastoralists because these farmers also contribute to the owning of a large number of cattle.

The movement of the pastoralists in the West Africa sub-region is a calculated one depending on the availability of pasture and water (Shettima & Tar, 2008). As pastoralists move throughout West and Central Africa, they come into contact with sedentary farmers and these contacts are inescapable. This is so because crop farmers and pastoralists depend on each other for survival and their dependency dates back into centuries. This dependency between the crop farmers and the pastoralists is not always mutually beneficial as there are occasional

conflicts between them which are attributed to the way the various parties carry out their activities (Horowitz & Little, 1987; Raynaut & Delville, 1997).

The farmer-herder conflict dates to the eighteenth and nineteenth centuries, a period characterized by the contest for power leading to conflict and open warfare between various nationals and groups, particularly, between pastoralists and sedentary farmers of the Sub-Sahara region (Shettima & Tar, 2008). Nonetheless, during this period, despite the political ascendancy and enforced slavery suffered by the farming populations at the hands of the herding populations from the northern areas of the Sahel, very deep exchange relations existed between the farmers and herders (Shettima & Tar, 2008; Bukari, 2013).

While the herders move their herds to graze on farmlands belonging to crop farmers, and also depended on the savannah farmers, exchanging salt for grain, and for the provision of the essential needs such as tent poles, cloth, and cooking utensils, the crop farmers on the other hand required from pastoralists protein and dairy products (Shettima & Tar, 2008; Webb, 1995). This exchange relationship also manifested in the broad network exchange between crop farmers and herders, for example, herders traded animal manure produced by their cattle to the crop farmers for grain from the crop farmers (Overseas Development Institute [ODI], 2000).

Horowitz and Little (1987) recount that in Niger, during post-harvest period crop farmers enticed animals onto their crop fields by presenting gifts such as money, tea, and sugar to the herders. In Niger also, crop farmers were noted for digging wells close to their farms with the intention of attracting the herders' cattle

for post-harvest grazing and the belief that these herders would lead the cattle to the owner's farm. By attracting the cattle onto the farms, the farmers are privileged to have the cattle manure dropped on their farms. However, Horowitz and Little equally acknowledged that the relationship between the farmers and herders have been strained. The suddenly strained relationship was marked by the early southward movement of the herders into the crop fields before the harvest was completed.

In Jos, in Central Nigeria, farmers still welcomed herders despite the increasing tensions between them over competition for resources (Awogbade, 1983). Awogbade stated that herders in the Jos area kept animals for the village farmers who considered livestock, particularly cattle, as a form of investment. Also, milk, cattle, and manure were sold for agricultural produce and social links between farmers and herders were evident in ceremonial exchanges. Such complementary interactions were also reported in Senegal, Mali, and Sudan (Hussein, 1998, Raynaut & Delville, 1997; Abubakari & Tonah, 2009; Bukari, 2013). Conversely, as Raynaut and Delville (1997, p.112) noted:

*Such a co-existence has never been without tension because it demands a conciliation of rival interests. Conflict can erupt when livestock is poorly controlled, and when herds wander on to cultivated fields. This has always had a tendency to occur at critical periods in the annual cycle, particularly during sowing, when herds are late in leaving agricultural lands, and during harvest, if they return too early. Clashes occur when*



*agricultural activities hinder the movement of the herds and cut off their access to water sources or pastures.*

This strain is what Coser (1956) described as social conflict; defined as a struggle over values or claims to status, power, and scarce resources, in which the aims of the conflicting parties are not only to gain the desired values but also, to neutralize, injure or eliminate their rivals. Such conflicts may take place between individuals, groups or between individuals and groups; inter-group as well as intragroup conflicts, which are perennial features of social life. This, however, is the case of the conflict between crop farmers and herders.

Some factors have been advanced to explain the causes of the farmer-herder conflicts in West Africa. Homer-Dixon (1999) argued that population growth, environmental change, and unequal social distribution are the foundations for resource scarcity, which lead to violent conflicts. In the case of the farmer-herder conflicts, Breuser *et al.* (1998) conclude that the growth in herder population and the expansion of farmlands on the crop farmers' side are the underscoring cause of the conflict. Nevertheless, Milligan and Binns (2007) questioned the aforementioned factors to argue that this crisis accounts are technicist in perspective and has greater chance of disguising other points of view, especially those factors that place an accent on the role of power, history, and symbolism in the dynamics of rural society and ignore the degree of heterogeneity and disequilibria in the natural environment. Milligan and Binns named other factors underlining the farmer-herder conflicts in West Africa as environmental and social factors, and

those factors that have to do with landlessness and political powerlessness of herders. The social and political factors combine to produce resource-use conflict.

Suliman (1997), Ahmadu (2011), and Moritz (2010) note that ecological borders are, in most cases, also ethnic and cultural borders where people meet to fight or cooperate. Tonah (2002, 2006) also adds to this debate that farmer-herder conflict underlines ethnic differences where Fulani pastoralists see themselves as different from the population group of sedentary farmers. These differences created between the feuding groups yield to how each group frames the other as explained by the framing theory. The theory postulates that frames held by the actors involved in a conflict form the basis on which they act and these frames are built upon underlying structures of beliefs, values, and experiences that actors construct to distinguish themselves in unique ways (Burgess, 2017). In identity frames, actors perceive themselves as having particular identities in the context of specific situations. These identities spring from the individuals' self-conception and group affiliations (Rothman, 1997).

The more central the challenge to one's sense of self, the more oppositional one is likely to act. The end result of this interaction is prejudice, exclusion, marginalization, and stereotype elements. In most parts of West Africa, the herdsmen (Fulani herdsmen) are considered migrants ('aliens') and the abusers of the host-migrant especially when herders start demanding equal rights of tenure and exploitation (Seddon & Samberg, 1997). Typical responses to threats to identity include ignoring information and perspectives that threaten the core identity,

reinforcing affiliations with like-minded individuals and groups, and negatively characterizing and disfavoured outsiders.

In West Africa, specifically Nigeria's middle states of Benue, Jos, and Taraba, the herders have been disfavoured against farmers on the grounds of resource sharing (Africa Report, 2018). As a result, the herdsmen have been known to wreak havoc in certain communities in Nigeria, and now, the rate at which they commit these atrocities have increased exponentially (Akinkuolie, 2018). According to statistics provided by the Institute for Economics and Peace (2016), 63 persons were killed in 2013 and 1,229 people were killed in 2014, and Benue State seems to be the hardest hit in recent times. In 2015, over 100 farmers and their family members were reportedly massacred in villages and refugee camps located in the Ukura, Per, Gafa and Tse-Gusa local government areas of the state.

In a study conducted by Beetseh, Tion and Terwase (2018), in December 2017, six persons were killed at Idele village in the Oju local government area in Nigeria. A reprisal attack by youths in the community saw three Fulani herdsmen killed and beheaded. In February 2018, as a result of crises between herdsmen and farmers in Benue State, 40 more people were killed, about 2,000 displaced and not less than 100 were seriously injured. In addition, more than 92 Nigerians were massacred by suspected Fulani herdsmen in Benue and Niger states.

Again, in Nasarawa state in Nigeria, Okoli and Atelhe (2014) reported that the herder-farmer conflict led to the death of 130 persons between 2011 and 2013. Some victims got injured and others rendered homeless. Additionally, there were loss of properties, food insecurity and increased violence as people's livelihoods

are dissipated and their security become endangered. This situation constitutes a serious obstacle to local development, particularly agricultural activities. All these indicate how endangered people's lives become during the conflict.

In Ghana, most of the violent farmer-herder conflicts involve Fulani herdsmen and settled farming communities. The Fulani are the most dominant pastoral group in Ghana (Abbass, 2014). The Fulani nomadic herders started migrating into Ghana in the early 1920s and 1930s from Niger, Burkina Faso, and Mali in search of pasture, water and better economic prospects (Tonah, 2002). There existed between these two groups of farmers, very deep exchanges and a cordial relationship. Many of these herders were people Ghanaian cattle owners hired and paid them for their services. Again, most of these hired herders would not even stay, let alone create problems for Ghanaians especially crop farmers.

Today, the Fulani herdsmen are found in almost all agro-ecological zones of Ghana and are known to have brought their own cattle from the neighboring countries. As a result, violent conflicts between farming communities and Fulani herdsmen have become widespread. Increasingly, the spate of violent clashes and reprisal actions between farmers and Fulani herdsmen in many parts of Ghana has led to human deaths and the displacement of people. Security agencies have intervened in many cases to prevent clashes in places such as Gushegu, Nangodi, Agogo, Dumso and various villages in Atebubu/Amanteng and Pru districts in Ghana. For example, in February 2016, about 80 cattle belonging to Fulani herdsmen were killed by furious youth in Dumso in the Brong-Ahafo region in response to the destruction of crops by cattle herded by Fulani herdsmen (Stanley,

Harvey & Asaah, 2017). Recent media reports also highlight the violent farmer-herder conflicts in the Kwahu East District in the Eastern Region and Sekyere Central District in the Ashanti Region.

The most violent and talked about is the farmer-herder conflict in the Asante Akyem North District (AAND) in the Ashanti Region of Ghana. The district is blessed with fertile land, reliable rainfall, and abundant pasture, and thus supports large scale crop cultivation and animal production. This has attracted several farmers and cattle owners, who rely on the services of Fulani herdsman. The farmers cultivate a variety of food crops such as plantain, maize, and watermelon on a commercial basis all year round. Coincidentally, these crops have also been found to be of nutritious value for the cattle and as such alternative feed, especially during the dry season. The engagement between the two groups results in conflict and has labeled the communities in Asante Akyem North District as a theatre of resource conflicts between sedentary farmers and nomadic herders since the eighteenth century (Boateng, 2015).

In 2004, the people of Agogo regrouped and launched another attack on the herdsman and reiterated their initial demand for their expulsion from the area. Again, the army was called upon to restore order. This again brought about a short-lived peace. In 2006, 2009, 2011 and 2013 the violence resurfaced and had become endemic (Ghana News Agency, 2012). In December 2017, the conflict erupted again, this time much more violent than before (Ghana News Agency, 2017). The report depicts that people have been killed, maimed and raped. Others have had their crops destroyed and cattle killed, with pupils having to drop out of school

because of the insecurity in the area. According to Alimba (2014), the consequences range from mere envy, suspicion, and jealousy to large-scale destruction of lives and properties. Consequently, these engender hatred for the entire Fulani ethnic group, and the mistrust for some traditional leaders create a culture of violence within the society. This constitutes a serious obstacle to local development, especially agricultural activities. There has been a general dissatisfaction concerning the activities of Fulani herdsmen among the Ghanaian populace.

In the media parlance, the situation is often described as the ‘Fulani menace’. These conflicts are curtailing the livelihood activities of farmers and herders. The Asante Akyem North District of Ghana has been a scene of farmer-herder conflicts despite government’s management effort to forcefully push the Fulani out of the areas and the recurrent introduction of army officials to restore peace (Ghana News Agency 2017; Ofuoku & Isife, 2009; Olaniyan, Francis & Okeke-Uzodike, 2015). According to Tonah (2006), resource-use conflicts create a tense and volatile relationship between herders and farmers which affect the level of cooperation between them.

Tonah (2006) in his study of farmer-herder conflict in the Volta basin of Ghana, stipulated that efforts by armed youth and commercial farmers to eject the herders forcibly further worsened the tensed relationship that existed between them and the herders. The herders see the farmers as enemies of their survival and progress and vice versa. This situation undermines social cohesion which is manifested by mistrust and animosity between the two groups. It, therefore, creates

an atmosphere of mutual suspicion and tension which is a threat to peace, security, and progress of any society.

The violence associated with the herder-farmer conflicts leads to malnutrition and pollution of drinkable water which causes disease outbreak like cholera and guinea worm. The environmental consequences include bush burning, soil erosion, compacting of soil, loss of soil fertility and loss of biodiversity (Ofuoku & Isife, 2009). According to Nchi (2013), these situations engender untoward outcomes that do not augur well for the socio-economic sustainability and livelihood well-being of the people. These conflicts have affected individuals as well as the entire area. This situation also echoes strongly to researchers to investigate the effects of the farmer-herder conflicts on actors' (farmers and herders) psychosocial well-being.

Psychosocial well-being, according to Baumgardner and Crothers (2010) is a global combination of emotional, psychological and social wellbeing. This definition was based on Keyes (2005) theory of complete mental health, which integrated features of subjective well-being (Diener, 2000) with the markers of high psychological well-being as indicated by Ryff (1989) and the concepts of social wellbeing, all conceptualized from the eudaimonic view (Keyes, 2005). In Keyes's theory of complete mental health, Keyes (2005), defined mental health as not only the absence of psychopathology but also the presence of sufficient levels of emotional, psychological and social wellbeing, though Keyes treated psychological and emotional components together. The operational definition and theory of well-being in this study further agree with WHO's (1948, 2006) concept of health as one

that does not only refer to physical health but includes mental and social facets of life.

According to the World Health Organization (2005) conflicts have catastrophic effects on the health and well-being of nations. Conflicts destroy communities and families and often disrupts the development of the social and economic fabric of nations. The effects of conflict include long-term physical and psychological harm to children and adults, as well as a reduction in material and human capital. Death as a result of conflict is simply the “tip of the iceberg”. Other consequences, besides death, are not well documented. They include endemic poverty, economic/social decline and psychosocial illness, to mention only a few (WHO, 2005).

In a cross-sectional study, Onyebueke, Okwaraji, and Obiechina (2018) found that the communal conflict over land in Ezza and Ezillo communities in Nigeria had varying degrees of psychological consequences including depression, anxiety disorder post-traumatic stress and major psychosis on the victims and these psychological symptoms varied significantly according to age and gender. Appiah-Boateng (2014) also evaluated the psychosocial effects of the Tuobodom chieftaincy conflict on the residents of the community and found significant effects of trauma, anxiety, and depression among the people.

In a study by Krafona and Appiah-Boateng (2017), both primary and secondary victims were psychologically affected by the chieftaincy conflict in Tuobodom, Ghana, though in that study, the aspect of disorder assessed was post-traumatic stress only unlike Onyebueke, Okwaraji, and Obiechina (2018) and



Appiah-Boateng (2014) who investigated several mental illnesses. The findings in the study by Krafona and Appiah-Boateng (2017) revealed that there was no significant difference between males and females. All suffered trauma after the chieftaincy conflict.

Indirect and direct victims exposed to the conflicts suffered from post-traumatic stress. On the factor analysis, two factors emerged where intrusion and hyper-arousal loaded as one factor and avoidance symptoms as the other factor. A high level of post-traumatic stress symptoms was reported by the participants. The study suggested that the outcome has implications for clinical work. Similarly, Bello (2013) assessed the socio-psychological effects of farmer-herder conflict in Nigeria. The conflict actors reported a loss in quality relations and social support. Other non-material resources that were lost included self-esteem (44.5% of farmers and 21.9% of herdsmen); and personal/family health (12.4% of farmers and 13.1% of herdsmen). Another non-material repercussion included sleepless nights, reduced interest in family affairs, anger, job abandonment, and staying more away from home.

In all these, Justino (2012) argues that many conflict victims continue to live in the conflict areas despite the heats of it. This implies that some coping mechanisms be adopted in order to survive within such environments. In this study, a grounded theory of coping was adopted. The Grounded Theory of coping was used to uncover the coping strategies employed by the farmers and herders. The main epistemological interest here lies in predicting and explaining the coping behaviors resulting from the Farmer-herder conflict (Strauss & Corbin, 1990). This

gives the opportunity to explore the cognitive, emotional, and behavioral efforts to master, reduce or tolerate the internal and/or external demands that are created by a stressful transaction within the victims' context and perspectives. Nonetheless, deductive reasoning was used to explore how emergent themes related to the existing theory of coping which puts coping strategies into two main themes: emotion-focused coping, otherwise known as regulatory of emotions and problem-focused coping (Lazarus, 1984).

Lazarus explained that the task of the emotion-focused coping was to regulate internal emotions and these include cognitive distraction, seeking emotional support, emotional expression, cognitive restricting, avoidance, denial, and emotional venting. Discussing the emotion-focused coping, Kopp (1989), contended that the concept characterizes the processes and features involved in coping with heightened levels of negative and positive emotions. On the contrary, problem-focused coping employs strategies that deal with the stressors itself. It also attests that coping includes more than the regulation of emotion.

When confronted with stress, individuals attempt not only to deal with emotional experience, expression, and physiological reactions, but also to coordinate motor behavior, attention, cognition, and reactions from the social and physical environments (Compas et al., 2001, Eisenberg et al. 1997, Lazarus & Folkman 1984). They include active coping and seeking instrumental support. In this study, conflict victims construct their own coping mechanisms from a grounded approach.

The effects of conflict can be alarming and the farmer-herder conflict in the Asante Akyem North District is not an exception. Yang, Cheng, and Chuang (2015) recall that conflict has tremendous effects on civilians particularly women, and children and the fact that it causes displacement. To McCormick (2006) areas that have conflicts have development programs obstructed and resources re-directed to less productive uses. There is also deterioration in the quality of life, the weakening of political and economic institutions and the discouragement of investment in areas where conflicts triumph (Adan & Pkalya, 2006). In response to emerging global trends and the need to make concerted and coordinated efforts to address the negative elements of conflict, conflict management has come to the fore.

The prime objective of conflict management is to keep social cohesion and co-existence intact by searching for common ground, optimizing each actor's position, integrating the interest of the weaker side into the compromise and persuading the victors and victims to accept integrated solutions that are mutually binding. Alternatively, in an ethnically and ideologically charged conflict where sources are deep, it is possible to moderate disagreement, rather than seek immediate resolution. Beyond the implication of reduced hostility levels, 'conflict management often seems to refer to both the efforts to control the relationship as well as the success of such efforts (Speakman & Ryals, 2010).

In the case of the farmer-herder conflicts in Agogo, Opoku's study (2014) found management strategies such as avoidance, mediation, negotiation, and adjudication. Whereas the majority of farmers used the adjudication strategy, and 66% of farmers felt satisfied with the resolution at the court, very few employed

negotiations because herdsman and cattle owners were unwilling to compensate farmers after negotiations are made. Olaniyan, Francis, and Okeke-Uzodike (2015) explored more constructive resolution and reconciliation policies aimed to deal with realities found in the complicated set of factors that lead to the farmer-herder conflicts in Agogo in Ghana. The findings indicated that the expulsion policy has been practiced in Nigeria, Senegal among others. In Ghana, the expulsion policy was used in Atebubu District in the Brong-Ahafo Region of Ghana in 1999 and 2000 to drive away Fulani herders, but according to Tonah (2002), it was fraught with inadequacies.

The expulsion policy in Agogo took place in 2010, 2011, 2013, 2015, and 2017 with military men using force to expel the Fulani in the town but the Fulani to date still linger around. In the case of Agogo, the policy has not been a total success. This is due to cattle ownership and the involvement of traditional institutions. According to Atta-Asamoah and Aning (2011), if a Fulani herder has fifty head of cattle, you can rest assured that twenty of them belong to indigenous Ghanaians, particularly “big men” and those that are in government. Therefore, agitation for the expulsion of Fulani herders threatens the economic interests of the traditional and political elites.

The authors concluded that the expulsion policy was not the answer. Rather, a more useful concept here may be reconciliation. According to Staub (2006), reconciliation means that both victims and perpetrators come to see the humanity of one another, accept each other, and see the possibility of a constructive relationship. This further calls on conflicts researchers to explore sustainable ways

of managing the farmer-herder conflicts in Agogo. It is only through a greater understanding of conflicts and the myriad of mental health problems that arise from them, can coherent and effective strategies for dealing with such problems be developed.

### **Statement of the Problem**

Land as a resource remains a major source of conflict, particularly in Africa. Evidence suggests a considerable increase in local clashes over agricultural land in many parts of Africa since the beginning of the eighteenth century (Manu et al, 2014). Land is not only considered as a great asset and means of livelihood but also as a source of wealth for both sedentary agriculturalists and nomadic pastoralists (El Hadary and Samat, 2011). Lack of access to land signals a deprivation of livelihood and a threat to the existence of farmers and herders (Okoli and Atelhe, 2014). As a result, both farmers and herders will do everything possible to maintain their access and rights to any portion of land. This often degenerates into a conflict.

In Ghana, farmer-herder conflict (violent and non-violent) is not a new phenomenon in areas such as Atebubu, Yeji, Pru, Gushegu, Nangodi, Dumso, Agogo, Begoro, Mamprusi, Sekyere Afram Plains, Kwahu Afram Plains among others. This type of conflict has been re-occurring for more than two decades now. Its frequency of occurrence, rate of spread and nature of fierceness have been a source of concern to stakeholders (Tonah, 2006). More importantly, the violent nature of the sporadic farmer-herder clashes in the Asante Akyem North District in the Ashanti Region has been a major security threat to the country. Several efforts including reprisal attacks on the herdsmen and demand for their expulsion from the

area by the people of Agogo as well as the deployment of security officers to the area have at best yielded a short-lived peace (Ghana News Agency, 2017).

Studies that have looked at the causes, effects and management of the conflict in the area (see Baidoo, 2014; Opoku, 2014; Boateng, 2015; Olaniyan, Francis, and Okeke-Uzodike (2015) have identified disagreement over available fertile land, constant rainfall, indiscriminate cattle grazing (often leading to destruction of farms) and the killing of cattle among others as the underlying sources of the conflict. While these and many other factors have been documented in the literature, little is known about how the actors of the conflict cognitively frame each other and how these frames influence the development and entrenchment of the conflict.

The dominant narrative about the impacts of conflicts in the existing literature revolves around socio-economic perspectives, ignoring the mental health or the intangible aspects. Researchers and policymakers have often paid attention to the observable valuable resources destroyed and scores of deaths recorded during their assessment of the impact of the conflicts (see Asamoah, 2014; Baidoo, 2014; Ofuoku and Isife, 2009; Opoku, 2014; Olaniyan, Francis, and Okeke-Uzodike, 2015) without paying attention to the psychological well-being of the affected individuals. Investigating the psychosocial well-being as a component of health among conflict victims is something rarely researched into in Ghana in general and the Asante Akyem North District's farmer-herder conflict in particular.

Drawing on the nexus between Sustainable Goal three [3] (promoting health and well-being) and Goal sixteen [16] (promoting peaceful and inclusive societies),

this study fills these gaps in the literature. The exploration of this dimension of the impact of the conflict is based on the established fact that there can be no sustainable development without peace and no peace without sustainable development. More importantly, none of the two assertions may hold without a critical assessment of the psychosocial well-being of conflict victims as emphasized by the World Health Organization (2012).

During violent conflicts, many households leave areas of more intense fighting to refugee and displacement camps, migrate to safer urban areas or move abroad (Justino, 2012). Though some victims migrate during such periods, several of the victims continue to live in these conflict areas and survive (Engel and Ibáñez, 2007; Steele, 2007; Wood 2003), carrying on their everyday lives through decades of violence (Nordstrom, 1997). Huber and colleagues (2011) argue that a healthy individual is the one that is able to cope with the psychosocial challenges that emanate from the farmer-herder conflict (Huber, et al., 2011).

Studies by scholars (see: Asamoah, 2014; Baidoo, 2014; Ofuoku and Isife, 2009; Opoku, 2014; Uzodike, 2015) and policymakers on the AAND farmer-herder conflicts have overlooked this dimension of coping among conflict victims. The complex and recurrent nature of the farmer-herder conflicts in AAND demands some scientific studies to investigate the psychosocial implications and coping mechanisms employed by farmers and herders. Effective recommendations on the management of the conflict are possible when a deeper appreciation of how frames affect conflict developments are outlined.

## **Research Objectives**

The general objective of this study is to investigate the protracted land-use conflict and its psychosocial effects on the well-being of farmers and herders in the Asante Akyem North District of Ghana. The study specifically:

1. Explored how actors' frames affect conflict development in the Asante Akyem North District;
2. Assessed the effects of the land-use conflicts on the psychological well-being of the farmers and herders;
3. Analyzed how the land-use conflicts influenced the social well-being of the farmers and herders; and
4. Explored the strategies used by the farmers and herders in coping with the psychosocial effects of the conflict.

## **Research Questions**

1. How do actors' frames affect conflict development?
2. What are the effects of the farmer-herder conflicts on the psychological well-being of the actors?
3. How have farmer-herder conflicts affected the social well-being of the actors?
4. How do the farmers and herders cope with the psychosocial effects of the conflict?



## **Significance of the Study**

The psychosocial impacts of conflicts and the coping strategies employed by conflict actors cannot be underestimated. This study probes into the psychology of the actors to reveal the frames they form about each other and how these frames influence conflict development. The relevance is to inform policymakers, the public, and the academic community about how the actors of the conflict themselves construct conflicts through a psychological lens. The study combines two disciplines (conflict and development studies and psychology) to assess how conflicts affect the psychological and the social well-being among the conflict actors.

Thematically, the study would reveal some coping strategies. The essence of exploring this objective was to technically know what abilities and skills are available on the part of the actors in managing their personal well-being when confronted with psychosocial stressors resulting from conflicts. This is reliving as the central government alone would not feel burdened in ensuring the safety and well-being of the people. The study opens discussion on crucial support systems for conflict victims. These would include safe and stimulating activities, building relationships and restoring trust, rehabilitation and reconstruction activities, empowerment and skills in coping through channels of media, religious organizations, enhancing community structures and building youth capabilities. It would also echo to stakeholders to map out strategies that would help sustain agriculture in farming communities despite conflicts.

The study will also provide answers to sustainable development goals three (3) and sixteen (16). The study will unravel the mental and social state of the actors and recommend psychosocial support mechanisms that will ensure healthy lives and promote well-being for all at all ages and promote peaceful and inclusive societies for sustainable development and peace.

This research will serve as a source of reference to students, academics, and researchers in future research. The outcomes of the study will be a useful source for policymakers dealing with conflict analysis and management in the country. Theoretically, this study will make meaningful contributions to livelihood security theory for conflict victims through conflict prevention or minimizing, ensuring agricultural production despite conflicts, among others.

The ultimate objective of this study is to strengthen the evidence-base for policymaking. The subjective measures of well-being in conflict communities can improve our understanding of the factors driving or marring societal progress. Again, the subjective/psychological dimension of conflict analysis is needful to complement the already existing literature.

### **Organization of the Study**

The study was organized into eight (8) chapters. The first chapter introduced the study by discussing the background to the study, statement of the problem, research objectives, research questions, significance of the study, and the organization of the study. Chapter two reviewed the concepts and theories underpinning the study. It also discussed the empirical cases related to the study and presented the conceptual framework guiding the study.

Chapter three looked at the methodology; that is, the research philosophy, study design, study areas, target population, sample and sampling procedures, data sources, seeking ethical clearance, fieldwork and community entry protocol, data collection procedure, data preparation and analysis, field experiences and challenges and ethical consideration.

The fourth chapter presented the profile of respondents and offered the history of the farmer-herder conflict. Chapter five provided alternative perspectives to the underlying causes of this resource conflict by arguing that mental constructions based on the formation of frames are the precursor. The sixth chapter highlights the psychosocial implications of conflict, an aspect that touches on mental well-being which several researchers ignore when investigating the effects of conflicts. Chapter seven presented findings on the coping strategies used by the conflict victims. The final chapter presented the summary of the findings of the study, conclusions and made recommendations towards effective management of the farmer-herder conflicts in the Asante Akyem North District.

## CHAPTER TWO

### REVIEW OF RELATED LITERATURE

#### **Introduction**

The theoretical, conceptual, empirical principles and conceptual framework guiding the study are relevant to consider. Now, having coherently discussed the background to the study, the problem statement, objectives, research questions, and significance of the study in the previous chapter, this chapter is devoted to the review of related literature and it is structured into three broad sections, namely: theoretical, conceptual and empirical reviews associated to this topic. The conceptual framework ends the chapter.

#### **Theoretical Review**

Merriam (2001) describes the theoretical framework as the structure, the scaffolding, the frame that underlined the study. Grant and Osanloo (2014) also supported this argument and added that theoretical framework is the foundation from which all knowledge is constructed (metaphorically and literally) for a research study. The theoretical framework provides a grounding base, or an anchor, for the literature review. There exist a number of theoretical explanations on framing, psychosocial wellbeing, and coping. Nonetheless, framing theory, Keyes' theory on complete mental health, and grounded theory of coping were carefully selected and combined to understand and explain how framing influences conflict development, psychosocial effects, and coping strategies employed in the farmer-herder conflicts.

## **Framing Theory**

The framing theory postulates that frames held by the actors involved in a conflict form the basis on which they act and these frames are built upon underlying structures of beliefs, values, and experiences that actors construct to distinguish themselves in unique ways (Burgess, 2017). Framing, which according to Esser, Benford, Snow, and Byrd emerges from actors' and observers' interpretations of conflict events, not only refers to the mode of interpretation through which actors involved in a conflict make sense of a situation but also includes a discursive dimension through which they define conflicts, causes and actions within narratives selected or generated by them (Esser, 1999; Benford & Snow, 2000; Snow & Byrd, 2007).

Framing contributes to understanding conflict from a process perspective and offers an approach that bridges this conventional dichotomy in conflict theorizing (Desrosiers, 2011). According to this approach, conflict dynamics and processes involved in an inter-communal conflict are the results of the purposeful behavior of actors that takes place against the background of a constraining and constitutive social setting. At the same time, processes involved in an inter-communal conflict and communal violence, including the transition from one stage of escalation to another, are not free from irregularities and digressions. The scrutiny of mobilization in conflicts requires taking into account, among other things, discursive dynamics, such as contested meanings and worldviews, discourses, norms and structures of power relations and their implications for the

actions of the actors involved in the conflicts (Esser 1999; Fearon & Laitin 2000; Desrosiers, 2011).

Additionally, framing is an inter-subjective process of definition, perception, and identification of a conflict situation or event in which a certain cognitive model of the situation is produced with informative and guiding functions (Esser, 1999). Frames, as mobilizing (or demobilizing) ideas, are produced as action-oriented “schemata” (Goffman, 1974) within the existing social environment that organizes experiences and guide the actions of actors in conflict processes, as well as mobilize the community and resources. In the space of conflicts, frames of a conflict produced by actors are consequential and this comes about as actors act as signifying agents engaged actively in this process of signification. The causative nature of frames is determined by their embeddedness in conflict dynamics and the wider political and social processes surrounding the conflict (Benford & Snow, 2000). The resonance of these frames, generated in how a conflict event is defined, predefines conflict dynamics and the processes involved therein, including the escalation or de-escalation of violence (Lewicki, Gray, & Elliott, 2003).

Taking this notion another step forward, framing involves frame generation, on the one hand, and frame reception and enacting, that is, mobilization based on the frame, on the other (Minsky, 1975). A conflict event is defined by an actor or an observer on the basis of the social environment and institutional setting that shape social relations. Hence, a frame of a conflict event has to be aligned with the social environment in order to be successful. From this viewpoint, frames of

conflict are generated on the basis of already existing larger “cognitive models”, as well as those that are ingrained in the minds, perceptions, and understandings of people and embedded as meaningful structures in the social environment (Esser, 1999, p. 247-249). These larger cognitive models can be myths relating to ethnic identity, traditions, and norms governing inter-communal relations, the history of past violence or the like. Actors within conflict frame the situation based on already existing, greater cognitive models, in order to make them acceptable by the community involved through alignment with common concerns and beliefs (Snow et al., 1986). Frames can also rely on more than one of such larger cognitive models already internalized by the given community.

In order to activate and strengthen the framing of the given conflict situation, actors through reflection on the wrongdoings of the other side rely on symbolically dramatized depictions of common concerns and interests (including material interests), often depicted as collective groups interests and apprehensions. This way, the cognitive aspect of framing involves cognition in broader terms, which also includes argumentative and symbolic aspects, and enables their communicative reception by the public (Esser, 1999). Burgess (2017) mentioned that several factors influence frames and their formation. Frames in conflict are never-ending. New and transformed frames may emerge throughout the course of conflict development.

### **Keyes’ Model on Complete Mental Health**

Keyes developed the mental health model and captured the model of mental health as one that operates on a continuum which moves from severe pathology to

optimal health and view mental health as a complete state in which human beings are free of any dysfunctional behavior and are instead flourishing with high levels of psychosocial well-being (Keyes, 2003). The author further internalized mental health as a condition for well-being and explained as a process where a person experiences related symptoms of hedonic while displaying just over half of the eudaimonia symptoms.

This model on well-being was adopted to support the argument on the psychosocial aspect of this study and the model of mental health thus comprised three distinct yet closely related components: emotional well-being, psychological well-being and social well-being (Keyes, 2007). Nonetheless, Linley, Maltby, Wood, Osborne, and Hurling (2009) found that emotional well-being and psychological well-being were closely related. For this reason, psychological and emotional wellbeing are discussed as one part of the model and social well-being as the other.

Psychological well-being has been described as a state in which individuals experience frequent positive emotions and a few negative emotions and are satisfied with their lives (Keyes, 2005; Lyubomirsky, Schkade, & Sheldon, 2005). Keyes further referred to psychological well-being where people experience high levels of satisfaction and happiness regarding their lives. Positive affect and life satisfaction are the constructs that this component is based on (Keyes, 2005). An individual would be said to have high subjective well-being with low levels of neuroticism (Keyes & Lopez, 2002).



For Ryan and Deci (2001), positive affect led to high levels of satisfaction with life and high emotional well-being had positive correlates with self-confidence, while this in turn correlated with goal-achievement, social relations, and leadership abilities. Diener and Ryan (2009), on the other hand, cautioned that excessive striving for high positive affect might expose people to possible risk-taking and reckless behavior. On a broader level, communities and society benefited from individuals with high psychological well-being, because such people were more altruistic, trusting, peaceful and tolerant of those different to themselves, such as foreigners and other racial groups (Perstling, 2011).

Within the realm of Keyes' understanding of social well-being, social acceptance referred to the degree to which people generally held positive attitudes towards those around them. Social actualization was the degree to which people believed that society had the capacity to develop and grow towards optimum levels of functioning. Also, social contribution referred to how much people believed their efforts to contribute to the upliftment of society and how much their community valued those activities; likewise, social coherence was the degree to which the society seemed to be understandable, predictable and logical for the individual; and social integration was the degree to which an individual felt part of the community, as well as how much support he/she received from the social society (Keyes, 1998).

Keyes (2005) further argued that society had a major role to play in the promotion of mental health. Demonstrating this assertion, Keyes found out that in a study by Matsumoto (1994) and Price and Caprio (1997) that collectivistic cultures such as those practiced in countries like China, Japan, and India tend to support

mental well-being. The cultures are community and socially oriented and the emphasis is placed on the significance of the individual's relationship with his/her immediate community as well as relationships characterized by support and encouragement amongst the group members despite their impoverished living conditions (Matsumoto, 1994; Price & Caprio, 1997). Within African communities, Nsamenang (2008) found that social support, culture, and heritage were thus important building blocks that shaped psychosocial well-being for young people.

Keyes (2002) indicated gender differences with regard to mental health, whereby females were found to be more prone to poor mental health while males and females were found to be equally prone to suffering. Keyes (2005) further emphasized that for complete mental health to be experienced, it was imperative for positive mental health to be promoted and mental illness to be reduced, as this would result in flourishing. This study employed the Complete Mental Health Model to serve as a measure for psychosocial well-being among conflict victims in the Asante Akyem North District of Ghana.

### **Grounded Theory of Coping**

For a better understanding of farmers and herders' exposure to the conflict in the Asante Akyem North District and their coping strategies, a grounded theory approach was used in the initial coding of the data and deductive reasoning used to explore how emergent themes related to existing theory (Charmaz, 2006). The Grounded Theory was propounded by Glaser and Strauss in 1967 as a strategy in qualitative research. The defining characteristics of Grounded Theory include simultaneous involvement in data collection and analysis, construction of analytic

codes and categories from data (not from preconceived logical hypotheses), use of the constant comparative method/analysis that involves making comparisons during all steps of the analysis, developing theory during each step of data collection and analysis, memo-writing to elaborate categories, etc., theoretical sampling aiming toward theory construction (not representativeness), and conducting a literature review after performing the analysis and developing theory.

When developing a theory, the identification of a core category is central for the integration of other categories into a conceptual framework or theory grounded in the data. Most grounded theories are substantive theories because they address delimited problems in specific substantive areas. The Grounded Theory methodological approach is grounded in the constructivist epistemology, that meaning is co-created in the discourse between people. The Grounded Theory approach supports the role of subjectivity in the creation of meaning.

Moreover, gaining knowledge through discourse is necessarily grounded in a particular social and historical context. For this study, a Grounded Theory perspective is valuable because of the implicit focus on taking farmers and herders' narratives as true representations of their perspective on trauma and coping. Also, a deductive process was used whereby emergent themes were categorized based on existing theory suggesting two coping domains, cognitive and emotional coping strategies by Lazarus and Folkman (1984) who characterize the relationship that exists among cognition, coping, emotion, and a person's fit to the environment. It further utilizes a cognitive perspective of the manner in which we engage with our surroundings and emphasizes the process as a mental evaluation (Lazarus &

Folkman, 1984). It posits that the best way to measure coping was through an individual's personal appraisal.

Qualitative Grounded Theory research was needed from actors of resource conflict such as the farmer-herder conflict in the Asante Akyem North to better define and gain in-depth knowledge of the coping strategies. Grounded Theory of Coping stresses the significance of context in understanding variations in the use of coping strategies. It is essential to document how conflict-affected victims cope with adversities. This would improve our understanding of the types of coping strategies used by the farmer-herder conflict victims in conflict and post-conflict settings. This study utilized in-depth interviews and relied on the dialogue between the interviewer and interviewee to construct an improved understanding of ways conflict victims cope with stress.

## **Conceptual Review**

### **Introduction**

This section of the study reviews principal concepts such as pastoralism, sedentary crop farming, resource-use conflict, land tenure, psychosocial well-being, coping, and conflict management. These concepts are discussed in detail in the subsequent sections.

### **Pastoralism**

According to Azarya (1996), pastoralism refers to an economy that is based on raising livestock, which could be undertaken by sedentary or nomadic groups. For Barfield (1993), pastoral nomadism is used to refer to societies specializing in animal husbandry requiring periodic movements. Nomadism, on the other hand,

refers to the extent of spatial movement of the groups in question. Thus, it is acknowledged in the literature that the debate on pastoral production is conceptually different from the extent of residential mobility. Further study by Salzman (1972) emphasized that it is possible to have multi-resource nomadism, that is, mobile groups who may combine cultivation, hunting, gathering, the sale of labor as well as livestock herding. Pastoralism involves the management of domesticated animals. While nomadism and pastoralism are not necessarily mutually inclusive, it is important to note that nomadism represents an integral social, political, and environmental dimension of pastoralism.

Swift (1988) also explained the concept in its essentials as a pastoral production system in which 50% of gross household revenue (that is, the total value of marketed production plus the estimated value of subsistence production consumed within the household) comes from livestock or livestock-related activities. Baxter (1994) also viewed pastoralism as an occupation or a vocation. Such a vocation can be a characteristic of an entire ethnic group, even if some of its members are not pastoralists by occupation. The term transhumance was used by Niamir-Fuller (1999) and SWAC-OECD and ECOWAS (2008) and defined it as a livestock production system characterized by the seasonal and cyclical mobility of animals between complementary ecological areas.

Globally, livestock contributes about 40% of the agricultural gross domestic product (GDP) and constitutes about 30% of the agricultural GDP in the developing world (World Bank, 2011). It plays crucial and multiple roles in the livelihood of people ranging from the food supply, family nutrition, incomes, employment,

livelihoods, safety net, draught animal power, manure and sustainable land use for agricultural production (Otte & Knips, 2005; Perry & Sones, 2007). The pastoralists in the West African sub-region operate within expansive geography, fluctuating between their major base in the semi-arid north and wetter south during the dry season. The pastoralists in Ghana particularly in Northern and central parts (Afram Plains) of Ghana are made up of both nomadic and semi-nomadic who move within and across the country, particularly in search of pasture and water for their herds (Ofuoku & Isife, 2009). Labels such as pastoral nomads, pastoralists, mobile pastoralists, trans-human pastoralists, and extensive pastoralists are widely used to refer to groups in this economy.

### **Sedentary Crop Farming**

Crop farming is practiced by sedentary farmers who are defined as farmers living in permanent settlements gaining their livelihood mainly from crop production, with domestic animals providing supplementary income (Hussein, 1998). Crop farmers have different aims for their activities. While most rural farmers aim to produce crops to feed their families, commercial farmers, on the other hand, grow crops to sell on the markets.

Crops sold on markets (cash crops) are an integral part of strategies to improve food security at the farm household level in developing countries. By selling their surplus production, agricultural households generate income that improves access to food. Cash crops are an essential part of sustainable intensification as income generated with cash crops provides farm households with means to save and invest in a more productive farm, and cash crops may have a

catalytic effect on agricultural innovations as they add value and productivity in rural areas. There is said to be food security when all people, at all times, have physical, social, and economic access to sufficient, safe, and nutritious food to meet their dietary needs and food preferences for active and healthy life (World Food Summit, 1996).

It must be noted that sedentary farmers also engage themselves in herding activities and just as many herders, are also to some extent, farmers. Bonte and Galaty (1991) pointed out that the link between farming and herding is continuous rather than a discrete phenomenon. Again, while it may appear paradoxical, the emergence of pastoralism as a specialized economic activity was actually enhanced by the development of agriculture. Through agriculture, the development of a regional system of complementary exchange between farmers and herders have been made possible. Nonetheless, their exchanges can lead to conflict.

### **Land Tenure**

Land tenure refers to the bundle of rights and responsibilities under which land is held, used, transferred, and succeeded. Land tenure can be categorized along three essential dimensions: (1) the presence or absence of formal land title, defined as registration of ownership rights with a government authority; (2) the extent of landowner and landholder rights to contract voluntarily for use of the land; and (3) the spectrum of private-communal property rights to the land (La Croix, 2002).

Lavingne-Delville (1998) and Ubink and Quan (2008) conclude that the Ghana land tenure system operates on a hybrid system, namely; customary and statutory land tenure systems. However, Lavingne-Delville (1998) expands further

to state that land tenure operates on legal machinery where customary and statutory laws co-exist in a complex mix, and range of institutions and regulations having authority over land rights and multiple bodies through which disputes are resolved.

Kasanga and Kotey (2001) and Mahama and Baffour (2009) detailed that the customary land tenure system operates under the customs, rules, norms, and traditions of the community, and varies from community to community across the country. Statutory tenure relates to lands owned by the state for public purposes or acquired through the state's powers of eminent domain in the interest of the public. Statutory tenure also refers to vested lands owned under customary tenure, but which are held and managed by the state for the beneficial enjoyment of the owners. It is estimated that about 80 percent of all landholding in Ghana is under customary tenure while the remaining 20 percent is held by the state for public purposes.

The land tenure system in Ghana has several types of interests and it includes allodial title, freehold title (customary freehold or common law freehold), leasehold; and a lesser interest created through sharecropping (Ollenu, 1962; da Rocha & Lodoh, 1999). The allodial interest is the highest land title in Ghana and it is held by stools (skins), sub-stools, clans, families, as well as individuals in some cases (see Bentsi-Enchill, 1964; da Rocha and Lodoh, 1999). Among the Akan, stools, and sub-stools hold the allodial title. Chiefs belonging to families also have an interest in family or communal land (Kasanga,1988; Kasanga & Kotey, 2001).

Both members of the landowning group (subject usufructuary) or strangers (stranger usufructuary) can hold the customary freehold interest. A leasehold interest is a legal interest in land created in favor of a lessee for a specific duration,



to occupy and use the lessor's scarcity at an aperiodic fee. Under the current legal regime of Ghana, 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 (Kasanga, 1988).

In many instances, Fulani pastoralists in Ghana are into leasehold arrangements (purely cash-based) with allodial trustees (chiefs and usufruct holder). 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. Whenever conflicts erupt with members of the host communities, the chiefs and the state are pressured by local communities to evict the pastoralists (Boamah, 2014). Also, Boamah (2014) has attributed the domineering stance of chiefs in land leasing to efforts aimed at re-establishing authority over customary lands and boundaries in Ghana. 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), giving way for pastoralism (Blocher, 2006).

### **Resource-use Conflict**

Resource-use conflict is the interaction among interdependent people who perceive incompatible goals and interference from each other in the use of resources (Hocker & Wilmot, 1985). Resource-use conflict springs from competition and conflict of interests and can be violent or non-violent (Hussein *et al.*, 1999). Competitive interactions occur between pastoralists and crop farmers over the use

of environmental resources such as land, pasture, crop residues, livestock passages and water points such as wells, boreholes, streams, and others (Shettima, 2008).

Farmer-pastoralist conflicts or farmer-herder conflicts (both used interchangeably) are conflicts between peasant/subsistence cultivators and nomadic/trans-human livestock keepers. Hussein *et al.* (1999), Tonah (2006) and Opoku (2015) 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 Catley, Lind, and Scoones (2013) and the Overseas Development Institute [ODI] (2009) describe the 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 and especially between nomadic herders and farmers.

A lot of scholarly works (see Adano, Dietz, & Witsenburg, 2009; Adebayo, 1997; Breusers *et al.*, 1998; Brown & Crawford, 2008) spell out the reasons for farmer-herder conflicts. Much of the literature has focused on resource explanations to farmer-herder conflicts and have argued that farmer-herder conflicts mainly result from competition between farmers and herders over natural resources, particularly land, pasture, and water. These arguments reignite Malthusian explanations that link scarcity to conflict. However, according to Bassett (1988), Hagberg (2000) and Moritz (2010), drivers of farmer-herder conflicts go beyond resource scarcity.

Moritz (2010) explains that an analysis of the causes of farmer-herder conflicts needs to involve both structural and processual factors. Turner *et al* (2011) supported Moritz's assertion. Nonetheless, they further indicated that resource-related conflicts do not simply arise from increased competitive pressure driven by physical scarcity of resources but that triggering events are often involved. They pointed out that factors such as climate change, population increase, expansion in agricultural production, social-cultural and religious differences, and changes in policies are generally considered remote causes of farmer-herder conflicts. The triggers of conflicts include the destruction of crops, pollution of water bodies, engagement in social vices and the inability of institutions (local and national) to deal with grievances (Turner *et al.*, 2011; Opoku, 2015; Bukari, 2017).

#### *Economic and Social Effects of Farmer-Herder Conflicts*

The farmer-herder conflict which largely is centered on land use, no matter how peaceful or violent produces negative consequences for individuals as well as for the entire society (Shettima, 2008). Many families across the Central and West African countries which mostly experience these menaces have suffered economic and non-economic consequences. A study carried out by Olabode and Ajibade (2010) and Fiki and Lee (2004) in the Guinea Savannah area of Kwara State, the study reported that out of about 150 households interviewed, 22 reported losses of livestock while 8 households from both sides reported the loss of human lives. Other studies as observed by Michael (2010) and Negedu (2005) have also indicated that stores, barns, residences, and household items were destroyed in many of the violent clashes.

Ofuku and Isife (2009) found out that conflict between farmers and herders bring about a reduction in income, disease outbreak, erosion, loss of lives, arms running, loss of houses and properties, and loss of farm product in storage. As Moritz (2010) points out, farmer-herder conflicts not only have a direct impact on farmer-herders lives and livelihoods but also disrupt and threaten the sustainability of agricultural and pastoral production. These conflicts can lead to a decline in agricultural production and productivity in general and food production in particular, thereby worsening the food security situation of farming and non-farming households. Livelihood activities of farming and herding households are already being curtailed. Farmers dreading to go to their farms for fear of being attacked prevent them from undertaking farming activities such as weeding, planting, and harvesting at important times. Whereas some farmers have left their occupation for Okada and artisan vocation.

In 2002, some 20,000 Fulbe cattle herders fled Nigeria and sought refuge in Cameroon to escape clashes with farming communities on the Mambila Plateau in Taraba State (IRIN, 2005). More so, in the Senegal valley, conflicts over natural resources between pastoralists, farmers and fishermen articulated with other conflicts, escalated into border conflict between Senegal and Mauritania (Homer-Dixon, 1999; Schmitz, 1999). Countries like Ethiopia, Sudan, and Somalia have also witnessed pastoral related violence resulting in famine, and mass displacement of civilian populations (Hendrickson, 1997).

The story is not different in Ghana. Some Fulani herdsmen are reportedly engaged in a social vice such as rape and destruction of the farm produce. This type

of conflict has led to the loss of lives, disrupted economic activities, and education (Opoku, 2014; Baidoo, 2014). Bajin, cited in Forson-Asimenu (2011) reported that the social and economic activities of almost all communities in the Upper West Region have been curtailed by Fulani nomads. Abubakari and Longi (2014) in a study in Northern Ghana, reported out of eleven highway robbery cases recorded between December 2011 and June 2014 in their study area, seven of the robberies were performed by Fulani herdsmen.

In extreme but not rare situations, people find themselves landless and/or without shelter for fear of being killed. In the case of a farmer, this often includes the loss of his/her production base. The farmers, on the other hand, are reported to retaliate by killing the cattle of the herders and taking the lives of some herders as well. Some farmers tend to spread poisons on pasture to get the cattle dead. The herders have been negatively labeled as poisonous and evil and this is a challenge reversing that tag by the Fulani (Opoku, 2012; Asamoah, 2015; Bukari, 2017).

### **Psychosocial Well-being**

Psychosocial well-being generally underscores the close connection between psychological aspects of our experience (thoughts, emotions, and behavior) and our wider social experience (relationships, traditions, and culture). Shah, Graidage, and Valencia (2005) described psychosocial well-being as a widely used concept that has been defined by several scholars in different ways.

Furthermore, Wong (2012) described psychosocial well-being as not only healthy functioning and happiness but also as being concerned with the assessment of wellness, the determination of a person's satisfaction with life with regard to

mental, emotional, social and economic aspects. A high level of well-being, both subjective and objective, “flows by living our best life (virtue), pursuing our cherished dreams (meaning) and overcoming life’s difficulties (resilience)” (Wong, 2012, p. 13). Closely related to this view of psychosocial well-being is the view that an individual’s state of mental functioning should lead to living a productive life; creating and maintaining fulfilling relationships with those around him/her; as well as the ability to cope with adverse events and to adapt to change (Prilleltensky & Prilleltensky, 2006; Satcher 1999).

Seifert (2005) had the view that psychosocial well-being is a dynamic concept that encompasses the individual’s psychological, social and subjective dimensions as well as health-related behaviors; a definition which was echoed by Evans and Prilleltensky (2007), who defined psychosocial well-being as a personal, relational and collective state characterized by a positive fulfillment of needs and aspirations. The World Health Organisation (2004) conceptualized psychosocial well-being (mental health) as “a state of well-being in which the individual realizes his or her abilities, is able to cope with the normal stresses of life, can work productively and fruitfully and is able to make a contribution to his or her community”.

Keyes (1998) throws more light on social well-being to reflect five areas of life: 1) social acceptance which refers to a positive view on other people and the ability to accept others as who they are, 2) social contribution as the belief of being able to fulfill and achieve activities and goals which are valuable for the society, 3) social integration which signifies a good relation to the community and society as

being an appendant part of it, 4) social actualization implying the belief that society has the potential for positive changes, and 5) social coherence referring to a logical and apprehensible view of the social world with interest in the social environment and social interaction (Keyes, 1998).

Finally, according to Baumgardner and Crothers (2010), psychosocial well-being referred to a global combination of emotional, psychological and social well-being. This definition was based on Keyes (2005) model of complete mental health, which integrated features of subjective well-being (Diener, 2000) with the markers of high psychological well-being as indicated by Ryff (1989a) and the concepts of social wellbeing, all conceptualized from the eudaimonic view (Keyes, 2005).

In Keyes' model of complete mental health, Keyes (1998, 2005), defined mental health as not only the absence of psychopathology but also the presence of sufficient levels of emotional, psychological and social well-being. According to this view, psychosocial wellbeing emanated from an integration of these three aspects of human existence (Keyes, 1998). Psychosocial well-being in this study is conceptualized as the expression of psychological/ emotional and social well-being as well as the characteristics of effective coping which deals with aspects of mental distress such as anxiety, depression, and trauma.

### **Coping**

Coping has been conceptualized by Folkman (1984) as a cognitive and behavioral efforts to master, reduce or tolerate the internal and/or external demands that are created by the stressful transaction. Compas, Connor-Smith, Saltzman, Thomsen, and Wadsworth (2001) also defined coping as a state of conscious and

volitional efforts to regulate emotion, cognition, behavior, physiology, and the environment in response to stressful events or circumstances. Eisenberg and colleagues (1997) view coping as those regulatory processes that manifest during a stressful situation.

All the above definitions reveal three characteristics that manifest during the process of stress. First of all, it is perceived as a process that draws attention to what the individual does and thinks as he/she encounters a specific situation. Again, it is context-specific which implies that it is influenced by the individual's appraisal of the actual demands in the situation. Personal and situational variables together determine the coping efforts and options. The individual may assess the events by merely perceiving the stressors or moving a step further to evaluate the effectiveness and impacts of the coping behavior. Lastly, Lazarus and Folkman (1985) did not establish what constitutes good or bad coping. However, coping is said to be effective if the stress is accurately appraised and specific behavioral and cognitive strategies are used to manage, reduce or tolerate stressful events (Folkman & Moskowitz, 2004).

Several coping strategies have been identified by researchers though there is little agreement on how these strategies should be conceptually grouped and the need to categorically admit that one strategy is better or beneficial than the other (Compas et al., 2001; Skinner & Zimmer-Gembeck, 2007). Nevertheless, two classical types of coping strategies exist in the literature, namely; emotion-focused coping, otherwise known as regulatory of emotions and problem-focused coping (Lazarus, 1984). Lazarus explained that the task of the emotion-focused coping was



to regulate internal emotions and these include cognitive distraction, seeking emotional support, emotional expression, cognitive restricting, avoidance, denial, and emotional venting.

On the contrary, problem-focused coping employs strategies that deal with the stressors itself. It also attests that coping includes more than the regulation of emotion. When confronted with stress, individuals attempt not only to deal with emotional experience, expression, and physiological reactions, but also to coordinate motor behavior, attention, cognition, and reactions from the social and physical environments. They include active coping and seeking instrumental support (Compas et al., 2001, Eisenberg et al. 1997, Lazarus & Folkman 1984).

Whereas some researchers have argued that problem-focused coping is seen as beneficial because of its implied action orientation, and that emotion-focused coping is seen as less positive because of its neglect of the underlying source of stress, work by Latack (1986) and Latack and Havlovic (1992) suggest that both types of coping can be conceptualized as potentially beneficial or detrimental depending on the degree to which they exhibit control (defining “control as consisting of both actions and cognitive reappraisals that are proactive”) or escape (consisting of both actions and cognitive reappraisals that suggest an escapist, avoidance mode).

The two types of coping differ in the type of stressful events that they are used with. If the situation requires the control of the distressing emotions, emotion-focused coping is used, as changing the meaning of the outcome of the event. In problem-focused coping, through problem-solving, decision-making, and or direct

action, the troubled person-environment relationship is controlled (Lazarus, 1993). Individual coping strategies that are used to handle the stress, fall in either problem-focused or emotion-focused coping styles.

Kuterovac-Jagodic (2003) on the other hand has categorized coping styles in different ways. A study in Croatia with war-affected children revealed six distinct types of coping strategies including aggressive activities, problem-oriented, avoidance and relaxation, emotional expression and social support seeking (Kuterovac-Jagodic, 2003). Beehr and McGrath (1996) distinguish more categories of coping styles and group styles as preventive, anticipatory, dynamic, reactive and residual coping. Ghimbulut and colleagues also categorized coping styles as, “emotion coping” (focusing on changing one’s own emotions), behavioral coping (directed toward the cause of the problem) and cognitive coping (directed on one’s own beliefs) (Ghimbulut, Ratiu & Opre, 2012). These and more families of coping styles exist to reinforce the assertion that there are several types and it is context and individual specific.

Lazarus and Folkman (1984) emphatically stated that effective coping requires a fit between situational appraisals and choice of coping responses; and that some coping strategies are not inherently better than others. Specifically, perceptions of controllability of the situation should lead to the utilization of problem-focused strategies to a greater degree than emotion-focused strategies, which are more suitable for situations that are less controllable.

However, Lazarus (1991) emphasized that coping is a dynamic process with substantial intra-individual and inter-individual variability; individuals might have

to utilize different coping strategies at different stages of the same stressful encounter or from one stressful encounter to another (Folkman & Lazarus, 1985). Again, coping strategies that are effective for one individual might not be effective for another person in the same encounter. However, Lazarus (1993) acknowledged that some coping strategies are more stable than others (Endler & Parker, 1990; Krohne, 1996).

Coping efforts can result in a variety of health-related, affective and behavioral outcomes. Successful coping has been related to a better quality of life, mental health, and illness remission (Aldwin, 2000). Coping efforts might also result in a positive adjustment to stressors such as adaptation to illness, caregiving responsibilities, and body image concerns (Kneebone & Martin, 2003; Holland & Holahan, 2003; Sabiston, Sedgwick, Crocker, Kowalski, & Mack, 2007).

### **Conflict Management**

A conflict management process entails the adoption of various measures including the establishment of communication links and personal interactions between the adversaries, setting up mechanisms to end or minimize violence, and seeking the commitment of the parties to a solution to their problem (Speakman & Ryals, 2010). According to Rahim, Magner, and Shapiro (2001), conflict management does not necessarily imply avoidance, reduction or termination of conflict but rather designing effective approaches or strategies to minimize the dysfunctions of conflict and enhancing the constructive functions of conflict (Crocker, Hampson & Aall, 2001; Warner, 2000; Williams, 2011). Bercovitch (2004) also notes that the purpose of effective conflict management is to minimize

disruption arising from the existence of a conflict, and contain structural conflicts such that they do not impinge on the equitable, efficient, and sustainable management of project activities.

The prime objective of conflict management is to keep social cohesion and co-existence intact by searching for common ground, optimizing each actor's position, integrating the interest of the weaker side into the compromise and persuading the victors and victims to accept integrated solutions mutually binding. Alternatively, in an ethnically and ideologically charged conflict where sources are deep, it is possible to moderate disagreement, rather than seek immediate resolution. Beyond the implication of reduced hostility levels, 'conflict management often seems to refer to both the efforts to control the relationship as well as the success of such efforts (Speakman & Ryals, 2010).

Conflicts are managed using the formal or western-centered mechanism, indigenous mechanism, or a hybrid involving both western-centered and indigenous mechanisms. The former involves the use of the formal court system (Atuguba, Agyebeng & Dedey, 2006; Kwesi, 2013), military intervention or peacekeeping, (Brigg, 2008; Hauss, 2003; Annan, 2013), and the commission of inquiries (Awedoba, 2009; Lundy, 2014). The indigenous mechanism is also used because it recognizes that cultures are embedded in every conflict because conflicts arise in human relationships (Akande, 2002; Earley & Mosakowski, 2004; Kilmann, 2007). Cultures affect the ways we name, frame, blame and attempt to tame conflicts (LeBaron, 2003). Culture is always a factor in conflict; it plays a central role or influences it subtly and gently (Bercovitch & Elgström, 2001).

Owing to the challenges that come with the use of the indigenous mechanism, the use of the hybrid conflict management approach is encouraged as this mechanism makes use of both the western and traditional approaches.

### **Empirical Review**

Generally, empirical overview and conceptual framework constitute important components of research activity. This section of the thesis concentrated on the empirical studies that are associated with this study. The conceptual framework, on the other hand, is essential as it provides a logical structure of related concepts that aids to offer a visual display of how issues in a study connect to one another as well as how to identify and describe concepts in the problem (Grant & Osanloo, n.d.; Kumar, 2011; Luse, Mennecke & Townsend, 2012). The empirical studies related to this study were reviewed and these provided rich and deep contextual data to help investigate how actors' frames influence conflict development, psychosocial effects, coping strategies, and management of the farmer-herder conflicts in Africa and for that matter, Ghana.

The empirical reviews gathered followed the objectives set for this study. In all, sixteen empirical studies were reviewed. Conflict and framing: Bukari and Schareika (2015); conflict and psychological well-being: Onyebueke, Okwaraji, and Obiechina (2018), Krafona and Appiah-Boateng (2017), Oqwuche and Dooior (2004), Cardozo et al. (2004); conflict and social well-being: Antwi (2018), Ofuoku and Isife (2009), Oli, Ibekwe, and Nwankwo (2018), and Boateng (2015); conflicts and coping strategies: Adisa (2012), Umar, Umar, and Illo (2013), Justino (2012);

and conflict management strategies: Ofuoku and Isife (2009), Bello (2013), Opoku (2014), Olaniyan, Francis, and Okeke-Uzodike (2015).

### **Conflicts and Framing**

Bukari and Schareika (2015) analyzed stereotypes, prejudice, and exclusion of Fulani pastoralists in Ghana. The authors' aim was to show how these attitudes have structured community-pastoralist relations. In attempting to understand exclusion, stereotypes, and prejudices, the authors used the social categorization theory which implies collective signification of a whole group with prejudices and stereotypes built through cognitive categories. The study employed a qualitative approach based on ethnographic research that purposefully sampled Fulani residents in Ghana, local farmers, Fulani pastoralists (including migrant herders, sedentary herders and cattle owners), local community residents, traditional chiefs, community leaders, and government officials.

The finding indicated that the citizens and media perceive the pastoralists as armed robbers and groups who also engage in banditry activities such as cattle rustling, animal theft (sheep, fowls, goats), theft of food crops and confiscating motorbikes. The indigenes used markers such as the dress, language, scent of cow milk, and looks to tell the identity of the Fulani pastoralists as being behind those criminal acts. The pastoralists are also perceived as rapists of women who go to the farms alone without male company. However, the pastoralists reacted that their tradition and customs do not accept sexual contact with women who are not legally married to them. They are further labeled as uncivilized, primitive and dirty people, non-citizens, and as violent and causers of farmer-herder conflicts. Bukari and

Schareika (2015) concluded that these social categorizations go a long way to develop hatred towards the pastoralists based on the indigenes stereotypical and prejudice schemas which eventually creates community-pastoralist relations.

### **Conflicts and Psychological Well-Being**

Onyebueke, Okwaraji, and Obiechina (2018) assessed the psychological consequences of communal conflicts among the inhabitants of two conflict-affected communities in Southeast Nigeria. The inhabitants of these communities have been involved in protracted communal conflicts arising from land disputes. The authors agreed with WHO (2002) observation that in a crisis situation such as communal conflict the population within these communities will exhibit varying degrees of psychological consequences including depression, anxiety disorder, post-traumatic stress, and major psychosis. This, therefore, formed the basis of their study.

This study used the cross-sectional descriptive research method. The inhabitants of the two communities of Ezza and Ezillo located in Ebonyi State Southeast Nigeria served as the respondents. The study used a simple random sampling procedure to select 850 inhabitants both males and females aged 14 years and above. The inclusion criteria were: (1) Those aged 14 years and above (2) those that were not sick at the time of data collection. (3) Those that consented to participate.

The study used instruments such as the General Health Questionnaire [GHQ – 12] (Goldberg & the Institute of Psychiatry, 1978), the Short Screening Scale for PTSD [Breslau, Peterson, Kessler & Schultz, 1999], the generalized anxiety disorder scale (GAD - 7) [Spitzer, Kroenke, Williams, Lowe, 2006], the Beck

Depression Inventory (BDI - 2) [Beck, Steer, Brown, 1996] and basic socio-demographic information was used to collect data for this study. All the instruments were said to have been validated and used for studies in Nigeria (Adekola, 2009; Taiwo, Abdulaziz, Ik, & Oluwatosin, 2014). Data analysis was done with the use of SPSS version 20.

The results of this study showed that respondents' age ranged from 14 - 50 years, with a mean age of 33.86 and a standard deviation of 9.12 years respectively. The study revealed some psychological consequences of communal conflict including psychological distress, PTSD, depression and anxiety disorder among the respondents. For instance, 30.8% had psychological distress, 24.7% had post-traumatic stress disorder, and 22.5% had mild depression, while 14.5% indicated moderate depression. Furthermore, 27.9%, 16.4%, and 3.6% had mild, moderate and severe anxiety disorder respectively. These findings corroborate previous studies in Nigeria which reported that communal conflicts have various psychological impacts among the population, such as depression, anxiety, post-traumatic stress symptoms and psychological distress (Obilom & Thacher, 2008; Ogwuche & Mkpelanga, 2014).

The results further revealed significant associations between psychological distress, PTSD, and anxiety disorder and age group. This may be due to the disparity in the ages of the respondents. The communal conflicts had impacted more negatively on those aged 14 - 30 who are mainly youths and this finding supported the study by Cooley–Strickland, Griffin, Stuart, and Bradshaw (2009). The association between depression and age group was not significant. Both males and



females had somewhat absent psychological distress and PTSD and also did not feel depressed or anxious.

The study concludes and makes the recommendation that various psychological consequences arise from communal conflicts and that efforts should be intensified by the government to introduce various peacebuilding and conflict resolution mechanisms to ensure an end to communal conflicts. Equally relevant psychological interventions should be introduced to address these psychological consequences among the inhabitants as revealed by the study.

Similarly, Krafona and Appiah-Boateng (2017) explored the reliability and factor structure of the Impact of Event Scale-Revised Edition (IES-R) among victims of Tubobodom chieftaincy in Tuobodom, a community that has been a conflict zone for many years. Particularly, the study investigated whether or not IES-R could be used, to determine the factor structure of the IES-R, and finally to investigate whether any differences existed between males and females with regard to the possibility of PTSD amongst them. The study was conducted in Tuobodom and included individuals that were directly or indirectly affected by the conflict. Both males and females who were 15 years and above were qualified to be included in the study. Three hundred participants were sampled by the multi-stage sampling technique.

The results of the study revealed that out of the 300 sampled individuals, the majority (60%) of the participants were males. The high number of male respondents may be due to the fact that many females fled the community out of fear leaving the majority of the males behind. With regard to scores on the

instrument, there was no significant difference between males and females. However, it is important to note that the total score suggests a significant level of post-traumatic stress symptoms among the participants. Creamer, Bell & Failla (2003) suggest a score of 33 and above as indicative of PTSD. A high Cronbach alpha of .95 was obtained for this study suggesting the IES-R could be used in Ghana both for research and clinical work.

The factor structure for the IES-R scale in this study was determined using principal axis factoring with oblique (Promax) rotation. The Kaiser-Meyer-Olkin (KMO) sampling adequacy score was .92 and Bartlett's Test of Sphericity was significant ( $X^2 = 543.0$   $df = 230$   $p < .001$ ). Two factors were extracted and there were no cross-loadings. Loadings less than .4 were suppressed. Factor one suggested intrusion and hyper-arousal (14 items) while factor two suggested avoidance (8 items). All the 6 items for hyper-arousal (4, 10, 15, 18, 19, and 21) loaded onto factor 1.

There was a moderate correlation (.54) between factor 1 and factor 2. The two factors contributed to 65.51 percent of the total variance. The authors looked at the relationship between the two factors to determine why the intrusive thoughts and hyper-arousal items loaded onto the same factor. Pearson's correlation coefficient between the intrusive and hyper-arousal factors was found to be 0.83. Cronbach's alpha for the subscales was .94, .89 and .92 for intrusion, hyper-arousal, and avoidance respectively.

In respect of the factor structure for this study, the two factors supported those reported by Creamer, Bell & Failla (2003) as well as Dawson, Ariadurai, Fernando,

& Refuge (2007) although the populations are different. That hyper-arousal and intrusive items form one dimension is of interest. The high correlation between the intrusive and hyper-arousal items seems to suggest that they are measuring the same concept. The authors concluded that a high level of post-traumatic stress symptoms was reported by the participants. The outcome of the study has implications for clinical work. There are many other conflict zones in Ghana and it was recommended that a similar study be conducted to have a clear picture in relation to conflict and to inform policy with regard to mental health.

Ogwuche and Dooior (2004) researched on psychological implications of cultural conflicts, using the Tiv farmers and Fulani herdsman experience in Nigeria. The study specifically examined the psychological implications of Tiv/Fulani cultural conflict among refugees and determined which gender suffers most in camps in Makurdi Local Government Area (LGA). This study employed a cross-sectional research approach to collect data using the General Health Questionnaire (GHQ) from a sample of 335 respondents. Data were analyzed using simple percentages and frequency and results presented in graphs and tables.

The results of the study indicated that out of the 335 respondents surveyed, 146.3 percent did not suffer any form of mental health. However, 23.6 percent suffered from post-traumatic stress disorder, 15.8 percent reported symptoms of depression and 5.1 percent reported symptoms of both depression and PTSD. These findings point to the fact that among the consequences of armed cultural conflict, the impact on the mental health of the civilian population is one of the most devastating.

The study again investigated gender differences in the prevalence rate of mental disorders among conflict victims. The results showed that females recorded higher (56.1%) levels of mental problems than males (43.9%) when exposed to armed cultural conflict. This is because women expressed concern about the safety of their husbands who are in the war front and their children who are dying of hunger; and these worries manifest themselves in loss of appetite, lack of sleep, nightmares, tiredness, and irritability. According to Stein *et al.*, (2000) and Breslau *et al.* (1999) gender is a commonly found risk factor in the development of mental disorders, with females being more vulnerable than males. Both Breslau *et al.* (1999) and Stein *et al.* (2000) suggest that this may be due, in part, to females' greater risk following excessive fear.

However, Breslau, Davis, Andreski, and Peterson (1991) report that trauma is more likely to be experienced by men, by those with less education, and by people who have a history of emotional problems. Experience of a traumatic event is surprisingly common, with estimates in the general community ranging from 51% of women and 61% of men (Kessler *et al.* 1995) to as high as 84% (Vrana & Lauterbach, 1994). Despite these contrary foreign-based findings, it is obvious from data collected from these local and other foreign studies that females are psychologically more affected than male adults during violent conflict. Ogwuche and Dooior (2004) concluded that there is an increased incidence of psychological consequences of armed cultural conflict among the civilian population. There is no doubt that the populations in war and conflict situations should receive mental

health care as part of the total relief, rehabilitation and reconstruction processes with special attention to be paid to female victims.

An empirical study conducted by Cardozo et al. (2004) examined mental health, social functioning, and disability in postwar that had lasted for more than two decades and had led to widespread human suffering and population displacement in Afghanistan. The authors' main aim was to provide national estimates of the mental health status of the disabled and nondisabled Afghan population aged at least 15 years. The study adopted a descriptive survey where it used 799 adult household members (699 nondisabled and 100 disabled respondents) aged 15 years or older from 15 district-level clusters. The study used psychological scales such as the Short-Form Health Survey, Hopkins Symptoms Checklist-25, and Harvard Trauma Questionnaire.

The results showed that a total of 407 respondents (62.0%) reported experiencing at least 4 trauma events during the previous 10 years. The most common traumatic events experienced by the respondents were lack of food and water (56.1%) for nondisabled persons and lack of shelter (69.7%) for disabled persons. The results of the study indicated that symptoms of depression were 67.7% and 71.7% and symptoms of anxiety 72.2% and 84.6% for nondisabled and disabled respondents respectively.

The prevalence of symptoms of PTSD were similar for both groups (nondisabled, 42.1% and disabled, 42.2%). Women had significantly poorer mental health status than men. Respondents who were disabled had significantly lower social functioning and poorer mental health status than those who were

nondisabled. Feelings of hatred were high (84% of nondisabled and 81% of disabled respondents). The authors concluded in the nationally representative survey of Afghans that prevalence rates of symptoms of depression, anxiety, and PTSD were high. These data underscore the need for donors and health care planners to address the current lack of mental health care resources, facilities, and trained mental health care professionals in Afghanistan.

The studies by Krafona and Appiah-Boateng (2017), Ogwuche and Doorior (2004), Onyebueke, Okwaraji, and Obiechina (2018), and Cardozo et al. (2004) all discussed mental health of social conflict victims namely farmers, herders, community residents, disabled and nondisabled. The authors all employed a quantitative approach. None of these studies employed a psychological theory to support the argument. More inferential and rigorous analyses could have been done to make the arguments stronger. In Ghana, studies on psychological well-being are relatively low and this needs to be strengthened.

### **Conflict and Social Well-Being**

Antwi (2018) explored the consequences of farmer-herder conflict in the Kwahu East District, Eastern Region in Ghana. The study employed a qualitative research approach and used data collection methods such as interviews, observations, focus group discussion. The findings indicated that the farmer-herder conflicts in the Kwahu East district have led to the loss of lives and injured residents. The report from the District Police Office showed that herdsmen have killed indigenes and injured others in the study area. The results also showed that there had been reprisal killings of Fulani herdsmen and some cattle rustling by host

villages. Also, there is an instance whereby the aged and children of both actors are severely injured as a result of the conflict between the two groups.

The conflict has forced both farmers and herders to relocate or migrate to other communities for safety. Some farmers revealed that there are herders who migrate from the Asante Akyem North District whenever the conflict is intensive and vice - versa. This allegation was confirmed by settled Fulani herders in the area. Some of the houses of the displaced farmers and other indigenes were allegedly burnt down and others raided by Fulani herders.

Another social consequence of the conflicts was the loss of properties and the fact that the conflict has also negatively impacted the education of farmers' children. The study ascertained that the conflict has led to the closure of seven schools serving 15 communities in the district. Economic consequences were directly linked to the social effects and they included joblessness, income reduction because of low production, shortage of labor and the ability of parties to secure loan facilities to expand their production.

Ofuoku and Isife (2009) investigated the farmer-herder conflicts in Delta state, Nigeria. Specifically, the authors ascertained the socio-economic effects of the conflicts on the farmers and herders in the study area, assessed the level of acceptability of nomads by host communities, and identified extension agents' intervention strategy in the resolution of such conflicts. The authors explained the farmer-herder conflicts from resource scarcity and ethnicity framework.

The study approach was quantitative. Data for the study were collected using an interview schedule administered to eighty (80) farmers from eight (8)

communities; both the farmers and the communities were randomly selected from the three agricultural zones of the state. Twenty (20) nomadic cattle herders were selected respectively from 8 purposively selected communities. This gave a sample size of 100 respondents. The farmers were selected from the register of the Delta State Agricultural Development Programme. Data collected were subjected to statistical analysis.

The findings stated that on the level of acceptance of nomads by host communities, the farmers (mean = 1.85) opined that the nomadic cattle herders were poorly accepted in their communities. The nomads (mean = 1.75) also had the same opinion about their acceptability in the host farming communities. The results in the socio-economic effects of the conflict revealed that many farmers lost part or the whole of their crops. This meant reduced yield which translated into low income on the part of the farmers taking farming as a major occupation. This tends to negatively affect their savings, credit repayment ability, as well as the food security and economic welfare of urban dwellers that depend on these farmers for food supply.

There were reports of displaced farmers and herdsmen alike. In the host communities, nomadic herdsmen relocated as a result of the conflict. Host farmers, especially women, who remain behind stop going to the distant farms for fear of attack by the nomads in the bush. Such female farmers have become a source of liability to other farmers whom they have to beg for food for themselves and their families. This has created a vicious cycle of poverty in such communities. Issues of erosion, physical injuries, dead cattle, and the killing by the nomads and reprisal



killing of nomads by the host communities took place during the conflicts and thus reduced some women farmers to the status of widows.

Oli, Ibekwe, and Nwankwo (2018) studied the socio-economic effects emanating from the herdsmen and farmers' conflict in Yakurr, Nigeria. The study was anchored on the frustration-aggression and Karl-Marx conflict theories where the former stipulates that aggression is an outcome or result of blocking or frustrating a person's efforts towards a certain goal (Myers, 2007).

The socio-economic implication of the conflicts in Nigeria indicated that the destruction of crops threatens food security in the country. The food security welfare of urban dwellers especially residents of Calabar that depend on these farmers for food supply has been negatively affected since the incessant clashes in Yakurr, which is predominantly a farming community and prices of available food supply skyrocketed (Ofem & Inyang, 2014).

The loss of human and animal lives, disruption of academic and other activities, displacements of persons and animals, as well as anti-Fulani sentiments have really weighed down the well-being of people and the national development at large. The authors concluded that until the farmer-herder conflicts are amicably resolved and absolute cooperation enhanced among the parties; food and national security will continue to be threatened in Nigeria.

Boateng (2015) also researched on herder-farmer conflicts in the Asante Akyem North District of Ghana. In this study, Boateng (2015) investigated the social and humanitarian consequences of the conflict on the people. The study revealed that the eruption of violent conflicts between farmers and herders has dire

humanitarian consequences which manifest, in many forms and dimensions (Abbass, 2014).

The study used eclectic approaches of personal observation, questionnaire surveys, and key informant interviews to obtain data. By way of quantitative and qualitative analyses, the study contended that the recurrent herder-farmer conflict was attributable to competition over the use of land and water resources. This resulted in crop destruction, pollution of drinkable water, rape, killing and maiming of natives. Also, the youths of the host communities resorted to reprisal attacks. The implication was that several people lost their lives while others sustained various degrees of injuries.

Besides, agriculture which is the mainstay of the economy was being disrupted leading to a reduction in production and income. In the end, the livelihood of the people and the development of the communities were affected negatively. This agreed to the works by Zeleza (2008), Ofuoku and Isife (2009) and Manu et al. (2014) who concluded that herder-farmer conflicts involve physical fight which usually results in loss of lives and maiming of people. Other social effects included population displacements, forced migration, refugees and school dropout.

The study concluded with the recommendation that a committee of experts should be set up to determine appropriate compensation for the affected person, cattle owners should adopt agro-pastoralism which integrates crop production and animal rearing.

## **Coping Strategies**

Adisa (2012) assessed the types of coping strategies used by conflict actors and further explored factors influencing the use of the coping strategies in Kwara State, Nigeria. In this study, the author employed Lazarus' cognitive appraisal model of coping as a theoretical foundation for the analysis of coping. The study conducted was quantitative research. The author selected 300 crop farmers and 60 herdsmen. In all, 360 respondents were selected for the quantitative data collection. Coping strategies of respondents were measured with 20 items on a 4 point Likert-type scale. These included 10 active problem-oriented strategies, seven avoidant (or emotion-oriented) strategies and three support seeking strategies (Folkman and Lazarus, 1980; Cooper, Dewe and O'Driscoll, 2001). Respondents were asked to indicate how often they used each type of coping strategy to deal with the aftermath of conflict. Descriptive statistics were used to analyze the coping strategies used by both farmers and herdsmen.

The findings showed that ten coping strategies were used, out of which 'use of job experience' (77.8% for farmers and 55.4% for herdsmen) was most often used by the respondents while the least used coping strategy was sale of entire farm/herd (14.7% for farmers and 3.6% for herdsmen). Herdsmen in the sample generally used less of problem-oriented strategies than the farmers. This perhaps is an indication that farmers considered the conflict situation from the 'problem' perspective more than the herdsmen. The herdsmen probably faced fewer problems or direct consequences of the conflict than the farmers. The importance of job experience came to the fore, as respondents claimed to rely on their previous

experiences to cope with the conflict situation. It could imply that respondents with long experience may be able to cope better than their colleagues with lesser experience.

Adisa (2012) also found out that on the emotional oriented coping strategy, accepting the conflict situation/consequences as an act of fate was found to be the most commonly used emotion-oriented coping strategy as 57.7 % of farmers and 39% of the herdsmen used it a great deal. The ability to accept the situation with equanimity among groups is not only a psychological coping strategy but is also capable of reducing the escalation of violent conflict between the two groups. Both actors also used prayer for peace, indicating their level of religious attachment. The use of drugs or alcohol was the least used among farmers. The rate of drug/alcohol use was however higher among the herdsmen. Other coping strategies used included “use my experience, borrow money, prepare for worse, buy food/new herd, sow less/reduce stock, take another job, tighten farm/herd security, and the use of charm”.

It was further revealed that farmers, on average, used more problem-oriented coping strategies than herdsmen. This, the author implied, it might be due to the fact that farmers encountered more conflict-related problems than herdsmen. On the other hand, the average use score in respect of emotion-oriented coping strategies was higher for herdsmen than farmers. The study further showed that while farmers’ average social support-seeking strategies score was 68.8%, that of herdsmen was 41.6%. This implied that the farmers had a greater tendency to seek

external help in order to cope with the effects of conflict than the average herdsmen in the study sample.

Adisa concluded that while farmers generally tended to use problem-oriented strategies, herdsmen basically used emotion-oriented strategies. This might be an indication of a strong emotional attachment to the cattle among the Fulani tribe in Nigeria. Similarly, the relatively more pronounced use of problem-oriented strategies among the farmers is an indication that they actively sought solutions to the problems arising from the destruction they encountered. The author recommends that coping strategies should be incorporated into the mainstream activities of farmer-herdsmen conflict management.

Umar, Umar, and Illo (2013) assessed coping strategies among farmers (crop farmers and fishermen) and herders during post-conflict situations in the Kainji Dam Area of Yauri Emirate, Kebbi State Nigeria. The study acknowledges that for individuals to cope effectively within their environment, context or culture must be taken into consideration. The authors employed a multidimensional theory, involving the orientation and modality of coping. A mixed-method approach to data collection and analysis was used in the study. Coping strategies of resource users were classified into three namely: problem-oriented coping strategies (POCS), emotion-oriented coping strategies (EOCS) and social-support coping strategies (SSCS).

In this study also, ten strategies were identified, out of which 'buying foodstuff for the family' was found to be the most often used coping strategy by the farmers (79.2%), while herders most often used to work harder (83.4%) and

fishermen most often used abandoning fishing for other jobs (75.0%). The herders generally used less of problem-oriented coping strategies than the farmers and fishermen. This perhaps is an indication that farmers and fishermen considered the conflict situation from the 'problem' perspective more than the herders. The herders probably faced fewer problems or direct consequences of the conflict than the farmers and fishermen.

Other most often used POCS by the farmers was the use of previous farming experience (73.3%), abandoning farming and taking up alternative occupation (70.8%), working harder (69.2%), and taking loans from friends and families (58.3%). The fact that the majority of the farmers claimed to buy foodstuff for home consumption may indicate the severity of the effect of the destruction of their crops. The least used POCS was tightened of farm security (24.2%). Farmers most often used prayer for peace (79.2%) as the first EOCS during the aftermath of conflicts, indicating their level of religious attachment in the study area. Accepting the conflict situation/consequences as an act of fate (77.5%) was found to be the second most commonly used emotion-oriented coping strategy among farmers.

On the part of the herders, the results showed that the majority of the respondents (83.4%) employed working harder as a coping strategy, which indicated the comparative resilience of the respondents in the face of unfavorable situations. The herders added that some herders' size declined while that of other herders were completely lost, thus they resorted to engaging in herding contract as laborers (biro) i.e. herding for other herders'/cattle owners. The herders, therefore, concluded that in recent days, some of the Fulani (most especially youths) engaged

in the robbery as a result of the loss of means of their livelihood. The results further indicated that the use of seeking assistance from friends, relatives and the herders' association (Miyetti Allah Cattle Breeders Association (MACBAN) was the most often used SSCS (63.9%) among the herders. The study recommends that it is imperative to mainstream the peculiarities of the conflict actors/victims' coping strategies into the management of natural resource conflicts.

Justino (2012) also researched on resilience in protracted crises and explored coping mechanisms and resilience of households, communities and local institutions. Justino analyzed the coping mechanisms based on available empirical evidence and discussed how this evidence could be best incorporated into international and national interventions aimed at securing access to food and livelihoods by individuals, households, and communities affected by violence and conflict.

The study found out that individuals and households adopted economic coping strategies in areas of violence. Five broad types of economic coping strategies adopted by individuals and households in contexts of violence and conflict included the use of savings and assets sales (including land), resort to subsistence agriculture and other low-risk activities, engagement in informal markets, intrahousehold allocation of labor and (non-forced) migration. In addition, livelihood support strategies of individuals and households in areas of violent conflict may also include fighting, looting, support for armed groups and participation in illegal activities (Justino, 2009). Justino (2012) concludes, there is the need to acknowledge that the security of lives and livelihoods in contexts of

enduring violent conflict depend on institutional structures that emerge during the conflict.

### **Management**

Ofuoku and Isife (2009) investigated the farmer-herder conflicts in Delta state, Nigeria. Specifically, the authors identified extension agents' intervention strategy in the resolution of such conflicts. The approach to the study was quantitative. The authors discovered that the protracted nature of the conflict can be minimized through extension intervention where Local Development Plans" (LDPs) should be applied by extension agencies. According to Sey (2002), the LDP approach has become necessary following the realization that after years of practicing development in the conventional top-down, supply-driven mode, it has failed to achieve much success in terms of economic growth.

This strategy (LDP) is expected to empower every resource user, expand his/her scope of freedom, give control and decision-making role to resource users and give voice to the ones normally excluded from planning. The researchers concluded that local development plans should be established to reduce such conflicts. Also, the extent of damage and compensation should be agreed upon by both parties at the community level with the agricultural extension agents as facilitators.

Similarly, Bello (2013) investigated the resolution of the conflict between Fulani herdsmen and farmers in the Yobe State of Nigeria. The study found out that for continuous harmonious coexistence and security between Fulani herdsmen and farmers, first, the government must make policies that are designed to enhance the



Fulani herdsmen by ensuring that they secure rights to land use in order to reduce insecurity and mitigate the spate of conflicts. The government must also ensure that laws on the grazing reserve are amended and improved upon. For a sustainable peace to reign, there must be a deliberate design to enlighten and mobilize the parties in conflict to understand the ecology and the resources available in the localities. This opens a window for interdependence and complementarity among groups in the optimal use of the resources for the collective benefit and equitable access.

The state government again must make herdsmen keep to agreed routes and farmers avoid farming across them with stern government policy and strict compliance. And lastly, factors associated with the conflicts must be properly appreciated and managed by appropriate institutions involved in the conflict resolutions. Hence, local governance in the conflict must not be overlooked. Traditional strategies may be combined with emerging ones. This relates to how communities create local structures and networks for the purposes of engagement, participation, inclusiveness, mutual partnership, and transformation of the environment through equity in the resource.

Opoku (2014) explored the management of pastoralist-farmer conflicts in Agogo in Ghana. The researcher in his study, combined both qualitative and quantitative data collection methods and used the two approaches to support each other. For the qualitative method, the researcher used exploratory interviews to obtain multiple perspectives on the management of the conflicts. Primary data for

this study was largely obtained through field interviews with affected farmers in the farming communities.

According to Opoku (2014) crop farmers often employed conflict management strategies such as avoidance, mediation, negotiation, and adjudication. Whereas the majority of farmers used the adjudication strategy, and 66% of farmers felt satisfied with the resolution at the court, very few employed negotiations because herdsmen and cattle owners were unwilling to compensate farmers after negotiations are made.

The author concluded that besides the ECOWAS Protocol on Transhumance, there seems not to be any policy that sought to regulate pastoral livelihoods in Ghana. This has exacerbated problems and insecurities of pastoralist host communities, particularly in relation to access to scarce natural resources and appeals to the government to ensure that state policies give due recognition to pastoral livelihoods in the country. The researcher commended the media for being effective both at the local and national levels. This is because the media stimulated debates and forced the government to intervene. However, using the media to bring the issue into the public domain also provoked the opposing actors and relevant institutions to respond.

Olaniyan, Francis, and Okeke-Uzodike (2015) explored more constructive resolution and reconciliation policies aimed to deal with realities found in the complicated set of factors that lead to the farmer-herder conflicts in Agogo in Ghana. In this study, the authors solicited for data that examined the political and operational relevance of the policy of expulsion in dealing with the conflict and

lastly, suggesting possible strategies or policies that may be adapted to deal with the violence. The study was carried out in Agogo town in the Asante-Akyem North District of Ghana. The study was qualitatively inclined and the main methods of data collection were unstructured interviews, participant observation, key informant interviews, and focus group discussions.

The findings indicated that the expulsion policy in Agogo took place in 2010, 2011, 2013 and 2015 with military men using force to expel the Fulani in the town but the Fulani to date still linger around. In the case of Agogo, the policy has not been a total success. This is due to cattle ownership and the involvement of traditional institutions. The study agreed with Tonah's (2002) assertion that the expulsion policy was fraught with inadequacies. The authors concluded the expulsion policy was not the answer. Rather, a more useful concept here may be reconciliation. According to Staub (2006), reconciliation means that both victims and perpetrators come to see the humanity of one another, accept each other, and see the possibility of a constructive relationship. There is no easy answer to the conflict and the violence. It is also a more honest appreciation of the interconnectedness of these peoples and their economies. The summary of the empirical review is found in the appendix section.

## **Lessons Learnt**

It appeared from the empirical studies that there are several theories explaining the causes of farmer-herder conflicts in Africa. The theories used so far in the studies above employed either, environmental scarcity theory, relative deprivation theory, the processual theory of utility, frustration-aggression theory, Karl-Marx conflict theories, structural-functionalist theory, and climate change. I also learned that the choice of theories was based on scholar(s) epistemological backgrounds.

It also emerged from the various empirical studies that the quantitative, qualitative and mixed-method research designs were all employed in studying the causes, effects, and management/resolution of the farmer-herder conflict. The use of a mixed-method design came in handy because the approach permits the use of both qualitative and quantitative measures, concurrently, in terms of data collection and analysis in a study.

The review again showed that the multistage sampling technique was employed due to the nature of the heterogeneity of the groups. Purposive sampling technique was mostly employed when adopting the qualitative method. It was normally applied to select key informants: traditional authorities, opinion leaders, security experts, Civic Society Organisations, (CSOs), Non-Governmental Organisations (NGOs), security personnel and local government officials. Even in the case of communities that suffered farmer-herder conflicts, they were purposively sampled based on some interesting characteristics. This selection was based on the frequency of occurrence of farmer-herder conflict in the

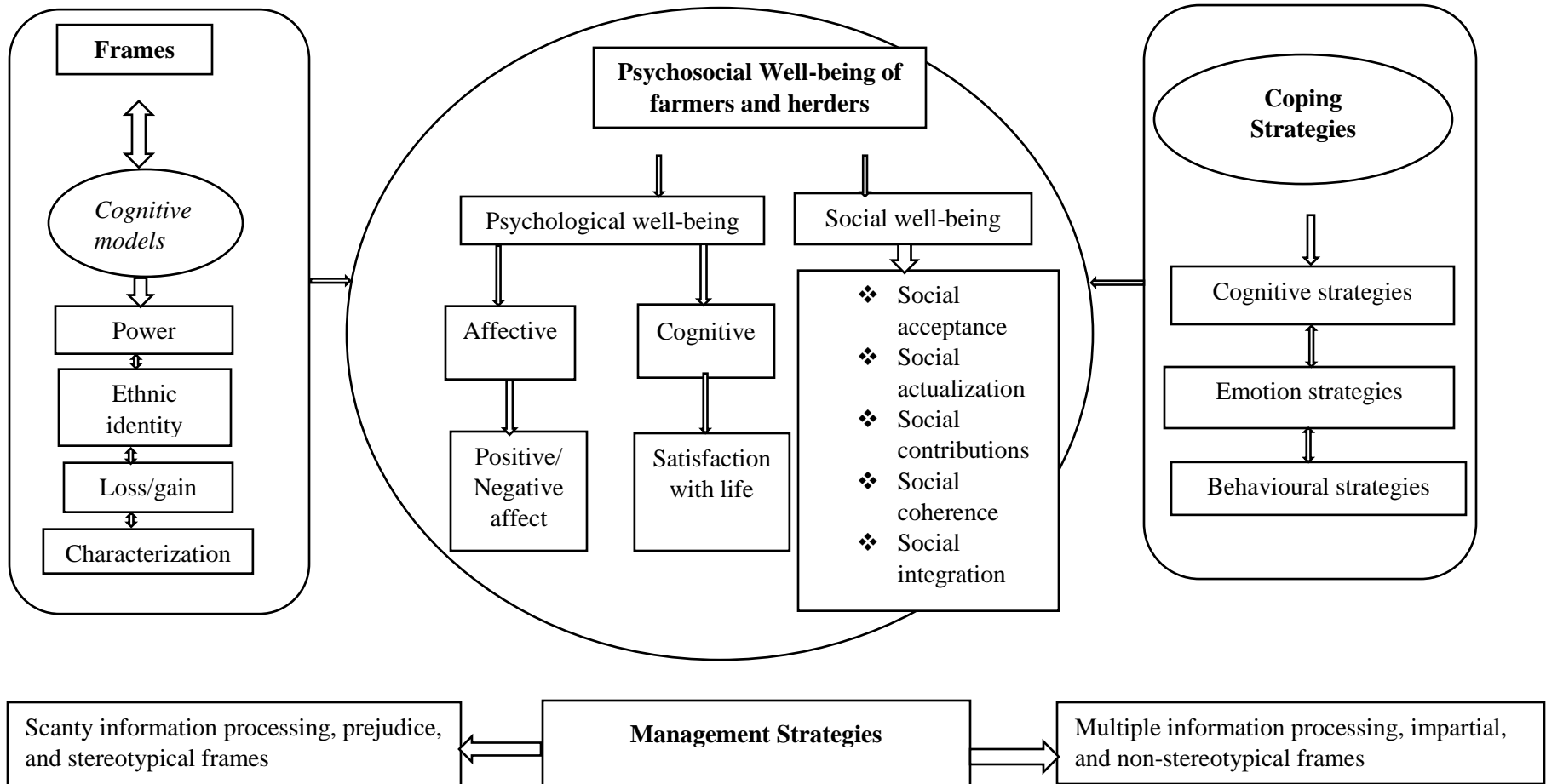
communities. It was also noticed that purposive and convenience sampling techniques were used to sample the Fulani herders due to the nature of their movements and homesteads.

The methods of data collection were predominantly interviews (in-depth), focus group discussions, and observations with the aid of interview guide, focus group discussion guide, structured interview guide (questionnaire) and observation guide as the corresponding instruments. In the qualitative design, the content analysis was predominantly employed to analyze data in all the reviews while the quantitative method used statistical and descriptive analysis for presenting the findings.

### **Conceptual Framework**

The review of theories, concepts and empirical cases inspired the development of the conceptual framework and thus create a synergy among the major variables underpinning the study as shown in Figure 1. The farmer-herder conflict as studied from the literature results from several factors of which some include climate change, population growth, distorted history and culture, deep-seated emotions, and resource scarcity. Framing as a source of conflict is of interest in this study. This is underpinned by the framing theory. Frames are mental outcomes (cognitive models) that stem from how individuals and groups assign meaning, derive perceptions, and identify with the event and these frames are guided by the functions and information perceived in the social environment (Esser, 1999).

## Conceptual Framework



**Figure 1: Conflict Frames, Psychosocial well-being, Coping, and Management Strategies of Asante Akyem North District**

### Farmer-Herder Conflict

Source: Burgess (2017); Ghimbulut, Ratiu, and Opre (2012); Keyes (2005); Layard (2005); Lewicki, Gray, and Elliott (2003); Kuterovac-Jagodic (2003); Diener, Lucas, and Oishi (2002); Putnam (2002); Benford and Snow (2000); Esser (1999); Woolcock (1998); Keyes (1998); Diener, Emmons, Larsen, and Griffin (1985); Folkman (1984); Lazarus and Folkman (1984); Minsky (1975).

Again, frames are underscored by political and social processes surrounding the conflict and the formation of these frames can either escalate or de-escalate the conflict (Lewicki, Gray, & Elliott, 2003; Benford & Snow, 2000). The framing process involves frame generation, frame reception, and frame enacting (Minsky, 1975). Burgess (2017) mentioned that several factors influence frames and their formation. The frames of most importance to conflicts usually include power, ethnic loss versus gain, and characterization. These frames invariably influence conflict development and at the end apparently affect the psychosocial well-being of the actors.

Psychosocial well-being generally underscores the close connection between the psychological aspects of our experience and our wider social experience. The psychological well-being also referred to as subjective or immaterial/intangible well-being is the one that signifies the farmers- and herders' cognitive and affective evaluation of their lives which spells out how happy, satisfied, and fulfilled they are. The psychological expression can be positive or negative [affective/emotional component] or satisfied or unsatisfied (cognitive component) (Diener, Lucas, & Oishi, 2002; Diener, Emmons, Larsen, & Griffin, 1985; Layard, 2005).

By social well-being in this study, the researcher refers to five main areas of the farmers and herders' lives: 1) social acceptance which refers to a positive view on other people and the ability to accept others as who they are, 2) social actualization implying the belief that society has the potential for positive changes, 3) social contribution as the belief of being able to fulfill and achieve activities and

goals which are valuable for the society, 4) social coherence referring to a logical and apprehensible view of the social world with interest in the social environment and social interaction, and 5) social integration which signifies a good relation to the community and society as being an appendant part of it (Keyes, 1998). In these concepts the notion of social capital (community network, norms, and trust), bridging and bonding are explored (Woolcock, 1998; Putnam, 2002). Keyes (2005) model of complete mental health supported the understanding of psychosocial well-being in this study.

When psychosocial stressors overwhelm the mental resources of the farmers and herders they explore some cognitive and behavioral efforts to master, reduce or tolerate the internal and/or external demands that are created by stressful transactions emanating from the farmer-herder conflict. This, Folkman (1984) referred to as coping. Lazarus and Folkman (1984), Kuterovac-Jagodic (2003), Ghimbulut, Ratiu, and Opre (2012) categorized coping strategies into cognitive strategies, emotion strategies, and behavioral strategies.

For a better understanding of farmers' and herders' exposure to the conflict in the Asante Akyem North District and other traumatic events and their cognitive and behavioral coping strategies, grounded theory was used simultaneously with an existing theory on coping. The Grounded Theory of coping was necessary because of the implicit focus on taking farmers and herders' narratives as true representations of their perspective on trauma and coping. Now, the decision to reduce incidences of the farmer-herder conflict or keep the conflict persisting would largely depend on how actors perceive, identify, and form frames. Nonetheless, this



study recommends sustainable ways of managing the farmer-herder conflict by considering psychological lenses that would translate into peaceful coexistence among the actors.

## **CHAPTER THREE**

### **METHODOLOGY**

#### **Introduction**

This chapter describes the methods and techniques that were used to address the objectives of the study. The significance of a research methodology is that it helps in addressing a research problem scientifically through a range of logical procedures (Gray & Malins, 2004; Kothari, 2004). That is, research methodology serves as a roadmap for the study. The methodological issues for this study included research philosophy, research design, the profile of study areas, sources of data, study population, sampling procedure and sample size, research instruments, ethical considerations, data collection procedure, data processing and analyses, and fieldwork challenges. The chapter concludes with a summary.

#### **Research Philosophy**

Philosophical paradigms lay the bedrock for the conduct of social science research. These philosophies are formed from basic ontological and epistemological positions and have developed in both classical and contemporary forms to effectively classify different research approaches. The most significant philosophical paradigms underpinning empirical social research encapsulate positivism, interpretivism, and pragmatism (Kumar, 1999; Sarantakos, 2005; Scotland, 2012; Uddin & Hamiduzzaman, 2009). Methodology and methods in a research endeavor signify that they are the building blocks of social science research. Hence, they serve as the drivers of the entire research process.

## **Positivism**

The positivist position is derived from that of natural science and is characterized by the testing of hypothesis developed from existing theory (hence deductive or theory testing) through measurement of observable social realities. This position presumes the social world exists objectively and externally, that knowledge is valid only if it is based on observations of this external reality and that universal or general laws exist or that theoretical model can be developed lending itself to be generalized. It also explains cause and effect relationships, and which offer themselves to predicting outcomes. In other words, positivists assume that reality is fixed, directly measurable, and knowable and that there is just one truth, one external reality. As a philosophy, positivism is in accordance with the empiricist view that knowledge stems from human experience (Collins, 2011).

Crowther and Lancaster (2008) explained that, as a general rule, positivist studies usually adopt a deductive approach using the quantitative research strategy. The deductive approach moves towards hypothesis testing after which a principle is confirmed, refuted or modified. These hypotheses present an assertion about two or more concepts with an attempt to explain the relationship between them. The study designs adopted in this paradigm include survey, experimental and quasi-experimental designs (Creswell, 2003; Krauss, 2005). Positivists collect data using a questionnaire, interview schedules, and observation (Neuman, 2007). Data is analyzed using statistical methods such as descriptive statistics and parametric and non-parametric methods (Bhattacharjee, 2012).

Positivism has the ability to study relationships, facilitate the generalization and replicability of studies and present value free findings. However, there have been several debates on the issue of whether or not this positivist paradigm is entirely suitable for the social sciences. Positivism is critiqued because studying social life is considered, in many ways, to be different from studying chemicals in a laboratory. For example, social research is imbued with values, experiences, and politics that cannot be separated from the data that the research produces. In addition, there are many questions raised about the nature of social reality – is there a reality (fact) that we can objectively know? Critics, also, argue that positivism is not value-free as some of its proponents suggest because no one can be fully detached from any type of research (Silverman, 2000).

### **Interpretivism / Constructivism**

Interpretivism / Constructivism is described by Hatch and Cunliffe (2006) as anti-positivist and by Blaikie (1993) as post-positivist since it is contended that there is a fundamental difference between the subject matters of natural and social sciences. In the social world, it is argued that individuals and groups make sense of situations based upon their individual experiences, memories, and expectations. Meaning, therefore, is constructed and (over time) constantly re-constructed through experience resulting in many differing interpretations. It is these multiple interpretations that create a social reality in which people act. Under this paradigm, therefore, it is seen as important to discover and understand these meanings and the contextual factors that influence, determine and affect the interpretations reached by different individuals.

Interpretivism considers that there are multiple realities (Denzin & Lincoln, 2003). Since “all knowledge is relative to the knower”, interpretivism aim to work alongside others as they make sense of, draw meaning from and create their realities in order to understand their points of view and to interpret these experiences in the context of the researcher’s academic experience (Hatch & Cunliffe, 2006), and hence is inductive or theory building. The focus of the researcher is on understanding the meanings and interpretations of ‘social actors’ and to understand their world from their point of view, this is highly contextual and hence, is not widely generalizable (Saunders, Lewis and Thornhill, 2007).

Understanding what people are thinking and feeling, as well as how they communicate, verbally and non-verbally are considered important (Easterby-Smith, Thorpe & Jackson, 2008), and given the subjective nature of this paradigm, and the emphasis on language, it is associated with qualitative approaches to data gathering (Eriksson & Kovalainen, 2008). The close nature of the researcher and the researched in this paradigm, and the risk that any interpretation is framed within the mind of the researcher mean that steps must be introduced to avoid bias. The use of self-reflection is advised. This paradigm is formed of several strands, most notably case study, hermeneutics, phenomenology, grounded theory, ethnography, and symbolic interactionism. Interpretive approaches rely heavily on naturalistic methods such as interviewing, focus group discussion, observation and analysis of existing texts. These methods ensure an adequate dialogue between the researchers and those with whom they interact in order to collaboratively construct a meaningful reality (Creswell, 2003; Crotty, 1998). This paradigm has been

criticized as being unable to uphold objectivity and produce generalizable results (Mack, 2010).

### **Pragmatism**

In the pragmatism paradigm of social research, knowledge claims arise out of actions, situations, and consequences rather than antecedent conditions (Creswell, 2003). Pragmatism is not bound to any one system of philosophy and reality (Creswell, 2003; Yin, 2003). For the pragmatists, the truth is what works at the time (Creswell, 2003). The pragmatists, therefore, reject any form of dualisms (Johnson & Onwuegbuzie, 2004). They believe in an external world independent of as well as embedded in the mind.

Within the pragmatic paradigm, researchers have the right to select the methods, techniques, and procedures of investigation that appropriately address issues of concern in a study (Creswell, 2003; Johnson & Onwuegbuzie, 2004). This illustrates that pragmatism promotes methodological pluralism. In addition, the study designs from both positivism and interpretivism are applicable under pragmatism. Research conducted within this philosophy uses the mixed method approach since the investigators draw freely from both quantitative and qualitative assumptions (Yin, 2003). This paradigm allows for the use of statistical methods that sanction the generalization of findings (Johnson & Onwuegbuzie, 2004) as well as non-statistical methods in data analysis.

Against the thrust of this study, the assumptions of pragmatism seem to align more with this study. This is because this study explores frames that influence conflict development, assess the psychosocial effects of the conflict on the victims,

and explores coping and management strategies. The objective and subjective domains of wellbeing require that data be collected from the individual and collective level giving way to single and multiple realities to be studied using both positivist and interpretivist paradigms to obtain an eclectic picture of the impact. The choice of the pragmatism paradigm is informed by three reasons.

Firstly, the study was meant to achieve a deeper understanding and appreciation of the causes, effects, and coping with the view to developing theories for sustainable management of conflicts and understanding the conflict actors' well-being. Secondly, since this research is on behavioral traits and allows the use of methods such as in-depth interviews, participant observation, and focus group discussions, the interpretive paradigm in here gave me an advantage of getting closer to the phenomenon to be studied and having an in-depth insight and exposure to its deep structure. The choice of positivism paradigm or quantitative approach for this study was needful as it helps to cover larger population, study relationships, facilitate generalization, replicability of studies and presentation of value-free findings (Neuman, 2007; Sarantakos, 2005). On this account, the study embraced the pragmatic paradigm as its philosophical underpinning.

This paradigm lends itself to the use of mixed methodology but qualitative driven. In mixed-method research, the researcher collects and analyses data, integrates the findings and draws inferences using both qualitative and quantitative approaches or methods in a single study (Tashakkori & Creswell, 2007). Johnson and Onwuegbuzie (2004) share their aspirations that the field of mixed methods research will move beyond quantitative versus qualitative arguments and will

instead focus on recognizing the usefulness of both approaches and identifying how these approaches can be used together in a single study to maximize the strengths and minimize the weaknesses of each other.

Specifically, the sequential explanatory method was adopted. Creswell, Plano, Gutman, and Hanson (2003) describe this design as one that consists of two steps, starting with the quantitative phase and then the qualitative phase, which aims to explain or enhance the quantitative results. This design offers an opportunity to do follow-ups and select participants for the study. That is, the researcher identifies specific quantitative findings, such as unexpected results, outliers or differences between groups that need further exploration using qualitative methodology and has the priority in the participant selection model, and the purpose of the quantitative phase is to identify and purposefully select participants. All the research questions of the study align themselves with the qualitative approach except research question two; assessing the psychological effects of the farmer-herder conflict on the residents' wellbeing which adopted the sequential explanatory mixed method.

### **Study Design**

The research design employed is the phenomenology and descriptive survey. Phenomenology is to develop a greater understanding of individuals' experiences through the consciousness of the experiencer within an empirical inquiry that investigates cases in their real-life context (Giorgi, 2009; Yin, 2003). By adopting this approach, the assumption is that it will allow the actors of the



conflicts to be understood from inside their subjective experiences (Todres & Holloway, 2006).

Therefore, the main emphasis of phenomenological research is to describe or to interpret the human experience as lived by the experiencer in a way that can be used as a source of qualitative evidence. The preliminary concern for the researcher is to use qualitative data collection techniques to obtain examples of everyday experiences. Due to its distinctive strengths in terms of describing or interpreting the nature of lived experience, phenomenology is the ideal method for experiential work within an interpretive paradigm. However, despite its clear assets as a method, phenomenology fails to address a larger population (Langridge & Ahern, 2003).

It is based on this weakness of phenomenology that I combined with a descriptive survey. According to Aggarwal (2008), a descriptive survey is devoted to the gathering of information about prevailing conditions or situations for the purpose of description and interpretation. This type of research method is not simply amassing and tabulating facts but includes proper analyses, interpretation, comparisons, identification of trends and relationships.

Descriptive surveys are said to describe systematically and accurately the facts and characteristics of a given population or an area of interest. It also aims to provide an accurate account of characteristics of a particular individual, situation or a group leading to means of discovering new meaning, describing what exists, determining the frequency with which something occurs/or categorizing information and gives room for generalization. It further portrays the characteristics

of persons, situations, or groups and the frequency with which certain phenomenon occurs.

Empirical phenomenological evidence and descriptive survey of farmer/herder conflicts in Ghana are needful to adopt for this study. It is purported to illuminate the specific, identify phenomena through how they are perceived by the actors, and represent them from the perspective of the research participants, enables generalization, and aim to inform policy and action (Moustakas, 1994; Smith, 2003; Lekoko, 2005).

### **Profile of Study Areas**

As indicated in the introduction, this study selected the Asante Akyem North District (AAND) in the Ashanti Region of Ghana due to the frequency and magnitude of the impact of the farmer-herder conflicts in the area. The Asante Akyem North District (AAND) was created in 2012. It was carved out of the then Asante Akyem North Municipal and established by Legislative Instrument 2057 (Ghana Statistical Service [GSS], 2014, p.1). Geographically, the district is located in the eastern part of the Ashanti Region and lies between latitudes 6° 30' and 7° 30' North and longitudes 0° 15' and 1° 20' West. It is bordered in the north by Sekyere Afram Plains North, east by Kwahu East, south by Asante Akyem South and Asante Akyem Central Municipal and Sekyere East in the west. It covers a total land area of 1,126 square kilometers constituting 4.6 percent of the region's land area (24,389 square kilometers) (GSS, 2014, p.1).

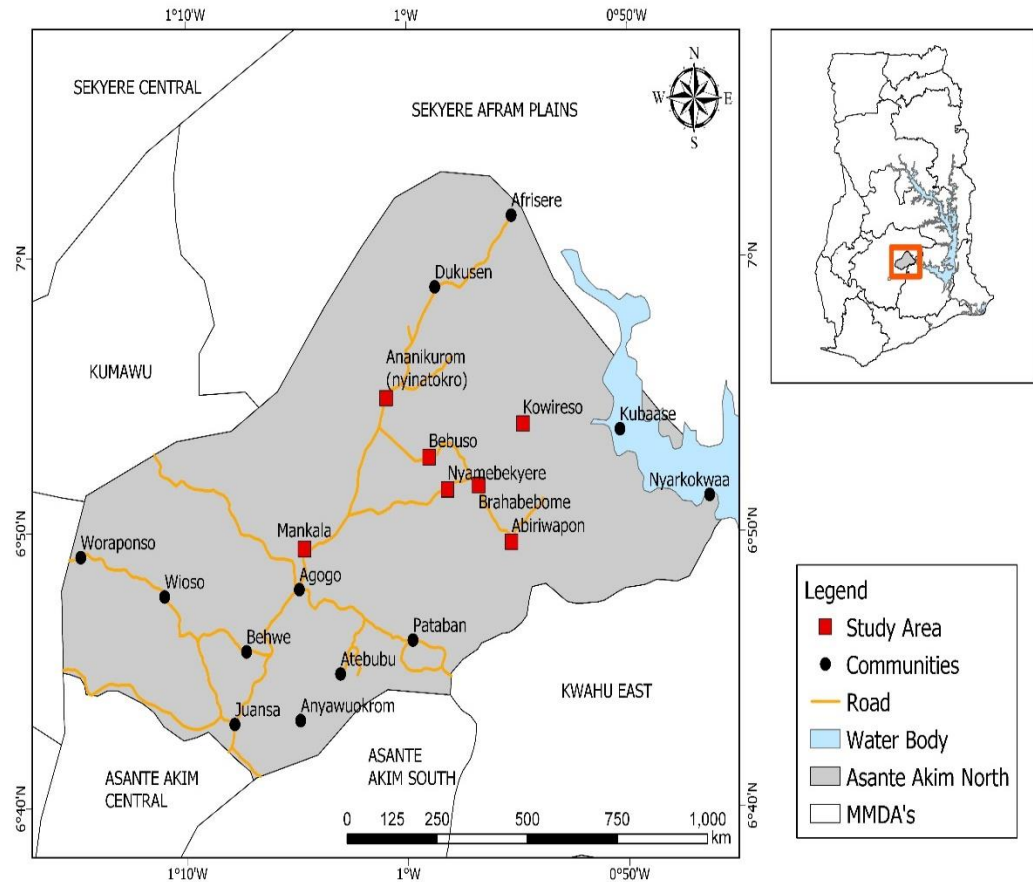
The topography of the district is generally undulating with gentle slopes making it conducive for crop farming. Two major types of soil are found in the

study area, that is, Forest Ochrosol and Savanna Ochrosol. The two soil types support food crops such as cereals, oil palm, cassava, plantain, cocoa, vegetables, yam, maize, and groundnut. The districts lie within the semi-deciduous forest belt. Most of the original forest has been degraded into secondary forests and grassland making the area very suitable for grazing by animals.

Agogo is the capital town of this district. The population of Agogo according to the 2010 Population and Housing Census is 32,196 with over 12,000 of them below 15 years. The crop farming populace is 18,952 while the cattle farmers were 148 (GSS, 2014; AAND Herders Association, 2018). These two groups of farmers coexisted peacefully in the 1980s when the chiefs of the community gave the herders places to stay. By the mid-1990s, however, the herder population had witnessed tremendous growth due to the migration of other herders coming to join the initial settlers, and over time they made a huge presence in such settlements as Nyamebekyere, Bebuso, Brahabebome, Mankala, Abrawapong, and Kowareso (Morgan, 2011). This was, however, not a problem for the indigenes until the 1990s when the indigenes opined that the crop farming populace had increased in size and needed more land to farm. They, therefore, moved closer to the lands given out to the herders and the engagement has been violent to date (Olaniyan, Francis & Okeke-Uzodike, 2015).

The government's commitment to forcefully push out the herders has been somewhat unsuccessful. In 2006, 2009, 2011 and 2013 the violence resurfaced and had become intractable (Joy Online, 2011; Ghana News Agency, 2012). In December 2017, the conflict erupted again, this time, much more violent than

before. This led to the deployment of several security officers to forcefully push the Fulani out of the areas (Ohemeng, 2018).



**Figure 2: Map of Study Communities**

Source: Adapted from GSS (2019)

### Study Population

The population for this study included both crop farmers and cattle herders living in AAND who have directly and indirectly been affected by the farmer-herder conflicts. It also included key informants, groups and institutions such as traditional authorities; cattle owners, cattle traders; crop farmers' association, cattle herdsman association, security official, agricultural official, District Chief

Executive, health officer, educational representative, female group, male group, and youth group.

### **Sampling and Sample Size**

Ghana experiences a series of farmer-herder conflicts due to the availability of fertile land, reliable rainfall, pasture, and water. In Ghana, the farmer-herder conflicts do occur in the Northern region, Upper East region, Upper-West, Brong-Ahafo, Ashanti, Eastern and part of the Volta region. The key guiding principles underlying the selection of the study areas are a high incidence of conflicts; protractedness, deep-rooted, relapsed nature of the conflicts; violent nature of the conflicts (the use of arms, injuries, property destruction, and deaths), and the frequency of media reports.

The Asante-Akyem North District was purposively selected because the district met the selection criteria. The selection of the study communities was also purposively done based on a review of the existing literature, including media reports. In the case of the Agogo Traditional Council, the report of the Agogo Fulani cattle evacuation plan submitted to the Regional Security Council (REGSEC) in 2012 was taken into consideration. This followed a Kumasi High Court ruling delivered on 20th January 2012, in a suit number, LMISC 11/2012, that compelled the Attorney-General and Agogo Traditional Council to evacuate the Fulanis from the Agogo area.

The specific communities were, Abrewapong, Mankala, Nyamebekyere, Kowereso, Bebuso, and Brahabebome. These are the six communities within Agogo Traditional Council that suffer farmer-herder conflicts. However, it was

observed during a visit prior to data collection that most of the farmers migrated from the above-named communities and settled in the Ananekrom area and so this community was also purposively selected and added to the six known study communities. Besides, these communities share similar environmental conditions in terms of topography, soil, vegetation, and climate. The orientation of the farmers and the type of crops cultivated were also similar. Lastly, the proximity of the communities in relation to time and financial resources informed the choice (Boateng, 2015).

Kumar (1999) notes that the primary consideration in purposive sampling is the judgment of the researcher as to who can provide the best information to achieve the objectives of the study. Some key informants and groups were purposively selected because they have adequate knowledge and experiences on the phenomenon under study. For the key informants, the study sampled head of the traditional authorities, two (2) cattle owners, two (2) cattle traders, head of the security official, head of agricultural department, the District Chief Executive, a representative of health care, and one educational representative. Groups such as Crop Farmers' Association, Cattle Herdsmen Association, female group, male group, and youth group were all purposively sampled. The sample size for each group ranged from six (6) to twelve (12) participants.

On the part of the crop farmers and herders, a multi-stage sampling technique was employed to obtain the quantitative data. Stratified sampling was done to ensure the homogeneity of the groups into crop farmers and herders. After

the stratification process and with a population size of 148 herders and 18,952 crop farmers, the Yamane's (1967) statistical formula was used to obtain the sample size,

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

Where: n= the desired sample size; N = the population size; e = the acceptable sampling error (.05).

The statistical formula obtained a sample size of 392 crop farmers and 108 herders. Therefore, the total sample size for the quantitative data was 500 as summarized in Table 1.

**Table 1: Sample Distribution of Crop Farmers and Herders**

<b>Conflict Victims</b>	<b>Population</b>	<b>Sample Size</b>
Crop farmers	18952	392
Herders	148	108
<b>Total</b>	<b>19100</b>	<b>500</b>

Source: GSS (2010); AAND Farmers and Herders Associations (2019)

This sample size of farmers and herders was selected from the seven communities in the district as shown in Table 2.

**Table 2: Sample Distribution of Farmers and Herders by Study Community**

No	Study Community	Farmers		Herders		Total	
		Estimated Sample Size	Actual Sample size	Estimated Sample size	Actual Sample size	Estimated Sample size	Actual Sample size
1	Koworeso	43	42	54	61	97	103
2	Bebuso	43	40	9	0	52	40
3	Brahabehome	61	52	9	0	70	52
4	Mankala	70	63	9	7	79	70
5	Nyamebekyere	35	28	9	3	44	31
6	Abrewapong	70	81	9	8	79	89
7	Ananekrom	70	86	9	12	79	98
<b>Total</b>		<b>392</b>	<b>392</b>	<b>108</b>	<b>91</b>	<b>500</b>	<b>483</b>

Source: Author's Field survey (2019)

The second stage of the sampling process was quite challenging because the populations of farmers and herders in each of the seven communities were unknown. In order to circumvent this challenge, this study followed the Cochran (1977) approach for the computing sample size of the infinite population. The formula for calculating a representative sample for proportions is specified as equation 2.

$$n_0 = \frac{z^2 pq}{e^2} \quad (2)$$



In equation 2,  $n_0$  and  $z$  represent the sample size of the respective communities and the critical value of the desired confidence level while  $p$  is the estimated proportion of an attribute that is present in the population. The variables  $q$  ( $(1 - p)$ ) and  $e$  capture the level of precision. Using the Cochran approach, the baseline sample size of farmers for each of the seven communities (see Table 2) was 35. However, preliminary discussions with the opinion leaders (director of agriculture, cattle owners, assembly, and heads of the farmers and herders' associations) in the study area revealed that although the actual farming population of each community is unknown there is high reason to believe that three communities (Ananekrom, Abrewapong, and Mankala) were the most populated farming communities.

In ranking order, the next populated farming community was Brahabebome, while the least populated was Nyamebikyere. Considering these disproportionate distributions of farmers across the communities, the first three most populated communities were doubled (100%) while 75% of the baseline sample (35) was added to the sample size of Brahabebome. Furthermore, one-fourth (25%) of the baseline sample was added to the samples for Koworeso and Bebuso but the Nyamebikyere maintained the original baseline sample. After these adjustments, the total estimated sample size of farmers in these seven communities was 392.

The same Cochran approach was used in sampling the herders in the study area. Once again, the interactions with the community and opinion leaders revealed that the herder population was highly skewed with Koworeso being the hub of the herders while Bebuso and Brahabebome had the least. During the fieldwork, there

were no respondents from those two communities possibly due to the very low population of the herders and the nomadic nature of their work. The actual sample sizes for Mankala and Nyamebkyere were also below the estimated sample sizes based on the Cochran approach.

Nonetheless, these shortfalls were offset by additional respondents from Koworeso and Ananekrom. The baseline sample of herders for each of the seven communities was 9. However, due to the highly skewed distribution, the sample for Koworeso (the most populated) was increased by 60%. The final sample size of the herders was 91 representing 84% of the estimated sample based on the Cochran approach. The simple random sampling technique was used in selecting the actual respondents for both the farmers and the herders. With support from the cattle owners and the assembly, getting access to the nomadic herdsmen was made much easier.

### **Sources of Data**

This study obtained data from both primary and secondary sources. Primary data was obtained from both farmers and herders, key informants such as traditional authorities; cattle owners, cattle traders; security officials, agricultural official, District Chief Executive, health officers, educational representative; and groups namely; Crop Farmers Association, Cattle Herdsmen Association, female group, male group, and youth group. Secondary data were obtained from both published and unpublished materials. Others included newspapers, journal articles, textbooks, and written dissertations.

## **Research Instruments**

This section concentrates on the instruments that were used in the collection of data. The instruments for data collection were interview guide, observation guide, focus group discussion guide, and interview schedule. The details of these instruments are in the ensuing sections.

### **Interview Guide**

An interview guide was used in collecting qualitative data. As stated by Freebody (2003), the interview guide is a useful way of collecting qualitative data because the technique is introspective and allows respondents to report on themselves, their views, their beliefs, practices, interactions, and concerns. This instrument contained themes based on the objectives of the study that were to guide the interviews. The interview guide covered issues on how frames influence conflict development, effects of the conflict on their psychological and social well-being, and coping strategies adopted by these actors.

The key informants responded to the interview guide items on how frames influence conflict development, psychosocial effects, and coping strategies used. The unstructured and semi-structured forms of interview guides were preferred in this study to collect data from the key informants and direct victims respectively. These had the advantage of building a good rapport and creating a relaxed and healthy atmosphere in which respondents easily cooperated, answered questions, and cleared misapprehension about any aspect of a study. The joy of using this instrument was because it was easy to administer. Again, it offered room to observe the non-verbal behavior of respondents, ensured completeness and facilitated the

collection of in-depth information. Nonetheless, the use of this instrument was time-consuming since the clarification and probing of some of the issues as needed.

### **Observation Guide**

I also employed an observation guide to collect qualitative data from the crop farmers and herders in the conflict communities. The issues captured focused on the observable effects of the conflict on their well-being. Specific issues observed were about: crop farms, cattle, school-going children, scars on people resulting from the conflict, burnt houses, abandoned homes, and other community facilities that had been affected by the conflict. The data from this instrument aided in the validation of the data collected through the interviews. These data were picked with the help of a camera and note-taking.

### **Focus Group Discussion Guide**

The focus group discussion (FGD) is a rapid assessment, data gathering method in which a purposively selected set of participants gather to discuss issues and concerns based on a list of key themes drawn up by the researcher (Kumar, 1987). As a qualitative technique, Kruger (1990) also defined the concept as a carefully planned discussion designed to obtain perceptions on a defined area of interest in a permissive non-threatening environment. After welcoming the groups at a sitting, I detailed the objectives of the study to them, broke down the major themes into discussion points and prepared probe questions.

Unlike individual interviews, which aimed at obtaining individual attitudes, beliefs, and feelings, focus groups elicit a multiplicity of views and emotional processes within a group context. In the focus group discussion, I was interested in

such things as how people respond to each other's views to derive some conclusions from the group interactions (Babbie & Mouton, 2001). Focus group discussions covered items on how frames influence conflict development, psychosocial effects, and coping strategies used. It targeted five groups such as crop farmer's association, cattle herdsman association, female group, male group, and youth group. The membership in each group ranged from six to twelve participants.

### **Interview Schedule**

A schedule is a set of questions with structured answers to guide an observer or researcher for a study. The interview schedule was used because the target population was semi-literate and not many of the residents could read and write in the English language. The interview schedule elicited quantitative responses to be analyzed for objective two: how the farmer-herder conflict has affected the psychological wellbeing of the residents. Here, the Impact of Event Revised Scale (IES-R), and Hopkins's Symptoms Checklist (HSCL-25) was adopted for use.

The Impact of Event Scale-Revised by Horowitz, Wilner, and Alvarez (1979) is a psychological instrument used to assess post-traumatic stress disorders among people who have experienced traumatic events. The IES-R is a short instrument that has 22 questions and it is an appropriate instrument to measure the subjective response to a specific traumatic event especially in the response sets of intrusion, avoidance, and hyper-arousal. The instrument consists of descriptive statements of post-traumatic stress symptoms which are rated on a 5-point scale with the following correspondence: not at all (0 point), a little (1 point), moderately

(2 points), a lot (3 points) and extremely (4 points) (Horowitz, Wilner, Alvarez, 1979).

The IES-R yields a total score ranging from 0 to 88 and subscale scores can also be calculated for the intrusion, avoidance, and hyper-arousal. The authors recommend using means instead of raw sums for each of these subscales scores to allow comparison. The reliabilities as determined by Cronbach's alpha for the subscales have ranged from .87 to .92 for the intrusion, .84 to .86 for avoidance and .79 and .91 for hyperarousal (Creamer, Bell, & Failla, 2003). Creamer *et al.* (2003) have reported the full-scale reliability score as .96. The IES-R factor structure has varied between one to four factors (Creamer, Bell & Failla, 2003; Wu & Chan, 2003; Gargurevich, Luyten, Fils, & Corveleyn, 2009) using varied population which may or may not account for the different factor structures. A score of 33 is considered a scientifically valid cut - off point.

The Hopkins Symptoms Checklist (HSCL) on the other hand, is a well-known and widely used screening instrument whose history dates from the 1950s. It was originally designed by Parloff, Kelman, and Frank at Johns Hopkins University (Parloff, Kelman & Frank, 1954). The HSCL-25 is a symptom inventory that measures symptoms of anxiety and depression. It consists of 25 items: Part I of the HSCL-25 has 10 items for anxiety symptoms; Part II has 15 items for depression symptoms. The scale for each question includes four categories of response (“Not at all,” “A little,” “Quite a bit,” “Extremely,” rated 1 to 4, respectively). Two scores are calculated: the total score is the average of all 25 items, while the depression score is the average of the 15 depression items. It has

been consistently shown in several populations that the total score is highly correlated with the severe emotional distress of unspecified diagnosis (APA, 1994).

For the scoring, responses are summed and divided by the number of answered items to generate the following scores:

1. For the responses to each item, assign the following numbers: 1 = "Not at all" 2 = "A little" 3 = "Quite a bit"; and 4 = "Extremely"
2. Add up item scores and divide by the total number of the answered items.  
Anxiety score = Items 1 – 10, Depression score= Items 11 – 25 and total score = Items 1 – 25.

Individuals with scores on anxiety and/or depression and/or total greater than 1.75 are considered symptomatic. That is,  $\geq 1.75$  is considered a scientifically valid cut-off point.

These scales are reliable to be used in conflict communities in Ghana after pre-testing and usage at Cronbach's Alpha of 0.92 for IES-R, and 0.94 for the Hopkins's Symptoms Checklist (HSCL) (Appiah-Boateng, 2014). Anomalies, confusions, inaccuracies identified during the testing served as benchmarks for correcting and refining the instrument before the actual data collection took place. In addition, open and close-ended questions were asked about positive and negative affects (Diener, 2009) and satisfaction of life (Diener, Emmons, Larsen & Griffin, 1985) among respondents in relation to the conflict and in the spaces they find themselves.

## **Ethical Considerations**

Before going to the field for the data collection, I obtained an introductory letter from the Department of Integrated Development Studies and gained ethical clearance from the University of Cape Coast's Institutional Review Board (IRB). Permission was obtained from the chiefs and elders of AAND as well as the Security Council before the fieldwork was embarked on. The principal researcher and assistants identified themselves to the respondents to avoid impersonation and doubts. Also, the purpose of the study was made known to the respondents in writing and verbally. Willingness and anonymity of respondents were duly observed. All forms of identification, including names, addresses, and telephone numbers were avoided in the interview processes.

## **Data Collection Procedure**

I contracted three research assistants to assist in the collection of data. Two of the research assistants recruited hold MPhil in Clinical Psychology and MPhil in Measurement and Evaluation from the University of Cape Coast and the remaining assistant is a local herder in good standing from the district. Two of the assistants were individuals who could easily and conveniently communicate with the Fulanis (even though most of the Fulanis who have lived in the district could understand and speak in the local dialect) to address the issues of the language barrier. These assistants received three days of training to abreast themselves with the data collection instruments and ethical issues.

The first day of training for the research assistants focused on the overview of the study, including the purpose and the objectives of the study. On the second



day of training, research assistants were taken through the instruments for data collection. They were taught how to electronically administer the quantitative data using the toolbox software. Also, skills in qualitative data collection were taught. The background of the study area (the selected communities) was studied by assistants to acquaint themselves with the respondents. At the same time, ethical issues, including the 'dos' and 'don't' of fieldwork, were also addressed. On the final day of training, the instruments for data collection were practiced until assistants were conversant with them.

In the process of conducting the interview, note-taking was done so as to capture information that was provided by the respondents. However, due to the limitation of note-taking where all information provided by the respondents cannot be captured, the researcher tape-recorded the interviews with respondents' permission. According to Walliman (2006), audio recording during interviews is necessary so as to retain a full, uninterrupted record of what has been said and also to check against the researcher's bias. Pictures were taken, where relevant, with a camera to aid in the analyses.

The focus group discussion also allowed some probing to be done. This elicited more detailed information on the farmer-herder conflict and its effects on actors' well-being. The focus group discussions were held separately (that is, indigenes farmers and herders were not put together) at separate fora. The groups were met at their respective areas in the communities. The membership of each group for the FGDs ranged from six to twelve. I also observed farmers and their farming activities. Each interview session lasted for about 40 minutes.

## **Fieldwork Challenges and How they were Resolved**

Research work always involves a lot of risks and difficulties especially in areas of conflict. As a female researcher, I was soaked with so much anxiety prior to the fieldwork especially with thoughts of visiting the nomadic herdsmen in the bushes. Confronting my fears, instead of staying and working from a hotel or guest house, I finally decided to stay in the Zongo (a slum area) with one family I had developed a relationship with prior to the fieldwork while my research assistants stayed and worked from the hotel. The Zongo in Agogo is actually that part of the community where most Muslims reside and where the Fulani herdsmen also come for visit. Most of the Muslims here are cattle owners who hire the services of the Fulani herdsmen. This strategy helped build a strong rapport with the cattle owners and some Fulani herdsmen who come over in the evening for their food and other materials.

On the arrival day, my research team paid a visit to the traditional authorities in the palace and got them informed of our mission in the district. We also interviewed the head of the traditional leaders on the farmer-herder conflicts in the district. After the interview, one of the chief's subjects took the research team on a tour in the district. We felt welcomed and that motivated us so much. In a few weeks, we were able to collect all data from all the key informants for the study. In the subsequent week, we organized focus group discussions for the study groups. Other challenges encountered were the issue of trust and security. It was particularly easy, safe, and welcoming in the farming communities compared to the herders.

Initially, some nomadic herdsman were not willing to grant interviews with the research team. Trust was a problem since the respondents suspected the researchers of being journalists. This challenge was resolved when the Director of Agriculture in the district joined us to pay a visit to the cattle owners and local herders. On the part of the nomadic herders, we were accompanied by a Fulani young man whose father was a cattle owner and had also employed several nomadic herders to take care of their cattle. This further became easier after displaying my identity card to the respondents as a student undertaking research as part of my academic requirement and further assuring them of full confidentiality. This settled all doubts and mistrusts.

However, something much more life-threatening happened as we journeyed to interview some nomadic herdsman in the Koworeso community which was about 60km away from the crop farming community. We heard gunshot warnings pointing to our direction. The nomadic herders gave the warning shots as they heard the sound of our motorbikes in the deep bushes. Apparently, it was this same time when the government of Ghana had deployed the armies and police to drive and flush out the herdsman and their cattle from the area as this was the case during the dry season. We heard the young man who accompanied us saying “dara dara dara nomi pullo naa, nomi konne maada wallin balmol maada” (stop! stop!! stop!!! I’m a Fulani, not your enemy. Drop your guns). Very quickly one of the field assistants advised that we stop and let the Fulani in our camp confront them. The Fulani went into the nomadic herdsman camp, spoke to them and we gained access. That notwithstanding, the young herders were hesitant to talk to us until their leader gave

them the go-ahead. We established rapport and achieved a friendly environment before conducting the interview.

Conducting the focus group discussion was a major problem particularly among some Fulani herders because of the language barrier. However, with the presence of my two research assistants who could fluently engage the Fulani herdsmen made the process easier and more convenient. Interestingly, during the interview process, most of them switched from speaking in Fulani to the local dialect and this made it much easier. We were convinced that the Fulani made it easier for us in terms of switching language because they gained our trust.

### **Data Processing and Analysis**

Data collected from the field comprised both quantitative and qualitative data. The quantitative data were edited, coded, imputed into the Statistical Product and Service Solutions (SPSS) version 21 and cleaned before analyses were run. These analyses involved the use of statistical techniques such as descriptive statistics, t-test, factor analysis, and correlation. The presentations of the quantitative results were in tables.

For the qualitative data, this was analyzed manually using thematic analysis. Data from the field was first cross-checked and edited to ensure that responses were obtained for all the questions on the interview guide and the focus group discussion guide. The tape recordings of the interviews and the focus group discussion were transcribed and categorized under specific themes to be used for the analysis. This made it easier to use direct quotes where relevant. In this study, research questions

one, three, and four were analyzed qualitatively while objective two was analyzed the quantitative way.

### **Chapter Summary**

This chapter addressed methodological issues. It adopted the pragmatism research philosophy which conforms with the use of a mixed-method research design that makes use of both quantitative and qualitative approaches though it is qualitatively skewed. The study design used was a phenomenology and descriptive survey. The study addressed the profile of the study areas as being Asante Akyem North District. This district was selected because it has been the hotspot of farmer-herder conflicts in Ghana. The following six communities were purposively selected in AAND: Abrewapong, Mankala, Nyamebekyere, Kowereso, Bebuso, and Brahabebome. However, it was observed that most farmers migrated and resettled in Ananekrom so this community was also purposively selected and added to the six known study communities.

Subsequently, the chapter touched on the study population and sampling procedures. The study population covered farmers and herders. It also included key informants such as traditional authorities; cattle owners, cattle traders, security officials, agricultural officer, District Chief Executive, health officers, and educational representative. Groups such as crop farmers' association, cattle herdsman association, female group, male group, and youth group were also selected. Purposive and multi-stage sampling techniques aided in the selection of the study respondents.

Data were collected from both primary and secondary sources. The instruments used for the collection of the primary data were interview guide, focus group discussion guide, observation guide and interview schedule. The ethical procedure was the next issue captured in the chapter. This encapsulated seeking informed consent of respondents and ensuring confidentiality and anonymity.

During the data collection exercise, the principal researcher and research assistants employed note-taking, tape recording, and picture taking techniques. The chapter also touched on fieldwork challenges and how they were resolved. Descriptive and inferential statistics were analyzed for the quantitative analysis while the qualitative analysis employed thematic analysis and quotations from victims were stated where necessary. The subsequent chapters comprise a discussion of the results and findings based on the substantive objectives of the study.

**CHAPTER FOUR**  
**SOCIO-DEMOGRAPHIC CHARACTERISTICS OF RESPONDENTS**  
**AND EVOLUTION OF THE FARMER-HERDER CONFLICTS**

**Introduction**

This chapter presents the socio-demographic characteristics of respondents and the evolution of the farmer-herder conflict in the district. The socio-demographic characteristics of respondents helped to know the targeted audience, differentiated between the herder and farmer groups and helped determine how close the sample replicated the population. In this study, the demographic characteristics generally communicate which of the conflict communities suffer more violence than the other. It also informs readers of the age bracket that are into agriculture work among others. The evolution of the conflict covers causes (remote and triggers), effects, and resolution.

**Profile of Respondents**

This section of the chapter explores the socio-demographic characteristics of respondents in the Asante Akyem North District. The socio-demographic characteristics covered in this study were residents' community, sex, age, level of education, marital status, religion, and occupation. Among the herders, the demographic data further explored the types of herding work, the origin of transmigrants, and the length of stay of nomads. The results of the background characteristics of respondents are presented in descriptive statistics in a tabular form and the results are summarized in Table 3.

**Table 3: Socio-Demographic Characteristics of Respondents**

	<b>N= 483</b>			
	<b>Farmers</b>		<b>Herders</b>	
	<b>Frequency</b>	<b>Percentage</b>	<b>Frequency</b>	<b>Percentage</b>
<b><i>Community</i></b>				
Abrewapong	81	20.7	8	8.8
Ananekrom	86	21.9	12	13.2
Bebuso	40	10.2	0	0.0
Brahabebome	52	13.3	0	0.0
Koworeso	42	10.7	61	67.0
Mankala	63	16.1	7	7.7
Nyamebikyere	28	7.1	3	3.3
Total	392	100.0	91	100.0
<b><i>Age</i></b>				
Up to 30years	73	18.6	29	31.9
31-35years	93	23.7	15	16.5
36-40years	49	12.5	8	8.8
41-45years	37	9.4	16	17.6
46-50years	37	9.4	14	15.4
51-55years	26	6.6	6	6.6
56-60years	23	5.9	1	1.1
60years and above	54	13.8	2	2.2
Total	392	100.0	91	100.0
<b><i>Gender</i></b>				
Male	228	58.2	91	100.0
Female	164	41.8	0	0.0
Total	392	100.0	91	100.0
<b><i>Education</i></b>				
None	150	38.3	79	86.8
Basic	207	52.8	12	13.2
Secondary	35	8.9	0	0.0
Total	392	100.0	91	100.0
<b><i>Marital status</i></b>				
Single	47	12.0	32	35.2
Separated	17	4.3	0	0.0
Married	318	81.1	59	64.8
Divorced	10	2.6	0	0.0
Total	392	100.0	91	100.0



**Table 3 continued**

<b><i>Religion</i></b>				
No Religion	13	3.3	2	2.2
Traditionalist	8	2.0	0	0.0
Christianity	262	66.8	9	9.9
Islam	109	27.8	80	87.9
Total	392	100.0	91	100.0
<b><i>Herders</i></b>				
Non-nomadic and indigenes	18	19.8		
Nomadic and migrant	73	80.2		
Total	91	100		
<b><i>Origin of migrants</i></b>				
Nigeria	32	43.8		
Burkina Faso	26	35.6		
Niger	11	15.1		
Mali	4	5.5		
Total	73	100.0		
<b><i>Length of stay of nomads</i></b>				
5-10 years	24	32.9		
10-20 years	18	24.7		
1-5 years	16	21.9		
30 years and above	8	11.0		
20-30 years	7	9.6		
Total	73	100.0		

Source: Field Survey (2019)

The results in Table 3 illustrate that out of the seven communities selected in the district, the majority of the farmers were interviewed in Ananekrom while Nyamebekyere recorded the least number of farmers. This finding, however, supported the narrative that Ananekrom served as a receiving community of farming migrants who had escaped from study communities within the district that suffered severe conflicts. Koworeso, on the other hand, recorded the highest number of herders. The high presence of herders in Koworeso was explained to

mean that several herdsman reside here. Koworeso is described as the home of the Fulani herdsman in the district due to Kowore River which never dries up even in the dry season. This is a resource that supports the lives of the cattle in addition to the rich pasture.

The results also showed that the district is dominated by energetic youth. This implies a great number of the youth have high interest delving into farming and herding business. Regarding gender, the majority of the respondents were males. The high number of male respondents may be attributed to the fact that more males than females are engaged in agriculture work. It may also mean that since the study is conducted in conflict areas, many females might have fled the community out of anxiety leaving the majority of males behind. Narratives record that men herd the cattle while the wives of the herdsman cared for the calves at home and milk the cattle. However, these women were not available to be interviewed because they had left the district to Nsawam and Techiman out of fear, humiliation and psychological torture by the farming community. In this regard, the young male herders take up the female roles in their absence and revenues generated are remitted to them for their upkeep.

The results further depicted a relatively low educational level among the respondents. Whereas the majority of the farmers had basic education, most of the herdsman interviewed were people who have not received any form of formal education. The herders narrated that they make their children model their herding business right from “birth” with the hope of this child taking after their fathers’ business when they are old. This implied that formal education was not a priority

to them. The majority of the farmers and herders were married at 81.1 % and 64.8% respectively.

Out of the 91 herders interviewed, 19.8% of them were non-nomadic and indigene herdsman while the remaining 80.2% herdsman were nomads that hailed from African countries such as Nigeria, Burkina Faso, Niger, and Mali with Nigeria recording the highest number of these transmigrant herders. The local herdsman with Konkomba identity (a tribe from the Northern part Ghana) were the most feared by the Fulani herdsman. The local herdsman also recounted that the Nigerian nomads were the most violent and dangerous ones who normally injure the farmers and make their cattle graze on the farmers' crops. Here, the local herdsman highlighted the mild conflicts they also experience with the nomadic herdsman.

All the transnational migrant nomads belonged to the Fulani ethnic group. With respect to the length of stay of these nomads, almost 42% of them attested that they have stayed and herded their cattle within the Asante Akyem North District for 5-10 years. Some herdsman also stated that they have lived all their lives in the district through birth. The ensuing subsection highlights the historical underpinning of the conflict.

### **Evolution of the Farmer-Herder Conflicts**

Asante Akyem North District (AAND) is noted for enduring an established history of violent clashes between indigenous farmers and transmigrant herders. Olaniyan, Francis, and Okeke-Uzodike, (2015) asserts that the history of Fulani herdsman migration to AAND is not a recent occurrence. The movement of Fulani in Ghana was in two waves. The first wave of the migration saw the movement

from various West African states in the northern part of Ghana. Then the second wave of the migration saw a dispersion of the Fulani migrants from northern Ghana to AAND. The second wave according to Olaniyan, Francis, and Okeke-Uzodike had some who were freshly moving from other West African states as well as some old Fulani inhabitants of northern Ghana (Olaniyan, Francis, and Okeke-Uzodike, 2015).

The two waves of this migration were believed to be connected to climate change (Olaniyan, Francis, and Okeke-Uzodike, 2015). Nevertheless, Blench (2004) and Balling (2005) attributed the Fulani migration to the “veterinary revolution” of the late 1950s and the “precipitation plunge” of the 1960s. The veterinary revolution, according to these authors led to the development of vaccines to overcome tsetse fly threats to cattle survival in the West African rain forest belts. These enabled cattle to be kept much further south than before, which also has the impact of making cattle keeping a prestige activity for sedentary farmers, especially for the elite. The precipitation plunge here refers to a rainfall shortage that resulted in the Sahelian drought that brought the whole of the Sahel region under intense and long-term environmental distress. Thus, the veterinary revolution potentially opened up the south for cattle keepers.

Olaniyan, Francis, and Okeke-Uzodike emphasize that during the late 1980s, the Fulani herdsmen who had initially settled in the Northern part of Ghana started moving to the southern part of the country as a result of a combination of population increase and dwindling grass up north (Olaniyan et al, 2015). The report has it that during this time of moving to the south, three Fulani herders approached

the Agogo traditional council, requesting lands for grazing. All was well until the mid-1990, where the herder population saw a tremendous growth due to the continuous migration of other herders to join the initial settlers and with time, their huge presences well felt in areas as Nyamebekyere, Bebuso, Brahabome, Mankalia, Abrewapong, Onyemeso, and Pataban (Morgan, 2011). Then, during the late 1990s, tensions started brewing. Prominent among the reasons for this tension was the fact there was an increase in the farming population and the need for more land for cultivation (Tonah, 2006). The population flare-up now prompted a gradual movement of the local farmers towards areas that were dominated by the Fulani settlers.

### **Causes of the Conflict**

In examining the causes of the conflict between Fulani herdsmen and farmers in AAND, Kyei-Poakwah posits that it is imperative to categorize the factors under two thematic areas. Thus, ‘fundamental’ factors and Immediate ‘Triggers’ (Kyei-Poakwah, 2018). The fundamental factors, according to Stanley and Others (2017) define it as those factors that accumulate over a considerable period and are the root cause of the conflict while they define immediate triggers as factors that immediately escalate violence between the two parties.

#### *Remote Causes*

Factors such as climate change, population growth and identity are key reasons for such conflicts (Stanley et al, 2017). It has long been argued that climate change will lead to mass migration, which in turn will lead to competition and ultimately armed conflicts around the world (Kyei-Poakwah, 2018). Hence, the

perennial droughts in the Sahel region of Africa, which resulted from a drastic change in weather conditions, has been historically known as the main factor that drove the Fulani further south to countries like Ghana. Furthermore, deteriorating climatic conditions in the Northern part of Ghana drove the Fulani herdsmen to move further south to areas like AAND and the Volta Basin where foliage and water resources are in abundance (Kyei-Poakwah, 2018; Dosu, 2011). Hence, climate change forced the Fulani to migrate, settled in AAND, and then compete with the indigenes over the resources.

Furthermore, the rapid population growth of both humans (expansion of farming communities in deeper areas of the Afram plains) and livestock (increase and continuous grazing of cattle) who depended on the same resources for survival consequently aggravated competition into conflicts (Baidoo 2014; Olaniyan et al, 2015 and Tonah, 2006). Lastly, Fulani herdsmen are perceived as foreigners, and as such, they are one of the misunderstood, vulnerable and marginalized occupation groups (Kyei-Poakwah, 2018). Hence, this perception among the indigenes of AAND tends to instigate tension, since these herdsmen are seen as strangers competing with them for their resources (Olaniyan et al, 2015).

### *Triggers*

To a large extent that increased competition for resources, driven by fundamental causes can result in hostility among the herdsmen and farmers, these causes are believed to be not sufficient enough to lead to an escalation of the violence AAND has been witnessing since early 2000. Stanley et al, (2017) describe them as curves that lead to violence. These factors include the destruction

of crops, killing of the cattle, and pollution of water bodies by the cattle, harassment or social vices, as well as the perceived collusion with the authorities.

The foremost trigger of these conflicts in AAND is the destruction of crops by the cattle. The Fulani herdsmen either intentionally or unintentionally, leave their cattle herds to wander onto farms to feed and destroy crops in the process. Out of anger, the farmers retaliate by killing the cattle that wander into their farms. Other farmers also resort to spraying the crops with pesticides that kill the cattle that graze through their farms. The herdsmen view the killing of their cattle as an act of aggression against them and consequentially attack the farmers. Tonah (2006) reports that the Fulani herdsmen do allow the cattle to step into the water bodies and muddy the water bodies making the water unusable for domestic activities. Furthermore, the cattle defecate into the water bodies contaminating it and making the water bodies prone to diseases. To avert these acts, the people forcefully prevent the pastoralist from accessing the water bodies through blockades (Opoku, 2014). The herdsmen retaliate by forcing their way through with guns.

In addition, the perceived criminal activities of the herdsmen serve as a trigger. Several reports attest to this perception, as the firearms they carry to give them the means to indulge in criminal activities (robbery and raping of female farmers) against small communities (Mortiz, 2010). Lastly is the perception that there is the collusion of the authorities of both parties. Opoku, (2014) and Olaniyan et al, (2015) in their study reported that indigenes believe that the traditional authorities, public officials and powerful individuals are in collusion with herdsmen

(for economic gains) and as such are reluctant to help expel the herdsmen, regardless the harm they were causing. This then gives the indigenes the belief that the authorities are on the side of the herdsmen, therefore, urging them to take matters in their own hands by killing of cattle found grazing on their farms.

### **Effects of the Conflict**

The conflict in AAND tends to reduce the output of production of both the pastoral industry and crop farmers. Reduction in the overall output of produce by farmers tends to indirectly reduce their income. Therefore, suggesting that the conflict threatens the means of economic livelihood of the crop farmers. Opoku (2014) also asserts that the conflict impedes agriculture expansion or extension programs designed by the government for agricultural development. Opoku (2014) again in a comparative analysis reported that farmers in conflict areas on average earn low incomes (GHC 827.00) compared to that of farmers in non-conflict areas earning (GHC 3,600).

In addition, Baidoo (2014) reports that the conflict on a personal level affects farmers' ability to repay loans they secured for investing in their farming business. Hence, the economic effects of the conflict on farmers and the district as a whole have larger implications for national policies intended to boost economic growth. Kyei-Poakwah, (2018) highlights that the displacement of families as one of the pertinent issues of this conflict. The violence between herdsmen and farmers in Agogo forces a good number of families to flee their communities. Baidoo (2014) asserts that another grave effect of this conflict is the environmental pollution of herding activities. Herders' activities affect land and water bodies.



Some herders burn the vegetation intending to allow fresh vegetation to grow. This often leaves the land bare and susceptible to erosion and land degradation, making the land unfit for agricultural purposes.

Socially, the conflict has consequences on the bond between farmers and herdsmen. Kyei-Poakwah (2018) reports that among crop farmers in Agogo, the attitude towards these Fulani herdsmen was that of fear and mistrust. The conflict often leads to human casualties.

### **Resolution**

The Government of Ghana adopted the policy of expulsion during the Agogo farmers-herdsmen conflict outbreak (Olaniyan, et al, 2015). The aftermath of violence in the early 2000s saw the Government of Ghana instituting stakeholders' committee in 2001 to investigate the conflict and make recommendations. The fallout of the committee works brought some policies. Prominent among the policies for the Agogo farmer-herder violence is 'Operation Cow Leg'. Ghana Armed Forces [GAF] (2016) emphasize that the objective of this operation was to expel the Fulani herdsmen and their cattle from the Afram Plains and Volta Basin areas due to their menacing activities. The operation was carried out through the collaboration with the District Security Council (DISEC), Regional Security Council (REGSEC), the Ghana Armed Forces (GAF) and the backing from the central government.

Nonetheless, Olaniyan et al (2015), Baidoo (2014) and Kuusana & Bukari (2015) assert that the operation has so far failed to expel the herdsmen from the area since the Fulani herdsmen continue to terrorize the indigenes of those areas.

Notwithstanding these calls, it should be noted that the government of Ghana in January 2018, launched a renewed and intensified operation against the activities of the Fulani herdsmen (Kyei-Poakwah, 2018). A similar conflict outbreak in Kintampo in the then Brong Ahafo region in 2017 saw the government of Ghana launching the Ghana Cattle Ranching Project (GCRP). Under the auspices of the Ministry of Food and Agriculture (MofA) and National Security, the Ghana Cattle Ranching Project Committee was set up and tasked to seek and recommend a sustainable and long-term proposal and strategies to address the perennial farmer-herder conflict that was affecting agricultural production and terrorizing Ghanaian citizens. (Kyei-Poakwah, 2018).

## CHAPTER FIVE

### FRAMING AND CONFLICT DEVELOPMENT

#### **Introduction**

This chapter explores how actors' framing influences conflict development. It discusses how the frames held by both the farmers and herders have an impact on the roles each faction plays in the conflict. The data in this study revealed to some extent how framing contributed to the conflict and the actions of the various factions. The frames discovered included split identity, linguistic identity, citizenship, characterization, an enemy-foe relationship, culture of work, and conflict management. These frames are discussed in the ensuing sub-sections. It was thus difficult to separate the emerged themes as they overlapped each other.

#### **Split Identity Frame**

One very important frame that was identified is what is described in this study as the "split-identity" frame. Both the farmers and the herdsman have labeled the identities of their counterparts, creating a direct split from each other. This was how a District Officer stated it:

*One day, a man was seriously lynched by some community youth close to the Presbyterian hospital in Agogo. According to the youth during the district's anti-Fulani campaign, this victim was a Fulani because he had some physical features like one: his facial and body looks, dialect spoken, and dress worn were typical of a Fulani. The victim claimed he was a Zabarama and not a Fulani and that he sells wristwatches*

*and other accessories in and around Agogo. When the police investigated further, the victim was known to be a Fulani. The Fulani can easily be identified. That is how bad the situation has become (District Officer, 2019).*

A herdsman also narrated this:

*In 2013, I asked my wife to move out of Agogo because the community members always harassed her and for my two sons I raised them with me in the bush. When my wife came from Niger, she could not speak Twi and that exposed her to the psychological torture (Fulani herder, Koworeso, 2019).*

This phenomenon seems to agree with the framing theory that in identity frames, actors usually see themselves as having particular identities in the context of specific situations. These identities spring from the individuals' self-conception and group affiliations (Rothman, 1997). Both the herders and farmers see themselves as having certain identities that characterize them. This mindset has a great impact on the behavior of the people and their reactions towards their opponents. The phenomenon goes beyond just couching of identities for themselves to a strong perception about others in the conflict as having unique characteristics.

Tonah (2006) has drawn a similar conclusion by asserting that the farmer-herder conflict debate underlines ethnic differences where Fulani pastoralists see themselves as different from the population group of sedentary farmers. The differences created between the feuding groups results in how each group frames the other. The end result of this interaction includes but not limited to the elements

of prejudice, exclusion, marginalization, and stereotype. This group identity categorization may be either positive or negative depending on the conflict situation. But in conflict situations, these categorizations are mostly negative. It is even possible that positive frames are twisted to appear negative. In a broader discourse in West Africa, the herdsmen (Fulani herdsmen) are considered migrants ('aliens') and the abusers of the host communities especially when herders start demanding equal rights of tenure and exploitation (Seddon & Samberg, 1997).

### **Linguistic Identity**

One subframe that was tied to split identity was language. The language was stated as a medium for communication and a source of conflict though not a major one. It is a tool that cannot be detached from the speaker and his or her context. This frame was stated as a contributing factor explaining the differences that existed between the two groups. This frame has the tendency to compound the hatred formed between them. This is how a farmer stated it:

*We don't understand the language of the Fulani herdsmen. Some of them can speak Twi especially those who have stayed here for long but anytime they want to cause a fight on the farm they switch to speak their Fulani dialect. This gets confusing. You actually cannot tell if they are planning evil. But we read their body language and as humans as we are because we cannot understand them as they speak you get aggressive in*

*preparation for their next step of actions (Male farmer, Brahabebome, 2019).*

A herder made a similar comment:

*They (referring to farmers) use their language to insult us and plan evil about us and our cattle (Fulani herder, Ananekrom, 2019).*

In the case of the Asante Akyem North District's farmer-herder conflict, language is taken as a ruling identity where parties rely on to injure and harm their adversaries. Lake (2002) opined that most observers tend to explain conflicts around the world as the result of racial, ethnic, religious, or territorial disputes and rarely consider language as a direct and fundamental cause. However, the findings of this study have revealed how language is as important as all the other factors which have been the focus of scholars in conflict studies. There is, therefore, the need for researchers to pay attention to and rethink language as a source of conflict. Citing the case of the Belkan war, language was one of the leading causes.

Lake (2002) recounts the fundamental reason to consider language as a source of tension because it is more tangible than race or religion, arguing that scholars increasingly understand race to be a fiction: belonging to one or another group is more of a social and historical matter than a biological one. As one of the most important elements of a culture's identity, language is also inflammatory. A group's language can feel essential to its very existence. It is no surprise that often the more vulnerable a group feels, the greater its devotion to its language. In the case of the land-use conflict in the Asante Akyem North District, language is

considered as backing the split identities of the feuding parties and the tendencies to increase tensions between groups and/or injure the other.

### **Citizenship Frame**

The concept of “kromhane” (citizenship) was also tied to identity. The farmers labeled the herdsmen as strangers and not belonging to AAND and Ghana at large. Unfortunately, in Ghana, ethnicity and citizenship are intricately linked. The perception that once an individual does not claim primordial ethnic identity the individual is not a citizen tends to negatively affect the Fulani and contribute to discrimination against them. This observation supports Schlee’s (2009) assertion that national politics and ethnicity (and citizenship) have influenced pastoralists’ relations where it is often assumed that “every group had a homeland and the right to expel minorities by force.” The attainment of citizenship in Ghana as indicated in Articles 6 and 7 of the 1992 Constitution could be through means other than only by parenthood, indigeneity or ethnicity. Citizenship, for instance, can be attained through marriage or naturalization. In this study, one Fulani herdsman claimed he is a Ghanaian but does not feel accepted. This is how he narrated it:

*I am a Fulani. I am 30 years old. I was born here in Agogo. My father currently lives in Techiman. No, I know I was born here but the people of Agogo don't like me and don't see me as a member of this place so I don't feel I'm a member of the community. No, I don't vote during elections. I can't even go close to the voting sites*

*during elections. My place is the bush or the suburb of Koworeso (Fulani herdsman, Koworeso, 2019).*

This respondent claims his citizenship is through birth and the duration of his stay in Ghana. He tells that he only knows Ghana and not any other country. It appears that some herdsman have stayed in the district for years now yet they do not enjoy any sense of belongingness. There have also been intermarriages between Fulani herdsman and the indigene women. As expressed below, one security officer's response supports the Fulani herdsman's feeling of not belonging:

*No, the Fulanis don't believe they belong to the community, because when they see you they start running away, they see the police vehicle then they run away. They see the indigenes and there is always antagonism. You know they are not in the town here. They are in the bush and they feel like they are strangers in this community, meanwhile, they have lived here for more than 20 years. Some have even married and have children with community women. Because they feel this way, for their own protection they always carry guns. How many of the people in AAND walk about holding guns? None, because they feel safe. The Fulanis don't feel safe because they know they are not members of the community (Security Officer, 2019).*



Situating these findings within the framing theory, it is obvious that identity is important for the escalation, duration, and intensity of the conflict. Identity, which is a human need, forms an important aspect in the development of psychological processes that ultimately creates psycho-cultural dispositions that cause ethnic groups to engage in violent interactions (Burton, 1990). The threat to individual and group identity is more pronounced when the fulfillment of one group's identity is viewed as a threat to the existence of the other. (Northrup, 1989). As a result, there emerges a psychological aggressive response that is distorted and defensive. Northrup further postulates that the rigidification process leads in the representation and toughening of what is construed as self and non-self which in essence widens the gap between groups as each tries to secure its boundaries. An image of others characterized by suspicion, hostility, and mistrust and at worst a process of unfriendly and unbending relationships between the groups.

### **Characterization Frames**

Similarly, there was the idea of tagging and otherness. The parties to intractable land-use conflicts often constructed characterization frames for themselves and these frames were mostly negative. Such characterizations often undermined the others' legitimacy, cast doubt on their motivations, or exploit their sensitivity. For example, the indigene farmers have, in their minds, identified the herdsmen as strangers who have an unforgiving and retaliating spirit. One farmer had this to say:

*When you make an attempt to touch their animals or  
report them to authorities when their animals destroy*

*your farm, they will come after you even if it is months or years later. There is a man here in Koworeso who runs a provision shop in town with the wife. The Fulani young men often go there to hang around but they caused a mess one evening and when the man reported them to the Zongo chief, as if all was well, a week later they came round and shot him in his house. The man got injured. Accidentally, one of the bullets hit his daughter's leg and got injured as well. As I talk to you the man is receiving treatment. They don't forgive at all.*

*(Male farmer, Koworeso, 2019).*

The Fulani identity is characterized by an unforgiving and retaliating spirit. In the minds of the farmers, Fulani herdsmen never forgive anyone who offends them and they are always ready to retaliate. This notion informs how they relate to them generally. According to some of the natives, this character trait stands as the root cause of the conflict. This is in line with the idea that framing emerges from actors' and observers' interpretations of conflict events. According to this viewpoint, framing does not only refer to the mode of interpretation through which actors involved in a conflict make sense of a situation but also includes a discursive dimension through which they define conflicts, causes and actions within narratives selected or generated by them (Esser, 1999; Benford & Snow, 2000; Snow & Byrd, 2007). Hence, this characterization frame that the resident farmers place on Fulani herdsmen greatly impacts their views of the issues relating to the conflict.

Other characterization frames that emerged were the tagging that Fulani herdsmen are rapists, criminals, and unclean individuals. Whereas many think that the herdsmen do not take a bath or brush their teeth, several others also perceive them as a group of persons who sleep at the same place with their animals.

*For persons who sleep (close proximity) with animals, how can they have empathy for human beings when they are destroying your source of livelihoods? The Fulanis are just like the animals they sleep with and so they don't have any human feelings when it comes to the destruction of our farms. Their mindset is just like that of their animals (Male farmer, Bebuso, 2018).*

Alleged reports by the farmers revealed that most of the criminal cases in the community were committed by the Fulani herdsmen who come from the bush at night to cause those wrongdoings. They either kill, injure and take away belongings such as money, clothes, shoes, and any other thing they find valuable at the time of the crime. The Fulani herdsmen are tagged as rapists. A woman narrated:

My sister got raped by a Fulani herdsman on her way from the farm. As we speak, she now lives in Akim Odo because she could not stand the shame. For the Fulani, once they see a female walking alone somewhere in the bush they can easily rape you so the women here are mostly afraid to walk alone (Female farmer, Koworeso, 2019)

On the rape tagging, the analysis revealed that the Fulani herdsmen raped women who visited the farm alone and sometimes would even rape females in the presence of their spouses just to make the men psychologically powerless. Data collected from women's group, men's group, youth group, individuals and with stakeholders revealed that some females were raped as in the case of this narrative:

There was an instance where a woman was raped in the presence of her husband at gunpoint. The man felt so helpless and could only watch his wife being raped by the Fulani herdsman (Stakeholder, 2019)".

The security service could not give evidence to support this claim. Nonetheless, the researcher's further interaction with the herdsmen about how they satisfy themselves sexually somewhat confirmed the farmer's assertion. When asked about what they do in an event of sexual urge, one herdsman replied amidst laughter saying there are so many women here and that their wives were in Nsawam (another city in the Eastern part of Ghana) due to the protracted conflict. As a result, they satisfy themselves although the means of sexual satisfaction was not disclosed.

The findings in this study further supported other studies such as Abubakari and Longi (2014) who reported that out of eleven highway robbery cases recorded between December 2011 and June 2014 in their study area, seven of the robberies were performed by Fulani herdsmen. Forson-Asimenu (2011) also stated that the social and economic activities such as going to the bush to fetch shea nuts, baobab or dawadawa (*parkia biglobosa*) for home consumption in all communities in the

Upper West Region have been curtailed by Fulani nomads lest the women end up being raped.

Such frames of identities have led to the exclusion of the Fulanis from many things in the society including politics, and participation in major activities in society. This seems to agree with the idea that framing involves frame generation, on the one hand, and frame reception and enacting, that is, mobilization based on the frame, on the other (Minsky, 1975). This plays out in the social relationships that result from framing. According to the theory, a conflict event is defined by an actor or an observer on the basis of the social environment and institutional setting that shape social relations. As a result, a frame of a conflict event has to be aligned with the social environment in order to be successful.

From this viewpoint, frames of conflict are generated on the basis of already existing larger “cognitive models”, as well as those that are ingrained in the minds, perceptions, and understandings of people and embedded as meaningful structures in the social environment (Esser 1999). Such perceptions and understandings contribute to the side-lining and exclusion that is reported. One Fulani respondent lamented:

*We are not part of anything they do in the community.  
Our place is the bush here. During Akwasidae  
(traditional festival) our Alhajis (cattle owners) attend  
but we do not. This year our cattle did not feature at the  
farmers' day celebration (Fulani herdsman, Mankala,  
2019).*

The Fulanis, on the other hand, see the people of Agogo as unaccommodating host farmers. This tag makes them relate with them with some form of dislike and disgust. It is clear that frames are built upon underlying structures of beliefs, values, and experiences that actors construct to distinguish themselves in unique ways (Burgess, 2017). The Fulanis see themselves as different and of a different character compared to the farmers. In other words, they think that if they were the hosts of the place, they would have been more receptive and accommodating.

### **Enemy-Foe Relationship Frame**

Another element of framing observed from the respondents was the perception of an “enemy-foe” relationship making actors see each other as enemies. This is a key issue that leads to most conflict situations around the world. In other words, the actors have framed each other as enemies. These perceptual frames generate certain behaviors from actors in either faction. Like Desrosiers (2011) explains, framing often contributes to understanding the conflict from a process perspective. This process can be observed as beginning from the purposeful behavior of actors. These behaviors may take place against the background of a constraining and constitutive social setting.

The idea of seeing each other as enemies have led to the Fulanis and residents attacking each other at different times and under different circumstances. These attacks have led to deaths, destruction of livelihoods, and causing serious injuries to the people who are seen as enemies. According to the narrative from a

focus group discussion with indigene herdsmen, this is how the farmers perceive them:

*The farmers perceive us as enemies. They do not think good about us. They think so because the cattle go to destroy their crops. They think it is deliberate but it is not. How can we deliberately allow our cattle to destroy their farms? We are herders and also eat food crops. We can't take meat without adding farm produce. We eat these together. It is only after getting cassava or plantain from the farm before you think of its accompaniment, meat (FGD with indigene herdsmen, Ananekrom, 2019).*

Some farmers also explained this point linking it to their source of livelihood. “*The herdsmen are evil. They don't want our good. They constantly destroy our farms leaving us poor all the time (Farmer, Nyamebikyere, 2019)*”.

A herdsman also narrated his experience:

*When the conflict occurs, instead of the natives to sit down with us they call the national security forces and when they come they shoot and kill our animals. Last year, I lost two hundred of my cattle. How do they expect us to make a living also? (Herder, Mankala, 2019).*

It is clear that such attacks and injury inflicted upon each other occur because they see each other as enemies. The findings of this study reinforce the

theoretical postulations that indeed framing can actually lead to conflict dynamics and the processes involved therein, including the escalation or de-escalation of violence (Lewicki, Gray, & Elliott, 2003). In the instance where these frames do not exist, actors would probably have been a bit more civil in their approach and attitude in the conflicts. Seeing each other as enemies sever the feeling of pity or sympathy for each other and fill actors with rage and hatred and the desire to hurt or kill their perceived opponent. When one faction begins, the response is equally serious as a result of framing.

In disputes that become intractable as a result of framing, it is common for most parties to the conflict to focus on threats of potential loss rather than on opportunities for gains. People tend to react differently to a proposed action when its expected consequences are framed in terms of losses as opposed to gains. This kind of framing happens as a result of the enemy-foe relationship with each other. In this instance, preventing a perceived loss is often more salient and more highly valued than capturing a commensurate gain (Schweitzer & DeChurch, 2001).

### **Culture of Work Frame**

Aside from the perception of the enemy-foe relationship, split identity, citizenry, characterization, and tagging of otherness, the culture of work as sedentary-nomadic was also identified as a major form of frame among the respondents. Whereas the farmers see the Fulanis' occupation as nomadic in nature, the Fulanis also see the farmers' occupation as sedentary in nature. One Fulani respondent explained that:



*With our type of work, you have to move the animals. We only stop when we want to rest. So we move always (Herdsman, Mankala, 2019)”.*

A farmer had this to say:

*Our work does not move. It is in one place, unlike the Fulanis who move about and through our farms causing destructions. There are no grazing routes and they end up passing through our farms (Farmer, Nyamebekyere, 2019).*

These explanations portray that the factions see each other in the frames they have made for themselves: sedentary and nomadic frames. This is probably because framing in mobilization processes and conflict, in general, defines not only conflict situations, but also an active and constitutive process (McAdam et al., 2001) that includes alignment with broader cognitive models, public sentiments, perceived transcendent collective interests, suitable modes of action vis-à-vis the action of the other side as well as its successful resonance in the community concerned. Hence, the type of lifestyle and culture in either divide formed part of the frames developed about each other.

### **Conflict Management Frame**

Finally, ideas over how best to manage or resolve differences are central to many intractable disputes. Depending on disputants' identity, characterization of other disputants, perceived power, and perception of the available options, conflict frames may impel parties to seek very different remedies in response to common problems. These remedies may range from actions as disparate as violence, civil

disobedience, litigation, and negotiation. Because of the wide complexity of possible actions and the uncertainty of their consequences, groups with shared interests and values may draw significantly different conclusions as to the best course of action within a particular dispute. One side, for instance, may be willing to sit down with a mediator and negotiate, while the other, thinking that it has the upper hand may refuse negotiation, preferring litigation or violent action (Schweitzer & DeChurch, 2001).

This reflects the farmer-herder conflict situation in the Asante Akyem North District where the farmers who are indigenes and custodians of the land feel more powerful over the transnational migrants who are the pastoralists. During decision-making procedures, disputants' conceptions of power and social control play a significant role in conflict dynamics. These power frames help the disputant determine not only which forms of power are legitimate but also the forms of power that are likely to advance one's own position (e.g., authority, resources, expertise, coalition-building, threat, voice). In the conflict process, the farmers as against the pastoralist/herders call on the central government of Ghana to come to their aid and this is how the government does it according to some stakeholders:

*Almost every year, when the conflict arises, we call on the president of the nation and soldiers are deployed. When they come, it is “operation cowleg” which means the security forces shoot and kill all cows as and when they see them. They also expel the herdsmen and their belongings from the district (District Officer, 2019).*

The herders also stated on this frame that:

*What we want the government and the authorities in this community to do for us is to give us some land far away from the farmers like those close to the Afram river so we graze there and we would not interrupt the farmers and also govern ourselves. We have put forth this request on many occasions but this doesn't seem to sink well for the authorities and the people to grant us that. Again, after every clash, when they are making decisions, hardly do they take our views into considerations. Until the stakeholders acknowledge our voices, the problem will continue to persist. When the approach is rightly done, we think that this way the conflict would stop or be minimized (Herder, in a focus group discussion, 2019).*

The herdsmen also pointed out that there had been some occasions where the regional ministers and local authorities invited them to workshops on management of the conflict. Although they spelled out their suggestions, their views were not considered during the implementation. The findings generally suggested that the various factions in the conflict had frames of each other and themselves. In accordance with available literature and theories on framing, their respective frames impacted the pre-conflict and post-conflict situations.

These findings supported the study by Bukari and Schareika (2015) that the crop farmers and the entire farming populace perceive the pastoralists negatively

based on their mental frames that are built by their underlining beliefs, culture, and experiences. This study and Bukari and Schareika (2015) opined that the pastoralists are mentally categorized as armed robbers, rapists, non-citizens, primitive and unclean individuals.

Nonetheless, whereas Bukari and Schareika's (2015) perspective was one-sided, this study looked at how the pastoralists, as well as the crop farmers, perceive themselves and how these perceptions influence conflict development. Indeed, the findings by Bukari and Schareika (2015), Tonah (2006), and this study all posit that the labels that the two main actors assign to themselves deepen the hatred and rivalry behaviors between them and consequently structure pastoralist-community relations. Thus, conflict cannot be managed without taking cognizance of the psychology of the actors involved. Here, the researcher looked at the effects of framing based on psychology.

## CHAPTER SIX

### EFFECTS OF THE CONFLICT ON PSYCHOSOCIAL WELL-BEING

#### Introduction

This chapter presents the psychological and social (psychosocial) effects of the farmer-herder conflict on the conflict actors' well-being. In assessing the psychological effects, three main psychological well-being dimensions were assessed, namely; post-traumatic stress, anxiety, and depression. Two main instruments were used to assess the psychological effects of the conflict on the conflict actors. These were the Impact of Event Scale [Revised Edition] (IES-R-22) and Hopkins Symptom Checklist (HSCL-25).

In examining the internal consistency of the two scales used, IES-R scale, used for assessing post-traumatic symptoms among farmers and herders following the land-use conflict recorded a Cronbach Alpha of .96 while the HSCL-25 used for screening for anxiety and depressive symptoms among the actors recorded .97 Cronbach Alpha. The Cronbach Alpha recorded in these scales for the study were high and these implied that the two instruments could be used in Ghana both for research and clinical work. These instruments have proven to be reliable and valid for measuring symptoms of depression and anxiety in various countries and cultures (Krafona & Appiah-Boateng, 2017; Cardozo et al., 2004; Mollica et al., 1987).

## **Post-Traumatic Stress (PTS)**

Post-traumatic stress disorders are symptoms following a psychologically traumatic event that is generally outside the range of human experience. The categories are intrusion, hyper-arousal, and avoidance. Whereas intrusive symptoms refer to the penetration into the consciousness of thoughts, images, feelings, and nightmares about the trauma and to a variety of repetitive behaviors, hyper-arousal, on the other hand, is an abnormal state of activation that occurs in the wake of traumatic or highly stressful events. This includes a situation where victims of the conflict experience some arousal symptoms which were not present before being exposed to the traumatic condition. This manifests itself among victims in the form of having difficulty in falling asleep. Some also maintain hyper-vigilance and startle responses. Avoidance reflects the tendencies of psychic numbing, conscious denial of meaning and consequences of the trauma, behavior, inhibition and counter phobic activities related to the traumatic event (APA, 1994).

The results reported on the trauma-intrusive experiences among the farmers and herders are summarized in Table 4. From Table 4, almost 80% of the farmers indicated that they experienced extreme reminders that brought back feelings and thoughts about the farmer-herder conflicts and the majority (66.6%) of the farmers, as a result, stated that they had trouble staying asleep. According to the respondents, reminders such as sounds of gunshots, the fall of leaf from tree branches, bereavement periods, bank loans, the sight of a Fulani herdsman, dry season, cows, farms, and presence of the security personnel psychologically tortured and

reminded them of the trauma. These reminders are very much observable in the community on a daily basis or seasonally, hence an intangible part of their lives.

This translated into 50.5% of farmers extremely experiencing pictures about the conflict popping into their minds and these made 64 percent of them constantly subjected to waves of strong feelings about it. On the part of the herders, they experienced little of these intrusive symptoms and could enjoy some amount of sound sleep.

**Table 4: Post-Traumatic Stress Symptoms among Farmers and Herders**

Post-traumatic Stress	Farmers (%)					Herders (%)				
	Not at all	A Little	Moderately	A lot	Extremely	Not at all	A Little	Moderately	A lot	Extremely
Reminders	4.1	3.1	2.8	10.2	<b>79.8</b>	2.2	<b>45.1</b>	5.5	18.7	28.6
Trouble sleeping	4.8	2.8	6.6	19.1	<b>66.6</b>	3.3	48.4	4.4	16.5	27.5
Other things make me think	3.8	3.6	7.4	36.5	48.7	41.8	7.7	9.9	12.1	28.6
Pictures pop into mind	4.3	4.6	8.4	32.1	50.5	1.1	47.3	6.6	18.7	26.4
Acting or feeling like I am back at that time	13.0	11.2	12.0	42.3	21.4	44.0	24.2	2.2	13.2	16.5
I think about it when I didn't mean to	6.4	5.6	14.5	40.3	33.2	64.8	6.6	2.2	8.8	17.6
Waves of strong feelings about it	5.6	4.6	7.1	18.6	64.0	68.1	3.3	4.4	4.4	19.8
I had dreams about it	19.6	8.9	11.7	20.2	39.5	71.4	3.3	1.1	11.0	13.2
I felt watchful	3.6	3.6	5.1	15.1	<b>72.7</b>	0.0	2.2	3.3	25.3	<b>69.2</b>
I had trouble concentrating	4.3	3.6	4.8	37.8	49.5	1.1	1.1	2.2	<b>75.8</b>	19.8
I felt irritable	5.4	1.5	4.6	17.1	<b>71.4</b>	<b>67.0</b>	1.1	0.0	6.6	25.3
I was jumpy	5.4	3.6	5.9	46.9	38.3	67.0	2.2	1.1	7.7	22.0
Physical Reactions	7.7	6.9	10.2	37.0	38.3	71.4	1.1	2.2	5.5	19.8
Trouble falling asleep	5.9	4.1	7.4	18.4	<b>64.3</b>	<b>69.2</b>	2.2	1.1	5.5	22.0
I tried not to think	22.4	16.6	13.3	16.6	31.1	69.2	1.1	1.1	5.5	23.1
I tried to remove it from memory	19.1	15.3	12.2	16.1	37.2	68.1	2.2	4.4	12.1	13.2
I felt as if it hadn't happened	27.3	7.7	4.8	19.9	40.3	69.2	2.2	4.4	5.5	18.7
My feelings was numb	8.2	2.6	8.2	44.1	37.0	67.0	2.2	1.1	9.9	19.8
I stay away from reminder	12.2	12.5	18.6	29.6	27.0	67.0	3.3	2.2	4.4	23.1
I tried not to talk about it	17.9	16.1	11.7	23.0	31.4	67.0	3.3	1.1	8.8	19.8
I avoided letting myself get upset	16.6	10.2	9.4	42.6	21.2	57.1	15.4	0.0	7.7	19.8
I didn't deal with it	17.1	9.4	8.9	42.9	21.7	64.8	7.7	2.2	6.6	18.7

Source: Field Survey (2019)



This is how some respondents narrated their intrusive symptoms:

*They (referring to herders) killed my brother-in-law who was supporting me in the farm work. Any time I attend a funeral, it reminds me of him (Male farmer, Koworeso, 2019).*

*The loan I collected from the bank keeps reminding me of the conflict. These thoughts about the loan become worse knowing I couldn't harvest much (Male farmer, Bebuso, 2019).*

*The Fulani herdsmen beat me almost to death on my farm. Their presence here has brought woes and ordeals to us. If I should show you my penis now you would appreciate the damage they are causing to us. They gave a shot and the bullet hit my penis. The mark there reminds me of that fateful day on the farm (Farmer, Brahabebome, 2019).*

*I find it difficult to sleep as I always think about my dead cows. This has affected my income and I am unable to care for my children like before (Cattle owner, Ananekrom, 2019)*

*I have a maize farm that I am harvesting. The Fulani herdsmen came to me and I asked, Abokyi (Fulani herder) why and they told me the cattle want to feed. I replied that the pasture was available so they can feed on that. They said no. With them were guns and so my wife suggested we go*

*home. The next day we realized that the cattle had grazed on all our maize. We also had some stretch of tomatoes farm, the cattle destroyed that in addition. I can't remove the scene from my memory. I can't also say I would not think about it because I even sometimes experience flashbacks of the incidence. When the Fulani herders are coming you would see two holding guns in front followed by about 3000 cattle and two Fulani herdsmen with guns at the rear (Male farmer, Koworeso, 2019).*

*I dream about the conflict. I dreamt that I was telling some Fulani that I will hit them with a cutlass on my farm (Male farmer, Ananekrom, 2019).*

*I am okay. The conflicts do occur but it is not a big deal. I am okay. I am bigger than this problem. The little issue we have is the soldiers who come around to shoot our cattle but we are fine (Fulani herdsman, Ananekrom, 2019).*

*I could never imagine or thought that one day I would be in the hands of the police because I know who I am. While doing hired work with my friend on somebody's farm, the police arrested my friend and me because some Fulani herdsmen reported that we attacked and maltreated them and so they are taking us to the police station. We got into their car but on our way, my friend skipped off and run away.*

*Luckily for me, when we got to the police station, the assemblyman was around. He dialogued with the officers and I was set free. The thought of being in the grasp of the police because of the Fulani herdsmen haunts me (Farmer, Bebuso, 2019).*

*I dreamt that the Fulani guys were chasing me on my farm and wanting to shoot me. In my sleep, I heard, Yaa Yaa are you not going to the farm today. It was my friend calling me from outside. Then I realized it was a dream (Female farmer, Mankala, 2019).*

*The loan from the bank frequently reminds me of the harm caused to me by the Fulani herdsmen. Irrespective of the time, when I wake up I'm unable to sleep again and I get to think about the loan and the damage caused (Male farmer, 2019).*

The results obtained on the hyper-arousal category reflected that the farmers and herders experienced extreme hyper-arousal symptoms. Seventy-two and sixty-nine percent of the farmers and herders respectively became watchful and on-guard, ensuing to 75.8 percent of the herders lacking the ability to concentrate. This often affected both actors in their ability to complete tasks as they always become alert and vigilant in their everyday dealings. Nonetheless, the herders did not experience extreme symptoms of irritability or jumpy behavior.

On the part of the farmers, 71.4 percent got irritable and angry at the sight of their destroyed farms by the herders. The situation led many farmers to have problems with sleep. Several of these respondents mentioned that they experienced insomnia. Hyper-arousal manifests itself as a tendency to startle easily, even in response to minor cues like low noise, irritability, restlessness, explosive anger and feeling of guilt and these manifested more in farmers than herders. This is how some respondents described their experiences:

*During this time (dry season) they (herders) come in their numbers and I am always scared and tend to be watchful of myself and my farm. These days it is always dangerous to sleep on the farm unlike first because the Fulani herdsmen will kill you just like they do to others in Koworeso (Female farmer, Bebuso, 2019).*

*The farmers and security personnel can act at any time so we are always alert and watchful (Herdsman, Koworeso, 2019).*

*When the Fulanis come during the dry season, we (farmers) can't sleep oo. They destroy our farms at night when we are home. How can you sleep when you keep thinking of what possibly could be happening on your farm? One elder Obeng (late) after witnessing the destruction on his farm fainted. He recovered but with high blood pressure and died (3) days after (Male farmer, Brahabebome, 2019).*

*The Fulani attacked me on my farm. When I saw them my heart started beating so fast and was sweating so much. I struggled with them, ran away and left my motorbike. Two days later when I visited the farm my motorbike was burnt (Male farmer, Koworeso, 2019).*

*I think that some of the farmers are armed so I am always vigilant and ready to defend myself (Herder, Mankala, 2019).*

The results on the hyper-arousal category revealed that the extent to which the farmers and herders experienced hyper-arousal disorders following the land-use conflict was severe or extreme in nature. The symptoms of sleep disturbances, being watchful, hyper-vigilance and exaggerated startle and anger among respondents endorsed the description of hyper-arousal by the American Psychiatry Association (1994) and thus considered the respondents as experiencing PTS. Largely, the findings depicted that the conflict has created feelings of detachment among the actors. The farmers demonstrated this in the form of their refusal to talk about it. Nonetheless, many others have difficulty removing it from their memories because of the loss of close relatives and friends and the disruptions of their livelihood. They expressed deep-seated emotions and memories about the repercussions of the recurrent land-use conflict.

The avoidance category is explained, according to the American Psychology Association (1994) as the efforts made by trauma victims, deliberately denying and repressing dreadful and hurtful effects of the trauma. The results from

Table 4 indicated that actors exposed to the traumatic and recurrent farmer-herder conflicts tried as much as possible to avoid thoughts, feelings, and conversations about the events but could not because the trauma always lived with them. These symptoms were more prevalent among farmers than herders. The majority of the farmers attested that they do not make any attempt at all to think about the farmer-herder conflicts yet thoughts about the conflict come to mind. However, 31.4 percent of the farmers try not to talk about the conflict due to fear but 67 percent of the herders were not bothered to talk about it. This is what a respondent said:

*I don't talk about the herdsmen because they have their spies among us and they can relay whatever you say to them. The next day, they will come at you with a gun. My life is important to me (Female farmer, Brahabebome, 2019).*

Another respondent also puts it in another way:

*The Fulani menace is heart-breaking and I don't want to discuss it with anybody because of the fear that somebody might disseminate the information to them and they may attack you. I only talk about the things they have destroyed (Male farmer, Abrewapong, 2019).*

A herder also stated:

*I talk about it. Nobody will harm me when I talk to people about the conflicts in this district or their related consequences (Herder, Mankala, 2019).*

Both the farmers and herdsmen explained that the farms and cattle respectively are part of their lives and whatever happens around them cannot be easily forgotten and as a result will always think about the implications of the conflict. Several of the farmers (40.3%) who experienced their farms destroyed or set ablaze felt as if it hadn't happened or it wasn't real. A farmer narrated his experience as:

*In fact, when I went to my farm one day and saw how the herdsmen and their cattle had destroyed my maize farm I thought it wasn't real because I know where my farm is located and believed that they wouldn't ever get here but it happened. That day, I couldn't work and just visited my friend on another farm to share my sorrows with. The truth is, even that day I went home very late and my family thought I was shot on the farm. Again, I couldn't tell my wife what had happened to our farm until some days later. We don't really know why the government cannot push them away from this country entirely (Male farmer, Brahabebome, 2019).*

## Reliability and Factor Structure of the IES-R among the Farmers and Herders

### *Reliability (internal consistency)*

The study achieved a high and significant Cronbach's alpha of .96 indicating that the IES-R scale could be used for cases like this and for more other social science-related studies and clinical research.

### *Item-total correlations*

The means, standard deviations and corrected item-total correlations of the IES-R are presented in Table 5.

**Table 5: Means, Standard deviations, and Corrected Item-Total correlations for the IES-R items.**

<b>Items</b>	<b>Mean</b>	<b>S. D.</b>	<b>r<sub>(tot)</sub></b>
1. Any reminder brought back feelings about it	3.31	1.18	<b>.71</b>
2. I had trouble staying asleep.	3.17	1.22	<b>.77</b>
3. Other things kept making me think about it	2.95	1.30	<b>.80</b>
4. I felt irritable and angry.	3.05	1.50	<b>.87</b>
5. I avoided letting myself get upset when I thought about it or was reminded of it.	2.18	1.50	<b>.72</b>
6. I thought about it when I didn't mean to	2.54	1.42	<b>.83</b>
7. I felt as if it hadn't happened or wasn't real	2.13	1.76	<b>.51</b>
8. I stayed away from reminders of it.	2.23	1.09	<b>.75</b>
9. Pictures about it popped into my mind	3.02	1.50	<b>.76</b>
10. I was jumpy and easily startled.	2.73	1.41	<b>.89</b>
11. I tried not to think about it.	1.98	1.65	<b>.63</b>
12. I was aware that I still had a lot of feelings about it, but I didn't deal with them.	2.17	1.52	<b>.74</b>
13. My feelings about it were kind of numb.	2.64	1.45	<b>.86</b>
14. I found myself acting or feeling like I was back at that time.	2.27	1.48	<b>.68</b>



**Table 5 continued**

15. I had trouble falling asleep.	2.89	1.54	<b>.86</b>
16. I had waves of strong feelings about it.	2.88	1.53	<b>.84</b>
17. I tried to remove it from my memory	2.11	1.65	<b>.66</b>
18. I had trouble concentrating	3.22	0.94	<b>.52</b>
19. Reminders of it caused me to have physical reactions, such as sweating, trouble breathing, nausea, or a pounding heart.	2.55	1.49	<b>.83</b>
20. I had dreams about it.	2.21	1.67	<b>.64</b>
21. I felt watchful and on-guard	3.52	0.95	<b>.39</b>
22. I tried not to talk about it.	2.11	1.61	<b>.63</b>

*Note:*  $r_{(tot)}$  = corrected item total correlation.

Source: Field Survey (2019)

The results of the study found that the total item means was 2.63 and ranged from 1.98 to 3.52 which suggested moderate to quite a bit distressing. Items rated high included feeling hot, unable to relax, fear of the worst happening, heart pounding or racing, nervous and sweating not due to heat. The item-total correlations ( $r_{(tot)}$ ) ranged from .39 to .89 indicating a coherent scale. An acceptable number is .30 as recommended by Nunnally and Bernstein (1994).

#### *Factor analysis of the IES-R*

Principal axis factoring and oblique (Promax) rotations were used for the factor analysis. The Kaiser-Meyer-Olkin (KMO) sampling adequacy score was .95 and Bartlett's Test of Sphericity was significant ( $X^2 = 10862.0$   $df = 231$   $p < .001$ ). The factor loadings of the items are reported in Table 6. Both eigenvalues and scree plot suggested a two-factor structure using Promax rotation. Loadings less than .4 were suppressed.

**Table 6: Factor Loadings and Communalities of Items of the IES-R Pattern Matrix**

Items	Factors	
	Intru- hyperarousal	Avoidance
Other things kept	.92	
Trouble staying asleep	.92	
Pictures popped into mind	.91	
Reminders	.88	
I had waves of strong	.79	
I thought about it	.77	
I was jumpy	.76	
Reminders physical reactions	.73	
I had trouble concentrating	.73	
I felt irritable	.72	
I had trouble falling asleep	.72	
My feelings were numb	.67	
I felt watchful	.59	
I had dreams about it	.48	
I felt as if it hadn't happened	.46	
I tried not to talk about it		.93
I stay away from the reminder		.92
I tried not to think		.89
I tried to remove it from memory		.88
I avoided letting myself get upset		.70
I didn't deal with it		.66
I found myself acting		.57

Source: Field Survey (2019)

The communalities ranged from .24 to .83. It is needful to state that there were no cross-loadings of the items. Factor one suggested intrusion and hyper-arousal while factor two suggested avoidance. The study further investigated why intrusion and hyper-arousal loaded onto each other. This was determined by exploring the relationship that existed between the two items. Pearson's correlation coefficient between the intrusive and hyper-arousal factors was found to be 0.89. The correlation between factor 1 and factor 2 was .76 which was high. Cronbach's alpha for the subscales was .93, .90 and .91 for intrusion, hyper-arousal, and avoidance respectively. Pearson's correlation was then computed to determine the relationship amongst all the three subscales. The outcome is reported in Table 7. All the subscales correlated highly.

These findings were similar to the study by Krafona and Appiah-Boateng (2017). The authors' study found two factors among conflict victims in a chieftaincy conflict. Like this study also, intrusion and hyper-arousal loaded unto the same factor. However, the correlation between the two factors was high in this study while that of Krafona and Appiah-Boateng (2017) was moderate. This inferred that the victims that suffered high intrusive symptoms also suffered hyper-arousal symptoms. The high correlation perhaps indicates that the farmer-herder conflict in the Asante Akyem North District is much fiercer than the chieftaincy conflict studied by Krafona and Appiah-Boateng (2017).

The two factors and reliabilities for the subscales in this study supported those reported by Creamer, Bell & Failla (2003) as well as Dawson, Ariadurai, Fernando, & Refuge (2007) although the populations are different. Findings in this

study corroborated existing studies as to how many factors are involved in the IES-R whether principal components, exploratory or confirmatory factor analysis are used. In view of the smaller sample in the herders' group, the study failed to compute the factor structure for each group. Thus, PTSD is common in conflict zones and health authorities as well as policymakers should take note of it as they strive to manage conflicts.

**Table 7: Pearson Correlation for the Subscales**

Subscale	Intrusion	Hyper-arousal	Avoidance
Intrusion	-	.89**	.74
Hyper-arousal		-	
Avoidance		.76*	-

\*\* Correlation is significant at the .01 level (2-tailed)

Correlation is significant at the .05 level (2-tailed)

Source: Field Survey (2019)

*Gender: Post-Traumatic Stress (PTS) among the Farmers and Herders*

An independent sample t-test was conducted to compare post-traumatic stress for males and female farmers and herders.

**Table 8: T-test Results and Descriptive Statistics for Post-Traumatic Stress (PTS) by Gender**

Post-Traumatic Stress	Occupation			Gender			95% CI for Mean Difference			
	M	SD	n	Male		Female		t	df	Sig
				M	SD	n	M			
Farmers	62.7	17.3	228	65.2	18.5	164	-1.37	390	.17	
Herders	32.9	29.1	91							

Source: Field Survey (2019)

The IES-R yields a total score ranging from 0 to 88 and a score of 33 is considered a scientifically valid cut - off point for the presence of PTSD (Creamer et al., 2003). The results from Table 8 indicated that there was no significant difference between male (M = 62.7; SD = 17.3) and female farmers (M = 65.2, SD = 18.5) condition;  $t(390) = -1.37$ ;  $p\text{-value} = .17$ , two-tailed. There was no statistically significant mean difference in trauma following the farmer-herder conflicts between male and female crop farmers.

The results showed that both males and females experienced high traumatic symptoms equally. Most wives get worried at home not knowing what could possibly be happening to their husbands and male friends and family members on the farm. As narrated by some women, they get extremely scared when their husbands don't get home early from the farm and extremely do not like the idea when their husbands report to them their decision to stay overnights on the farm especially during pre-harvest periods. Females again get traumatized as they gather thoughts about rape any time they see cows and herdsmen as narrated by a female farmer in a focus group discussion:

*My husband (me wura) has stopped me from going to the farm because of the Fulani herdsmen. Sometimes, when I follow him without his consent and I see the Fulani and their cows passing I get scared that they can rape me. Even the women, when we are at home and our husbands are on the farm, we see the Fulani here walking about in the community and our hearts are never at peace. The home is neither as*

*safe as the farm. We live in fear (Female focus group discussion, 2019).*

This analysis could not be run for that of the herders because the sample was only males but the majority of these male herders experienced minimal or no trauma.

### **Differences in Post-Traumatic Stress (PTS) symptoms between Farmers and Herders**

In determining the differences in post-traumatic stress between farmers and herders, an independent sample-test was conducted. The results from Table 9 showed that there was a significant difference between the farmers (M = 63.7, SD = 17.8) and herders (M = 32.9, SD = 29.1) condition;  $t(481) = 13.0$ ;  $p\text{-value} = .01$ , two-tailed. There was a statistically significant mean difference in trauma between farmers and herdsmen. The differences implied that crop farmers suffered high trauma symptoms while herders suffered low traumatic symptoms following the score of 33 which is considered a scientifically valid cut - off point (Creamer et al., 2003).

**Table 9: Results of t-test and Descriptive Statistics for Post-Traumatic Stress (PTS) by Occupation**

	Occupation						95% CI for Mean Difference	t	df
	Farmers			Herders					
	M	SD	n	M	SD	n			
<b>Post-Traumatic Stress (PTS)</b>	63.7	17.8	392	32.9	29.1	91	30.9	13.0	481

\*  $p < .001$

Source: Field Survey (2019).

The findings showed that the crop farmers were reported to have suffered more trauma than the herders. The sedentary nature of their agricultural work made them more vulnerable compared to the nomadic herdsman. Farmers mostly have their farms destroyed leaving the farmers and their households very miserable. It was observed that among the herders, those who suffered high trauma were those who owned the cows. It was observed that the hired workers (Fulani herdsman) seem not to be traumatized by the conflict because they had the least attachment to the cattle in terms of ownership.

### **Assessing Anxiety and Depression Symptoms among Farmers and Herders**

In the wake of a traumatic event such as the Asante Akyem North District's farmer-herder conflict, a large proportion of the population may experience nightmares, anxiety attacks and other stress-related symptoms, although these effects usually decrease in intensity over time and become very much intense during and immediately after the eruption of the conflict. Analysis of internal consistency reliability for the Hopkins Symptoms Checklist (HSCL-25) used to assess the anxiety and depression symptoms following the farmer-herder conflict produced a Cronbach's alpha of 0.97. Table 10 presents the results on the symptoms of anxiety and depression among the main actors of the conflict.

**Table 10: Symptoms of Anxiety and Depression among Farmers and Herders**

	Farmers				Herders			
	Not at all	A Little	Quite a bit	Extremely	Not at all	A Little	Quite a bit	Extremely
Suddenly scared for no reason	4.1	6.1	4.1	85.7	69.2	2.2	0.0	28.6
Feeling fearful	4.3	5.4	6.6	83.7	75.8	5.5	2.2	16.5
Faintness	4.6	8.4	32.7	54.3	78.0	2.2	3.3	16.5
Nervousness	5.9	20.7	20.9	52.6	65.9	5.5	2.2	26.4
Heart racing	6.1	8.2	14.0	71.7	69.2	4.4	3.3	23.1
Trembling	5.1	10.7	41.6	42.6	65.9	2.2	5.5	26.4
Feeling tense	5.4	7.9	49.0	37.8	69.2	3.3	2.2	25.3
Headaches	25.8	14.3	17.9	42.1	73.6	0.0	3.3	23.1
Spell of terror	5.6	4.6	10.7	79.1	71.4	2.2	1.1	25.3
Feeling restless	6.9	8.9	16.3	67.9	71.4	0.0	4.4	24.2
Low in energy	8.9	5.4	22.7	63.0	34.1	39.6	2.2	24.2
Blaming yourself	61.7	8.7	9.9	19.6	74.7	1.1	4.4	19.8
Crying easily	24.2	22.7	14.0	39.1	74.7	2.2	3.3	19.8
Loss of sexual interest	19.4	15.8	30.1	34.7	63.7	11.0	4.4	20.9
Poor appetite	11.0	15.3	17.6	56.1	68.1	5.5	1.1	25.3
Difficulty falling asleep	7.4	5.4	20.9	66.3	72.5	1.1	6.6	19.8
Feeling hopeless	7.7	11.2	31.9	49.2	2.2	72.5	3.3	22.0
Feeling blue	6.4	7.4	23.0	63.3	72.5	3.3	3.3	20.9
Feeling lonely	10.5	10.7	49.5	29.3	74.7	2.2	6.6	16.5
Thought of ending life	60.5	10.2	12.5	16.8	82.4	1.1	4.4	12.1
Feeling of being trapped	19.6	23.7	39.3	17.3	71.4	4.4	6.6	17.6
Worry too much	11.5	12.8	16.6	59.2	72.5	1.1	7.7	18.7
Feeling no interest	12.5	23.7	30.4	33.4	58.2	16.5	4.4	20.9
Feeling everything is an effort	8.7	13.3	29.6	48.5	70.3	3.3	6.6	19.8
Feeling of worthlessness	6.4	5.9	39.3	48.5	0.0	73.6	5.5	20.9

Source: Field Survey (2019)

The findings indicate that the effects of the farmer-herder conflict have had negative effects on the psychological well-being of actors. Nearly 86 percent of the farmers suddenly get scared for no reason leading to the extreme feeling of



fearfulness (83.7%) and nervousness (52.6%). In the process of feeling scared and nervous, many farmers extremely experience heart racing (71.7%), spell of terror (79.1%), and more than half (67.9%) of the farmers experience feeling restless symptom which makes it difficult to even sit still or stand at one location following the reminders of the conflict. The results from the table indicate that most of the herders do not experience symptoms of anxiety. This could be explained by the resilient nature of the pastoralists.

The anxiety symptoms translated into depression symptoms. The fearful and scary nature of the conflict and its consequences led many farmers (63%) to feel low in energy in their jobs and lives. Although the farmers experienced these awkward feelings and life experiences, they (61.7%) never blame themselves for the bad things happening to them. Rather most of them blamed their rivals (herders) for causing all the psychological stressors. Some farmers lamented that they blame themselves for not taking their education seriously, a reason for farming.

Whereas many shed tears especially the females, men did not and depended on the gendered epistemic position that “men do not cry”. Crying was characterized as a female thing and it reflected the weakness of an individual. Loss of sexual interest or pleasure was also a major finding. The farmers and herders recounted how much they had lost the energy to engage their partners in intimate sexual relations especially the farmers. According to the crop farmers, they either do not have the pleasure to engage in sexual intercourse or they performed poorly when they made attempts due to the reminders that dropped in their minds during the acts.

The resultant effects are lack of happiness in marriages, divorce or promiscuity.

This is how a cattle owner narrated his experience:

*For about four (4) weeks after the incident, I had no desire to engage in any sexual activities. I could not sleep. I watch over my ceiling till it is morning. My sister came from Accra to spend about 3days here. In that period, it was the encouraging words of people that got me through but any time, I am alone, I start to think about the consequence suffered (Cattle owner, AAND, 2019).*

A male farmer also stated his sex life this way:

*Sister, when I am “inside” (referring to the lovemaking moment) and my mind gets to the farm at night when the herders mostly destroy our farms, I get soft and cannot continue (experiences premature ejaculation). But my wife understands me so I am okay (Farmer, Bebuso, 2019).*

Other respondents also tried to repress the consequences of the conflicts to enjoy their sex lives as stated by this respondent:

*.....that one, what can you do? Once a while you forget about your pains and feel good inside (Male respondent, Bebuso, 2019).*

The loss of interest to engage in sexual activities among the actors revealed how much depression they experience due to the conflict.

The consequences further led to poor appetite among victims with several others (55.3%) experiencing extreme sadness (feeling blue). The conflict has caused the youth, aged, men, and women, farmers and herders' sleepless nights. Most of them indicated that they experienced insomnia. "Feeling of hopelessness about the future" (44.1%), worrying (51.6%), and worthlessness (43.3%) were other symptoms of depression expressed by the crop farmers. Several of the herders experienced some minimal amount of worthlessness.

The respondents shared in the opinion that they feel hopeless about the future and that they cannot foresee any better future for themselves and their household in the district. This led to some respondents blaming traditional leaders and the national government for the tragic occurrences. They mentioned that as long as the farmer-herder conflict exists, they have much to worry about because the future of their lives, livelihood security, and children's education are threatened.

In all of the disastrous experiences, two-thirds of the actors had the least thought about suicidal tendencies. To them, ending one's life was not the ideal solution. This was inspired by religion and family responsibilities such as taking care and giving hope to their children irrespective of the situation they found themselves in. One farmer explained it as:

*"who will take care of my children when I am no more? You certainly cannot tell what the future will hold. Until you die*

*you might not know what is in store for you” (Farmer, Christian, Brahabebome, 2019).*

Another also narrated:

*In my religion, it is a sin to end your life so no matter how many of my cows the soldiers shot and the effects on me, I will not commit suicide (Cattle Owner, Muslim, Ananekrom, 2019).*

#### *Gender: Anxiety and Depression among the Farmers and Herders*

An independent sample t-test was performed comparing the mean consistency scores of males and females on anxiety and depression symptoms. The HSCL instrument suggests that individuals with mean scores on anxiety and depression greater than 1.75 are considered symptomatic. That is,  $\geq 1.75$  is considered a scientifically valid cut - off point. The results from an independent samples t-test indicated a significant difference stating that female farmers (M= 3.2, SD=.6, n=164) experience higher anxiety and depressive symptoms than male farmers (M =2.7, SD=1.0, n = 228),  $t(390) = -5.9$ ,  $p < .01$ , two-tailed as seen in Table 11. This further implied that both males and females crop farmers experienced a high level of anxiety and depression symptoms but it is more severe among females than males.

**Table 11: Results of t-test and Descriptive Statistics for Anxiety and Depression by gender**

Anxiety and Depression	Occupation			Gender			95% CI for Mean Difference		
	M	Male		M	Female		t	df	Sig
		SD	n		SD	n			
Farmers	2.7	1.0	22	3.2	.6	16	-5.9	39	.01
Herders	1.8	1.1	91					0	

\* p < .001

Source: Field Survey (2019)

*Anxiety and Depression among Farmers and Herders*

From Table 12, an independent sample t-t was conducted to compare anxiety and depression symptoms between farmers and herders. The results showed that there was a significant difference between farmers (M = 3.1, SD = .6) and herders (M = 1.8, SD = 1.1) condition;  $t(481) = 14.9$ ; p-value = .001, two-tailed. The results inferred that farmers and herders did not experience the same level of anxiety and depression and thus the former group experience more of this psychological or mental illness.

**Table 12: Results of t-test and Descriptive Statistics for Anxiety and Depression by Occupation**

Anxiety and Depression	Occupation						95% CI for Mean Difference		
	Farmers			Herders			t	df	
	M	SD	n	M	SD	n			
	3.1	.6	392	1.8	1.1	91	30.9	14.9	481

\* p <.001

Source: Field survey (2019)

As mentioned by Kahneman, Diener, and Schwarz (1999) and Lyubomirsky and Lepper (1999) psychological well-being define a state of happiness that highlights constructs such as affects and life satisfaction. Philosophers in psychological/hedonic well-being such as Epicurus, Start Mill, and Bentham stress that happiness is the only intrinsically good thing, and pain is the only intrinsic bad. An individual is said to be happy when he/she is able to obtain and maximize happiness and avoid pain, protracted fears, and sufferings (Griffin, 1986; Parfit, 1986; Sumner, 1996). In this study, the psychological well-being of farmers and herders were assessed bringing to the fore the affective expressions with respect to the consequences of the conflicts experienced and the cognitive expressions of their life satisfaction in relation to their agricultural work and life in general.

The results attained on the post-traumatic stress highlighted that the crop farmers and herders experienced extreme and mild intrusive syndromes respectively following the farmer-herder conflicts in the district. This manifested through symptoms such as trouble staying asleep, flashbacks of reminders, pictures popping into memories and experiencing terrible dreams. According to the respondents, reminders such as sounds of gunshots, the fall of leaf from tree branches, bereavement periods, bank loans, the sight of a Fulani herdsman, dry season, cows, farms, and presence of the security personnel psychologically tortured them and reminded them of the trauma. These reminders are very much observable in the community on a daily basis or seasonally, hence an intangible part of their lives.

The results on the hyper-arousal category revealed that the extent to which the farmers and herders experienced hyper-arousal disorders following the land-use conflict was severe or extreme in nature. The symptoms of being watchful and hyper-vigilance and exaggerated startle and anger were severely endorsed by both crop farmers and herders. The findings indicated that the herders felt free and talked about the conflicts and their related effects compared to the crop farmers and as a result do not entertain any fear or harm from anybody, while this was not the case for the crop farmers on the avoidance category.

Anxiety and depression disorders are among the most common illnesses that arise in conflict communities. Findings on anxiety and depression likewise showed that most of the respondents suffered psychological stress. Respondents either got scared, felt blue, tensed, and experienced sudden headaches, and sweat profusely. Many others felt giving up farming and owning cattle because of the constant disruptions of their business by either the nomadic herdsmen on the part of the farmers or by the military on the part of the cattle owners and nomadic pastoralists. The findings got interesting as it was observed that respondents who suffered depressive symptoms also got anxious, and those with anxiety disorders commonly suffered from depression. That is, the two psychological illness co-occurred together as studied also by Shapira, Lessig, and Goldsmith (2003).

Several of the respondents similarly felt hopeless and worthless with their life's journey as they linked the atrocities to their inability to fend for their children in schools, and give brighter hope for their families. Many respondents especially farmers lost self-esteem. In the case of some male farmers and cattle owners, some

opted to stay away from home and would only go home at night. This finding corroborated that of Bello (2013). Yet, in all the bitter experiences, many of them stated that ending one's life was not the solution as some explained this from a religious perspective.

Interestingly, the female farmers in this study were more anxious and depressed than male farmers. This was perhaps, due to the ways females process information and the experiences they go through in troubling circumstances like the farmer-herder conflicts. Again, this possibly was the situation because women expressed care on the safety of their husbands who are in the conflict front and their children who are dying of hunger, and denied quality education and lives; and these worries manifest themselves in loss of appetite, lack of sleep, nightmares, tiredness, and irritability. The findings here agreed more with Ogwuche and Dooior (2004) that females suffer more depression than males.

According to Stein *et al.*, (2000), Breslau *et al.* (1999) and Keyes (2005) gender is a commonly found risk factor in the development of mental disorders, with females being more vulnerable than males. Both Breslau *et al.* (1999) and Stein *et al.* (2000) suggest that this may be due, in part, to females' greater risk following excessive fear. Cardozo *et al.* (2004) also supported the assertion in this study that women experience lower and poorer mental health than men. However, the farmers were again more anxious and depressed compared to the herders. This could be that farmers formed the majority of indigenes who own the land and possibly could not stand it for transnational migrants' nomads to harm them that much. The farmers have a greater attachment to the land and would fight all breaths



to have their land and work intact but unfortunately, they engage the pastoralists with weak weapons while the pastoralists do so with sophisticated weapons.

The World Health Organisation report (2005), Ogwuche and Dooior (2004) and Cardozo, Bilukha, Gotway *et al.* (2004) also supported the assertions in this study that conflicts have psychological effects on victims. This study and other researches [see: Cardozo, Bilukha, Gotway *et al.* (2004); Boehnlein, Kinzie, Sekiya, *et al.*, (2004)] have shown a definite increase in the incidence and prevalence of mental illness. This is because the farmer-herder conflict in AAND expands to threaten life, death of loved ones, loss of livelihoods, loss of properties among other challenges. Generally, the two groups of farmers are not satisfied with their lives as a result of the recurrent farmer-herder conflicts which affects all facets of their lives. It is, therefore, undeniable that the farmer-herder conflicts in the AAND have left permanent psychological scars on the lives of the victims.

It was also irrefutable as stated by Keyes's (2005) model on complete mental health that mental health operates on a continuum that moves from severe pathology to optimal health. In the case of AAND, respondents mentioned that the consequences of the conflict on their mental well-being were severe before, during and immediately after the conflict but it subsides with time especially when it is getting to wet season where the presence of the nomadic herdsmen is not much. The affective and cognitive experiences (psychological well-being) were never expressed without linking it to other facets of life such as work, relations, personal and household development or life satisfaction, physical illness, properties, among others. This further explained why Keyes (2005) stated that psychological well-

being interrelated with eudaimonic well-being. This implies that irrespective of the context, human life is interrelated and thus confirm WHO's (1948, 2006) definition of health to include social and psychological and not merely the absence of physical ailment.

From the above findings, it is justifiable to conclude that several of the farmers have poor psychological well-being as many entertain negative emotions, possess weak adaptation skills, and are not satisfied with their lives as a result of the violent conflict and also experience irregular positive emotions (Keyes, 2005; Lyubomirsky, Schkade, & Sheldon, 2005). Many are said not to be happy because they experience more of pains than good feelings and better lifestyles as argued by philosophers such as Epicurus, Start Mill, and Bentham (Griffin, 1986; Parfit, 1986; Sumner, 1996).

Nonetheless, the herders are reported in this study to entertain a lot of positive emotions with low neuroticism, have excellent resilient skills, and experience high levels of satisfaction with life despite the conflicts (Keyes & Lopez, 2002). Largely, it can be concluded that the psychological well-being of the farmers falls on the left continuum of the mental health model according to Keyes (2005) while the herders appear to be approaching the right side of the continuum.

### **Social Well-Being**

Objective three of this study assessed how the land-use conflict in the Asante Akyem North District has influenced the social well-being of the farmers and herders. There was no doubt that the repetitive nature of the violent conflict between farmers and Fulani herdsmen in the district affected the social capital,

norms, network, trust, household and community developments, and livelihood security of the actors involved. The consequences further posed threats to lives, properties, agricultural work, community security, and cultural leadership. The findings on social effects obtained from the fieldwork are discussed in the themes below.

### **Loss of Lives**

Conflicts, be it violent or non-violent, have direct and indirect effects. One of the commonest direct effects is death. The recurrent Asante Akyem North District farmer-herder conflicts have taken a remarkable effect on the lives of the people, causing mortality rates to increase. Records suggest that the conflict as of 2018 had taken away the lives of 69 indigene farmers (Interview with traditional council head, 2019). One assembly member confirmed the statistics but puts it in this way:

*Yes, the record says about 69 farmers have died out of the conflict but do we know how many Fulani herders are dead? Nobody cares about them because they are the voiceless (Assemblymember, 2019).*

A young farmer tells his story this way:

*I am 25 years old and I am taking over my father's job. I was with my father when the Fulani came over. They had a hot argument with my father asking us to leave for their cattle to feed on our crops. I observed that they were angry and I told*

*my father to stop arguing with them. Immediately, one held my neck and said to my father that he would kill me. Just when my father picked his cutlass, the one who had held my neck pushed me on the ground and shot my father. I run into the bush and later found my father in a pool of blood (Young male farmer, Nyamebikyere, 2019).*

Another woman shares her experience as to how she lost her husband and now playing the role of head of the family.

*It was a Thursday when my husband called me from the farm to bring him a few kinds of stuff including fertilizer for our watermelon farm. Yes, he has a shelter on the farm and sleeps there often. In fact, on my way to the farm a bad omen impressed on my mind and so when I got there I told my husband and his two family members whom they were working together that my instinct tells me we don't continue this farm after harvest. They asked why but I didn't say a word. That evening in the hut just when we were about to eat dinner, we heard some people speaking and coming to our direction and heard our dog barked continuously but my husband used a wooden stick to drive the dog away. The people that were coming to our direction spoke Fulani. When they arrived, my in-laws gave them water to drink, as to whether they drunk it I couldn't tell because there was no*

*light on the farm. Immediately I turned on my torchlight in their direction and there were three Fulani herdsmen. They said they wanted to buy cigarettes and my husband replied that we don't sell cigarettes here. They replied okay and moved a little distance from us. The herdsmen spoke to themselves in their language and after whatever they discussed, they shot my husband. From the other room, I could see my husband shake helplessly and the Fulani herdsmen run away. I couldn't help but also run to the bush just as my in-laws did. In the bush, I was mercilessly bitten by mosquitoes. I shivered, the night seemed extra-long for the day to come. I moved through the bush till the next morning and reported the case to the police. He is no more and it is difficult taking care of five children. Some of my children have gone wayward because I'm unable to take them to school (Deceased farmer's wife, 2019).*

A 30-year-old Fulani herdsman born in Agogo also shared his experience.

*In 2017, the soldiers killed hundreds of our cows. My father upon hearing the news in Techiman got a heart attack, got bedridden and died (Herdsman, Koworeso, 2019).*

The conflict has taken away the lives of both farmers and herders, youth, wives and husbands, security personnel, among others. The statistics only mentioned the number of deaths reported on the spot of the event but does not tell the number of farmers and herders who died from depression and other means following the conflicts. In January 2019, the farmer-herder engagement resulted in the death of a herdsman, farmer and private security officer.



**Figure 3: Deceased private security officer being conveyed to the mortuary**  
Source: Fieldwork (2019).



**Figure 4: Deceased farmer being conveyed to the mortuary**  
Source: Fieldwork (2019).

## **Injuries and Permanent Scars**

The resultant effects of the farmer-herder conflict are injuries and permanent deformities. The respondents explained how they frequently recalled the events of the clashes at the mere look of the scars and injuries on their bodies. The other aspect of injuries and lasting defects is sexual and gender-based violence where some female victims got raped and sexually assaulted by some herdsmen. These experiences impressed them with emotional and psychological torture. The district security council narrated the experiences of 5 soldiers who were seriously wounded by gunshots from the Fulani herdsmen in the process of operation cow leg in 2017. He said:

*In 2017, during the operation cow leg, 5 soldiers were brutally injured by the armed herdsmen. Then we took them to the hospital here but they were later sent to 37 military hospital for further health care (District Security Head, AAND, 2019).*

Some youth have also found a reason to make humor of their peers who have suffered permanent deformities following the farmer-herder conflicts. This is how a young lady narrated her story:

*My friends do tease me that I have a Fulani birthmark. This is it. My husband and I met two herdsmen on our farm. One struggled with my husband and the other with me. He wanted to sleep with me but I could struggle well with him because he was a young boy but unfortunately, he took a knife and*

*cut parts of my body. My husband had a bullet mark too  
(Female farmer, Brahabebome, 2019).*



**Figure 5: Male farmer with a bullet injury on his stomach**

Source: Fieldwork (2019).



**Figure 6: Female farmer with knife injury on her left cheek**

Source: Fieldwork (2019).



A woman narrated her family's experience where the intended bullet for her husband hit her daughter's leg.

*Four months ago, this solar (point to it) has been going off intermittently. We were asleep when my husband woke up around 11 pm to see who was knocking on the door. He saw a Fulani who wanted to enter the room but my husband didn't allow him entry. They shot four times all to scare indigenes around and then ran away. The next day my husband then confided in the Zongo chief and the chief instructed people to arrest the Fulani people who came around that night. One evening I was showing my solar TV whilst my husband was lying on a bench outside. They came around to shoot my husband and their reason was that my husband reported them to the Zongo chief. They shot four times, my husband missed the first one but it passed through our door and hit my daughter but the second and third bullet hit him. They went ahead to step on my husband's head. He has taken the pictures all to Kumasi to show his friends and family the damage experienced. I would have shown them to you but this is the marks from the bullet that hit my daughter" (Wife of an injured husband, Koworeso, 2019).*



**Figure 7: School pupil receives a bullet meant for her father in her thigh**

Source: Fieldwork (2019).

One stakeholder recalled a scenario in 2005 where a woman was raped at the full glare of the husband. These casualties happen in the eyes of the immediate family members and spouse and the scars live with them eternally.

### **Retarded Development in the Asante Akyem North District**

Generally, conflicts are the foremost obstacle to the development of any community. Although it is an inevitable event, it requires serious attention to the management of it. The findings showed that the communities in the Asante-Akyem North District have been retrogressing in all aspects of development. The repetitive conflicts have led to the disruption of education, destruction of physical infrastructure, displacement, weakened powers of local authorities, ill-branding of the district and Ghana, weak security systems, food insecurity, illicit trading in drugs and sex, and destruction of cultural and familial values. These impacts are discussed in the ensuing paragraphs.

### *Disruption of Education*

The findings indicated that the farmer-herder conflicts led to the disruptions in the academic calendar. This was the narrative by a representative of the educational unit:

*The conflict in this district is not helping us at all. Trained teachers refuse posting to this place. Sometimes, during class sessions, the herdsmen move their cattle through the schools and the school children are afraid and the sessions get disrupted. Any time there is an eruption, students mostly don't come to school and parents who get victimized are unable to raise money to pay their wards fees (Educational Representative, AAND, 2019).*

The educational system in the district has been impaired in several ways following the conflict. Whereas trained teachers refuse to be posted to the district, some teachers especially female teachers are always on the lookout for opportunities to flee from the conflict communities. This creates shortages in the schools in the Asante Akyem North District. On the part of the students, conversations with the stakeholder revealed that most of the students are demotivated for two reasons.

First of all, their parents are unable to pay their school fees due to the disruption of livelihood activities. This results in most school children dropping out of school and either joining their parents to do farming when the environment is

safe or engaging in trading such as MTN Mobile Money business. Secondly, the recurrent conflicts and casualties witnessed in the communities incite in them fear and this contributes to their poor attendance and poor academic performance in schools.

### *Displacement*

The findings also revealed that the conflict led to the displacement of some farmers to other communities. The farmers moved from more violent conflict communities like Koworeso, Abrewapong, Bebuso, Mankala, Brahabebome, and Nyamebekyere to a less violent community like Ananekrom and Agogo township itself. One farmer stated:

*I was raised in Bebuso by my parents. This is my house but I cannot live there all the time because of the conflict. The place is not safe. When the conflict is very fierce, I go back to the Agogo township because if you don't go, the herdsmen can come in and kill you. Most people are unable to stay in the villages and some of them also move to Ananekrom. In Ananekrom, the "Konkombas" (local herdsmen from the Konkomba tribe in Ghana) are there so the Fulani don't easily go there to misbehave (A 62-year-old male farmer, Bebuso, 2019).*

### *Destructions of Properties*

Some farmers recounted how their farms and other properties such as houses were set ablaze by the migrant herders in an attempt to retaliate farmers that

reported them to higher authorities or touched their cattle in a harmful manner. A female farmer shares her experience:

*They set our house ablaze one night. It took my daughter to notice this and when they did that they fled and so we could manage to escape and asked for help (Farmer, Brahabebome, 2019).*

#### *Weakened Powers of Local Authorities*

The farmer-herder conflict in the Asante Akyem North District has led to weakened powers of local authorities. In Ghana, traditional authorities play a pivotal role in local governance. Chieftaincy systems are marked as the embodiment of the spirit of the ancestors as well as the living community. It has its own resilience and cultural value systems (Abotchie, 2006). While chiefs can be described as traditional leaders, Ray and Reddy (2003) describe traditional leaders as both social and political leaders. Though their primary function is to regulate and control relationships and social behavior within a traditional community, they are in essence people-oriented and service-oriented as government structures are.

Where the institution of traditional leader or cultural leader exists, it is sanctioned in accordance with the culture, customs, and traditions of the people to whom it applies. Today in Asante Akyem North District, this institution is regarded as somewhat a weak one as chiefs have become powerless owing to their involvement in the farmer-herder conflicts. This is affecting the management of the conflict. The acting Omanhene reports on the traditional leaders' inability to handle the conflict on their own. He puts it in this way:

*We cannot do anything about the farmer-herder conflicts. It has moved beyond us, that is why we always invite the soldiers for support. The Fulani herdsmen are dangerous and we don't need them here (Traditional leader, 2019).*

However, some community members and stakeholders opined that the traditional leaders have become powerless because they involved themselves in the menace from the beginning owing to the benefits, they also gained from the Fulani herdsmen.

*The traditional institution here has become weak and powerless because of the involvement of some of the chiefs. Some of the chiefs gave lands to Fulani nomads and they get royalties sort of from the Fulani and they are like if they go where would we get this financial support (Stakeholder AAND, 2019).*

#### *Ill-Branding of the District*

The Asante Akyem North District has been labeled as a theatre of farmer-herder conflicts. The ill-branding of the district has led to the loss of interest by potential investors/entrepreneurs. As a result, the Agogo township and its surrounding communities do not have new and big companies and entities mounting up. Employment opportunities are very low. An assembly member tells that the ill-branding does not only affect the district but Ghana at large. This is how he puts it:

*Internationally, this conflict is giving the country a bad reputation on grounds that, Ghana is not a friendly nation which is a breach of our international relations. That notwithstanding, you cannot come from your country and conduct yourself as you please. There are rules and regulations that a person's conduct guides. As such, it is unacceptable to act contrary to such rules and regulations. The act of killing, maiming and all other bodily assaults are unacceptable in Ghana. Ghanaians are too hospitable unlike other neighboring counties like Nigeria (Assemblyman, AAND, 2019).*

#### *Reduced Productivity in Agriculture*

The periodic sedentary-agriculturalist and nomadic-pastoralist conflicts have brought about reduced productivity in agriculture. This is where the discourse linked economic consequences with social effects and food security. Whereas the majority of the crop farmers narrated that the conflict led to the destruction of their farm crops by the nomadic herders, the nomadic herders and cattle owners also explained how the deployed soldiers mercilessly shot and killed their cows. This process has demotivated some farmers and cattle owners in agriculture business leading to reduced yields, joblessness, income reduction because of low production, shortage of labor and the ability of parties to secure loan facilities to expand their production.

The menace portends the livelihood security of both farmers and cattle owners and thus affects their household income and lifestyle. The conflict has also led to reducing the quality and quantity of crops and animals. Some farmers have devised ways of making quick money within a short period by using strong chemicals and fertilizers for their crops and this is how a farmer and herdsman narrate their experiences.

*I grow watermelon. Sometimes when I get to the farm especially the season when the herdsmen are here in their numbers, I observe that they cut the melons into two halves and their cows feed on them. Yet, I also need money to take care of my children so I introduce some non-harmful chemicals that make them grow faster (Farmer, Ananekrom, 2019).*

*My cattle stock has reduced so much. I used to have over 300 cows but in 2017 the soldiers killed most of them and my Alhaji (cattle owner) has not been able to restock them (Herdsman, Mankala, 2019).*

Lack of sustainable management of the farmer-herder conflict is a threat to food security for the local people, urban communities and Ghana at large since Asante Akyem North District (AAND) is one of the prominent farming communities that contributes greatly to the nation's GDP through agriculture. The conflict is impairing on the quantity and quality of food and meat. Again, the urban



cities that also rely on this district to supply some food and meat also get affected and thus make food and meat expensive in the cities.

*A decline in District Development and Illicit Trading*

The farmer-herder conflicts in the district have influenced community security, introduced illicit trading, and retarded development. The finding revealed that the community enjoys relative peace. The conflict is said to occur almost every year during the dry season. The community members are thus gripped with fear before, during and after the dry season. Law and order have remained weak. Borders have become porous resulting in the proliferation of small arms and light weapons that exacerbates the effects of the conflicts. Youth delinquency, use of drugs such as tramadol, heroin, and female youth trading sex (prostitution) are on the increase. One assemblyman recounts: *“Most of the youth here have become hopeless. Many of our young ladies engage in prostitution and the guys do drugs (Assemblyman, AAND, 2019)”*.

The stakeholders in the district mentioned that AAND is not receiving much development because of the conflicts. The district development funds have been diverted to managing conflicts other than doing developmental projects. One district officer puts it this way:

*This year alone, we have spent about six hundred thousand Ghana cedis (GHS 600,000). The year has not ended we are still spending. When the soldiers come, we feed, house them at the dollar-in hotel and all these are generated from the district assembly’s coffers (District Officer, AAND, 2019).*

The assembly member also made a similar assertion that the district assembly is unable to build new schools or clinics because much of the assembly's resource is directed to combating the conflict.

#### *Destruction of Cultural and Familial Values*

Lastly, the findings pointed out the destruction of social capital as a consequence of the social well-being of farmers and herders. Specifically, the farmer-herder conflicts are said to be disrupting marriages, breaking family ties, and distracting familial and societal values and ritual norms. Divorce in AAND has become somewhat a common phenomenon as most men who witnessed the sexual violation of their wives could no longer commit to their vows. Mistrust and mischief underline the relationship between the farmers and herders, and between the actors, traditional leaders, and some government officials in the district. However, members of families have become over-dependent on one another.

It is therefore obvious that the AAND farmer-herder conflict that has occurred for over two decades has had notable effects on the social well-being of the main actors. The findings in this study align with the study by Antwi (2018) that farmer-herder conflicts do take away the lives and injure actors, especially indigene farmers. Most of these injuries have either been gunshots or knife welts. Whereas studies by Antwi (2018), Boateng (2015) and Ofuoku and Isife (2009) did not inform the consequences of these injuries, this study revealed the permanent scars impressed on the victims, emotional and psychological torture that live with them forever. The social consequences of farmer-herder conflicts in Ghana and

Nigeria are thus similar as indicated by the works of Boateng (2015), Oli, Ibekwe, and Nwankwo (2018), Ofuoku and Isife (2009), and Antwi (2018).

Although, the above studies declared that this type of conflict results in the displacement of the actors, they do not discuss the implications of the displacement. In this study also, the conflicts force both farmers and herders to relocate or migrate to safer communities. What this implies is that when these movements occur there is the tendency where the displaced find themselves living in crowded environs or have their normal hygiene routine cut off. These sometimes lead to disease outbreak (UNICEF, 2009; Deng, 2003). The movement further exacerbates the heightened protection risk where many victims lose access to farmlands, properties, and other valuable assets. As revealed by UNICEF (2004), family and community support structures collapse as a result. Unaccompanied and separated children, single-headed households, older persons and persons with disabilities are at increased risk of abuse, sexual exploitation, and child labor.

The conflict further leads to other social effects like the destruction of farms, loss of property, burnt houses, and the fact that the conflict has also negatively impacted education in the district. The destruction of farm crops by herders and the massive killing of cattle by soldiers threaten food security in Ghana. This is because most urban dwellers and exporters rely on the supply of foodstuffs, milk, meat, vegetables, and fruits from farmers in AAND. Again, the quality and quantity of farm produce, meat, and milk are compromised.

The Asante Akyem North District has been labeled as “a theatre of resource conflicts between sedentary farmers and nomadic herders” since the eighteenth

century. Another labeling in the media parlance has been “Fulani menace”. The ill-branding of the district goes a long way to peg Ghana as becoming violent in the international relations discourse and further deters investors into the region (Shettima & Tar, 2008). The conflict in the Asante Akyem North District has consistently increased tensions and decreased trust between farmers and herders despite the mutual relationship that existed between them. As reports of violence are spread, parties have become wary of each other as they highly think of themselves as enemies.

Cooperation has drastically decreased, and factions are sharply divided (Colletta & Cullen, 2000). Family members and friends who share the same or similar values rely and depend on each other. Social ties are formed on the basis of solidarity in the face of an external threat. For this reason, while bridging social capital is on the decrease, bonding social capital is on the increase. That is, members of the same ethnic group or occupation show more inter-group social capital but less out-group social capital (Colletta & Cullen, 2000). Colletta and Cullen (2000) therefore opine that violence weakens social capital and the social fabric of a community, divides community members, undermines interpersonal trust and collective action, destroys norms and values, and if not addressed can lead to more communal strife.

Arguing from Keyes’ (1998) complete the mental health model, both farmers and herders experience minimal social acceptance as they generally hold negative attitudes towards themselves. Since the district is generally battling and fuelling most of its funds into managing the conflict, developing the capacity of

growth among the farmers and herders have been relegated to the background and thus experience poor social actualization. These conflict actors have challenges satisfying their basic needs due to the conflicts and have their livelihood security threatened. As a result, many of these actors are unable to significantly and socially contribute to the upliftment of the district. There should be a meaningful social coherence that tolerates some level of integration for the conflict actors in the district.

## **CHAPTER SEVEN**

### **COPING STRATEGIES**

#### **Introduction**

The fourth objective explored the coping strategies used by the victims of the farmer-herder conflict in the Asante Akyem North District (AAND). Reports by World Bank (2011) and Themner and Wallenstein (2011) posit that violent conflict affects the lives, livelihoods, and health of almost 1.5 billion people in the world. This study also showed that the resource-use conflict has affected the psychological and social well-being of the conflict actors in AAND as the study's objectives two and three explained.

During post-conflict analyses, several people and households decide what coping strategies work best for them. Whereas many individuals move from places and regions of violent conflict to displacement and refugee camps, others migrate to safer urban communities. Then again, there are some individuals perhaps, the greater masses, risk-takers and the least connected who choose to live in the conflict areas and endure, sometimes for a long period of time, going about their usual lives and errands in the midst of conflict and violence (Justino, 2012).

As Justino (2012) argues, residents who live in areas of enduring conflicts often manifest series of coping mechanisms and this section sought to unearth the strategies used by the conflict actors in the AAND farmer-herder conflicts. That is to say that, how the farmers and herders cope with the conflict can actually minimize or magnify the effects on the actors' psychosocial well-being (Skinner, Edge, Altman, & Sherwood, 2003). The concept of coping, which describes responses to stress whereby a person appraises an event as "exceeding his or her

resources and as endangering wellbeing mobilize" (Lazarus, 1984). It further theorizes that the best way to measure coping was through an individual's personal appraisal, which refers to the various ways individuals seek to modify adverse aspects of their life to minimize the internal threat of stressors.

The findings unearthed six distinct coping strategies used in response to the experiences of the trauma and violence associated with the AAND farmer-herder conflicts and this included religion, non-forced migration, working harder, socio-cultural support, avoidance, and economic strategy. Nonetheless, these strategies were grouped into three domains namely: cognitive, emotional, and behavioral strategies. Cognitive coping strategies included religion and non-forced migration while socio-cultural support, working harder, and economic strategy were grouped as behavioral strategies. Avoidance as a disengagement strategy was labeled emotion-focused coping. The subsections below discuss the themes that emerged from the qualitative findings on the coping strategies employed by the farmers and herders in AAND.

### **Cognitive Strategy: Religion as a Reliever**

One strong theme that emerged from the analysis was religion. This was not surprising because religion is one of the core elements of African culture and for that matter Ghanaian cultural identity. Religion is an influencer of African's art, culture, and philosophy. It serves as a support system that brings people from all walks of life together. The finding indicated that when individuals are confronted with stressful events such as the farmer-herder conflict, they resort to religion as a coping strategy.

Most of the farmers and indigene herders and cattle owners used religion and spiritual practices to cope with the trauma, anxiety, depression, and poor life satisfaction. It was also observed from the narratives that conflict victims who used religion as a coping strategy either used positive or negative religion but more of the positive. Positive religious coping users either made meaning amidst the traumatic circumstances whereas negative religious coping users either battled with their faith in God or questioned and doubted the existence of God in their lives (Pargament, Smith, Koenig, & Perez, 1998).

The findings showed that religious coping was more pronounced in the narratives by females and older adults than males and younger farmers and among crop farmers than herders. This is how an old woman and farmer explained it:

*True, we have been through sadness and fear. A year ago, the Fulani came to burn the house in which my children were sleeping. My children didn't do anything. The Fulani came to seek a place of refuge but my husband didn't allow them. He told them there wasn't any vacant room. There, they decided to burn the room where our children sleep. This child (pointing to her son) was part but he was very young. Her elder sister was there when it all happened. She even woke us up to alert us about the burning of the house. Our house has been burnt twice. All with people in the house. I was very sad when all these things happened. We live in terrible fears. The herdsmen don't give us peace in our own hometown. I said to myself that*



*whatever happened, God knows best so let His will be done. After all, we didn't die and having a life is the most important thing (Female farmer, 62years, Brahabebome, 2019).*

Another female respondent also narrated how she employed positive religious coping strategy:

*Very soon the herdsmen will come. I pray daily to God so my farm gets saved and untouched. **Researcher:** Apart from praying what other plans have you put in place to safeguard your farm? **Respondent:** I can't afford the wires. All I can do is to pray to my God. The trust I have in God keeps me going daily (Female farmer, 52 years, Abrewapong, 2019).*

Whereas some victims were of the view that every bad and good thing that ever happens to them was the will of God, others also deepen their trust in God, some farmers have become more committed to prayer. This is what another respondent had to say:

*For the cattle not to come to your farm is God. So me I have to pray more to God that he watches over my farm for me while I am sleeping in my home. Because some farmers even go to sleep in their farms yet the Fulani herdsmen still attack them (Male respondent, 41years old, Brahabebome, 2019).*

The story was not the same for all others. This respondent questioned her faith and puts it this way:

*Sister, almost every year, my farm is destroyed by the herdsmen's cattle. I don't know why I'm always a victim. Sometimes, I wonder if I have committed any sin to deserve this punishment from God. I have four children, how does God expect me to eat and also feed my family. I don't enjoy farming anymore (Crying) (Female respondent, Bebuso, 2019).*

The study supported findings by Schweitzer, Greenslade, and Kagee (2007) that religion promoted social interaction through church and these interactions provided social, informational and material support. This was how a respondent puts it:

*I am a Pentecost church elder. I face the herdsmen squarely all the time. If they have charms, I have God too. There was one night I felt I should go to the farm. Then I had my bicycle and I rode there. As if God spoke to me. A few minutes later when I got to the farm I heard them with their cattle approaching my farm. I shouted abokyi abokyi you dare not come to my farm. I had my cutlass for defense. They shot twice but by God's grace, the bullets didn't hit me. Sometimes, when members meet at church and they talk about their experiences, it is so terrible that we have to support one another. By giving some foodstuffs to a brother or sister who had his or her farm*

*destroyed is also a ministry (37-year-old male farmer, Koworeso, 2019).*

This study conceivably reinforced the findings of Halcon and his colleagues (2004) that the use of religion as a coping strategy could be an African thing. The findings in this study reflected that religion was a major resource for the conflict victims in AAND. The victims used religion to either strengthen their spiritual growth or used this means to assess the magnitude of their support system to the level that victims defined their fatalities as the doing of God in their lives and in this way, may experience the farmer-herder conflict as less threatening and less stressful. These findings established that active and positive religious coping strategies predicted the lower rates in depression, anxiety, and trauma among the victims of the farmer-herder conflicts in AAND in the Ashanti Region of Ghana as also expressed in the works by Ano and Vasconcelles (2005).

The findings in this study could not agree more with Schweitzer, Greenslade, and Kagee (2007) whose study similarly found that conflict victims used religion as a form of emotional support. This translated into the promotion of social interactions through church and these interactions provided social, informational and material support. These findings are in agreement with literature showing the different types of religious coping either increased or decreased mental health (Carpenter, Laney & Mezulis 2012; Carleton, Esparza & Thaxter, 2008). However, in this study, most of the conflict victims viewed positive religious coping strategy as one that is linked with lower symptoms of psychological distress.

I further deduced that most of the crop farmers rather employed this coping strategy than the nomadic herdsmen.

### **Cognitive Strategy: Non-forced Migration**

During conflicts, conflict victims and households resort to migration as a coping strategy (Justino, 2012). The migratory situation can be defined as forced or non-forced. In this study, victims resorted to non-forced migration either to avoid the conflict and its dreadful effects or to move out and have changed in jobs. Some studies have shown that individuals in conflict areas migrate in order to avoid violence (Moore & Shellman, 2004), but also for economic reasons (Engel & Ibanez, 2007; Czaika & Kis-Katos, 2009). This respondent reports of not staying when the conflict is about erupting and does so to avoid the farmer-herder conflicts:

*During the dry season when the Fulani herdsmen are here in their numbers I move to my sister in Kumasi. She sells second-hand clothing and during this period she buys a lot of bails because she knows I will be joining her to sell. I stay in Kumasi till the dry season is over. I would be going soon because we are told they are coming. This place is not safe in the dry season at all. My life is more important than my farm and I make lots of money when I sell these clothes. **Researcher:** Do you move alone or with your family? **Respondent:** Oh my children are with their father in Akim Oda. Yes, they were first with me but because of the insecurities in this place I had to move them there (Female respondent, Koworeso, 2019).*

There were also reports of migration within the AAND district. This perhaps implied that some communities within the district are safer than others. A respondent recounted:

*I have joined my other family in Ananekrom. I feel safe there than Koworeso. Yes, I don't farm there anymore. There is a town close to Ananekrom which is where I now farm (Female farmer, Ananekrom, 2019).*

The findings further showed that there were gendered experiences in relation to migration as a coping strategy and that fewer males than females migrated. Again, more farmers than herders were reported to temporarily migrating to other places. This is how a male farmer puts it:

*For the men, where do we go to? It is mostly the women who move to join others because of fear of dying or being raped. Sometimes, we the men we even tell our wives and the children to go from here. For the men, we stay here, farm despite the presence of the Fulani herdsman's destructions. You will lose respect as a man if you move away. You will be labeled as weak. Look, I farm four (4) acres of land here but if I should join my family elsewhere, I won't get that size of land to farm. A man must be a man and it is mostly the farmers who are at the losing end (Male farmer, Bebuso, 2019).*

A Fulani also narrated:

*During the conflicts, I move my cattle to Kwame Danso because the police and soldiers may shoot them. Not all of us move. The pasture here is correct! I come back when the soldiers are not shooting (Herdsman, Koworeso, 2019).*

This implies that the nomadic herdsman rather fear the engagements with the security personnel than with the farmers. The migration from Agogo and its environs was not only experienced by farmers and herders. Some government workers such as teachers and health workers who were posted to Agogo health and educational facilities worked it all out to be transferred following the violent farmer-herder conflicts as reiterated by a stakeholder:

*We have some staff who were posted to the health facility here but when the Fulani herdsman came to Agogo town itself to cause more harm with the youth, they asked that they are transferred to other health centers that are safe (Health Officer, 2019).*

### **Emotion-Focused Strategy: Avoidance**

Another theme that kept surfacing was avoidance. This manifested victims' "trying to forget" that the events even existed. Even though farmers and herders adopted several ways to cope with the stress, trauma, and depression that emanate from the resource-use conflict, trying to forget was also described as potent means to dealing with the psychosocial effects of the conflict. For instance, a woman responded:

*I try to forget about how the herdsmen destroyed my farm. Anytime, I get sad I try to block negative thoughts about the conflict. If I don't do that I will end up developing blood pressure and I will die and leave my children (Female respondent and farmer, Nyamebekyere, 2019).*

Another woman explained why she tries to forget in order to avoid future attacks.

*I try to forget because when I don't, I may end up saying something about the Fulani herdsmen. They have their spies here. They may communicate to them what I said and I can be pounced on (Female respondent and farmer, Brahabebome, 2019).*

Nonetheless, a herdsman described his failure to forgetting the incidence due to reminders.

*Any time I see that cow there (pointing to a particular cattle) I get sad. It used to be very close to one that died. They are special to me (Herdsman, Koworeso, 2019).*

The use of “trying to forget” as a coping strategy has been described as “disengagement/avoidance strategy” and stimulus-response. The study makes known how conflict victims try to forget the pains associated with the conflict as a way of avoiding physical health problems, a thought of care and welfare about their future generation, and fear of future harm. In this way, some victims assume that there is/are no stressor(s). Some victims admitted using “trying to forget” as a coping strategy because they feel the situation can never be changed though it is

undeniably stressful and traumatizing. However, by attempting to forget or avoid, they are not actually processing the issues to an adaptive resolution. This is because the memory of the incident will psychologically linger on and create more problems in the future, although the strategy may have a temporary effect.

### **Behavioral Strategy: Socio-Cultural Support**

One other theme that emerged as a behavioral coping mechanism was socio-cultural support. This declared the essence of social capital and cultural identity. The findings supported the argument by Matsumoto (1994) who viewed collectivistic cultures in Africa as one that focuses on communal and not individualistic, social and not economic driven orientations and the end products of these cultures are encouragement and support amongst the group members.

For Nsamenang (2008), social support, culture, and heritage were thus important building blocks that shaped human psychosocial differentiation. The findings in this theme revealed that whereas some victims sought social support from friends and family, support from the community, institutions, and groups, there were also cultural activities that groups performed to cope with the conflict. Youth peers also served for others as a source of social support. Youths that are into farming and herding expressed their feelings and thoughts and also engaged in activities such as sports and singing to relieve them of the stress, trauma, and depression they have experienced. For example, a male farmer and a herder responded:

*For the Fulani herdsmen, they have really done us more harm than good but what can we do. I and my friends*



*organize a football match on the community field, talk about the menace small, tease, sympathize, and encourage ourselves. We sing lots of “jama” songs (cheer songs) and end with a football match. When we are in the playing mood it feels all is well but some time after I get angry in my mind about how my farm had been destroyed (Male farmer, Brahabebome, 2019).*

*In 2017, I was herding thirty-six cattle for one Alhaji but the soldiers killed most of them. After the shootings, two cattle could run away and six got seriously wounded. I didn't get to work for that Alhaji again but my friend who is also a hired herder accepted me as a laborer to care for cattle (Migrant Herder, Koworeso, 2019).*

Most of the conflict victims' first point of social support was their family. They shared their feelings with members of their families any time their farms were destroyed. The forms of support were either information giving, monetary support, humor or advice. A respondent said:

*The first time I had my farm destroyed, I cried so much because I remembered my father. My father handed over his farm to me because he was intimidated by the herdsmen a couple of times and died later. I promised myself to take care of it and farm so well than my father but after my second harvest, my farm was attacked by the Fulani herdsmen. But*

*my uncle advised that I get bending wire to fence my farm and this he also helped me raised the money to buy it (20-year-old male farmer, Nyamebekyere, 2019).*

A thirty-seven-year-old woman was privileged to have been saved with given information. She recounted:

*I went to get water to drink from the stream near this farm. Whiles coming, I heard the man whom I share a boundary with shouting my name and saying ran ran ran the herders are in our area. I ran away leaving the farm ahead of time. Thanks to that man, I would have been perhaps raped or dead (Female farmer, Ananekrom, 2019).*

Another explained:

*It is very sad when I think of my destroyed farm but when I am with my friends especially the male friends they will tease and make hilarious statements about the manner I cried that day when my farm was destroyed. The sense of humor keeps me alive and happy anytime I remember them (Youth female farmer, Nyamebekyere, 2019).*

The experiences of coping in the conflict community in relation to socio-cultural support moved beyond friends and family members to the support from community leaders. The farmers' group stated it in this way:

*We are happy that we expressed our woes to the local authorities and assembly and they channeled our plight to government. Today, any time we need soldiers to come and deal with the Fulanis they come (Farmers Association, AAND, 2019).*

The results fit into the definition by Dumont and Provost (1999) that social support is the support received either through informative, emotional, or instrumental means or the sources of the support that is family and friends that enhance recipients' self-esteem or provide stress-related interpersonal aid. It is observed that social relationships play a vital role in enduring life difficulties of conflict, stress, and coping. The conflict victims here rely on families and friends' support for minimizing the effects of the conflict on their psychosocial well-being. This is in line with McMichael and Manderson's (2004) finding when they assessed the coping strategies among refugees.

Culturally, the element of collectivism was observed among the victims as a coping strategy. For collectivists, the social networks are said to consist of tightly connected members across a large number of social groups, including immediate and extended families, kin, and friends (Chun, Moos & Cronkite, 2006). As explained by Dick, Ketturat, Häusser, and Mojzisch (2017) referencing the social identity approach, individuals who identify with groups tend to provide and receive more social support thus reflecting a stronger sense of collective self-efficacy.

It was gathered from the study that herders and farmers received social supports from their kind. It further agrees with Haslam, Reicher, and Levine (2012)

and Frisch, Hausser, van Dick, Mojzisch (2014) that a shared social identity serves as a basis for a more favorable interpretation of social support and has more positive effects if the provider and recipient of support share a social identity. The socio-cultural support following the traumatic farmer-herder conflicts in Agogo is observed to be a coping indicator aligned with minimized rates of psychosocial problems.

### **Behavioral Strategy: Working Harder**

Working harder as a coping strategy was more pronounced among herdsmen than crop farmers. This reflected the resilience spirit among the herders in the face of unfavorable situations. Many professed that they work harder as ways to fill in the dead cows and also to enjoy their benefits. These are the narratives by some herdsmen and a cattle owner:

*You don't stop fathering your child when he/she urinates on your laps. I work hard despite the conflicts. It is the reason for my survival so I am not worried at all by what the soldiers do. Mine is to work harder than before even after losing some cows (Fulani herdsman, Mankala, 2019).*

*I take advantage of the rich pasture in this area. I feed my cows twice a day and I make sure they are very much satisfied and these help them to grow faster and produce more. The conflict always occurs but ours is to work and*

*work harder than worry about the dead cows (Fulani herdsman, Ananekrom, 2019).*

*The culture of the pastoralists is to move and because of their movement culture and sleeping in the bush, the herders are fearless people. Every three (3) months, the cattle owners give a calf to their herdsman for taking care of their cattle so, in a year, a Fulani has about 4 cows to himself. Based on this motivation, they work all out to get their share. When their cows are all grown, they sell them and get money for themselves. This explains their hardworking working spirit despite the heats of the conflicts. You will not come across a herdsman crying because of his dead cows. They work very hard to replace the dead ones (Cattle owner, Ananekrom, 2019).*

This result supported Adisa's (2012) findings that the herders worked extra hard in order to cope with the conflict situation and their consequences.

### **Behavioral Strategy: Economic Coping Strategy**

Violent conflicts such as the Asante Akyem North District's (AAND) land-use conflict is characterized by the destruction of farmlands and the killing of cattle. As a result, individuals and households devise strategies to enable them to survive, hence the economic coping strategy. The economic strategy includes acquiring loans to revamp the farming and herding business, livelihood diversification,

household role sharing, and setting new economic life goals. To restore the economic shocks among individuals and households, actors opined that they gained support from banks and other credit facilities. Respondents narrated as:

*When my farm got destroyed I took a loan from Agogo Rural Bank. Just before harvesting, I had part of my farm destroyed by the herdsmen's cattle. I have no idea how I am going to pay the loan with respect to the given date but I am working very hard to survive this as well. I have decided to do backyard farming which is not close to the herding areas and also farm at my usual place. I decided to go this way so I can make double income to pay off the loan or even get to harvest one side in case the other gets destroyed (Male farmer, Mankala, 2019).*

*Everybody knows me here. I am a big-time butcher. During the 2017 eruption, most of my cows were killed by the soldiers. To date, I have not recovered because if I should tell you the loan I collected to do this business, you will be marveled. I do sell to other butchers in Kumasi and Techiman. It took the intervention of my brother in Accra to settle part of the loan I took from GCB. Now how to pay that of the rest in GCB and that of the rural bank I have no idea. I feel so light in weight. Now, I run a taxi business alongside my primary work (Butcher, AAND, 2019).*

In setting new economic life goals, there were households that minimized the effects of the conflicts by engaging in low-risk jobs and activities. Whereas some engaged in “by-day-job” (hired work), others resorted to doing subsistence farming and caged herding. A respondent had this to say:

*Personally, I was affected in the year 2018 when the Assembly brought the soldiers here February –March thereabout. We the local cattle owners went to see the MP, Andy Appiah Kubi, to discuss the way forward for us. He told us that, due to the nature of the situation at hand, we must all move away from the area for the meantime so that later, he would discuss a ‘come back’ if possible as we the local cattle owners were the same people that brought some of the Fulanis’ and they live amongst us. He then gave us a date to move our cattle. He made an alternative proposal that we put our cattle in cattle sheds or cages and not allow the cattle to move out. He suggested we dug a well or have pipe water for the cattle to drink from. We took this alternative suggestion and took steps to implement them. So my cattle have been caged at a place in between Agogo township and Ananekrom. However, my other cattle in the bush died, most of them from the shootings by the army (Cattle owner, 2019).*

Some of the actors also abided by the advice given to them by experts in agriculture and have their lives protected. This is how an agricultural officer explained it:

*As a result of the Fulani herdsmen destructions, we decided and advised farmers to go into cashew farming. For cashew production, the cows don't graze on them so we tried to diversify the type of crops. For the cashew, it is a permanent crop too. Because of that, we decided that is better we bring in crops that cannot be destroyed by the cattle. Apart from that, you see our area we have decided to go into backyard farming because we have seen that for you to have a quarter of an acre around your house is better than having 10 acres in the farm which can be destroyed overnight. So we have actually promoted backyard farming around Agogo. If you go outside Agogo, now we asked them to plant something around them. We have even gone ahead to bring in, you know we are being supported by the Canadian government, and we have a small irrigation system, where farmers around their own farms irrigate simple vegetables, so that their livelihood, what to eat, will not be a problem. Some are practicing these methods (Agriculture officer, AAND, 2019).*



A female farmer recounted that she quit her farm out of fear to engage in a hired job. She explains:

*The females get raped by nomadic herdsman in the bush. There is a lady in this community she was raped, she couldn't bear the pains, she felt sick and died after some time. She was always in the house. I don't want to be a victim. I have decided to do by-day-work for those who farm on a very large scale in order to fend for myself and the child (Female, Brahabebome, 2019).*

A herdsman also recounted:

*I now work as a laborer for my friends because most of my cattle died from the gunshots from the soldiers and I don't work for the Alhaji anymore. I do that in order to survive (Fulani Herdsman, Ananekrom, 2019).*

Household livelihoods comprise access and mobilizing resources that enable them to pursue goals necessary for their survival and longer-term well-being, and thereby reducing the vulnerability created and exacerbated by conflict are threatened among victims in Agogo (Young, Jaspars, Brown, Frieze, Khogali, 2002). For this reason, some households took a creative and proactive step in diversifying their source of livelihood either totally or partially. Some male spouses settled to practice partial livelihood diversification in order to protect their wives from harm or rape. A male farmer explains:

*Our farms have been destroyed twice so I decided my wife leaves the farm work and does and a chop bar business (eatery) so in the situation where we lose revenue from the farm we can still get something to feed on. She welcomed the idea because she was anxious about being raped and today, we can smile a bit even when an acre of our farm gets destroyed (Male farmer, Brahabebome, 2019).*

These findings partially support Justino's (2012) assertion that households leaving in violent conflict environs get access to credit to revamp their business or sustain their livelihood. The question of how victims who accessed credit or loans managed to pay back amidst repetitive conflicts was not explored. The coping strategies to divert to subsistence farming were found among victims that typically hold limited or no liquid assets but also by those that anticipated being potential targets of violence as in the case of Justino (2012). The thoughts of being a target of violence, social uncertainty, and mistrust between feuding parties heightened the use of this strategy. Brück (2004) further adds that the switch to subsistence farming led to improvements in the economic security of households living in extreme poverty because the market and social exchange entailed limited welfare gains.

In this study, just like Adisa (2012), crop farmers other than herders accepted the conflict situation and its related consequences. However, unlike Adisa (2012) and Umar, Umar and Illo (2013), the herdsmen employed more of the problem or cognitive focused coping while the crop farmers used emotion-focused coping. Farmers used prayer (religion) and avoidance mostly to deal with the

consequences of the conflict. These approaches although it temporarily helped the farmers to adjust to the situation, were not problem-targeted.

The herders, on the other hand, sought through problem-solving skills, made decisions and directed actions towards controlling the troubled environment through their resilience nature and lifestyle. Many crop farmers especially females abandoned their farms for low informal markets such as engaging in the MTN Mobile Money business. Many of these females who lost their partners to the conflict also assumed the position of heads of the family and engaged in hired jobs on others' farms where they have nothing to lose when the farms get destroyed. In this way also, they are able to improve the economic security of their household as argued by Brück (2004).

Classical coping theorists such as Folkman and Lazarus (1984) categorize coping into two broad domains namely cognitive and emotion-focused coping. The categorizations have the tendency to assert that emotion-focused strategies are negatively associated with psychosocial well-being while problem-focused or cognitive coping strategies are positively associated with psychosocial well-being. The normative stance gets questioned when a grounded theory on coping is employed. Grounded theory on coping was ideal for interpreting the coping strategies in this study. This is because the conflict victims co-created coping strategies that best fit their subjective expressions and also shared their coping experiences from their unique social and historical context.

In this study, the emerging themes were grouped into cognitive coping styles, emotion-focused style and behavioral domain of coping. This was acceptable as several scholars grouped coping styles in ways that reflected their findings. Beehr and McGrath (1996) distinguish more categories of coping styles and group styles as a preventive, anticipatory, dynamic, reactive and residual coping while the categories or groupings in this study aligned more with recent studies such as Ghimbulut and colleagues who categorized coping styles as emotion coping, behavioral and cognitive coping (Ghimbulut, Ratiu & Opre, 2012).

Even though this study had similar categorization with Ghimbulut, Ratiu, and Opre (2012), it must be noted that there existed overlap between these domains and was thus difficult discussing them as isolated themes. “Religion (prayer and faith in God) is considered to be a cognitive strategy and avoidance (trying to forget) as emotion-focused strategy, they are both observed as disengagement strategies, though not certain in this context if they should be considered as negatively affecting psychosocial well-being or mental health. This is because they provided a temporal and short relief to the farmers and herders that used them though they are relevant in the immediate aftermath of the disaster and were described as an engagement strategy in the early stages of recovery (Ekanayake, Prince, Sumathipala, Siribaddana & Morgan, 2013).

Iacoviello and Charney (2014) explained that “trying to forget” may also be representative of a kind of cognitive flexibility, which refers to the ability to reappraise one’s perception and experience of a traumatic situation instead of being rigid in one’s perception. Cognitive flexibility allows acceptance and assimilation

of traumatic experience into one's life and can provide opportunities for growth and recovery. Prayer and faith, a common coping strategy utilized by participants, maybe a coping strategy that works as a form of cognitive optimism. Optimism has been conceptualized as the maintenance of positive expectations or hope for the future.

The research argues that cognitive flexibility, together with optimism can allow an individual to demonstrate resilience while accepting their current reality. Another coping strategy mentioned subtly is political participation as a problem-focused strategy. This manifested as community members cried unto the government to constantly deploy security to salvage and sustain, an approach that is immediately somewhat effective but not sustainable. Other actors employed a proactive strategy by fleeing from the community to avoid any harm while others resorted to taking a risk by taking loans from banks.

With reference to the collective nature of Ghanaian identity, community relationships have a role in shaping coping strategies. In this study, participants sought support among peers, family, churches and community leaders. Research has found that social support and feeling connected to neighborhoods is associated with better mental health outcomes among conflict victims (Kliewer, Lepore, Oskin & Johnson, 1998). This is very unlike Western societies where coping strategies are often connected to an individualistic approach whereby the traumatized seek help through counseling. In developing countries like Ghana as in the case of AAND, the coping approach is very collective in nature, with greater use of

community support systems to support emotion-focused coping strategies rather than problem-focused strategies.

## CHAPTER EIGHT

### SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

#### **Introduction**

The conflict has been an intractable element of human existence with its consequential effect on the development of societies around the world. The dynamics and magnitude of its impact on resources depend largely on the approaches and collective efforts of stakeholders, institutions, and individuals towards its management. The approaches are in turn, informed by sound research based on reliable data. This chapter summarises, concludes and provides recommendations based on this study's contribution to the broader literature on this issue from the perspective of the farmer-herder conflict in the Asante-Akyem North District of Ghana.

The rest of the chapter is structured into six main sub-sections. The next section summarises the research processes and outlines the major findings from the analysis of the objectives. This is followed by a section on the conclusions drawn from the main findings while the subsequent section presents recommendations based on the findings and conclusions to guide policymakers in designing and implementing policies towards the sustainable management of the farmer-herder conflicts in the study area. The last two sections, respectively spell out this study's contribution to knowledge and build on its limitations to make suggestions for further research.

## **Summary of the Study**

The study investigated the Asante Akyem North District's (AAND) land-use conflicts and the psychosocial effects on the well-being of the farmers and herders. However, it specifically: 1) explored how actors' frames influence conflict development in the study area, 2) assessed the effects of the conflicts on the psychological well-being of the farmers and herders, 3) assessed how the land-use conflicts have influenced the social well-being of the conflict actors, and 4) explored the coping strategies used by these actors.

A pragmatic research philosophy that requires the use of a mixed-method research approach but qualitatively skewed in nature was applied in addressing these objectives. Of all the four objectives, only the second one on the assessment of the effects of the conflicts on the psychological well-being of farmers and herders was addressed using a quantitative approach. The study relied on a cross-sectional study design that involved the collection of data from seven communities (Abrewapong, Mankala, Nyamebekyere, Kowereso, Bebuso, Brahabebome, and Ananekrom) in the Asante Akyem North District. Data were collected from 483 respondents, comprising 392 crop farmers and 91 herdsmen (18 non-nomads and 73 transnational migrants' nomads).

Key informants and groups such as traditional authorities; cattle owners, cattle traders; crop farmers' association, cattle herdsmen association, security officials, Regional Peace Council (RPC), agricultural official, District Chief Executive, health officers, educational representative, female group, male group, and youth group were all contacted for the study. The instruments used for the



collection of the primary data were interview guide, focus group discussion guide, observation guide and interview schedule. The analysis of data covered the application of descriptive and inferential statistics for the quantitative data while thematic analysis was applied to the qualitative data. Some relevant quotations from victims were used to support the quantitative data.

### **Key Findings**

The analysis, and results of the first objective on how actors' frames influenced conflict development revealed that:

- i. Split-identity frame was one of the main factors influencing the farmer-herder conflict in the District. In this frame, the actors created the "us versus them" phenomenon where each faction sees themselves as having unique identities different from the other. This influenced their behavior towards each other contributing to frequent violent and conflictual clashes.
- ii. The idea of citizenship (kromhane) which is intricately linked to one's ethnic affiliation in Ghana was found to be a major cause of the conflict. The herders are labeled as strangers (non-citizens) and not belonging to the District and Ghana at large, a situation which has engendered a sense of non-belonging among some of the Fulani herdsman who were born in the District.
- iii. Language was also cited as a factor that influences the constant development of the conflict in AAND. It was observed that the inability of both parties (herders and farmers) to understand each

other's language often leads to heightened speculation and perception of framing evil or conflict. Respondents from both factions of the conflict mentioned nonverbal cues as their means of reading threat intent of their opponent.

- iv. Likewise, there was the idea of tagging and "otherness". Conflict actors formed characterization frames which were often negative and undermined others' legitimacy, cast doubt on their motivations, or exploit their sensitivity. While the indigene farmers perceive the herdsmen as strangers who are vindictive, criminals, rapists, and unclean individuals who do not take their baths or brush their teeth, the herdsmen, on the other hand, have unaccommodating, and unfriendly frames for the indigene farmers. These frames usually inform each party's subjective interpretation of the conflict, its causes and how to relate to each other.
- v. The perception of an enemy-foe relationship was a reason for the repetitive nature of the farmer-herder conflicts in AAND. Both parties see themselves as enemies and they tied this explanation to their opponents destroying their source of livelihoods that threatens the well-being of their household. The idea of seeing each other as enemies have led to the Fulanis and residents attacking each other at different times and under different circumstances. These attacks have led to deaths, destruction of livelihoods, and causing serious injuries to the people who are seen as enemies.

- vi. The nature of their occupation was perceived as a cause of the conflict. While the herders believe that their work requires constant movement (nomadic) for grazing of their animals and access to water, the farmers whose work is perceived as sedentary by the Fulanis see the nomadic nature of the occupation of the Fulanis as an attempt to destroy their farms which are the sources of their livelihood.
- vii. The final observation on objective one was conflict management frames which mostly reflect the differences between the two parties over how best to manage or resolve any conflict. This frame happens when one party is willing to sit down with a mediator and negotiate, while the other, thinking that it has the upper hand, may refuse negotiation, but rather prefer litigation or violent action. This is often inspired by disputants' identity, characterization of other disputants, and perceived power. In this conflict, the farmers who are indigenes and custodians of the land feel more powerful over the transnational migrants who are pastoralists and argue that the herdsman be flushed out without negotiation.

The second objective assessed the effects of the conflict on the psychological well-being of the farmers and herders. The principal findings that appeared are as follows:

- i. On post-traumatic stress and conflict, the results on the traumatic-intrusive experiences among the farmers and herders revealed

that almost 80% of the farmers indicated that they experienced extreme reminders that brought back feelings and thoughts about the farmer-herder conflicts. As a result, the majority of the farmers stated that they had trouble staying asleep. The reminders included sounds of gunshots, leaf, bereavement periods, bank loans, the sight of a Fulani herdsman, dry season, cows, farms, and the presence of the security personnel. This translated into 50.5% of farmers extremely experiencing pictures about the conflict popping into their minds and these made 64 percent of them constantly subjected to waves of strong feelings about it. On the part of the herders, they experienced little of these intrusive symptoms and could enjoy some amount of sound sleep.

- ii. The results obtained on the hyper-arousal category reflected that the farmers and herders experienced extreme hyper-arousal symptoms. It was observed that 72% of the farmers and 69% of the herders became watchful and on-guard, ensuing to 75.8% percent of the herders lacking the ability to concentrate. This often affected both actors in their ability to complete tasks as they always become alert and vigilant in their everyday dealings. Nonetheless, the herders did not experience symptoms of irritability or jumpy behavior. On the other hand, 71.4% of the farmers got irritable and angry at the sight of their destroyed

farms by the herders. The situation led many farmers to have problems with sleep. Several of these respondents mentioned that they experienced insomnia. Hyper-arousal manifests itself as a tendency to startle easily, even in response to minor cues like low noise, irritability, restlessness, explosive anger and feeling of guilt and these manifested more in farmers than herders.

- iii. On the avoidance category, the results showed that actors exposed to the traumatic and recurrent farmer-herder conflicts tried as much as possible to avoid thoughts, feelings, and conversations about the events but could not because the trauma always lived with them. These symptoms were more prevalent among farmers than herders. The majority of the farmers attested that they do not make any attempt at all to think about the farmer-herder conflicts yet thoughts about the conflict come to mind. However, 31.4% of the farmers try not to talk about the conflict due to fear but 67% of the herders were not bothered to talk about it.
- iv. The analysis of the trauma experience across gender revealed that there was no significant difference between males and female farmers as far as the farmer-herder conflicts are concerned. The results showed that both males and females experienced high traumatic symptoms equally.

- v. Across the two parties, the results showed that the traumatic symptom was higher among the crop farmers than the herders.
- vi. Also, victims who were anxious were also prone to depression. The findings indicated that the effects of the farmer-herder conflict have tormented the psychological well-being of actors especially the crop farmers. Nearly 86 percent of the farmers suddenly get scared for no reason leading to the extreme feeling of fearfulness (75.8%) and nervousness (65.9%). In the process of feeling scared and nervous, many farmers extremely experience heart racing (71.7%), spell of terror (79.1%), and more than half (67.9%) of the respondents' experience feeling restless symptom which makes it difficult to even sit still or stand at one location following the reminders of the conflict. The results indicated that most of the herders did not experience symptoms of anxiety.
- vii. The anxiety symptoms translated into depression symptoms. The fearful and scary nature of the conflict and its consequences led many farmers (63%) to feel low in energy in their jobs and lives. Although the farmers experienced these awkward feelings and life experiences, they (61.7%) never blame themselves for the bad things happening to them. Rather most of them blamed their rivals (herders) for causing all the psychological stressors.

Some farmers blamed themselves for not taking their education seriously, a reason for engaging in farming.

- viii. Whereas many shed tears especially the females, the men did not partly because of the gendered epistemic position that “men do not cry”. Crying was characterized as a female thing and it reflected the weakness of an individual. Loss of sexual interest or pleasure was not left out in the findings. The farmers and herders recounted how much they have lost the energy to engage their partners in intimate sexual relations. The consequences suffered as a result of the conflict either mentally crippled them to acknowledge sexual pleasure as a need for themselves and partners or performed poorly as attempts are made due to the reminders that drop in their minds during the acts.
- ix. Females experienced more anxiety and depression symptoms than male respondents. The results inferred that farmers and herders did not experience the same level of anxiety and depression and thus the former group experienced more of this psychological or mental illness.

Objective three assessed how the land-use conflict has influenced the social wellbeing of the conflict actors. The major findings were:

- i. The farmer-herder conflicts in Asante-Akyem North District have led to the death of both farmers and herders, causing mortality rates to increase. Records suggest that the conflict as

of 2018 had taken away the lives of 69 indigene farmers. Statistics on the number of deceased herdsmen were not documented.

- ii. The conflict has also led many farmers to have injuries and permanent scars. These scars on the bodies of the victims, according to them constantly remind them of the atrocities. The other aspect of injuries and lasting defects is sexual and gender-based violence where some female victims got raped and sexually assaulted by some herdsmen. These experiences impressed them with emotional and psychological torture.
- iii. Generally, the conflict has been a setback for the development of the entire District. The repetitive conflicts have led to the disruption of education, destruction of physical infrastructure, displacement, weakened powers of local authorities, ill-branding of the District and Ghana, weak security systems, food insecurity, illicit trading in drugs and sex, and destruction of cultural and familial values.

The following were the key findings of the fourth objective, which explored the coping strategies used by the farmers and herders:

- i. The actors indicated six distinct coping strategies used in response to the experiences of the trauma and violence associated with the farmer-herder conflict in the District. These strategies which were further categorized into three themes



(cognitive, emotional, and behavioral) included religion, non-forced migration, working harder, socio-cultural support, avoidance, and economic strategy. Cognitive coping strategies included religion and non-forced migration while socio-cultural support, working harder, and economic strategy were grouped as behavioral strategies. Similarly, avoidance as a disengagement strategy was labeled an emotion-focused coping strategy.

- ii. Most of the farmers and indigene herders used religion and spiritual practices to cope with the trauma, anxiety, depression, and poor life satisfaction. The findings showed that religious coping was more pronounced in the narratives by females and older adults than males and younger farmers and among crop farmers than herders.
- iii. Conflict victims resorted to non-forced migration either to avoid the conflict and its dreadful effects or to move out and have their jobs changed. There were also reports of migration within the Agogo district. This perhaps implied that some communities within the district are safer than others. The findings further showed that there were gendered experiences in relation to migration as a coping strategy and that fewer males than females migrated. Again, more farmers than herders were reported to temporarily migrating to other places.

- iv. Even though farmers and herders adopted several ways to cope with the stress, trauma, and depression that emanate from the resource-use conflict, trying to forget (denial) was also described as potent means to dealing with the psychosocial effects of the conflict. The study makes known how conflict victims try to forget the pains associated with the conflict as a way of avoiding physical health problems, a thought of care and welfare about their future generation, and fear of future harm. In this way, some victims assume that there is/are no stressor(s). Some victims admitted using “trying to forget” as a coping strategy because they feel the situation can never be changed though it is undeniably stressful and traumatizing.
- v. One other theme that emerged as a behavioral coping mechanism was socio-cultural support. This declared the essence of social capital and cultural identity. The findings in this theme revealed that whereas some victims sought social support from friends and family, support from the community, institutions, and groups, there were also cultural activities that groups performed to cope with the conflict. Youth peers also served for others as a source of social support. Youths that are into farming and herding expressed their feelings and thoughts and also engaged in activities such as sports and singing to relieve them of the stress, trauma, and depression they have

experienced. This behavioral strategy was employed both by the farmers and herders.

- vi. More herdsmen than crop farmers employed working harder as coping strategies.
- vii. Individuals and households devised economic strategies to enable them to survive. This strategy includes acquiring loans to revamp the farming and herding business, livelihood diversification, household role sharing, and setting new economic life goals. To restore the economic shocks among individuals and households, actors opined that they gained support from banks and other credit facilities.

## **Conclusions**

Generally, the study highlights the changing dynamics of developmental discourse beyond tangible issues to the intangible aspects to include psychosocial/mental health issues, especially in conflict-affected areas. The study explored the causes of the farmer-herder conflicts through a psychological lens from the conflict actors' dimension. Individual actors formed frames based on senses and experiences and these influence their collective processes on reasoning and intuitions. Throughout the explorations, actors either inductively or deductively processed sensory information and/or interpret these sensations by their knowledge, experiences, and thoughts. During framing, actors skewed the processes using scanty information to create single interpretations and this encouraged conflicts. These were influenced by their beliefs, values, prejudices, power, expectations, and

life experiences. It revealed that the psychological lens on the causes of conflicts goes beyond thoughts and feelings to include socio-cultural dimensions.

Also, the study determined that mental constructions and its attended hostile reaction between actors of conflict, usually lead to symptoms and levels of psychological disturbances, emotional distress, and diagnosable mental health problems that differ across gender, occupation and the faction of the conflict to which one belongs. The psychosocial illnesses experienced by the victims included trauma, anxiety, depression, and poor satisfaction in life. Through this study, it revealed the link between mental and physical health. The relationship between these variables posits that people who experience depression and anxiety tend to live shorter than those who do not have these conditions.

They are also likely to experience heart-related diseases. In other words, negative emotions through the experience of high anxiety and depression correlate with deficits in a person's physical well-being. Conflict actors who experience scars on their skins are likely to experience a mental illness called psoriasis, a condition in which the effects go beyond the visual signs impacting psychological well-being and quality of life. In addition to these psychological effects, the study investigated how conflicts do impose social costs such as voluntary mobility which usually disadvantages women and other vulnerable groups, damages, and loss of human and material resources. It discussed the loss of social capital and poor and delayed developments within conflict settings.

Further, this study provides a context-specific, in-depth analysis of coping strategies on psychosocial well-being outcomes. Six distinct types of coping

strategies specific to this study included in the analysis, religion, non-forced migration, working harder, socio-cultural support, avoidance, and economic strategies. These strategies were grouped into three domains namely: cognitive, emotional, and behavioral strategies. The choice of these strategies associated with better or poorer psychosocial well-being. This study refuted the general argument that cognitive-focused coping benefits mental health while emotion-focused strategies harm mental health, particularly in conflict and post-conflict settings. Although the assertion is partly the case that cognitive-focused coping was associated with increased internalizing and externalizing problems and reduced pro-social behaviors while emotion-focused strategies were not, this study suggests coping flexibility, or use of multiple coping strategies may be particularly useful to improving psychosocial and well-being in general. Conflict victims who combined several coping strategies experienced better psychosocial well-being. The need for context-specific understandings of coping strategies in conflict-affected populations is highlighted by the results of the study.

### **Recommendations**

The study makes recommendations based on the findings and conclusions from the study.

### **Government and Its Agencies**

- i. The central government through the District Assembly, Ministry of Health, Regional and District Security Councils, and Peace Councils should develop a comprehensive program to incorporate mental health and

conflicts. This would help to know how the two factors influence each other and devise sustainable solutions for them.

- ii. Regional and District Agriculture Officers must draw programs that encourage mixed rotational farming where both farmers and herders would benefit from it. This is to ensure food security despite the recurrent conflict.
- iii. There would also be the need to institute trauma management programs in schools' curriculum as students, directly and indirectly, observe and experience trauma-related issues. This recommendation is to minimize the psycho-cultural effects of conflicts.
- iv. The annual anti-Fulani herdsmen campaign practiced in the Asante Akyem North District is against international relations and thus makes the government of Ghana unpopular in the world. This study recommends that the government makes policies where the two factions see and appreciate the humanity of the actions and inactions and the mutual benefits they get from each other.
- v. This study abhors cheap diplomacy where security officers are deployed yearly to temporarily salvage the menace. Rather, this study recommends the use of the security personnel in preventive ways whereby the security officials would be deployed at the borders of the district especially just before and during the dry seasons to deal with the herders.
- vi. The government must also provide the appropriate policy frameworks that clearly spell out the limit to which each faction can go in engaging in their occupational activities. This will help the farmers; the Fulani herdsmen and

the state security agencies to implement and adhere to the ECOWAS protocol on Trans-Humans, which Ghana is a signatory.

- vii. This study recommends duly implementing the ECOWAS protocol with the focus on the local decision in mind. Thus, there is no need to innocently dampen the implementations of the protocol.
- viii. Appropriate stakeholders must properly demarcate grazing routes for the herdsmen.
- ix. The government and its agencies should focus on the early warning signals to minimize the destructive nature of the conflicts as the management mechanisms are not as totally effective as preventive measures. The District Peace Councils or Security Councils should be tasked with the responsibility of reporting either monthly or quarterly on possible triggers of conflicts within their jurisdictions. This will minimize the lengthy times, loss of lives and properties, psychological trauma, and huge resources expended on managing the conflicts.

#### **Civil Society Organizations (CSOs)**

- i. Non-governmental organizations including faith-based organizations should take up before-conflict measures instead of the post-conflict initiatives to sensitize and educate community members on the need for a peaceful co-existence. The education program can comprise all activities that improve attitudes, knowledge, and capabilities for conflict management. People of all levels of the social structure should be shown how to alter their conflict-related behavior, how to counteract escalation of

violence and how to promote conflict management. This could take the form of organizing community outreach groups and equipping members with mediation and negotiation skills to undertake conflict management activities at the grassroots level.

- ii. This study acknowledges the relevance of mental health and psychosocial support programs and their roles in peacebuilding. Traumatized individuals can become stressors for the district and trigger further violence if left unattended. For this reason, the study calls on the expertise of psychologists, with funding from the central government and CSOs, and leadership support from the local authorities to provide psychosocial support or trauma healing to the conflict victims.
- iii. While the roles of conflict psychologist and counselors will be instrumental in helping the victims of the conflict to overcome their fears, stress and emotional imbalances, there is equally the need for timely reconciliation that involves the traditional leaders and members of both factions of the conflict as well as farmer associations such as the General Agricultural Workers Union.
- iv. Religious leaders must also incorporate into their activities, sensitization programs to support the work of other stakeholders in the mental deconstruction exercises. Achieving the objective of ensuring sustained peace in AAND requires a strong national government's commitment to its nested regional and local governments. It further requires material support



to enable the individuals, groups, and institutions involved in the education, mediation, and deconstruction exercise to function effectively.

- v. There is the need for a community-level education that emphasizes constructive framing relationships between the transmigrant pastoralists and the host farming populace to ensure their peaceful coexistence and minimize conflict eruptions. The educational campaign should involve the role of psychologists who would be responsible for applying their expertise in supporting the various factions of the conflict in the deconstructing process.

### **Community Leaders**

- i. Community leaders must be coached on the mental health implications of conflicts. These would help them appreciate the depths of mental health impacts that emanate from conflicts as well as the delays in community development compared to non-conflict communities.
- ii. This study recommends that community leaders take very neutral positions in this conflict so they can help implement conflict management strategies without fears. By so doing, these authorities take selfless roles that take into consideration the general well-being of the people in Asante Akyem North District.
- iii. Again, traditional leaders should improve their skills in conflict management by developing partnerships and networks with institutions of higher learning like the KAIPTC and WANEP to enhance their knowledge and skills in conflict management. Through this, they will be able to share ideas and

exchange notes on common issues in arbitration, mediation, forgiveness, reconciliation and other conflict management practices.

- iv. In order to minimize conflict eruptions, it is necessary for the conflict actors to use several sources of information and to adopt several interpretations of these sources with the aim to validate the frames made before acting.

### **Adversaries (Crop Farmers and Herders)**

- i. Both farmers and herders should be willing to engage with others in peaceful discussions on ways to resolve their differences without the use of violent approaches. If adversaries are holding on to old hurts and resentments, their ability to see the reality of the current situation will be impaired. Rather than looking to the past and assigning blame, they should focus on what they can do in the “here-and-now” solve their differences.
- ii. Both crop farmers and herders must abide by the directives given by stakeholders for peaceful coexistence.
- iii. The study recommends interventions that support faith-based and emotion-focused strategies for improving well-being as these only temporarily promoted psychosocial well-being for the conflict actors.

### **Contributions to Knowledge**

The rationale for every academic research lies in its ability to fill some identified gaps. In line with this, the current study filled a number of identified gaps, thereby contributing to knowledge.

Several studies on the farmer-herder conflict in the Asante Akyem North District have explored the causes of the conflict explaining these causes from different epistemological perspectives. Whereas these researchers have explained the resource-use conflict stating that population growth, climate change, resource scarcity, among others are the underlying causes, this study argues alternatively that the causes of this resource-use conflicts start with mental constructions where frames are formed. These frames are cognitive models formed with informative and guiding functions and are built upon underlying structures of beliefs, values, and experiences that actors construct to distinguish themselves in unique ways. In other words, the study explored the causes of the conflict from the psychological lens: how perceptions of conflict in different phases are constructed and how the specific framing affects the development of the conflict and its management.

The study connects conflict and mental health studies. It highlights the extent to which conflicts affect the mental health of the people involved in conflicts. Thus, this study deviated from the routine socio-economic impact assessments of conflicts and delved into the intangible dimensions, highlighting the consequences of conflicts to include anxiety, depression, trauma, and poor life satisfaction which were less explored by the prior studies. The psychological scales opine that to effectively explore how respondents do well or bad on the scale, take into consideration the scientifically cut-off points. This principle was duly applied in the analyses of data in this study. Additionally, this study further runs a factor analysis to deepen the arguments on these scales. The aim was to simplify, summarize and reduce data into fewer dimensions and to observe their interrelated

measures. Correlation analysis was also run on the categorical Impact of Event Scale-Revised Edition.

The study supported the World Health Organization's definition of health which concludes that there is no health without mental health. Nonetheless, this study thus adds that the dimensions of health in the definition (physical, mental, and social) cannot thrive in a conflict environment. This study redefines health as a state of complete physical, mental, and social well-being and not merely the absence of diseases or infirmity in a peaceful and stable environment or society.

The study agreed with the Complete Mental Health Model that mental health or psychosocial well-being is in a continuum. That, in the heats of the conflicts, there are high levels of psychological symptoms but subsides as the conflict gets calmer and reduced. However, the study adds that the model should take into consideration the context-specific conditions during application.

Methodologically, this study moved slightly away from the purely quantitative applications of psychological scales on data collection and analysis. It highlights the relevance of adding voice to figures. This approach helped to know the multiple realities of the conflict victims as far as the psychological effects of conflicts are concerned.

The study filled a data gap by exploring the capability skills (coping strategies) embedded in conflict victims to master, reduce or tolerate the internal and/or external demands that are created by psychosocial stressors emanating from conflict settings. The study highlighted the consciousness of livelihood security theory. Thus, ensuring the safety of livelihoods in conflict settings.

This study debunked the western style of conflict management (use of force or the army) in the annual anti-herdsmen expulsion policy and argue that the policy is not a sustainable one. Rather, a sustainable approach to managing the farmer-herder conflict in AAND must take cognizance of the psychology of the actors as well as the cultural tenets of the people involved.

The conceptual framework is unique as it reveals psychological perspectives to conflict eruptions, mental health challenges, and capabilities imbibed in the actors to master ways to individually cope with the conflict. The framework also discusses the management options taking into cognizance the psychological standpoints. This implies that sustainable conflict management requires a holistic approach that transcends the tangible aspect to include the intangible dimensions.

### **Suggestions for Further Research**

Based on the key findings, the following thematic areas are suggested for further research.

- i. Assessing the psychosocial effects of conflict in Ghana is rarely researched and this study suggests that this study be replicated in areas where there are conflicts such as the Dagbon chieftaincy conflict, the Nkonya-Alavanyo land dispute, and the farmer-herder conflicts in the Afram Plain areas in the Eastern region among others.
- ii. Explore the gender and psychosocial effects of the Asante Akyem North District's farmer-herder conflicts.
- iii. Investigate the nexus between migration and conflict.

- iv. Explore media framing of the farmer-herder conflicts and how that influences the eruption of the conflicts and its related psychological effects on the people.
- v. The study revealed qualitative data on framing and coping strategies. This study suggests that these qualitative data be assessed through a quantitative approach to know the prevalent causes of conflict and coping strategies.
- vi. Explore the use of hybrid (indigenous and western) conflict management styles to managing the AAND farmer-herder conflicts.

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Farming  
Other.....

**NB: Question 8 to 10 applies to migrant herders only**

- (8) What is your ethnicity.....  
(9) How long have you been living in this community?  
1-5years, 6-10years, 10-20years, 20-30years, 30years and above  
(10). Which country do you hail from? .....

**SECTION B: Psychological Effects of the Farmer-Herder Conflict**

**13.** Below is a list of difficulties people sometimes have after stressful life events. Please indicate the extent to which you were greatly affected by the farmer-herder conflict in this community.

**0 = Not at all      1 = A little      2 = Moderately      A      lot      =      3**

**Extremely = 4**

**IES-R**

**0 1 2 3 4**

1. Any reminder brought back feelings about it
2. I had trouble staying asleep
3. Other things kept making me think about it
4. Pictures about it popped into my mind
5. I found myself acting or feeling like I was back at that time
6. I thought about it when I didn't mean to
7. I had waves of strong feelings about it
8. I had dreams about it
9. I felt watchful and on-guard
10. I had trouble concentrating
11. I felt irritable and angry
12. I was jumpy and easily startled
13. Reminders of it caused me to have physical reactions
14. I had trouble falling asleep
15. I tried not to think about it
16. I tried to remove it from my memory

- 17. I felt as if it hadn't happened or it wasn't real
- 18. My feelings about it were kind of numb
- 19. I stayed away from reminders about it
- 20. I tried not to talk about it
- 21. I avoided letting myself get upset when I thought about it or  
was reminded of it
- 22. I was aware that I still had a lot of feelings about it, but I  
didn't deal with them

**Total**

14. Listed below are symptoms or problems that people sometimes have. Please read each one carefully and describe how much the symptoms bothered you or distressed you following the farmer-herder conflicts. Place a check in the appropriate column

	<b>HSCL</b>	<b>Not at all</b>	<b>A little</b>	<b>Quite a bit</b>	<b>Extremely</b>
1.	Suddenly scared for no reason				
2.	Feeling fearful/scared				
3.	Faintness, dizziness or weakness				
4.	Nervousness or shakiness inside				
5.	Heart pounding or racing				
6.	Trembling				
7.	Feeling tense				
8.	Headaches				
9.	Spell of terror or panic				
10.	Feeling restless or can't sit still				



11. Feeling low in energy,  
slowed down
12. Blaming yourself for things
13. Crying easily
14. Loss of sexual interest or  
pleasure
15. Poor appetite
16. Difficulty falling asleep,  
staying asleep
17. Feeling hopeless about  
future
18. Feeling blue
19. Feeling lonely
20. Thought of ending your life
21. Feeling of being trapped or  
caught
22. Worry too much about  
things
23. Feeling no interest in things
24. Feeling everything is an  
effort
25. Feeling of worthlessness

## APPENDIX B

### INTERVIEW GUIDE FOR STAKEHOLDERS

#### Traditional leader

##### A. Causes

- How would you describe the farmer-herder conflict?

Probe:

Knowledge of the conflict

How does the culture of Fulani herders interfere with the culture of crop farmers in this community?

How do these actors (crop farmers and herders) see each other?

How do they get on as community members? Are they friends or enemies?

Would you say the herders feel they belong in this community? Explain your answer

How much have the indigene crop farmers accepted the herders in this community?

How much of communal participation are the herders allowed in this community: decision making, communal gathering, leadership?

What role do the herders play during the ritual performance for agricultural production, akwasidae festival and other occasions that require all agriculturists?

Do you think the herders or farmers have deep-seated emotions that make them retaliate in conflict? Explain

How much negative emotions does each group have towards the other?

What are the triggers of the conflict?

##### B. What is the nature (violent or non-violent) of the farmer-herder conflicts?

If violent, probe for what makes it violent (weapons, open battles, destruction of properties, etc). Also probe for physical, psychological, social, and economic damages

If not violent, probe for the form it takes or the underlying reasons

##### C. Actor analysis

Who are the actors in the farmer-herder conflicts?

What are their main interests? Probe for more data on *need for land, economic resources, cultural values - identity to lands, rituals.*

#### **D. Effects**

The effects of the conflict (psychological: PTS (intrusion, hyper-arousal, avoidance), anxiety, depression)

Social Effects (relational, social support, work activities, use of community facilities, communal participation)

#### **E. Coping Strategies**

1. What coping strategies do the victims employ? **Probe**
2. Are these strategies the same for the youth, men and women, farmers and herders? **Probe**
3. How effective are these strategies? **Probe**

#### **Conflict Management Strategies**

- A. Are there any efforts in managing/resolving farmer-herder conflicts?
- B. Who is/are at the centre of these management efforts? (probe for both state and non-state efforts)
- C. What mechanisms were employed by these people to managing the conflict? (probe for data on whether the mechanisms were traditional/indigenous or Western-centered mechanisms)
- D. If indigenous mechanisms were employed, how were they administered and by who or which individuals? (probe for data on how that indigenous mechanisms were done and whether it involved all the adversaries to the conflicts)
- E. Where are the indigenous strategies employed?
- F. How has this indigenous mechanism employed been able to manage the conflict? (probe for the **success or failures of the mechanisms**)

- G. How can the cultural/indigenous strategies be used to sustainably manage the conflict?
- H. How can individuals involved in using the cultural strategies be equipped to effectively execute their functions to culturally sustain the management of the conflict?
- I. What western-centered (foreign) mechanisms have been employed?
- J. What makes the farmer-herder conflict in the area difficult to manage? (Probe for underlying reason for the frequent eruption of the conflict)
- K. How could the conflict be resolved to the satisfaction of all the parties involved? (probe for management styles)

### **Cattle owners and traders (entrepreneur)**

#### **A. Causes**

How would you describe the farmer-herder conflict? (probe for knowledge of the conflict)

How does the culture of Fulani herders interfere with the culture of crop farmers in this community?

How do these actors (crop farmers and herders) see each other?

Describe how the crop farmers relate with the herders? Are they friends or enemies?

Would you say the herders feel they belong in this community? Explain your answer

How much have the indigene crop farmers accepted the herders in this community?

How much of communal participation are the herders allowed in this community: decision making, communal gathering, leadership?

What role do the herders play during ritual performance for agricultural production, akwasidae festival and other occasion that require all agriculturist?

Do you think the herders or farmers have deep seated emotions that make them retaliate in conflict? Explain

How much negative emotions does each group have towards the other?

What are the triggers of the conflict?

B. What is **the nature** (violent or non-violent) of the farmer-herder conflicts?  
If violent, probe for what makes it violent (weapons, open battles, destruction of properties, etc). Also probe for physical, psychological, social, and economic damages

If not violent, probe for the form it takes or the underlying reasons

**C. Actor analysis**

Who are the actors in the farmer-herder conflicts?

What are their main interests? Probe for more data on *need for land, economic resources, cultural values, identity to lands, rituals.*

**D. Effects**

How has the conflict affected cattle business?

How are you ensuring food security despite the conflict – cattle production?

**E. Coping Strategies**

1. What coping strategies do you employ? **Probe**
2. Are these strategies the same for the all? **Probe**
3. How effective are these strategies? **Probe**

**F. Conflict Management Strategies**

- What does your organisation do to bring about peace when the conflict starts?
- What does your organisation do to ensure that it sustains the peace?
- What strategies would your organisation recommend to sustain peace?
- Aside your organisation, are there any efforts in managing/resolving farmer-herder conflicts in this community?
- Who is/are at the centre of these management efforts? (probe for both state and non-state efforts)
- What mechanisms were employed by these people to managing the conflict? (probe for data on whether the mechanisms were traditional/indigenous or Western-centered mechanisms)

- If indigenous mechanisms were employed, how were they administered and by who or which individuals? (probe for data on how that indigenous mechanisms were done and whether it involved all the adversaries to the conflicts)
- Where are the indigenous strategies employed?
- How has this indigenous mechanism employed been able to manage the conflict? (probe for the **success or failures of the mechanisms**)
- How can the cultural/indigenous strategies be used to sustainably manage the conflict?
- How can individuals involved in using the cultural strategies be equipped to effectively execute their functions to culturally sustain the management of the conflict?
- What makes the farmer-herder conflict in the area difficult to manage? (Probe for underlying reason for the frequent eruption of the conflict)
- Is there any way the conflict could be resolved to the satisfaction of all the involved parties?  
(probe for management styles)

## **Health Officers**

### **A. Causes**

How would you describe the farmer-herder conflict? (probe for knowledge of the conflict)

How does the culture of Fulani herders interfere with the culture of crop farmers in this community?

How do these actors (crop farmers and herders) see each other?

Describe how the crop farmers relate with the herders? Are they friends or enemies?

Would you say the herders feel they belong in this community? Explain your answer

How much have the indigene crop farmers accepted the herders in this community?

How much of communal participation are the herders allowed in this community: decision making, communal gathering, leadership?

What role do the herders play during ritual performance for agricultural production, akwasidae festival and other occasion that require all agriculturist?

Do you think the herders or farmers have deep seated emotions that make them retaliate in conflict? Explain

How much negative emotions does each group have towards the other?

What are the triggers of the conflict?

A. What is **the nature** (violent or non-violent) of the farmer-herder conflicts?

If violent, probe for what makes it violent (weapons, open battles, destruction of properties, etc). Also probe for physical, psychological, social, and economic damages

If not violent, probe for the form it takes or the underlying reasons

B. *Actor analysis*

Who are the actors in the farmer-herder conflicts?

What are their main interests? Probe for more data on *need for land, economic resources, cultural values, identity to lands, rituals.*

B. **Effects**

- Have you had patients that report to your facility as a result of the conflict?
- How often do they report about the conflict?
- What reports do they give?
- What have been the diagnoses for such people: BP rise, injuries, anxiety, depression, PTSD, ETC
- Are their conditions sometimes referred to bigger health facility? Probe for the serious nature of the conditions that demand referral.
- Which category of age group often report about health issues that emanate from this conflict? Children/aged, youth, men, women probe for the why and how questions

- Is the health facility opened to all including the herders?
- How often do the herders (Fulani) patronise the facility?
- What health conditions do they report about?
- Do the staff in this facility get scared or anxious about the conflict happenings?
- How does the farmer-herder conflict affect the work activities of the facility?
- How does the farmer-herder conflict affect post of new staff to this community?
- Do you have clinical counselling unit to deal with the psychological issues among the patients' particularly the "conflict patients?". If yes, what motivated you to have one. If no, what explains this?

### **Coping Strategies**

1. What coping strategies do the victims employ? **Probe**
2. Are these strategies the same for the youth, men and women, famers and herders? **Probe**
3. How effective are these strategies? **Probe**

### **C. Conflict Management Strategies**

- Are there any efforts in managing/resolving farmer-herder conflicts?
- Who is/are at the centre of these management efforts? (probe for both state and non-state efforts)
- What mechanisms were employed by these people to managing the conflict? (probe for data on whether the mechanisms were traditional/indigenous or Western-centered mechanisms)
- If indigenous mechanisms were employed, how were they administered and by who or which individuals? (probe for data on how that indigenous mechanisms were done and whether it involved all the adversaries to the conflicts)
- Where are the indigenous strategies employed?



- How has this indigenous mechanism employed been able to manage the conflict? (probe for the **success or failures of the mechanisms**)
- How can the cultural/indigenous strategies be used to sustainably manage the conflict?
- How can individuals involved in using the cultural strategies be equipped to effectively execute their functions to culturally sustain the management of the conflict?
- What western-centered or foreign mechanisms have been deployed?
- What makes the farmer-herder conflict in the area difficult to manage? (Probe for underlying reason for the frequent eruption of the conflict)
- How could the conflict be resolved to the satisfaction of all the involved parties?  
(probe for management styles)

### **Education officer**

#### **4. Causes**

How would you describe the farmer-herder conflict? (probe for knowledge of the conflict)

How does the culture of Fulani herders interfere with the culture of crop farmers in this community?

How do these actors (crop farmers and herders) see each other?

Describe how the crop farmers relate with the herders? Are they friends or enemies?

Would you say the herders feel they belong in this community? Explain your answer

How much have the indigene crop farmers accepted the herders in this community?

How much of communal participation are the herders allowed in this community: decision making, communal gathering, leadership?

What role do the herders play during ritual performance for agricultural production, akwasidae festival and other occasion that require all agriculturist?

Do you think the herders or farmers have deep seated emotions that make them retaliate in conflict? Explain

How much negative emotions does each group have towards the other?

What are the triggers of the conflict?

A. What is **the nature** (violent or non-violent) of the farmer-herder conflicts?

If violent, probe for what makes it violent (weapons, open battles, destruction of properties, etc). Also probe for physical, psychological, social, and economic damages

If not violent, probe for the form it takes or the underlying reasons

B. *Actor analysis*

Who are the actors in the farmer-herder conflicts?

What are their main interests? Probe for more data on *need for land, economic resources, cultural values, identity to lands, rituals.*

## 5. Effects

Do the staff in this facility get scared or anxious about the conflict happenings?

How does the farmer-herder conflict affect the work activities of the facility?

How does the farmer-herder conflict affect post of new staff to this community?

Do you have counselling unit to deal with the psychological issues among students particularly those whose household have suffered the conflict? If yes, what motivated you to have one. If no, what explains this?

How does the conflict affect the students in the following ways:

- Performance
- Enrolment/Attendance
- Attitude and behaviour towards their mates and school authorities

Do the students feel scared as a result of the farmer-herder conflicts? Yes No

How are they manifested

Do the students get depressed as a result of the farmer-herder conflicts? Yes No

How are they manifested: feeling of worthlessness, withdrawal from hobbies and activities they like doing, fear of dying, loss of appetite, etc

How much of intrusive thoughts do the students experience?

How much do victimized students try to avoid conversations about the conflict?

What symptoms characterize their hyper-arousal reactions? Irritable, jumpiness, physical reactions, poor concentration

How do the authorities of the school deal with these symptoms?

### **Coping Strategies**

1. What coping strategies do the victims employ? **Probe**
2. Are these strategies the same for the youth, men and women, farmers and herders? **Probe**
3. How effective are these strategies? **Probe**

### **Conflict Management Strategies**

- L. Are there any efforts in managing/resolving farmer-herder conflicts?
- M. Who is/are at the centre of these management efforts? (probe for both state and non-state efforts)
- N. What mechanisms were employed by these people to managing the conflict? (probe for data on whether the mechanisms were traditional/indigenous or Western-centered mechanisms)
- O. If indigenous mechanisms were employed, how were they administered and by who or which individuals? (probe for data on how that indigenous mechanisms were done and whether it involved all the adversaries to the conflicts)
- P. Where are the indigenous strategies employed?
- Q. How has this indigenous mechanism employed been able to manage the conflict? (probe for the **success or failures of the mechanisms**)
- R. How can the cultural/indigenous strategies be used to sustainably manage the conflict?

- S. How can individuals involved in using the cultural strategies be equipped to effectively execute their functions to culturally sustain the management of the conflict?
- T. What western-centered mechanism have been employed
- U. What makes the farmer-herder conflict in the area difficult to manage?  
(Probe for underlying reason for the frequent eruption of the conflict)
- V. How could the conflict be resolved to the satisfaction of all the involved parties?  
(probe for management styles)

### **Security official**

#### **Causes**

How would you describe the farmer-herder conflict? (probe for knowledge of the conflict)

How does the culture of Fulani herders interfere with the culture of crop farmers in this community?

How do these actors (crop farmers and herders) see each other?

Describe how the crop farmers relate with the herders? Are they friends or enemies?

Would you say the herders feel they belong in this community? Explain your answer

How much have the indigene crop farmers accepted the herders in this community?

How much of communal participation are the herders allowed in this community: decision making, communal gathering, leadership?

What role do the herders play during ritual performance for agricultural production, akwasidae festival and other occasion that require all agriculturist?

Do you think the herders or farmers have deep seated emotions that make them retaliate in conflict? Explain

How much negative emotions does each group have towards the other?

What are the triggers of the conflict?

A. What is **the nature** (violent or non-violent) of the farmer-herder conflicts? If violent, probe for what makes it violent (weapons, open battles, destruction of properties, etc). Also probe for physical, psychological, social, and economic damages

If not violent, probe for the form it takes or the underlying reasons

### B. *Actor analysis*

Who are the actors in the farmer-herder conflicts?

What are their main interests? Probe for more data on *need for land, economic resources, cultural values, identity to lands, rituals.*

## 6. Effects

- How safe is this community? Explain what underlines safe and unsafe community
- How do outsiders perceive this community? Conflict community, unsafe place, bedevilled with bad names/tags
- How does the farmer-herder conflict affect your work?
- How does the farmer-herder conflict affect post of new staff to this community?

## Coping Strategies

\*What coping strategies do the victims employ? **Probe**

\*Are these strategies the same for the youth, men and women, famers and herders? **Probe**

\*How effective are these strategies? **Probe**

## Conflict Management Strategies

- What does your council do to bring about peace when the conflict starts?
- What does your council do to ensure that it sustains the peace?
- What strategies would your council recommend to sustain peace?
- Aside you're your agency or council, are there any efforts in managing/resolving farmer-herder conflicts in this community?

- Who is/are at the centre of these management efforts? (probe for both state and non-state efforts)
- What mechanisms were employed by these people to managing the conflict? (probe for data on whether the mechanisms were traditional/indigenous or Western-centered mechanisms)
- If indigenous mechanisms were employed, how were they administered and by who or which individuals? (probe for data on how that indigenous mechanisms were done and whether it involved all the adversaries to the conflicts)
- Where are the indigenous strategies employed?
- How has this indigenous mechanism employed been able to manage the conflict? (probe for the **success or failures of the mechanisms**)
- How can the cultural/indigenous strategies be used to sustainably manage the conflict?
- How can individuals involved in using the cultural strategies be equipped to effectively execute their functions to culturally sustain the management of the conflict?
- What western-centered (foreign) mechanism have been employed
- What makes the farmer-herder conflict in the area difficult to manage? (Probe for underlying reason for the frequent eruption of the conflict)
- Is there any way the conflict could be resolved to the satisfaction of all the involved parties?  
(probe for management styles)

## **District Chief Executive (DCE)**

### **A. Causes**

How would you describe the farmer-herder conflict? (probe for knowledge of the conflict)

How does the culture of Fulani herders interfere with the culture of crop farmers in this community?

How do these actors (crop farmers and herders) see each other?

Describe how the crop farmers relate with the herders? Are they friends or enemies?

Would you say the herders feel they belong in this community? Explain your answer

How much have the indigene crop farmers accepted the herders in this community?

How much of communal participation are the herders allowed in this community: decision making, communal gathering, leadership?

What role do the herders play during ritual performance for agricultural production, akwasidae festival and other occasion that require all agriculturist?

Do you think the herders or farmers have deep seated emotions that make them retaliate in conflict? Explain

How much negative emotions does each group have towards the other?

What are the triggers of the conflict?

A. What is **the nature** (violent or non-violent) of the farmer-herder conflicts? If violent, probe for what makes it violent (weapons, open battles, destruction of properties, etc). Also probe for physical, psychological, social, and economic damages

If not violent, probe for the form it takes or the underlying reasons

### **B. Actor analysis**

Who are the actors in the farmer-herder conflicts?

What are their main interests? Probe for more data on *need for land, economic resources, cultural values, identity to lands, rituals.*

## **B. Effects**

- How does this menace affect your responsibility towards community development?
- How do outsiders perceive this community? Conflict community, unsafe place, bedevilled with bad names/tags
- Budget and conflict management

## **Coping Strategies**

\*What coping strategies do the victims employ? **Probe**

\*Are these strategies the same for the youth, men and women, farmers and herders? **Probe**

\*How effective are these strategies? **Probe**

## **Conflict Management Strategies**

- What does your office do to bring about peace when the conflict starts?
- What does your office do to ensure that it sustains the peace?
- What strategies would your office recommend to sustain peace?
- Aside your office, are there any efforts in managing/resolving farmer-herder conflicts in this community?
- Who is/are at the centre of these management efforts? (probe for both state and non-state efforts)
- What mechanisms were employed by these people to managing the conflict? (probe for data on whether the mechanisms were traditional/indigenous or Western-centered mechanisms)
- If indigenous mechanisms were employed, how were they administered and by who or which individuals? (probe for data on how that indigenous mechanisms were done and whether it involved all the adversaries to the conflicts)
- Where are the indigenous strategies employed?



- How has this indigenous mechanism employed been able to manage the conflict? (probe for the **success or failures of the mechanisms**)
- How can the cultural/indigenous strategies be used to sustainably manage the conflict?
- How can individuals involved in using the cultural strategies be equipped to effectively execute their functions to culturally sustain the management of the conflict?
- What western-centered mechanism have been employed
- What makes the farmer-herder conflict in the area difficult to manage? (Probe for underlying reason for the frequent eruption of the conflict)
- How could the conflict be resolved to the satisfaction of all the involved parties?  
(probe for management styles)

## **Agricultural Officer**

### **A. Causes**

How would you describe the farmer-herder conflict? (probe for knowledge of the conflict)

How does the culture of Fulani herders interfere with the culture of crop farmers in this community?

How do these actors (crop farmers and herders) see each other?

Describe how the crop farmers relate with the herders? Are they friends or enemies?

Would you say the herders feel they belong in this community? Explain your answer

How much have the indigene crop farmers accepted the herders in this community?

How much of communal participation are the herders allowed in this community: decision making, communal gathering, leadership?

What role do the herders play during ritual performance for agricultural production, akwasidae festival and other occasion that require all agriculturist?

Do you think the herders or farmers have deep seated emotions that make them retaliate in conflict? Explain

How much negative emotions does each group have towards the other?

What are the triggers of the conflict?

What is **the nature** (violent or non-violent) of the farmer-herder conflicts?

If violent, probe for what makes it violent (weapons, open battles, destruction of properties, etc). Also probe for physical, psychological, social, and economic damages

If not violent, probe for the form it takes or the underlying reasons

### ***Actor analysis***

Who are the actors in the farmer-herder conflicts?

What are their main interests? Probe for more data on *need for land, economic resources, cultural values, identity to lands, rituals.*

### **B. Effects**

- How has the farmer-herder conflict affected the work of these farmers (both crop and cattle farms)?
- How has the conflict affected agriculture production? (crop and animals)
- How are you ensuring food security despite the conflict?

### **Coping Strategies**

\*What coping strategies do the victims employ? **Probe**

\*Are these strategies the same for the youth, men and women, famers and herders? **Probe**

\*How effective are these strategies? **Probe**

### **Conflict Management Strategies**

- Are there any efforts in managing/resolving farmer-herder conflicts?

- Who is/are at the centre of these management efforts? (probe for both state and non-state efforts)
- What mechanisms were employed by these people to managing the conflict? (probe for data on whether the mechanisms were traditional/indigenous or Western-centered mechanisms)
- If indigenous mechanisms were employed, how were they administered and by who or which individuals? (probe for data on how that indigenous mechanisms were done and whether it involved all the adversaries to the conflicts)
- Where are the indigenous strategies employed?
- How has this indigenous mechanism employed been able to manage the conflict? (probe for the **success or failures of the mechanisms**)
- How can the cultural/indigenous strategies be used to sustainably manage the conflict?
- How can individuals involved in using the cultural strategies be equipped to effectively execute their functions to culturally sustain the management of the conflict?
- What western-centered/foreign mechanisms have been employed?
- What makes the farmer-herder conflict in the area difficult to manage? (Probe for underlying reason for the frequent eruption of the conflict)
- How could the conflict be resolved to the satisfaction of all the involved parties?  
(probe for management styles)
- What effort(s) has your office laid down to resolve the conflict?

## APPENDIX C

### FOCUS GROUP DISCUSSION GUIDE

#### Crop Farmers

##### A. Causes

What is the culture of the indigene crop farmers in this community?

Who are the herders?

What is their main occupation?

Where do they hail from?

What is the culture of the Herders (Fulani)

How does your culture affect the activities of herding?

How do the herders perceive the crop farmers?

How do crop farmers perceive the herders?

Are the herders your enemies?

What explains the answer you provided above?

What do men and women do differently regarding crop farming?

What is the relationship between you and your crops?

What type of crops do the crop farmers grow in this community?

Is it same for men and women? Why? What explains this?

How does the culture of herders affect the activities of crop farming?

Do the herders feel belong in this community? Explain

How much have the indigenes accepted the herders in this community?

How much of communal participation are the herders allowed in this community: decision making, communal gathering, leadership?

Do you think the herders have deep seated emotions that make them retaliate in conflict? Explain

What is the main reason or interest of the crop farmers in this conflict?

What are the triggers of the farmer-herder in this community conflict?

How and why do you perform rites on a given land for agricultural production?

What role do herders play during festivals for agricultural production?

## **B. Nature/Actors of the conflict**

What is **the nature** (violent or non-violent) of the farmer-herder conflicts?

If violent, probe for what makes it violent (weapons, open battles, destruction of properties, etc).

## **Psychological Effects**

### **PTSD**

Do you experience unwanted distressing memories about the farmer-herder conflicts in this community?

How often have you been having these memories in the past month?

Are you able to stop thinking about the memories of the conflict when you want to?

How much do these memories bother you?

Have you been having dreams about the farmer-herder conflicts?

How intense are these dreams?

What happens when you have these dreams?

Do these dreams wake you up?

Are you able to go back to sleep?

Do you experience flashbacks of the farmer-herder conflicts?

What type of things or events remind you of the conflict?

How upset do you become?

Do others notice you are upset?

How long does it take you to calm down afterward?

What physical reactions do you experience at the thought of the farmer-herder conflicts?

Have you been making efforts to avoid thoughts or feelings related to the trauma?

Have you been making efforts to avoid activities, situations, or places that remind you of the trauma of the farmer-herder conflicts?

## **Depression**

Have you been viewing yourself or others (farmers/herders) in a more negative way due to the conflict?

What are some of the examples of this kind of thinking?

Did you think this way before the conflict?

How often have you thought this way in the past month?

How convinced are you that these thoughts gathered are true?

Have you blamed others for the conflict?

Have you had intense negative feeling such as fear, guilt or shame?

Have you lost interest in activities you used to do or engage in?

What kind of things did you used to enjoy doing that you don't do anymore as a result of the conflict?

Why don't you enjoy doing these activities anymore?

Have you felt detached from others as a result of the conflict?

Are there people you feel close to?

## **Anxiety**

Have you had difficulty concentrating?

Have you had difficulty staying asleep?

Have you been overly alert, on-guard (checking to see who is around you, etc)

What type of places, situations, events, people cause you to be anxious?

How long does it take to calm down?

Do others react the same way?

## **Social Effects**

What resources would you say you need to live well and be happy?

How would you say you are doing with respect to the stated resource?

What enables/ constrains your access to these resources

What do you think would help you gain better access to resources?

What kinds of activities do you participate within the family and community?

How satisfied would you say you are with this?

What enables/ constrains your ability to participate effectively?

What do you think would help you participate more effectively in activities in the family and community?

What relationships and connections beyond the household are important to your living well and being happy?

How satisfied are you with these relationships or connections?

What enables/ constrains your ability to develop relationships and connections?

What do you think would help you build better relationships and connections beyond the household?

Have you experienced displacement as a result of the farmer-herder conflict?

How much changes took place as a result of displacement compared to your original home: Place of stay, food, relationship, support, home management, children, health.

### **Coping Strategies**

\*What coping strategies do the victims employ? **Probe**

\*Are these strategies the same for the youth, men and women, farmers?

**Probe**

\*How effective are these strategies? **Probe**

### **Conflict Management Strategies**

- A. Are there any efforts in managing/resolving farmer-herder conflicts?
- B. Who is/are at the centre of these management efforts? (probe for both state and non-state efforts)
- C. What mechanisms were employed by these people to managing the conflict? (probe for data on whether the mechanisms were traditional/indigenous or Western-centered mechanisms)
- D. If indigenous mechanisms were employed, how were they administered and by who or which individuals? (probe for data on how that indigenous

mechanisms were done and whether it involved all the adversaries to the conflicts)

- E. Where are the indigenous strategies employed?
- F. How has this indigenous mechanism employed been able to manage the conflict? (probe for the success or failures of the mechanisms)
- G. How can the cultural/indigenous strategies be used to sustainably manage the conflict?
- H. How can individuals involved in using the cultural strategies be equipped to effectively execute their functions to culturally sustain the management of the conflict?
- I. What wester/foreign mechanisms have been employed?
- J. What makes the farmer-herder conflict in the area difficult to manage? (Probe for underlying reason for the frequent eruption of the conflict)
- K. How could the conflict be resolved to the satisfaction of all the involved parties?  
(probe for management styles)

### **Focus Group Discussion for Herders**

#### **A. Causes**

Who is a herder?

What is/are their main occupation?

Where do they hail from?

What is the culture of the herders?

How does your culture affect the activities of crop farming?

How do people perceive the herders generally?

How do crop farmers in this community perceive the herders?

Describe your relationship with the crop farmers in this community? Are they friends or enemies? What explains the answer you provided above?

What do men and women do differently regarding the herding as an occupation?

What is the relationship between you and your cattle?



What type of cattle do you herd? If there are different types.

Do you (herders) feel belonged in this community? Explain

How much have the indigenes accepted the herders in this community?

How much of communal participation are you allowed in this community: decision making, communal gathering, leadership?

Do you perform rites and rituals on grazing lands?

How do you perform these rites and rituals?

Do you experience deep seated emotions that makes you retaliate in conflict? Explain

Do you think that the crop farmers have deep seated emotions that make them retaliate in conflict? Explain

What are the triggers of the farmer-herder in this community conflict?

What is the main reason or interest of the herders in this conflict?

#### **A. Nature/Actors of the conflict**

What is **the nature** (violent or non-violent) of the farmer-herder conflicts?

If violent, probe for what makes it violent (weapons, open battles, destruction of properties, etc).

### **Psychosocial Effects of the Farmer-Herder Conflict**

#### **A. Effects**

##### **PTSD**

Do you experience unwanted distressing memories about the farmer-herder conflicts in this community?

How often have you been having these memories in the past month?

Are you able to stop thinking about the memories of the conflict when you want to?

How much do these memories bother you?

Have you been having dreams about the farmer-herder conflicts?

How intense are these dreams?

What happens when you have these dreams?

Do these dreams wake you up?

Are you able to go back to sleep?

Do you experience flashbacks of the farmer-herder conflicts?

What type of things or events remind you of the conflict?

How upset do you become?

Do others notice you are upset?

How long does it take you to calm down afterward?

What physical reactions do you experience at the thought of the farmer-herder conflicts?

Have you been making efforts to avoid thoughts or feelings related to the trauma?

Have you been making efforts to avoid activities, situations, or places that remind you of the trauma of the farmer-herder conflicts?

### **Depression**

Have you been viewing yourself or others (farmers/herders) in a more negative way due to the conflict?

What are some of the examples of this kind of thinking?

Did you think this way before the conflict?

How often have you thought this way in the past month?

How convinced are you that these thoughts gathered are true?

Have you blamed others for the conflict?

Have you had intense negative feeling such as fear, guilt or shame?

Have you lost interest in activities you used to do or engage in?

What kind of things did you used to enjoy doing that you don't do anymore as a result of the conflict?

Why don't you enjoy doing these activities anymore?

Have you felt detached from others as a result of the conflict?

Are there people you feel close to?

### **Anxiety**

Have you had difficulty concentrating?

Have you had difficulty staying asleep?

Have you been overly alert, on-guard (checking to see who is around you, etc)

What type of places, situations, events, people cause you to be anxious?

How long does it take to calm down?

Do others react the same way?

### **Social Effects**

What resources would you say you need to live well and be happy?

How would you say you are doing with respect to the stated resource?

What enables/ constrains your access to these resources

What do you think would help you gain better access to resources?

What kinds of activities do you participate within the family and community?

How satisfied would you say you are with this?

What enables/ constrains your ability to participate effectively?

What do you think would help you participate more effectively in activities in the family and community?

What relationships and connections beyond the household are important to your living well and being happy?

How satisfied are you with these relationships or connections?

What enables/ constrains your ability to develop relationships and connections?

What do you think would help you build better relationships and connections beyond the household?

Have you experienced displacement as a result of the farmer-herder conflict?

How much changes took place as a result of displacement compared to your original home: Place of stay, food, relationship, support, home management, children, health.

### **Coping Strategies**

\*What coping strategies do the victims employ? **Probe**

\*Are these strategies the same for the youth, men and women and herders? **Probe**

\*How effective are these strategies? **Probe**

## **Conflict Management Strategies**

- B. Are there any efforts in managing/resolving farmer-herder conflicts?
- C. Who is/are at the centre of these management efforts? (probe for both state and non-state efforts)
- D. What mechanisms were employed by these people to managing the conflict? (probe for data on whether the mechanisms were traditional/indigenous or Western-centered mechanisms)
- E. If indigenous mechanisms were employed, how were they administered and by who or which individuals? (probe for data on how that indigenous mechanisms were done and whether it involved all the adversaries to the conflicts)
- F. Where are the indigenous strategies employed?
- G. How has this indigenous mechanism employed been able to manage the conflict? (probe for the success or failures of the mechanisms)
- H. How can the cultural/indigenous strategies be used to sustainably manage the conflict?
- I. How can individuals involved in using the cultural strategies be equipped to effectively execute their functions to culturally sustain the management of the conflict?
- J. What western/foreign mechanisms are employed?
- K. What makes the farmer-herder conflict in the area difficult to manage? (Probe for underlying reason for the frequent eruption of the conflict)
- L. How could the conflict be resolved to the satisfaction of all the involved parties?  
(probe for management styles)

**What role has the herders' association and stakeholders play in managing or resolving the conflict?**

## **APPENDIX D**

### **FOCUS-GROUP DISCUSSION FOR MEN AND WOMEN GROUP AND YOUTH GROUP ON THE PSYCHOSOCIAL EFFECTS OF FARMER- HERDER CONFLICT**

#### **Psychological Effects**

##### **PTSD**

Do you experience unwanted distressing memories about the farmer-herder conflicts in this community?

How often have you been having these memories in the past month?

Are you able to stop thinking about the memories of the conflict when you want to?

How much do these memories bother you?

Have you been having dreams about the farmer-herder conflicts?

How intense are these dreams?

What happens when you have these dreams?

Do these dreams wake you up?

Are you able to go back to sleep?

Do you experience flashbacks of the farmer-herder conflicts?

What type of things or events remind you of the conflict?

How upset do you become?

Do others notice you are upset?

How long does it take you to calm down afterward?

What physical reactions do you experience at the thought of the farmer-herder conflicts?

Have you been making efforts to avoid thoughts or feelings related to the trauma?

Have you been making efforts to avoid activities, situations, or places that remind you of the trauma of the farmer-herder conflicts?

## **Depression**

Have you been viewing yourself or others (farmers/herders) in a more negative way due to the conflict?

What are some of the examples of this kind of thinking?

Did you think this way before the conflict?

How often have you thought this way in the past month?

How convinced are you that these thoughts gathered are true?

Have you blamed others for the conflict?

Have you had intense negative feeling such as fear, guilt or shame?

Have you lost interest in activities you used to do or engage in?

What kind of things did you used to enjoy doing that you don't do anymore as a result of the conflict?

Why don't you enjoy doing these activities anymore?

Have you felt detached from others as a result of the conflict?

Are there people you feel close to?

Do you sometimes feel like it would have been better you did not exist as a result of the conflict? how often? why?

## **Anxiety**

Have you had difficulty concentrating?

Have you had difficulty staying asleep?

Have you been overly alert, on-guard (checking to see who is around you, etc)

What type of places, situations, events, people cause you to be anxious?

How long does it take to calm down?

Do others react the same way?

Do you fear going out to access community facilities because of the conflict?

## **Social Effects**

What resources would you say you need to live well and be happy?

How would you say you are doing with respect to the stated resource?

What enables/ constrains your access to these resources

What do you think would help you gain better access to resources?

What kinds of activities do you participate within the family and community?

How satisfied would you say you are with this?

What enables/ constrains your ability to participate effectively?

What do you think would help you participate more effectively in activities in the family and community?

What relationships and connections beyond the household are important to your living well and being happy?

How satisfied are you with these relationships or connections?

What enables/ constrains your ability to develop relationships and connections?

What do you think would help you build better relationships and connections beyond the household?

Have you experienced displacement as a result of the farmer-herder conflict?

How much changes took place as a result of displacement compared to your original home: Place of stay, food, relationship, support, home management, children, health.

### **Coping Strategies**

\*What coping strategies do the victims employ? **Probe**

\*Are these strategies the same for the youth, men and women, famers and herders? **Probe**

\*How effective are these strategies? **Probe**

### **Observation checklist for study Areas**

Date/Time	Community	Name	of	Observation/Description
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item/Gesture

## APPENDIX E

### ETHICAL CLEARANCE FROM UNIVERSITY OF CAPE COAST

UNIVERSITY OF CAPE COAST

**INSTITUTIONAL REVIEW BOARD SECRETARIAT**

TEL: 0558093143 / 0508878309/ 0244207814 C/O Directorate of Research, Innovation and Consultancy  
E-MAIL: irb@ucc.edu.gh  
OUR REF: UCC/IRB/A/2016/547  
YOUR REF:  
OMB NO: 0990-0279  
IORG #: IORG0009096

22<sup>ND</sup> OCTOBER, 2019

Ms. Sabina Appiah-Boateng  
Department of Integrated Development Studies  
University of Cape Coast.

Dear Ms. Appiah-Boateng,

**ETHICAL CLEARANCE – ID (UCCIRB/CHLS/2019/28)**

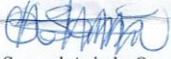
The University of Cape Coast Institutional Review Board (UCCIRB) has granted **Provisional Approval** for the implementation of your research protocol titled **Land-Use Conflicts and Psychosocial Well-Being: A Study of Farmer-Herder Conflict in Asante Akyem North District of Ghana**. This approval is valid from 22<sup>nd</sup> October, 2019 to 21<sup>st</sup> October, 2020. You may apply for a renewal subject to submission of all the required documents that will be prescribed by the UCCIRB.

Please note that any modification to the project must be submitted to the UCCIRB for review and approval before its implementation. You are required to submit periodic review of the protocol to the Board and a final full review to the UCCIRB on completion of the research. The UCCIRB may observe or cause to be observed procedures and records of the research during and after implementation.

You are also required to report all serious adverse events related to this study to the UCCIRB within seven days verbally and fourteen days in writing.

Always quote the protocol identification number in all future correspondence with us in relation to this protocol.

Yours faithfully,

  
Samuel Asiedu Owusu, PhD  
UCCIRB Administrator

**ADMINISTRATOR  
INSTITUTIONAL REVIEW BOARD  
UNIVERSITY OF CAPE COAST**



## APPENDIX F

### SUMMARY OF EMPIRICAL REVIEWS

No	Author(s)	Year of publication	Title	Location	Theories	Research Approach	Study Population	Sampling	Instruments for data collection	Findings
1.	Bukari and Schareika	2015	Stereotypes, prejudices and exclusion of Fulani pastoralists in Ghana	Ghana	Social Categorization	Qualitative	Fulani residents in Ghana, local farmers, Fulani pastoralists (including migrant herders, sedentary herders and cattle owners), local community residents, traditional chiefs, community leaders, and government officials.	Purposive	Interview guide, observation and FGD guides	Perceive the pastoralists as armed robbers, rapists, primitive and unclean, and as anon-citizens
2.	Onyebueke, Okwaraji, and Obiechina	2018	Assessing the psychological consequences of communal conflicts among the inhabitants of two conflict-affected communities in south east Nigeria	Nigeria	None	Quantitative	Inhabitants of two communities	Simple random sampling	General Health Questionnaire (GHQ - 12), PTSD Scale, Generalized anxiety disorder scale (GAD - 7), and Beck Depression Inventory (BDI - 2)	Mild symptoms of psychological distress, PTSD but moderate depression.  Youth (14-30 years) were negatively impacted by the conflict.  Both males and females experienced psychological distress and PTSD but were not depressed or anxious.
3	Krafona and Appiah-Boateng	2017	Reliability and factor structure of the IES-R among victims of violent conflict in a rural Ghana	Ghana	None	Quantitative	Rival community residents	Multi-stage sampling	IES-R scale	No significant difference between the males and females  Significant level of PTSD symptoms  2 factor structure for the IES-R scale

4	Ogwuche and Dooior	2004	Psychological Implications of Cultural Conflicts:  The Tiv/Fulani Experience in Nigeria	Nigeria	None	Quantitative	Refugees of farmers and herder conflict	Purposive	General Health Questionnaire (GHQ).	53.6% suffered mental health  However, 23.6% suffered PTSD while 15.8% reported symptoms of depression  Females recorded higher mental illness compared to men.
5.	Cardozo et al.	2004	Mental health, social functioning, and disability in postwar Afghanistan	Afghanistan	None	Quantitative	Disabled and nondisabled populace	Multistage sampling	Short-Form Health Survey, Hopkins Symptoms Checklist-25, Harvard Trauma Questionnaire	High trauma, depression and anxiety symptoms  Poor mental health for women than men  Poor mental health and social functioning of disabled group Loss of lives
6.	Antwi	2018	Farmer–herder conflict and food security in Kwahu East District, Eastern Region, Ghana.	Ghana	None	Qualitative	Farmers and herders	Purposive sampling	Interviews, observations, focus group discussion	Injured residents  Migration  Loss of property  Closure of schools
7	Ofuoku and Isife	2009	Causes, effects, and resolution of farmers-nomadic cattle herders conflict in Delta state, Nigeria.	Nigeria	None	Quantitative	Crop farmers and herdsmen	Purposive  And simple random	Interview schedule	Poor level of acceptance of nomads by host communities Loss of farm lands Causes:  Low income
8	Oli, Ibekwe, and Nwankwo	2018	Prevalence of Herdsmen and Farmers Conflict in Nigeria	Nigeria	Frustration-aggression and Karl-Marx conflict theories	Qualitative	Crop farmers and herdsmen	Purposive	Interviews	Displaced farmers Loss of human and animal lives  Disruption of academic and other activities  Displacements of persons and animals,  Anti-Fulani sentiments
9	Boateng	2015	An Analysis of the Herder-Farmer Conflicts in The	Ghana	Conflict theory	Mixed method	Farmers and herders	Not stated	Interview Observation Questionnaire	Loss of lives  Displacement

			Asante-Akim North District of Ghana.							Disrupting agricultural work lack of community development
10	Adisa	2012	Land Use Conflict Between Farmers and Herdsman – Implications for Agricultural and Rural Development in Nigeria	Nigeria	Lazarus'c ognitive Appriasal Model	Quantitative	Crop famers and herders	Simple random	Likert scale	Problem-oriented coping strategies (POCS), Emotion- oriented coping strategies (EOCS), and Social support- seeking coping strategies (SSCS)
11	Umar, Umar, and Illo	2013	Coping Strategies among Farmers and Herders during Post Conflict  Situation in the Kainji Dam Area of Yauri Emirate, Kebbi State Nigeria	Nigeria	Multidime nsional theory	Mixed method	Crop famers, herders, and fishermen.	Purposive and simple random	Questionnaire and interview guide	Problem-oriented coping strategies (POCS)  Emotion-oriented coping strategies (EOCS)  Social-support coping strategies (SSCS).
12	Justino	2012	Resilience in protracted crises: exploring coping mechanisms and resilience of households,  communities and local institutions.	Rome	None	Qualitative	Individuals and households conflict victims		Interviews	Use of savings and assets sales (including land), resort to subsistence agriculture and other low-risk activities, engagement in informal markets, intra household allocation of labour and (non-forced) migration

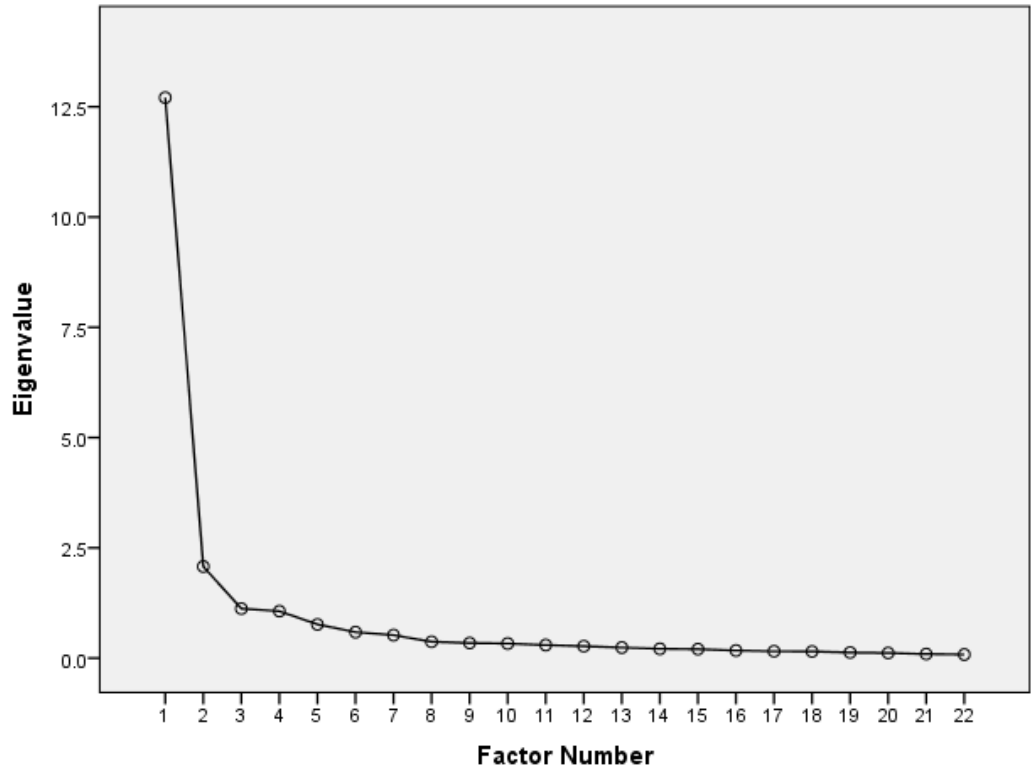
13	Ofuoku and Isife	2009	Causes, effects, and resolution of farmers-nomadic cattle herders conflict in Delta state, Nigeria.	Nigeria	None	Quantitative	Crop farmers and herdsmen	Purposive And simple random	Interview schedule	Establishing local development plan Mutually agreeing to compensation plan
14	Bello	2013	Herdsmen and Farmer conflicts in North-Eastern Nigeria: Causes, Repercussions, and Resolutions	Nigeria	None	Quantitative	Farmers and Herders	Simple random	Structure questionnaire	Securing rights to land use for the Fulbes Revising laws on grazing reserve Adherence to agreed routes
15	Opoku	2014	Exploring the Causes and Management of Pastoralists-Farmer Conflicts in Ghana	Ghana	None	Mixed	Crop farmers and herders	Purposive	Structured and unstructured Interview	Management strategies such as avoidance, mediation mediation, negotiation, and adjudication.
16	Olaniyan, Francis, and Okeke-Uzodike	2015	The Cattle are “Ghanaians” but the Herders are Strangers: Farmer-Herder Conflicts, Expulsion Policy, and Pastoralist Question in Agogo, Ghana.	Ghana	Processual theory of utility, Relative deprivation theory, and climate change theory	Qualitative	Crop farmers, herdsmen, local government officials, experts at the Kofi Annan Institute for Peace Training Institute, journalists, traditional chiefs and opinion leaders	Purposive	Unstructured interviews, participant observation, key informant interviews, and focus group discussions	Availability of rainfall, abundant pasture, and vast unused lands Expulsion policy not ideal reconciliation encouraged

**APPENDIX G**  
**FACTOR ANALYSIS EXTRACTS**

**KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.			.95
Bartlett's Test of Sphericity	Approx. Chi-Square	10862.0	
	df	231	
	Sig.	.000	

**Scree Plot**



**Communalities**

	Initial	Extraction
Reminders	.72	.64
Trouble staying asleep	.81	.73
Other things kept	.81	.77

Pictures popped into mind	.75	.72
I found myself acting	.60	.52
I thought about it	.78	.75
I had waves of strong	.84	.78
I had dreams about it	.53	.43
I felt watchful	.45	.24
I had trouble concentrating	.56	.37
I felt irritable	.86	.80
I was jumpy	.89	.83
Reminders physical	.78	.73
reactions		
I had trouble falling asleep	.84	.78
I tried not to think	.72	.63
I tried to remove it from	.75	.65
memory		
I felt as if it hadn't happened	.56	.28
My feelings was numb	.81	.76
I stay away from reminder	.74	.78
I tried not to talk about it	.64	.66
I avoided letting myself get	.79	.62
upset		
I didn't deal with it	.80	.63

Extraction Method: Principal Axis Factoring.

### Pattern Matrix

Items	Factors	
	Intru- hyperaro usal	Avoidance
Other things kept	.92	
Trouble staying asleep	.92	
Pictures popped into mind	.91	
Reminders	.88	
I had waves of strong	.79	
I thought about it	.77	
I was jumpy	.76	

Reminders physical reactions	.73	
I had trouble concentrating	.73	
I felt irritable	.72	
I had trouble falling asleep	.72	
My feelings were numb	.67	
I felt watchful	.59	
I had dreams about it	.48	
I felt as if it hadn't happened	.46	
I tried not to talk about it		.93
I stay away from reminder		.92
I tried not to think		.89
I tried to remove it from memory		.88
I avoided letting myself get upset		.70
I didn't deal with it		.66
I found myself acting		.57

### Structure Matrix

	Factors	
	1	2
I was jumpy	.90	.74
I felt irritable	.88	.74
I had waves of strong	.88	.68
Other things kept	.88	.59
I had trouble falling asleep	.87	.73
I thought about it	.86	.67
Trouble staying asleep	.85	.55
My feelings were numb	.85	.73
Reminders physical reactions	.85	.68

Pictures popped into mind	.84	.55
Reminders	.80	.51
I had dreams about it	.64	.56
I had trouble concentrating	.59	
I felt as if it hadn't happened	.53	.42
I felt watchful	.47	
I stay away from reminder	.60	.88
I tried not to talk about it	.48	.80
I tried to remove it from memory	.51	.80
I tried not to think	.48	.79
I didn't deal with it	.64	.79
I avoided letting myself get upset	.62	.79
I found myself acting	.60	.71