AND CONFLICTS AND FOOD SECURITY IN THE DORIMON TRADITIONAL AREA OF WA WEST DISTRICT, GHANA

SABOGU ADAMS

2020
LAND CONFLICT AND FOOD SECURITY IN THE DORIMON TRADITIONAL AREA OF WA WEST DISTRICT, GHANA

BY

SABOGU ADAMS (BACHELOR OF EDUCATION, BASIC EDUCATION)

(UDS/MDS/0366/15)

THESIS SUBMITTED TO THE DEPARTMENT OF AFRICAN AND GENERAL STUDIES, FACULTY OF INTEGRATED DEVELOPMENT STUDIES, UNIVERSITY FOR DEVELOPMENT STUDIES, IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE AWARD OF MASTER OF PHILOSOPHY DEGREE IN DEVELOPMENT STUDIES.

MARCH, 2020
DECLARATION

Student’s Declaration

I hereby declare that this is the result of my own original work and that no part of it has been presented for another degree in this university or elsewhere. Due recognition has been given to other works used in this thesis.

Signature………………………………   Date …………………………………………

Name of Student: SABOGU ADAMS

Supervisor’s Declaration

I hereby declare that the preparation and presentation of this thesis was supervised by me in accordance with the guidelines on supervision of thesis laid down by the University for Development Studies.

Supervisor’s Signature: …………………………… Date: ……………………..

Name Supervisor: PROF. ISSAKA KANTON OSUMANU
This study examined the implication of land conflicts on food security in the Dorimon Traditional Area of the Wa West District of Northern Ghana. The study used a phenomenological research design approach, employing both qualitative and quantitative methods in data collection and analysis. Primary data were sought primarily from interviews with household heads, key informants and focus group discussions. Various methods were combined to sample a total of 221 respondents from eight communities and four institutions for the study. The study revealed the existence of numerous land conflicts in the area, notable among them are the land boundary conflict between the Guse and Dontanga Clans, land ownership conflict between Guo-Nayiri and Guo-Katung Clans and that of land ownership conflict between Charile and Nyimbale communities. Other forms of land conflicts were user conflicts between neighbouring land users and some form of limited access due to discrimination against women and settlers. The main drivers of these land conflicts were greed and selfish interest by individuals, the lack of clear land boundaries between clans, rising population pressure and the weakening of traditional institutions. Meanwhile, the study revealed that 62.2 per cent of household were food insecure. It was established that land conflicts affect food security negatively as it leads to low food production, loss of income, destruction of food systems, disruption of herbal health delivery and also depletion of food stalk as a result of sale of food staff in pursuit of conflicts. Customary system of conflict resolution is the most popular system of conflict resolution in the area. In order to improve on the efforts at managing land conflicts and also mitigating their effects on food security, it is recommended that; alternative livelihoods should be provided to the people, land boundaries between clans or communities should clearly be defined, demarcated and documented and, also, there should be strong stakeholder collaboration in land administration.
I would like to express my profound gratitude to Prof. Issaka Kanton Osumanu (Associate Professor and Coordinator for Graduate School, FIDS) for his guidance and offering of corrections towards the completion of this work. Your guidance has indeed made this work insightful to me.

My sincere thanks go to my research team, Fuzy, Jalilu, Yahaya and Oliman, for their time and sacrifices. To my course mates, I owe a gratitude to you for your support during our face-to-face meetings and even after we have left. We have indeed formed a family.

I also wish to extend my gratitude to the chiefs of Dorimon, Bienye, Donkoru, Dontanga, Charile, Siriyiri and Zanko for granting access to their communities.

Gratitude goes to my wife, Ansanaw Seidu Zumwini for your unflinching support during this journey. You have always been there for me socially and financially during this exercise. To my little daughter Maanasong Sabogu, I thank you for your consistency in waking me up in the night to study. Not forgetting my son Fayyad Sabogu with all your troubles when I sit in front of the computer.

Finally, to all friends and relatives, your continuous prayers and encouragements have urged me this far. May the almighty Allah bless us all?
DEDICATION

To my father, Naa Sabogu Dassah of blessed memory, and my mother, Asana Sabogu.
# TABLE OF CONTENTS

- DECLARATION ........................................................................................................... i
- ABSTRACT ................................................................................................................ ii
- ACKNOWLEDGEMENTS .............................................................................................. iii
- DEDICATION ............................................................................................................... iv
- TABLE OF CONTENTS ............................................................................................... v
- LIST OF TABLES ......................................................................................................... x
- LIST OF FIGURES ....................................................................................................... xii
- LIST OF ACRONYMS .................................................................................................... xiii
- CHAPTER ONE .......................................................................................................... 1
  - INTRODUCTION ...................................................................................................... 1
    - 1.1 Background of the Study .................................................................................. 1
    - 1.2 Problem Statement .......................................................................................... 3
    - 1.3 Research Questions ........................................................................................ 5
      - 1.3.1 Main Research Question .......................................................................... 5
      - 1.3.2 Specific Questions .................................................................................... 5
    - 1.4 Research Objectives ....................................................................................... 5
      - 1.4.1 Main objective ........................................................................................... 5
      - 1.4.2 Specific objectives ...................................................................................... 5
    - 1.5 Significance of the Study ................................................................................ 6
    - 1.6 Organization of the Study ............................................................................... 6
CHAPTER TWO ........................................................................................................ 8

LITERATURE REVIEW ........................................................................................... 8

2.1 Introduction ....................................................................................................... 8

2.2 Land Tenure Systems ....................................................................................... 8

  2.2.1 Land Administration Systems ....................................................................... 10

  2.2.2 Customary Land Administration in Northern Ghana .................................... 12

2.3 Conceptualizing Land Conflicts ...................................................................... 12

2.4 Theories of Conflicts ......................................................................................... 14

  2.4.1 The General Theory of Conflict ................................................................... 14

  2.4.2 The Relative Deprivation Theory ................................................................ 16

  2.4.3 The Emic and Etic Approaches to Conflicts ................................................ 17

2.5 Nature of Land Conflicts .................................................................................. 18

  2.5.1 Types of Conflicts ....................................................................................... 19

  2.5.2 Conflict Levels ............................................................................................ 21

  2.5.3 Conflict Styles ............................................................................................. 22

2.6 Conflict Resolution Mechanisms ...................................................................... 24

  2.6.1 Negotiation ................................................................................................ 25

  2.6.2 Mediation ................................................................................................ 25

  2.6.3 Arbitration ................................................................................................ 26

  2.6.4 Adjudication .............................................................................................. 26

  2.6.5 Peace Building ........................................................................................... 27
2.7 Conceptualizing Food Security

2.7.1 Dimensions of Food Security

2.7.2 Food Insecurity

2.7.3 Food Security Indicators

2.8 Nexus between Land Conflicts and Food Insecurity

2.9 Conceptual Framework

CHAPTER THREE

STUDY AREA AND RESEARCH METHODOLOGY

3.1 Introduction

3.2 Profile of the Study Area: Wa West District

3.2.1 Administrative Profile

3.2.2 Location and Physical Characteristics

3.2.3 Vegetation of the area

3.2.4 Demographic Characteristics

3.2.5 Economic Activities

3.2.6 Land Tenure System

3.2.7 Governmental and Non-governmental Agencies in the District

3.3. Research Design

3.4 Rationale for Selection of Study Area

3.5 Study Population

3.6 Sampling
3.6.1 Determination of Sample Size ................................................................. 47
3.7 Sources of Data Collection ........................................................................ 50
3.8 Primary Data Collection Method .............................................................. 51
  3.8.1 Interviews ......................................................................................... 51
  3.8.2 Questionnaire Survey ........................................................................ 51
3.9 Data Analysis and Presentation ................................................................. 53

CHAPTER FOUR ............................................................................................... 55

DATA ANALYSIS AND PRESENTATION ......................................................... 55
  4.1 Introduction ............................................................................................. 55
  4.2 Demographic and Socio-Economic Characteristics of Households .......... 55
    4.2.1 Age and Sex Characteristics of Household Heads ................................ 55
    4.2.2 Respondents’ Native Status, Ethnicity and Religion ............................ 56
    4.2.3 Marital Status ................................................................................... 57
    4.2.4 Household Size ................................................................................ 58
    4.2.5 Educational Levels .......................................................................... 59
    4.2.6 Source of Livelihood ......................................................................... 59
    4.2.7 Income levels ..................................................................................... 60
  4.3 Land Conflict Situation in the Wa West District ........................................ 61
    4.3.1 Stakeholders of Land Conflicts ......................................................... 64
    4.3.2 Forms of Land Conflicts ................................................................. 68
    4.3.3 Causes of Land Conflicts .................................................................. 72
4.3.4 Nature of Land Conflicts ................................................................. 73
4.3.5 Levels of Land conflicts................................................................. 75
4.4 Food Security Situation................................................................... 75
  4.4.1 Respondents Understandings of Food Security ......................... 76
  4.4.2 Effects of Land Conflicts on Food Availability ......................... 82
  4.4.3 Effects of Land Conflicts on Food Access ................................. 86
  4.4.4 Effects of Land Conflicts on Food Utilization ......................... 88
  4.4.5 Effects of Land Conflicts on Food Stability ......................... 90
4.5 Conflict Resolution Mechanisms suitable for Managing Land Conflicts ............ 91
  4.5.1 Existing Land Conflict Resolution Structures in the Wa West District .... 92
  4.5.2 Earlier attempts at Resolving Land Conflicts using Existing Structures .... 92
  4.5.3 Effectiveness of Land Conflict Resolution Mechanisms .......... 96
  4.5.4 Making the Customary Resolution of Land Conflict Effective .... 98
  4.5.5 Strategies for Resolving Outstanding Land Conflicts ........ 99
4.6 Conclusion ................................................................................. 100

CHAPTER FIVE .................................................................................. 102

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS ........ 102
  5.1 Introduction ................................................................................ 102
  5.2 Summary of Key Findings ............................................................ 102
    5.2.1 Situation of Land Conflicts .................................................. 102
    5.2.2 Food Security Situation ...................................................... 104
5.2.3 Relationship between Land Conflicts and Food Security ........................................ 107

5.2.4 Land Conflict Resolution Mechanisms ..................................................................... 110

5.3 Conclusions .................................................................................................................. 114

5.4 Recommendations ....................................................................................................... 117

REFERENCES .................................................................................................................. 121

APPENDICES .................................................................................................................. 131
<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table 3.1: Population of sampled communities</td>
<td>48</td>
<td></td>
</tr>
<tr>
<td>Table 3.2: Distribution of sample by communities</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>Table 3.3: Summary of Data sources and collection techniques</td>
<td>52</td>
<td></td>
</tr>
<tr>
<td>Table 4.1: Sex of respondent</td>
<td>55</td>
<td></td>
</tr>
<tr>
<td>Table 4.2: Age of respondents</td>
<td>56</td>
<td></td>
</tr>
<tr>
<td>Table 4.3: Native status and ethnicity of respondents</td>
<td>57</td>
<td></td>
</tr>
<tr>
<td>Table 4.4: Respondents’ religious status</td>
<td>57</td>
<td></td>
</tr>
<tr>
<td>Table 4.5: Respondents’ marital status</td>
<td>58</td>
<td></td>
</tr>
<tr>
<td>Table 4.6: Respondent Household Size</td>
<td>58</td>
<td></td>
</tr>
<tr>
<td>Table 4.7: Educational status</td>
<td>59</td>
<td></td>
</tr>
<tr>
<td>Table 4.8: Respondents Main Occupation</td>
<td>60</td>
<td></td>
</tr>
<tr>
<td>Table 4.9: Household Monthly Income Level</td>
<td>60</td>
<td></td>
</tr>
<tr>
<td>Table 4.10: Households’ land ownership</td>
<td>61</td>
<td></td>
</tr>
<tr>
<td>Table 4.11: Household land conflict situation</td>
<td>63</td>
<td></td>
</tr>
<tr>
<td>Table 4.12: Awareness of incidences of land conflicts in the community</td>
<td>63</td>
<td></td>
</tr>
<tr>
<td>Table 4.13: Stakeholder analysis matrix for land use, management and conflicts in the Wa West District</td>
<td>65</td>
<td></td>
</tr>
<tr>
<td>Table 4.14: Forms of Land Conflicts in the Dorimon Traditional Area</td>
<td>68</td>
<td></td>
</tr>
<tr>
<td>Table 4.15: Main Drivers of Land Conflict in the Dorimon Traditional Area</td>
<td>72</td>
<td></td>
</tr>
<tr>
<td>Table 4.16: Respondents lacking food some times in the year</td>
<td>78</td>
<td></td>
</tr>
<tr>
<td>Table 4.17: Food consumption groups</td>
<td>79</td>
<td></td>
</tr>
<tr>
<td>Table 4.18: Land conflicts experience and household farm production</td>
<td>83</td>
<td></td>
</tr>
<tr>
<td>Table 4.19: Preferred Mechanism for land conflict resolution</td>
<td>96</td>
<td></td>
</tr>
</tbody>
</table>
Table 4.20: Preferred formal structure for land conflict resolution ................................. 97
Table 4.21: Preferred ADR mechanism ............................................................................... 98
<table>
<thead>
<tr>
<th>Figure</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Figure 2.1: Conceptual Framework for Land Conflicts and Food Security</td>
<td>37</td>
</tr>
<tr>
<td>Figure 3.1 Map of Wa West District</td>
<td>40</td>
</tr>
<tr>
<td>Figure 4.1: Effects of land conflicts on farm productivity of respondents</td>
<td>83</td>
</tr>
<tr>
<td>Figure 4.2: Effects of experiences of land conflict on access to food.</td>
<td>87</td>
</tr>
<tr>
<td>Figure 4.3: Effects of land conflicts on food system and health service delivery</td>
<td>88</td>
</tr>
</tbody>
</table>
LIST OF ACRONYMS

ADR………………..Alternative Dispute Resolution

AfDB………………African Development Bank

AgNRM………………Agricultural and Natural Resource Management

AUC………………African Union Commission

BATNA………………Best Alternative Targeted Negotiated Agreement

S……………Customary Land Secretariat

.DU………………District Agricultural Development Unit

.W………………Department of Game and Wildlife

.-ECA………………United Nations Economic Commission for Africa

A………………Executive Council of the African Heads of State and Government

A………………Environmental Protection Agency

O………………Food and Agricultural Organization

S………………Food Consumption Score

FSIN………………Food Security Information Network

GSS………………Ghana Statistical Services

HHS………………Household Hunger Scale

IFAD………………International Fund for Agricultural Development

IFPRI………………International Food Policy and Research Institute

LANDac………………Land Governance for Equitable and Sustainable Development
LAP.................................Land Administration Project
LI.....................................Legislative Instrument
MDG.................................Millennium Development Goals
MLNR...............................Ministry for Lands and Natural Resources
MMDAs.............................Metropolitan, Municipal and District Assemblies
MOFA...............................Ministry of Food and Agriculture
PC.................................National Development Planning Commission
O.................................Non-Governmental Organization
SL.................................Office of Administrator of Stool Lands
IS.................................Participatory Geographic Information system
DA.................................Savana Accelerated Development Authority
G.................................Sustainable Development Goals
PA.................................Town and Country Planning Authority
UN.....................................United Nations
UNDP.................................United Nations Department for Political Affairs
UNEP.................................United Nation Environment Program
WFP.................................World Food Program
CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Globally, it is reported that there is more than enough food to feed everyone, yet there is still unacceptable high number of people who remain hungry (Bridge, 2014). The Millennium Development Goals (MDG1) targeted halving the proportion of people who were undernourished by 2015 (Bridge, 2014) but that was not to be. According to FAO (2017), the number of food insecure people increased from 777 million in 2015 to 815 million in 2016 as at the end of 2018, over 820 million people were facing hunger while two billion people were facing severe or moderate food insecurity (FAO; IFAD; UNICEF; WFP; WHO, 2019).

The situation of food insecurity is much observed particularly in parts of sub-Saharan Africa, South-Eastern Asia and Western Asia with more than 100 million people reported to be facing crisis level (FAO, 2017). In early 2017, famine was declared in South Sudan and high alert risks were issued for north-east Nigeria, Somalia and Yemen (FAO, 2017). This worsening situation of food insecurity has been attributed to situations of conflict and natural disasters like droughts or floods and food price volatilities that restrict access to food (FAO, 2017; FSIN, 2017).

The UN defines food security as a situation in which all people at all times have physical and economic access to sufficient, safe and nutritious food which meets their dietary needs and food preferences for an active and healthy life (WFP, 2012). Four dimensions which must all be present to ensure food security include; availability of food; access to food; utilization of food and food stability (Helland and Sørbø, 2014). The Ministry of Food and Agriculture (MoFA) of Ghana cited in Nkegbe, Abu & Haruna (2017), defines food security as a “good
quality nutritious food hygienically packaged, attractively presented, available in sufficient quantities all year round and located at the right place at affordable prices.” This definition also touches on availability, access, utility and stability. Food insecurity itself is a human security issue and has the tendency of igniting conflicts in the world. This happens when there is uneven distribution of food due to internal inequalities or corruption (Bridge, 2014).

In 2016, about 5% of the Ghanaian population was reported to be food insecure with additional two million people being vulnerable to food insecurity Darfour & Rosentrater (2016). A comprehensive food security and vulnerability analysis conducted focusing on northern Ghana by the WFP (2012) revealed that 28% of people in Upper East, 16% of people in Upper West and 10% of people in Northern were food insecure (WFP, 2012), this translate into 680,000 people with prevalence rate being high in the rural areas. The Wa West District was considered the district with the highest prevalence of food insecurity with 42% households being food insecure in 2012 (WFP, 2012).

Meanwhile, as world population grows, so do demand for increase in production. This situation has led to people, both local and foreign, going in to long-term investments on land which has the tendency of instigating unintended conflicts over scarce resources (Telesetsky, 2011). Many conflicts in the world are traced to competition over these scarce resources which are often land related (Awedoba, 2009). Most communal conflicts have also been attributed to boundary disputes (Uyang, Nwabgbara, Undelikwo & Eneji, 2013) as a result of population pressures. The situation becomes helpless when most governments are unable to regulate land acquisitions in developing countries due to weak governance and corruption (Helland & Sørbø, 2014).

There are numerous land conflicts involving neighbouring communities in the Upper West Region and for that matter, the Wa West District. These land conflicts are often about
Ownership or boundary conflicts between clans, families or communities, user conflicts between individual land users and discrimination against women and settlers (AgNRM, 2017). A study conducted by the AgNRM (2017), on land tenure and natural resource management issues in northern Ghana reveal that, many land conflicts in the Upper West Region are attributed to unfair distribution of benefits, lack of transparency, accountability and elite capture. Some of the issues of land conflicts also stem from undefined boundaries, unresolved inheritance issues and also multiple sales of lands. Of great concern is the issue of Fulani Herdsmen who are always on collision course with farmers over destruction of farms their cattle (AgNRM, 2017). In the Dorimon Traditional Area, for instance, there are pockets of land conflicts between gates that remain unresolved and serve as a source of rising tensions (Bebelleh, 2008).

Doubtlessly, agriculture is the greatest casualty, access to land for agricultural purposes have affected. Investors who wish to engage in commercial farming are scared because of the uncertainty of who emerges as owner of the land or who lays claim to the land later. The food security situation in the Wa West District is unacceptable and need prudent measures to arrest situation. This situation of food insecurity among small holder farmers tests the efficacy government agricultural interventions over the years. Achieving the SDG 2 target will be a mirage if the current drivers of food insecurity are not looked at. Meanwhile, not much has been done to establish the relationship between conflicts over farm lands and that of food security in the Dorimon Traditional Area. Evidence abounds that in the Dorimon Traditional Area and for that matter, the Wa West District food security depends much on agricultural production, market stability and other socio-economic factors.

1.2 Problem Statement

The growing demand for natural resources and the commercialization of land use has given rise to land resource conflicts across the globe. These conflicts range from international,
inter-ethnic, intra-ethnic, between communities, families and even between individuals. The effects of these conflicts are devastating. They lead to loss of lives, properties, reduction in income, low productivity, and other serious humanitarian situations like famine and malnutrition (Azechum, 2017).

The northern part of Ghana, being classified as poverty endemic, also has the highest food insecurity situation in the country (WFP, 2012) with 42 percent of households in the Wa West District considered as moderately to severely food insecure in 2012. Analyzing the food insecurity situation in the northern part of Ghana, persistent poverty, limited agricultural outputs, seasonal effects and also fluctuations in food prices have been identified as the key factors that affect food security in the area (WFP, 2012).

There are numerous cases of land conflict cases in the Wa West District. In the Dorimon Traditional Area for instance, there are pockets of land conflicts that are unresolved (Bebelleh, 2008). Undoubtedly, agriculture is the greatest casualty. Access to land for agricultural purposes have been affected. However, little attempts have been made to explore the link between land conflicts and food insecurity in the north, particularly the Wa West District. Investors who wish to engage in commercial farming are scared because of the uncertainty of who emerges as owner of the land or who lays claim to the land later. Like many other northern societies where land use is controlled by men landlords (Kuusaana et al., 2013), marginalized groups like women and settlers’ access and control to land is seriously affected. This situation results in forced migration of the youth, loss of livelihoods, low income and food insecurity. This study therefore sought to bridge the knowledge gap on the relationship between land conflicts and the rising food insecurity in the Dorimon Traditional Area.
1.3 Research Questions

1.3.1 Main Research Question

The main research question is: what are the implications of land conflicts for food security in the Dorimon Traditional Area?

1.3.2 Specific Questions

Specifically, the research sought to find answers to the following questions.

i. What is the situation of land conflicts in the Dorimon Traditional Area?

ii. What is the food security situation in the Dorimon Traditional Area?

iii. How do land conflicts affect food security in the Dorimon Traditional Area?

iv. What conflict resolution mechanisms are suitable for the management of land conflicts in the Dorimon Traditional Area?

Research Objectives

1 Main objective

The main aim of the study is to examine the relationship between land conflicts and food security in the Dorimon Traditional Area.

1.4.2 Specific objectives

The specific objectives of the study are:

i. To assess the situation of land conflicts in the Dorimon Traditional Area.

ii. To assess the food security situation in the Dorimon Traditional Area.

iii. To examine the effect of land conflicts on food security in the Dorimon Traditional Area.
iv. To explore conflict resolution mechanisms suitable for managing land conflicts in the Dorimon Traditional Area.

1.5 Significance of the Study

In addressing the issue of land conflicts and food security, the study is relevant for the following reasons. First, it attempted to assess the conflict situation in the Dorimon Traditional Area, by conducting conflict mapping where the main issues and key actors, victims and potential victims were identified, and possible resolution mechanisms based on local knowledge system of the people explored. The findings of the study would reveal effects of land conflicts on food security in the area, therefore informing advocacy on the need to resolve such conflicts. The findings will serve as evaluation for interventions towards enhancing food security in the area and also validate findings of previous studies.

The study brought to the limelight acceptable knowledge system of the people on how conflicts are resolved and add up to the existing literature on land conflict resolution mechanisms. This will serve as a guide to practitioners who attempt to intervene in similar situations in the area or other parts of the country.

Organization of the Study

This study is organized in five chapters. Chapter one introduces the study by providing problem statements; significance of the study; research questions, objectives and the scope and limitation of the study. Chapter two reviews the literature review relevant to the study. It reviewed concepts related to land conflicts and food security, the various land tenure regimes, conflict resolution mechanisms and related works on land conflict and food security. Chapter three, captures the research methodology describes the methods and processes that were adopted in collecting data for the study. Presentations and analysis of data are done in chapter
four. The final chapter, Chapter five focuses on the major findings, conclusions and recommendations drawn from the study.
CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The focus of this chapter is a review of existing scholarly literature on the subject under study. This review takes into consideration how various scholars have theorized and conceptualized their findings. The chapter is organized in line with the objectives of the study.

Land Tenure Systems

According to (UNDP & UNEP, 2015) Land tenure refers to the set of relationships that exist between individuals and groups with respect to land and other resources. Land tenure systems determine who can use which resource of the land, for how long, and under what conditions. It is often categorized into four types: private, communal, open access, and state. Under any of the tenure systems, lack of secure access to land or unclear land rights are said to be contributing factors to exclusion and poverty.

Ubink (2009) explains land tenure as the terms and conditions that govern the holding, usage and transaction of land which designates the rights individuals and communities have with regards to the land. He noticed that there are various types or forms of land tenure system which include; the rights to land based on customary law; land occupation against the will of the legal owner and also, legally acquired land being developed in an unauthorized manner.

Mends (2006) observed that customary land tenure system is the most common land tenure in Sub-Saharan Africa where the land is communally owned and accessed by the people. This type of tenure gives unrestricted rights of usage to the people with the head of family or chief being the symbolic owner and has the vested power to administer lands. However, colonization impacted greatly impact on these land tenure systems in Africa (ECA, 2004;
Burns, 2007; Kameri-Mbonte, 2005). According to Kameri-Mbonte (2005), the impact of colonization introduces the notion of individual ownership of land. The introduction of the sale/common law free hold which allows a stranger to acquire and own land in perpetuity was a system introduced through colonization (Mends, 2006). This phenomenon has created a lot of gaps in most countries. Post-independence governments have made attempts to streamline land policies in response to the failures created by the colonial regimes.

Kpieta and Bonye (2014) also revealed that the common land tenure system practiced in Africa and for that matter Upper West Region is the customary system. They define land tenure as the customary practice whereby individuals and households own land and have the rights to either lease or sell it for a means of living. They further stated that land tenure indicates the terms and conditions on which land is held, used and transacted. Under these terms and conditions, the land is said to be for the ancestors and for that matter its usage is ded by certain norms under the authority of the earth priest. Concerning the usage of the land, there are restrictions. For instance there are some crops classified as ritual crops which women cannot cultivate (Kpieta and Bonye, 2014).

ECA (2004) reports that contemporary issues of commercialization of agriculture, rapid socio-economic change disruption of customary institutions and excessive government interference in customary tenure systems and other issues such as marketing, finance, technology and high incidence of conflicts are factors responsible for changes in the customary tenure system in Africa.

From the literature discussed above, it is clear that customary land tenure system is the dominant land tenure system practiced in Africa and has the potential of supporting economic development and poverty reduction if properly managed. Despite the challenges the land tenure system faces due to the growing population and diversification of land use with no
comprehensive legal administration, it is considered very important and in Ghana has the backing of the 1992 Republican Constitution (Mends, 2006).

2.2.1 Land Administration Systems

There are several institutional frameworks, both locally and internationally that deal with administration of lands for sustainable development. Land administration has to do with the structure and processes for which land rights are determined, achieved, delivered and managed (AUC, AfDB & ECA. (2010) & Burns (2007), describe land administration as a system put in place by the state to take records and manage land rights.

Tanzania, the statutory laws recognize customary ownership of land but also recognize acquisition of lands and that of women right to own lands. On the other hand, the customary laws do not recognize women right to own land and property in general since they themselves are considered properties (Massoi, 2015). In Uganda, lack of clarity, poor knowledge and misinterpretation of land laws and policies including that of customary rules have often been drivers of conflicts over lands (Auma, 2016). Rwanda and Ethiopia have success stories in Africa to share when it comes to land administration. The Rwandan Land Tenure Regulation System functions very well and provides cost effective valid documents to legitimate landholders whilst Ethiopia has had greater success in certifying land holdings for the rural households at a lesser cost (Enemark et al, 2014) and applies customary and religious laws in resolving land disputes (UNDPA & UNEP, 2015). The AU Commission jointly developed a frame work and guidelines with the African Development Bank and that of the European Union Commission of Africa to assist member countries design policies that will guide the administration of lands in their respective countries.

According to Ubink (2008), eighty per cent (80%) of the lands in Ghana are customarily owned; therefore, the 1992 Constitution of Ghana gives recognition to customary law as a
source of law (Ubink, 2008). The Constitution of Ghana in article 267(1), 270(2) (a) and 36(8) vested all customary lands on their respective stool and skins on behalf of and in trust of the people. The Constitution also created institutions to be responsible for the administration of these lands. The Lands Commission is mandated to administer public lands in Ghana. Under it are several departments which perform specified functions in the land administration.

The Ghana’s Land Administration Project was an institutional reform which involved both sector agencies and customary land tenure institutions that seeks to bring all land sector agencies under one umbrella with the Customary Land Secretariats (CLSs) to provide appropriate governance structures that will improve land management and administration in country (Kpieta & Bonye, 2014.) These reforms were to allow for the management of customary lands to the customary Lands Secretariat with the land sector agencies providing regulatory frameworks.

1992 constitution places fiduciary obligation on managers of public, stool, skin and family lands to discharge their functions for the benefit of the people of Ghana and the stool, family concerned (LANDac, 2016). Meanwhile, institutions involved in land administration include: National Development Planning Commission (NDPC); Ministry of Lands and Natural Resources (MLNR); Forestry Commission; Lands Commission; Office of the Administrator of stool Lands (OASL); Department of Game and Wildlife (DGW); the Environmental Protection Agency (EPA); Town and Country Planning Authority (TCPA), Metropolitan/Municipal and District Assemblies (MMDAs).

The Lands Commission Act of 2008 merged the Survey and Mapping Division; the Land Valuation Division; the Land Registration Division and the Public and Vested Land Division into an umbrella body known as the Lands Commission. The Office of Administrator of Stool

www.udsspace.uds.edu.gh
Lands is mandated by law to administer customary land whilst the Land commission is responsible for the administration of public lands with the LAP also supporting the creation of Customary Land Secretariats (LANDac, 2016).

2.2.2 Customary Land Administration in Northern Ghana

The effect of colonization on land administration in Ghana is manifested in Northern Ghana. Through the policy of indirect rule, the power of administering customary lands was placed solely on the hands of chiefs. This act ignored the indigenous land and natural resource governance systems which placed land management issues on different authorities. Ghana at independence vested all lands in the northern territories on the state. This was, however, reversed under the 1992 constitution. Under this arrangement all customary lands were vested the chiefs to administer in trust for the people, hence, the designation of lands as skin ds (Mends, 2006).

In most part of the northern region of Ghana, chiefs directly control the alienation of land, along with access and user rights to land and other natural resources. However, in most parts Upper West and Upper East Regions, allodia title and control of land is vested in the Tendaana (earth priest) (Kpieta and Bonye, 2014; Kuusaana et al, 2013). According to Bebelleh (2008), in the Dorimon and Wechiau Traditional Areas of the Wa West District, there is more than one Tendaana who exercises land administration duties in consultation with the chiefs.

2.3 Conceptualizing Land Conflicts

The concept conflict has been defined by so many writers in different ways. While many perceive conflict to be disruptive; others view it to be functionally positive in social systems. However, there is convergence in most of the definitions with most of them highlighting the existence of incompatibilities, divergence, differences or disagreement. Like it or not, conflict
has become part of the human system and it is inevitable in every human relationship either at the interpersonal or intra-personal levels (UNANDE, 2017)

According to Awedoba (2009) Conflict is the relationship differences or disagreement, divergence, incompatibilities or clash of wills that exist between two or more parties on an issue of common interest or concern which may be characterized with antagonism and opposition. This position is shared by Rahim (2010) in describing conflict as an interactive process which manifests incompatibility, disagreement or dissonance within or between individual entities. Jeong (2008) argues that conflict does not only focus on the incompatibilities of goals but also has to do with irreconcilable behaviours or relationship between the parties in pursuit of their goals.

Galtung (2009) explains conflict as a triangle with contradiction (C), attitude (A) and behaviour (B) at its vertices. The contradiction shows the nature of the conflict environment or the underlying conflict situation which includes the perceived or actual incompatibility of goals between the parties. The attitude talks about the perception and feelings that the parties have about each other. Behaviour is what is exhibited by the parties in reaction to the contradiction which can involve cooperative or coercive gestures signifying conciliation or hostility (Galtung, 2009).

Most conflicts revolve around issues of scarce resources especially land due to the growing population and changing use of land. Land conflicts can therefore be defined as a “social fact that involves two or more parties with differences over the property rights to land usage, land management, generation of income from the land, to transfer it, exclude others from the land and also over the right to receive compensation from the land” (Wehrmann, 2008). Land conflicts exist when there is degeneration of relationship, incompatibilities and differences in
claims and counter claims over land ownership, control, usage, access, and the right to transfer and manage lands.

2.4 Theories of Conflicts

In order to understand why certain phenomena occur, social scientists often use theories, models and concepts to give their opinions. There is no single widely accepted theory that best explain conflict. According to McLeod (2003), theories consist of set of ideas or concepts that are used to give meaning or sense of some dimension of reality. Creswell (2009) defines theory as a set of interrelated construct formed into propositions, or hypotheses that specify the relationship formed among variables. Theory is also viewed as a tem of interconnected abstractions or ideas.

Two relevant theories, The General Theory of Conflict and The Relative Deprivation Theories would be explored in analysing land conflicts. The anthropological approaches of emic and etic would be adopted to analyse the intractability of land conflicts and food security among the people in the Dorimon Traditional Area.

1 The General Theory of Conflict

Proponents of this theory include; Sigmund Freud (Instinctual Theory), Lorenz Konrad and Robert Andrey (Genetic Inheritance Theory) and Neeil Miller and John Dollard (Frustration-Aggression Theory). They view conflict from different view-points, however, they have common ground on conflict as innate which is inevitable in the human system (UNANDE, 2017) and can only be managed. The General Theory Conflict belongs to the psychological school of thought and both concepts would be used interchangeably. These theories focus on understanding individual aggression, and see such aggression as the source of conflict (Schellenberg, 1996)
Freud approach to conflict express that an individual urge to violence is driven by the pressure from the innate “id” instinct which blend together the operation of sexuality and destructiveness at the same time (Schellenberg, 1996) this theory sought to portray every individual as possessive of conflictual imposus and that can be understood by his natural instincts. This assertion is shared by Lorenz Konrad and Robert Andrey, both ethologist by arguing that every organism is potentially aggressive and that the aggression is genetically inherited and thus human beings have strong instincts for aggression (Schellenberg, 1996). They maintained that man’s aggressive nature and propensity to fight has caused clashes ween groups and countries.

Other school of thought from the psychological point of view led by Neil Miller and John llard in 1939 introduced the frustration-aggression theory. They explained that individuals some aggressive out of frustration on interference against them in achieving their goal. ording to them, such a frustrated individual becomes aggressive and tend to attack the eived source of interference or blockade. Hence, every conflict is caused by an nderlying factor which frustrates the aggressor from achieving a desired goal (Schellenberg, 196).

ositions of these psychologists, though potent in some sense, have manifested weaknesses as conflict situations especially over natural resources appear to be more pronounced these days than the ancient days. The instinctual theory fails to explain the absence of conflict (violence) between groups that are culturally and radically different even though they may be in a constant provocative contact (Himes, 1980). The genetic inheritance model also stands to be questioned since it fails to explain why conflicts are experienced in contemporary times than they were manifested in the ancient days if really aggressive behaviours are tied to specific pattern genes.
2.4.2 The Relative Deprivation Theory

These theories view the social organization as the main source of conflict. Class divisions, racial or ethnic divisions or sex divisions form the basis for social conflict. Proponents of this theory believe that the society or an organization functions so that individuals and groups struggle to maximize their benefits, which inevitably contributes to conflicts (Yakkaldevi, 2014). The theory belongs to the sociological school of thought.

Karl Marx who is credited with this theory holds the view that in every stratified society, there exist two major groups or classes: the ruling and the subject class, where the ruling class draws its power from control of the resources and in effect, exploits and oppresses the subject class. This most often generates into conflicts between the two. This theory explains conflict as a struggle between social classes; proletariat versus bourgeoisie (Yakkaldevi, 2014; Folarin, 2013) and it is termed as the class theory. The theory implies that, any human relationship which is characterized by exploitations has the tendency of degenerating into confrontations. This assertion has been criticized as instigating violence since conflict does not necessarily means violence.

Another perspective from the sociological worldview of conflict is the need based theory. This theory suggests that human beings have certain fundamental needs and the denial of such needs or restriction to access them has the tendency to spark conflicts. These needs are universal, ontological and necessary for growth, development and harmonious functioning of societies. According to Burton (1987), needs are non-negotiable but they are not scarce. It will be difficult to talk of peace and security while majority of the population go hungry. Food is an ontological need, any threat to its availability or access could invariably result in confrontation for a hungry man is an angry man. This makes sense for people to struggle over land since it is the most important production resource and for that matter food availability hinges mostly on food productivity. It is important to emphasize here that most conflicts in
the world are over scarce resources. However, the over generalization of conflict as violence by proponents of this theory, is problematic since they fail to realize the constructive nature of some conflicts.

2.4.3 The Emic and Etic Approaches to Conflicts

Broadly speaking, there have been two main ways of conceptualizing an approach to culture that has relevance for conflict and conflict resolution. Emic and etic are terms largely used by anthropologists and others in the social and behavioural sciences to refer to two kinds of data concerning human behaviours.

According to Edwin (2013), the emic approach investigates how local people think, how they perceive and categorize the world; their rules for behaviour; what has meaning for them; and how they imagine and explain things. He argues that, the emic approach investigates into the people local knowledge system and their worldviews, identifying and using their native or indigenous institutions for conceptualization, description and analysis. For Avruch (1998), the emic approach focuses on studying the culture in an actor-centered or from inside approach where the researcher attempts to understand the culture the way its members understand it. The strength of this approach rests on the ability of the practitioner to understand and speak to the problem like a native (Avruch, 1998). He however pointed out that there is the temptation of one to use these understandings to label and categorize cultural groups which may not be appropriate.

The etic approach focuses on identifying underlying, deep structural and trans-cultural factors that are universal in all cultures (Edwin, 2013). This approach, unlike the emic approach focuses on the experiences of the analyst instead of the people’s knowledge system by using predetermined universal characteristics. The approach allows the researcher to compare attributes and variations that exist across cultures and reduce these variations to manageable
levels. The etic approach relishes that members of a cultural domain are often too involved in what they are doing to interpret their cultures impartially (Edwin, 2013). However, the limitation of this approach is that it reduces diversity to a degree that can no longer measure the finer points of culture (Avruch, 1998) therefore over simplifying the real issues and the cultural differences that exist. What may be applicable in one setting may not work in another environment.

Looking at the intractability of land conflicts, ignoring cultural differences will create failure (Avruch, 1998) therefore the combination of the emic and etic approaches are partly able to interact one another’s theoretical weaknesses in describing culture to make full judgment possible (Morris et al, 1999 cited in Edwin, 2013). Their combination also reflects the spectves of both the researcher and the insiders, thus showing the two sides of ‘a coin’ for independent judgments on the conclusions made.

2.5 Nature of Land Conflicts

The nature of conflict especially land conflicts take varying forms which require proper understanding to proffer possible resolution mechanisms to the situation. According to Herrmann (2008), the nature of land conflicts can be analysed by enquiring to know whether the issues are about scarce resources or norms and values, whether the conflict is divisible or indivisible, latent or manifest conflict, symmetric or asymmetric conflicts or whether the conflict is violent or non-violent.

Talking about the divisibility or indivisibility of land conflicts one would have to find out whether there are issues regarding the usage. The indivisibility may occur where there is competing interest on the same piece of land at a particular point in time for instance, both parties wanting to use the land; or one party wanting to exclude the other – while that party wants to have a right of way. The divisibility may arise out of incompatibility of interest on
the land, such as one party wants to use the land while the other one wants to have control over how the land is used; or two parties want to use the same land at different times.

Analysing whether the conflict is manifested or latent, we consider whether the issues are underlying and have the tendency of escalating or they are already visible. Latent conflicts most often need to be dealt with more sensitively, in order to avoid unnecessary escalation. The symmetric or asymmetric conflicts are concerned with the parties involved in the conflict. Do the parties have the same power and influence in society, or is one side more powerful than the other? Then we answer the question on the violence or non-violence nature of the conflict. Thus, whether the parties engage in antagonistic tendencies which may involve injuries or casualties.

### 2.5 Types of Conflicts

Different types of conflicts exist in our society and there is no one typical way of classifying them. According to Moore (1986), the typology approach seeks to classify conflicts into dictable patterns. He identified five typologies and argues that the typology is useful when issues in a conflict are centralized in one of the five categories (Moore, 1986). The focus of this study is on how conflict over land in all these contexts affects food security in the Dorimon Traditional Area. This classification will help determine which conflict resolution mechanisms would be suitable for resolving land conflicts in the area.

#### 2.5.1 Interest-Based Conflicts

Interest-based conflicts arise as a result of actual or perceived competition over scarce resources such as physical assets (money or other tangible things), procedural issues (how decisions should be made) or psychological issues (Oduro-Ofori, Ocloo, Peprah, & Effah, 2015). These interests can be money, land, job, etc. According to Moore (1986), these objects of interest are the motivations that drive the person position which would often be
The increasing economic value of land has led to many parties competing over the same piece of land.

2.5.1.2 Value-Based Conflicts

Value conflicts erupt when people have different ways of life, deeply rooted goals or varying criteria on how to evaluate behaviours (Moore, 1986). It could be linguistic, religious, ethnic, ideas and customs. This has been observed in most natural resource conflicts as there are always underpinning issues regarding the culture of the people (Oduro-Ofori et al., 2015).

1.3 Structural-Based Conflicts

Structural-based conflicts arise when there is inequality in the control, ownership and distribution of resources, power and authority or geographic separation (Oduro-Ofori, Ocloo, Peprah, & Effah, 2015). Perceived power inequality, competition over limited resources, and urgent interests amongst groups are the fundamental factors that contribute to structural conflicts (Moore, 1986). In communities where there are different classes of people, such inequalities in terms of access to land may exist and can lead to conflicts.

1.4 Data-Based or Information Conflicts

Conflict arising based on the possession of information, or lack of such information. Inaccurate information and the different interpretations of data are fertile grounds for conflict (Moore, 1986). When there is inadequate information, people resort to guessing and miscommunication. For instance unclear or inconsistent information on land regulations has been the major cause of land conflicts in many parts of Africa (AUC et al, 2010).

2.5.1.5 Relationship Conflicts

Relationship conflicts prosper in environments of repetitive negative, experiences, behaviour strong emotions, poor communication which lead to negative patterns. Parties with such previous negative experiences with each other are most prone to relationship conflicts (Moore,
In the Upper West Region, there are numerous conflicts between land owning families who are considered indigenes and the others called settler farmers such as the Piisi land conflicts (AgNRM, 2017).

2.5.2 Conflict Levels

Analysing the conflicts based on their levels enables one to determine the extent of the conflicts as well as acquainting oneself on the appropriate mechanism to use in resolving the conflicts (Oliva & Charbonnier, 2016). According to Awedoba (2009), conflicts can be uped into internal and external conflicts. He argues that the external conflicts may involve or more ethnic groups or inter-states while the internal conflicts may be found in amunities where differences exist between segments of the population. The defect of such orization is that it ignores the fact that conflict can occur between homogenous idividuals.

ording to Rahim (2010), conflicts are categorized into; interpersonal conflicts; peronal; inter-societal conflict and intragroup/societal conflicts. Wehrmann (2018) uses that many conflicts regarding land are often either interpersonal or intra-societal conflicts. For the purpose of this study, the focus will be on the interpersonal and that of the a-group/societal conflicts

2.5.2.1 Inter-personal Land Conflict

According to Rahim (2010), interpersonal conflict refers to the manifestation of incompatibility, disagreement, or difference between two or more interacting individuals. This kind of conflict may be over resources such as land boundary conflicts between neighbours, ownership conflicts due to inheritance among family members, occasional multiple sales of private property by individuals without administrative assistance and without harming third parties and individual occupation of private land (Wehrmann, 2008).
The rest are building extensions on the private land of another and illegal lease/sale of somebody else’s private land (Wehrmann, 2008).

2.5.2.2 Intra-societal Land Conflicts

Inter-societal conflict refers to the collective incompatibility or disagreement between two or more divisions, departments, or subsystems in connection with common resource (Rahim, 2010). They encompasses boundary conflicts between tribes or villages, illegal sale/lease of communal land/tribal land, illegal allocation of state or communal land by private individual, up invasion of private land, land use conflicts between different users e.g. farmers and dsmen, occasional building extension on public land, illegal use of public land and illegal of one’s own land. It may also be about multiple sales, land grabbing by the privileged in ity and Land use conflicts between private and public utilization due to a general regard of land use regulations by a majority of people (Wehrmann, 2008).

3 Conflict Styles

The extent or stage of the land conflict will determine the style to use in resolving such conflicts. There are numerous angles to the approaches to be used, but it all depends on the pure and even the actors involved in the conflict (Wehrmann, 2008). Five prominent styles conflict are discussed and these include; confrontation, compromising, avoidance, accommodating and collaboration.

2.5.3.1 Confrontation

Confrontation is one style that can be used by aggressors to show their might and also register some concerns which may either lead to violence. In instances where the opponent is perceived to be a bully, some level of deterrence is needed and it rest on the other party’s willingness to confront the aggressive bully (Awedoba, 2009). However, this strategy may not all the time lead to resolution as the other conflicting party may feel reluctant to
Compromise for fear of being perceived to be weak and this may lead to counter confrontation (Awedoba, 2009).

2.5.3.2 Compromise

Compromise in conflict is reached by balancing the demands of the conflicting parties and bargaining in a give and take position to reach a solution. Each party gives up something and also gains something. This mechanism often involves series of trade-offs. Though it may not be satisfying to parties, it serves as face saver especially when there is conflict fatigue (Awedoba, 2009).

3.3 Avoidance

Some conflicts may be so fundamental to the position of the actors you allow events to take their own shape or the parties involved in the conflict may themselves prefer to avoid conflict, especially if they are emotionally upset by the tension and frustration created by it. However, this position regarding land conflict, when the issues fester for long, feelings get pent up and the grievances become big to ignore (Awedoba, 2009). In effect, avoidance may be the best style in land conflict situation since it is mostly about scarce resources or values. Such conflict situations need to be addressed earlier before they get aggravated.

2.5.3.4 Collaboration

Collaboration involves confronting the conflict in order to seek the best solution to the problem by pooling individual needs and goals towards a common goal. It requires assertive communication and cooperation to achieve better results. It is effective in conflicts revolving around values such that the parties involved can co-exist without compromising those values. Land use conflicts can be resolved through this approach.
2.5.3.5 Accommodation

This style entails recognizing the concerns of the opponent and for the interest of peace letting go some of the demands. Here, one party accepts the legitimacy of the demands being made by and concedes either because of the legitimacy or it does not wish to engage in conflict. People using this style are diplomatic in yielding or subjugating their needs, interest and desires to others (Awedoba, 2009). Some people have lived and farm on lands in the area from generation to generation. Such people have become part and parcel of the community though they may recognize the fact that their forebears were settlers, they have no place to go. Such people, in times of conflict, the best mechanism may be to use diplomacy to contain varying interests.

Conflict Resolution Mechanisms

cording to Burton (1990), conflict resolution involves bringing conflicting parties together in a face to face analytical dialogue, facilitated by a third party to discover their common goals. With this when the common goals are established, then the stage is set in search for means to satisfy all the conflicting parties (Burton, 1990). Conflict resolution may not necessarily involve third party collaborative efforts as espoused by Burton (1990), but parties themselves can make determination on issues at sometimes. Wallenstein (2002), defines conflict resolution as getting the conflicting parties enter into an agreement that solves their incompatibilities and enable them to accept to continue to coexist and cease all violent actions against each other. Putting the various perspectives together, conflict resolution in this study essentially entails a set of mechanisms adopted to manage the land conflict situation in Dorimon Traditional Area. These range from such peaceful means as negotiation, mediation, arbitration or adjudication through the formal or customary system.
2.6.1 Negotiation

According to Forsyth (1999), negotiation is a reciprocal communication process whereby two or more parties to a dispute examine specific issues, explain their positions, and exchange offers and counter offers. The Food and Agricultural Organization describes negotiation as a vehicle of communication and stakeholder management (FAO, 2008). This process can therefore be explained as a voluntary process that the parties consciously engage in communication to jointly confront the problem at hand for their common interest. Issues surrounding land usage between individuals or groups can be resolved through conscious efforts by the parties themselves and this will minimize the escalation of such conflicts. With the parties are open to the best solution that most at times should result in some trade-offs among parties. This process is best achieved if there is the availability of Best Alternative Negotiated Agreement (BATNA).

2.6.2 Mediation

Moore (1986) defines mediation as the intervention in a standard negotiation or conflict of an acceptable third party who has limited or no authoritative decision-making power but who assists the involved parties in voluntarily reaching a mutually acceptable settlement of issues in dispute. This process could be said to be a voluntary dispute resolution mechanism with the aim of arriving at an agreement between conflicting parties through the assistance of a mediator, who has no major influence on decision or the substantive issues Jeong, (2008), posits that, in mediation, the parties voluntarily accept final decisions on the issues and commit themselves into their implementation.

According to Wehremann (2008), land conflicts at the micro or meso level can be handled using the consensual approaches such as mediation and negation. It also depends on the level of escalation of the conflict would determine the kind of mediator that would be required. According to him, land conflicts that involves emotions or violence may require high level of
professionalism in handling (Wehrmann, 2008) therefore land conflicts involving individuals or groups at the community level can be managed using third parties, such as family heads, chiefs or even religious leaders.

### 2.6.3 Arbitration

Arbitration is a quasi-judicial process in conflict resolution in which the intervention of an impartial and a neutral third party (arbiter) is sought by parties in a conflict to resolve the contested issue(s). The arbiter is expected to make direct suggestions on how to settle the conflict (Wehrmann, 2008). The arbiter renders a decision on the basis of facts of the case and these facts are determined on the basis of evidence presented by the parties (Brulle and Nesie, 2001 cited in Edwin, 2013). Two forms of arbitration exist, the formal and the customary arbitration. The formal arbitration allows parties to enjoy the services of an expert and also have legal representation. Decision as to the outcome however rests in hands of the arbiter. The customary arbitration doesn’t require legal representation and its rulings are not open for appeal. Noncompliance to a resolution reached in the process of customary arbitration, may lead serious sanctions such as ban from attending communal functions and enjoying community facilities. In extreme cases, he or she may be expelled from the community (Kuusaana, Kidido, Appiah, & Mireku, 2013).

### 2.6.4 Adjudication

Adjudication, like arbitration is a mechanism which parties are committed to the intervention of a third party where they present their cases for determination. This third party can be an institution of the state such as the courts. Under the customary system, institutions like the chiefs and Tendaana (earth priest) play a very vital role in land conflict resolution in the Upper West Region through as they perform adjudicatory roles (Kuusaana, Kidido, Appiah, & Mireku, 2013). The adjudicatory powers of the chiefs is recognized by Marfo (2019) who argues that the chieftaincy institution has played and continues to play significant roles in the
governance system in Ghana. Before the advent of colonialism, chiefs performed political, religious and adjudicatory roles within their jurisdictions (Marfo, 2019). Chiefs

2.6.5 Peace Building

Fundamentally, peace building entails putting measures in place to achieve or maintain peace. This can be a proactive measure to prevent the occurrence of a seemingly potential conflict or measures to avoid reoccurrence of a conflict or violence. According to Boutros Boutros-Ghali (cited in Marfo, 2014), peace building is an action to identify and support structures which tend to strengthen and solidify peace in order to avoid a relapse into conflict.

Conceptualizing Food Security

World Food Summit (1996), defines Food security as a situation in which all people at times have physical and economic access to sufficient, safe and nutritious food which meets their dietary needs and food preferences for an active and healthy life. This definition food security involves food availability, access to food; utilization of food and food security and has gained international acceptance since the World Food Summit held in November, 1996 and has been modified by several scholars.

According to The Ghana’s Ministry of Food and Agriculture (MoFA) cited in Nkégbe et al (2017), food security exist when there is good quality nutritious food hygienically packaged, attractively presented, available in sufficient quantities all year round and located at the right place at affordable prices. This definition also touches on the availability, access, utility and stability of food.

It is in synch with the argument that food security do not only concern with the individual having access to available nutritious food but also encompasses the production, processing, and marketing systems that determines cost and shape people’s food choices and concerns about acquiring food in the future as well as today (Simmons, 2013)
2.7.1 Dimensions of Food Security

The World Food Programme identified four dimensions of food security which include food availability, access to food, food utilization and food stability (FAO, 2016).

2.7.1.1 Food availability

Food availability is concerned with whether there is sufficient quantity and quality of food physically present in an area (WFP 2012). It focuses on supply side either through agricultural production locally, through the market or through food aid (Helland & Sørbø, 2014). Availability can therefore be achieved through proper infrastructure, marketing information, transportation, processing and equitable distribution either through domestic production or through regulating the market and provision of safety nets (Upreti et al, 2010)

2.7.1.2 Food access

Access dimension has to do with the individual’s ability to acquire appropriate foods for a nutritious diet by possessing adequate resources in other words called entitlements (Helland & Sørbø, 2014). This can be physically or economically (Simmons, 2013). This dimension finds prominence in the Amartya Sen’s “entitlement approach” which states that an entitlement set of a person is determined by his original bundle of ownership (endowment) and additional bundles acquired (Sen, 1986). This argument is potent in the sense that, the mere availability does not ensure food security, but the ability of people to get access to it at all time.

2.7.1.3 Food utilization

The food utilization dimension focuses on adequate diets in food which has to do with the ability of individuals and households to maintain a healthy diet that meets human requirements in terms of nutrition, including energy and micronutrients (Helland & Sørbø, 2014). It is a measure of how food supplies accessible to consumers are used properly to
promote health and productivity which includes the existence of appropriate food processing and storage practices, adequate knowledge and application of nutrition and child care and adequate health and sanitation services (Simmons, 2013).

2.7.1.4 Food Stability

This fourth dimension is emphasizing on the existence of the three dimensions at all times. This means the availability, access and utility of food all year round. It is concerned with whether there is predictability, stability, and certainty with regards to the other three dimensions of food security (Simmons, 2013). In order to ensure food security, a population, household or individual must have access to adequate food at all times without the risk of losing access to food as a consequence of sudden shocks or cyclical events (FAO, 2016).

2.7.2 Food Insecurity

Having established that food security exist when there is the availability of sufficient quality food that is physically accessible to all people at affordable levels at all times and meeting the dietary needs of the population, we can describe food insecurity as the absence of quality nutritious, affordable and stability in food. To Simmons (2013), Food insecurity occurs when people’s access to the food that they produce themselves or from the markets is disrupted, reducing the volume and quality of foods available to them; the resulting in diets with insufficient nutrients for an active and healthy life. According to Hitzhusen (2006), food insecurity exist when the daily per capita food supply or consumption of an individual depart from the dietary minimum requirement. The bottom line of all the definition is that food insecurity may occur when households are not able to afford the consumption of a well-balanced diet at all times.
2.7.3 Food Security Indicators

Indicators are constructed from a set of observations, or measurements of food security-related conditions, which are classified according to a set of criteria, aggregated, and placed in some program-relevant perspective. Hoddinot (1999) categorized food security indicators into four categories; dietary diversification, food intake data, household caloric acquisition and household coping strategies. These four indicators are discussed below.

2.7.3.1 Dietary Diversity

$s$ is the sum of the number of different foods consumed by an individual over a specified period. It may be a simple arithmetic sum, the sum of the number of different food ups consumed, sums of the number of different foods within a food group, or a weighted where additional weight is given to the frequency by which different foods are assumed. Questions are asked to different household members of differences in food assumption among household members.

2.7.3.2 Food Intake Data

$s$ is a measure of the amount of calories, or nutrients, consumed by an individual in a en time period, usually 24 hours. This covers the type of food consumed, the amount assumed, food eaten as snacks and meals outside the household. It is done by observing the consumption pattern the whole day or interviewing household members to recall. The quantities of food consumed are expressed in terms of their caloric content, using factors that convert quantities of edible portions into calories.

2.7.3.3 Household Coping Strategies

This is to measure the presence of threat to food shortages and how households adapt to these threats. This is done by asking the person within the household who has primary
responsibility for preparing and serving meals a series of questions regarding how households are responding to food shortages.

All the above indicators have their strengths and weaknesses. Hoddinot (1999) recognizes the fact that there are more methods that are regarded as more accurate, but these are more skill-intensive (Hoddinott, 1999). Nkegbe et al (2017) adopted the Household Hunger Scale (HHS) model indicators in measuring food security in the Savanna Zone of Ghana, arguing that the HHS gives valid results across cultures and settings and give meaningful description of the use of different population groups in comparable way (Nkegbe et al, 2017). However, inherent weakness of this process is that it is subjective as different people have different ideas as to eating; therefore comparison across households or localities is problematic (Hoddinott, 1999).

In a comprehensive analysis of the food security situation in northern Ghana, the World Food Programme (2012) used the Food Consumption Score (FCS) in measuring food security. The Food Consumption Score takes into consideration the dietary diversity, food frequency, and relative nutritional importance of various food groups consumed by a household (WFP, 2012). The strength of this process is that it is easy to train enumerators to ask these questions and individuals generally found the questions easy to answer (Hoddinott, 1999). However, it has been criticised of lacking details of quantity of food consumed by households (Hoddinott, 1999).

Despite the weaknesses embedded in the various indicators as discovered, it would have been better if so many indicators could be used in one single study, but time and resources would not allow that. That notwithstanding, this study will employ the dietary diversity process which is an improvement of the FCS by combining it with the HDDS and CSI. It is believed that better results would be achieved in the combination (Vhurumuku, 2014).
2.8 Nexus between Land Conflicts and Food Insecurity

The nexus of land conflicts and food security is a double edge sword. It has been established by many researchers that conflicts trigger food insecurity and the vice versa. Uperti et al (2010) believes the nexus between conflict and food insecurity is that of a vicious cycle where either of them triggers the other. They reveal that food insecurity has created huge social tension in Nepal and is one of the major sources of armed conflict (Uperti et al., 2010).

According to Helland and Sørbo (2014), about 40 food riots took place during the 2007/2008 food crisis with some degenerating into violence. The 2010 and 2011 uprising around the Arab world in what has become known as the “Arab Spring” were all attributed to food price latilities (Helland and Sørbo, 2014). It stands to reason that people will always fight to protect any potential threat to their source of food as food is a basic need. Simmons (2013) agrees with this argument citing the rioting in Mozambique over the attempt of government to increase bread price and also the Arab Spring as case studies. The reduction or removal of subsidy on food was the triggers of the Arab Spring, though there were other underlying issues. Competition over scarce production resources such as land can trigger land conflicts. Food insecurity may also encourage people to join insurgent groups and sustain it to in effect maintain their livelihoods (Simmons, 2013).

Undoubtedly, the arguments supporting the potential of food insecurity being triggered by conflicts and for that matter land conflicts is plausible. There exist a large body of knowledge supporting the fact that land conflict triggers food insecurity. However, past studies on food security in the Wa West District fail to highlight that angle. As the study progresses, this dimension will be deeply explored.

The Food and agricultural Organization (FAO, 2017), in its report on the situation of global food security reveal that conflict is the key driver of food crisis in the world. Countries which
were experiencing prolonged conflicts had the worst hunger situations (FAO, 2017). The effects of these conflicts are that they disrupt production, lead to loss of lives and also causes displacement. In 2016 an estimated 6.3 million Syrians were internally displaced and additional 4.8 million people externally displaced. Other countries that also had high displacement rates include Yemen (3.2 million), Iraq (3.1 million), Somalia (2.1 million) and North East Nigeria (2.1 million). (FSIN, 2017). This situation affects both the conflict countries and countries that experience the spill over effects of the conflicts as they host the refugees.

Due to the influx of refugees from Yemen, Somalia and Ethiopia, Djibouti saw an increase in the number of people who were food insecure from 5.6 million in 2015 to 9.7 million in 2016 (IN, 2017). In early 2017, famine was declared in South Sudan, Somalia, Yemen and North East Nigeria (FAO, 2017). These are all countries experiencing protracted conflicts.

Simmons (2013), in a desk review of scholarly works established strong evidence on the linkage between conflict and food insecurity. Conflict can reduce the amount of food available, disrupt access to food by people, limits food preparation facilities and block access to health care and facilities and also increase uncertainty about the availability of satisfying future food needs (Simmons, 2013). During conflicts especially land conflicts agricultural activities are disrupted due to insecurity. Other people may deliberately reduce production for fear of them being looted or destroyed. People are forced to migrate from the production areas where the land conflict is prevalent in urban centres. Conflict also affects people access to food, in some areas, inflow of humanitarian services are affected due to insecurity. Assets are lost or diverted towards arms and peace building therefore affecting people’s ability to acquire food (Simmons, 2013). The report also reveals compelling evidence that conflicts in general affect food preparation, food diversity and health care. All the above stated lead to high uncertainties regarding the future food needs and can lead to price hikes or market manipulation.
An ethnographic study conducted by Massoi (2015) on land conflicts and livelihood on pastoral women in Kilosa District of Morogoro, Tanzania revealed that land conflicts trigger food insecurity. Land conflicts disrupt access to resources like land, water, herbal medicine, cooking equipment, food stores, and income. The conflicts also lead to displacement and hunger with women and children experiencing the effects more than men. It is established that land conflicts affect the dietary practices and food preferences, as in the case of Kilosa, pastoral Massai were forced to change their dietary practices and preferences from meat, milk and blood dominated meals to cereals and grains (Massoi, 2015). This situation was occasioned by the disruption of their animal production.

A survey research conducted by Uyang et al. (2013) revealed that, boundary dispute is a significant cause of food security problem in the Obudu Local Government Area of Cross River State of Nigeria. Frequent communal land conflicts in the area have exacerbated food security. Land conflicts have led to the loss of properties and lives coupled with the loss of food systems thereby creating food emergencies where food prices are escalated. This situation pushes many young abled bodied men to migrate out of the area to non-conflict areas halting agricultural activities (Uyang et al., 2013).

Assessing the impact of land conflicts on agricultural production and for that matter food security in Uganda, Auma (2016) sighted among others that land conflict lead to loss of farmland, forces people to reduce farm size and farm investment. The protracted land conflicts also waste a lot of time of parties involved. In some cases, at the time the conflict is resolved, the farming season may be over. All these reduce food production and for that matter availability. These land conflicts also result in rural-urban migration and sale of labour making life unpleasant (Auma, 2016). The declining food security condition often lead to rise in illegal practices such as stealing of non-harvested crops by community members (Auma, 2016).
The land conflict between Fulani Herdsmen and small holder farmers in Agogo area in the Ashante Region has brought untold hardship to many farmers. According to Opoku (2015), this rampant stand-off has resulted in loss of lives including breadwinners of families, destruction of crops and even reduction of agricultural production, reduced income among others. There are instances the Fulani will deliberately destroy farm crops which lead to reduction in income and stifle family access to food. This also threatens the stability of food in the area and that of health care delivery as a clinic in Bebome community has to be closed due to the worsening security situation (Opoku, 2015). By far land conflicts are major drivers of food scarcity and diseases in the area and many areas.

According to Azechum (2017), conflicts have been one of the major causes of food insecurity in northern Ghana. These conflicts which are mostly land related have had a toll in terms of lives lost, injuries to residents, destruction of property including loss of critical social and economic infrastructure (Azechum, 2017). All these have immediate and long term impact on food security. There is often reduction in agricultural production due to the workforce through the conflicts, inability to access food due to loss of income and other livelihood and the destruction of social and economic infrastructure which affects health care delivery market stability.

The literature reveals compelling evidence of strong nexus on land conflicts and food insecurity. The relationship is like vicious cycle, either of them triggers the other. While the quest for food lead to competition over land to increase food production and therefore triggers conflict over the land, it is also established that land conflicts also triggers food insecurity in many parts of the world. These land conflicts lead to loss of lives, loss of properties, destruction of food systems among others and denying access to the land itself for food production. On the national level, resources are channeled towards conflict resolution and peace building instead of provision of essential services. However past studies on food...
security in the Wa West District have often not been explored deep to establish the relationship between land conflicts and food insecurity though it has been established that most of the conflicts in the northern Ghana are land related (Awedoba, 2009).

2.9 Conceptual Framework
The diagram below (Figure 2.1) provides a road map to summarize the direction of the study of land conflicts and food security. It is constructed based on the review of concepts and thus, clearly identifies the key components of the study structure and also indicates their linkages.

The framework essentially covers land tenure and land administration system in the area and attempt to establish the relationship between land conflicts (forms, nature, typologies, styles, levels and drivers of land conflicts) and food security in the area. Further linkages are drawn on the various stakeholders’ interest and influence on land conflicts and food security situation in the area. The last component indicates the land conflict resolution and management mechanisms adopted by stakeholders to respond to these emerging threats of land conflicts. The arrows suggest the direction of influences of the various components and how they affect each other.
Land Conflicts
(Nature, Forms, Styles, Typologies, stakeholders, Levels and Drivers of Land Conflicts)

Land Tenure System
Land Administration System

Food Security
(Food availability, Food access, Food utility & Food Security)

Local knowledge systems

Land Conflict Resolution Mechanisms
(Customary conflict Resolution, Formal Conflict Resolution Mechanism and Alternative Dispute Resolution Mechanism), Peace Building and Reconciliation

Figure 2.1: Conceptual Framework for Land Conflicts and Food Security

Source: Author’s construct, 2018
CHAPTER THREE

STUDY AREA AND RESEARCH METHODOLOGY

3.1 Introduction

Methodology is a framework for the research, and comprises the research design, procedures and tools for collecting and analysing data in order to find answers or solutions to the research problem (Kumekpor, 2002). It is therefore absolutely important that research methodology is properly designed and conducted to obtain accurate and valid data for analysis and interpretation to answer the research questions and address the objectives. This chapter presents the methodology for the study. It elaborates the profile of the study district, research approach and design, the sampling procedure, methods of data collection, and analysis procedures.

Profile of the Study Area: Wa West District

1. Administrative Profile

Wa West District was carved out of the then Wa District in 2004 by a Legislative Instrument (LI 1751) under the Local Government 1993 (Act 462) with Wechiau as the district Capital. The Wa West District Assembly, headed by the District Chief Executive is the highest political, administrative and planning authority in the district with deliberative, legislative and executive functions. The District has 28 electoral areas and 5 area councils. Alongside the decentralized governance system is a traditional governance system which runs parallel and often appears to be at variance with the district assembly system (GSS, 2014). The district is made up of two paramountcies; the Wechiau and Dorimon Paramountcies with the titles ‘Wechiau-Naa’ and ‘Dorimon-Naa’ respectively. There are also divisional and sub-divisional chiefs under the authority of the two paramountcies. The succession to the thrones is patrilineal. Despite the fact that both the decentralized and the traditional authorities seek
to achieve development for the district, their activities are most often poorly coordinated. This may be attributed to the subtle power dynamics and competition for control of resources between the two systems (GSS, 2014).

### 3.2.2 Location and Physical Characteristics

The Wa West District is located in the south-western part of the Upper West Region, approximately between Longitudes 9° 40” N and 10° 10” N and also between Latitudes 2° 20” W and 2° 50” W (GSS, 2014). It shares borders to the south with Sawla-Tuna-Kalba district in the Savana Region, north-west with Nadowli District, and east with Wa municipality, south-west with Wa East District and to the West with Burkina Faso (Figure ). The total land area of the district is approximately 1,856 square km, representing about 10% of the region’s total land area. The land in the district is of Pre-Cambrian, granite and metamorphic rock types with a topography gently rolling with a few hills ranging between 180 and 300 meters above sea level. It is drained by one main river, the Black Volta (GSS, 4).

The district has two main seasons namely, the wet season and rainy season. The wet season starts from April to September and dry seasons which starts from November to March. The rainfall pattern is erratic with the mean annual rainfall between 840mm and 1400mm. The erratic rainfall regime reflects the poor soil moisture conditions in the area. The soil moisture condition is only adequate for the cultivation of crops such as millet, guinea corn, yam, groundnuts and beans. The irregular rainfall pattern sometimes affects the farmers’ crop yields.
Figure 3.1 Map of Wa West District

3.2.3 Vegetation of the area

The vegetation is one of the Guinea Savannah grassland type; made up of short trees with little or no canopy and shrubs of varying heights and luxuriance, with grass ground cover in the wet season. Commonly found trees are the Shea, dawadawa, kapok and baobab. Cashew and mango are exotic species that also grow well in the area. The trees are mostly scattered except in valleys where isolated woodlands and forests are found. Most of the trees are deciduous, shedding their leaves during the dry season to conserve moisture.

3.2.4 Demographic Characteristics

In the 2010 Population and Housing Census (PHC), the Wa West District had a total population of 81,348, representing 11.6 per cent of the regional population, comprising 227 (49.5%) males and 41,121 (50.5%) females with a youthful population of 45.5% and a total number of 11,486 households (GSS, 2014). The district is dominated mainly by the Wa-Dagbani ethnic group, which comprises of the Waala, who are the indigenous people, Gabaas and Brifors, who are the settlers on the other hand. There are other minority groups such as the Fulanis, Hausas, Akans and Ewes. Christianity is the largest religion in the district with 38.6%, followed by Traditionalists representing 29.5%, then Islam with 23.5% and those with no religion representing 8.4% with literacy rate of 49% (GSS, 2014).

3.2.5 Economic Activities

Agriculture accounts for 86.0% of the district’s economy. The predominant agricultural activity is farming. About 91.6 per cent of all households in the district are engaged in agriculture. Crop farming (97.2%) and livestock rearing (69.5%) are the most dominant agricultural activities in the District. The main crops grown in the district are millet, maize, yam, groundnut, among others. The major livestock reared in the District are cattle (33.4%), goat (29.4%), and sheep (10.0%), among others. Commonly found trees are the Shea, dawadawa, kapok and baobab. Cashew and mango are exotic species that also grow well in
the area. The District is blessed with a number of water bodies including the Black Volta which has the potential of supporting all year round farming. There are eight marketing outlets in the district. These are located at Dorimon, Dabo, Taanvare, Wechiau, Vieri, Ponyentanga, Nyoli and Gurungu.

Meanwhile, the Wa West District as at 2012 had the highest proportion (42%) of households which were food insecure and as high as 82% per cent of households found in the poorest quartile. This made the Wa West District the poorest and food insecure district in the country (FP, 2012). As at 2016, the Wa West District was still among the top 10 food insecure districts in Ghana with 27.1% of households experiencing severe to moderate food insecurity (FP, 2016).

6 Land Tenure System

Control of land and its resources are in the hands of the indigenes whilst the settlers use it on freehold basis. Land ownership is in the hands of the Tendamba who are first settlers and accordingly wield the power of control, use and allocation of land (Kuusaana, et al, 2013). These Tendamba are of the Waala ethnic group and are mostly men. The Dagaaba and the Brifors are considered the ‘settlers’. These “settlers” in the real sense have inhabited the area for decades, but because of the first occupant ownership principle, they are classified as such.

What it means is that women who are even from the Tendamba clan have no control over the allocation of land. They are sometimes allocated plots within their husbands’ farms to cultivate crops, mainly food crops. They have access to economic tree products which are on their husbands’ plot of lands and have limited access to land for commercial farming. Even the male settler farmers are permitted to plant only food crops on the land. The Ghana Statistical Service (2014) observed that the traditional land use practices and limited rainfall have adverse effect on crop production and was forcing the youth (men and women) to look for sustenance elsewhere.
3.2.7 Governmental and Non-governmental Agencies in the District

Various numerous governmental and non-governmental organizations (NGOs) working in the district. Notable among them are MOFA, Plan International and AgNRM. The AgNRM is a USAID sponsored project being implemented by four NGOs; Techno Serve, CECOTABS, NCRC and WinRock International under the project name Agriculture and Natural Resource Management (AgNRM). The goal of this project is poverty reduction in Northern Ghana through sustainable increase in wealth and nutrition from natural and non-traditional agricultural products.

Research Design

Research was conducted using mainly qualitative methods and supported by quantitative techniques (mixed method research design). According to Creswell (2009), no one approach represents perfection. The suitability of a research methodology depends on its ability to answer the research question (Oduro-Ofori et al., 2015). Hence, both qualitative and quantitative research designs have their strengths and weaknesses. On the basis of the inherent weaknesses and strengths, this research employed both qualitative and quantitative designs concurrently in collecting and analysing data to arrive at the conclusions. The combination of qualitative and quantitative methods in one study is termed as the mixed method. The mixed method design fills the gap of both qualitative and quantitative approaches (Sharp et al., 2012).

Qualitative data employs phenomenology in exploring the issues under investigations. Qualitative research involves exploring and understanding the meaning individuals or groups ascribe to a social or human problem (Creswell, 2009). Phenomenological studies are concerned with describing the lived experiences of the people involved with the issue under studies (Groenewald, 2004). Quantitative research on the other hand, involves quantifiable and measurable data that examines the relationship among variables (Creswell, 2009)
The rational for combining both qualitative and quantitative methods in this study is a reflection of an epistemological or philosophical stance to research, influenced by the research philosophy of pragmatism that served as a bridge between conflicting paradigms (Sharp, et al., 2012). It is argued that, the complex nature of social research requires understanding the relationships between philosophical paradigms, methodology and methods of data collection (Sharp et al., 2012). The decision to use the mixed method is therefore to address the inherent weaknesses of either qualitative or quantitative research design, and also to capitalize on their strengths to better understand the phenomenon of land conflicts and food security in the Dorimon Traditional Area.

However, it must be noted that the mixed method approach is not perfect as it also has its weaknesses. Onwuegbuzie & Collins (2007), argue that in using the mixed method, it often difficult to represent respondents lived experiences with text or numbers. It is most at times difficult drawing conclusions when there is contradiction between qualitative and quantitative data (Onwuegbuzie & Collins, 2007).

**Rationale for Selection of Study Area**

The focus area for the research was the Dorimon Traditional Area of the Wa West District. The justification for selecting the Dorimon Traditional area was that, the area is close to the Wa Municipality and is experiencing a spill over of urbanization from the Wa Municipality. This situation has led to indiscriminate sale of land for commercial and residential purposes. Based on the value placed on land, and the absence of clear land governance systems, there are numerous conflicts in the Dorimon Traditional Area (Bebelleh, 2008).

The Dorimon Traditional Area is also inhabited by two main groups of people where one group is considered indigenes and the other considered as settlers. The “settlers” have lived in the area for generations, but have no control over land. On the other hand, the indigenes own
and control the lands. Another factor influencing the selection of the area is based on ease of access and ability of the researcher to communicate in the local language of the people.

### 3.5 Study Population

Study population here refers to the specific pool of cases that the researcher wants to study (Neuman, 2012). The population therefore concerns with people with some observable characteristics which the researcher may interact with for the purpose of gathering data for the research. The study population involves household heads (both male and female land users), non-governmental and governmental agencies working in the land and food security sectors in the study area as well as the traditional authorities (Tendamba, Chiefs, family heads and Queen mothers) in the study area. The governmental and non-governmental agencies included in the study were; one official each from the AgNRM, District Assembly, DADU and The Ghana Police Service. Considering persons 18 years and above was premised the fact that 18 years is the age of maturity in Ghana as enshrined in the 1992 constitution.

The study targeted land users based on the fact that about 91.7% of the population in the Wa West District engages in agriculture (GSS, 2014). Since agriculture is intricately linked with land and its usage, in investigating into the implications of land conflicts for food security, it is only proper to target the land users. The traditional authorities were equally targeted because lands in the district are communally owned and are vested in the traditional authorities to keep in trust for the people.

### 3.6 Sampling

A combination of methods was used to select households for interviews. Eight communities were purposively sampled for the study. Purposive sampling is suitable when the goal of the research is to obtain insights and maximize understanding of an underlying phenomenon (Onwuegbuzie & Collins, 2007). The purposive sampling was guided by the researcher’s
quest to obtain deep insights into the phenomenon of land conflicts in the selected communities as there was manifested evidence of land conflicts during a pre-study investigations in the study area. These communities are Dorimon, Donkoru, Bienye, Dontanga, Kogle, Siriyiri, Zanko and Charele.

The selection of these communities also fits into the socio-cultural dynamics of the Dorimon Traditional Area as there are two principal gates that ascend to the Dorimon Paramountcy. They are Gangoyiri and Dakpanyiri. Each of these gates has a land domain locally called “gara” and is managed by their land priests (Tendamba). Dorimon is the seat of the amountcy and has people from all clans in Dorimon residing there and using land. It also serves as a base where most of the land owning families draw their land ownership from. Donkoru and Bienye are situated in the Gangoyiri (Guse clans) lands while Dontanga and Kogle are situated in the Dakpanyiri (Dontanga clan) lands. These four communities are inhabited by both settlers and indigenes. The communities also share border with each other. The pre-study investigation revealed a lack of consensus on the actual land boundary between the two gates. Siriyiri and Zanko are the border communities to the Wa Municipality and very close to the Upper West Regional Capital, Wa. These communities are experiencing a spill over of urbanization from Wa and in effect, increasing competing demand for land, both for residential and agricultural purposes. The proximity of these communities to Wa has also increased the value of lands surrounding them and also triggering conflicts in many forms. Charele community’s selection was based on the fact that it is located at the border of the Wa West District and shares boundary with the Wa Municipality and the Nadowli-Kaleo District. There have been instances of disputes of land ownership between the community and the neighbouring communities in the Nadowli-Kaleo District and Charia in the Wa Municipality.
Again, representatives of the following organizations and agencies were also purposively selected; the District Assembly, DADU, the Ghana Police Service and AgNRM. Purposive sampling was used to select key informants who were considered rich in information (Onwuegbuzie & Collins, 2007) on land conflicts and food security issues for interviews. These key informants were the Chiefs, Land Priest (Tendaana), Queen Mother in the case of Dorimon and Makazies in the other seven (7) communities.

Stratified sampling was used to sample households in the sampled communities for interviews. According to Onwuegbuzie & Collins (2007), when the sample frame consist of subgroups that are homogenous with respect to one or more characteristics, samples can be positively or randomly selected from each stratum. The use of the stratified sampling is because the researcher wished to give equitable opportunity to both settlers and indigenes to be selected. It also allowed for both male and female household heads to be selected. After stratifying the respondents into indigenes and settlers, random sampling was employed to select respondents from each category.

3.6.1 Determination of Sample Size

The size of the sample should be informed primarily by the research objectives, research question(s), and subsequently, the research design. According to Onwuegbuzie & Collins (2007), the sample size should neither be too small nor too large. It should be possible to use the sample to achieve data and theoretical saturation and also undertake deep and case-oriented analysis (Sharp, et al., 2012). The Wa West District Assembly presented the study with the most current population figures of the eight selected communities (Table 3.1).
### Table 3.1: Population of sampled communities

<table>
<thead>
<tr>
<th>S/n</th>
<th>Community</th>
<th>Total population</th>
<th>Number of households</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Dorimon</td>
<td>1461</td>
<td>212</td>
</tr>
<tr>
<td>2</td>
<td>Dontanga</td>
<td>263</td>
<td>44</td>
</tr>
<tr>
<td>3</td>
<td>Kogle</td>
<td>205</td>
<td>31</td>
</tr>
<tr>
<td>4</td>
<td>Donkoru</td>
<td>298</td>
<td>45</td>
</tr>
<tr>
<td>5</td>
<td>Bienye</td>
<td>535</td>
<td>67</td>
</tr>
<tr>
<td>6</td>
<td>Zanko</td>
<td>249</td>
<td>29</td>
</tr>
<tr>
<td>7</td>
<td>Siriyiri</td>
<td>835</td>
<td>95</td>
</tr>
<tr>
<td>8</td>
<td>Charile</td>
<td>870</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>4716</strong></td>
<td><strong>623</strong></td>
</tr>
</tbody>
</table>

Source: Wa West District Assembly, 2018

With the total household of 623, the sample size for the study was drawn from these communities as indicated in Table 3.1 above, which constitutes the sampling frame. The study employed the International Fund for Agriculture Development’s (IFAD, 2009) sample size determination formula to derive the sample size for the study.

It is as follows:

**Standard formula**

Sample size \((n)\) = \[
\frac{t^2 \times p (1-p)}{e^2} \]

\[
\frac{z^2 \times p (1-p)}{}
\]
Translating that into the equation:

Sample size (n) = \[\frac{z^2 \times p \times (1-p)}{e^2} / 1 + \frac{z^2 \times p \times (1-p)}{e^2} \times N\]

Where:

- n - Desired sample size
- z - Confidence level set at 90% (standard value = 1.65)
- p - Estimated proportion of the target population with similar characteristics (standard deviation = 0.5)
- Margin of error set at 5% (standard value = 0.05)

Number of households = (623)

\[\text{Sample size (n)} = \frac{1.65^2 \times 0.5 \times (1-0.5)}{0.05^2} / 1 + \frac{1.65^2 \times 0.5 \times (1-0.5)}{0.05^2} \times 623\] = 189.457

Therefore, the household sample size is rounded up to 189.

To take care of the possibility of some respondents not responding to the questionnaires, 7 respondents were added making a total of 196 households sampled. These respondents were sampled from the study communities proportionally according to the number of households in each community using:

\[y = \frac{x}{N} \times n\] where

- y - Number of households to be interviewed in a community.
- x - Number households in the community
- n - Total number of households to be interviewed
- N - Total number of households in the eight communities

The distribution of the samples is presented in Table 3.2 below.
Table 3.2: Distribution of sample by communities

<table>
<thead>
<tr>
<th>S/N</th>
<th>Community</th>
<th>Population</th>
<th>Households</th>
<th>Indigenes</th>
<th>Non-indigenes</th>
<th>Sample size</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Dorimon</td>
<td>1461</td>
<td>212</td>
<td>55</td>
<td>10</td>
<td>65</td>
</tr>
<tr>
<td>2</td>
<td>Dontanga</td>
<td>263</td>
<td>44</td>
<td>8</td>
<td>6</td>
<td>14</td>
</tr>
<tr>
<td>3</td>
<td>Kogle</td>
<td>205</td>
<td>30</td>
<td>5</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>4</td>
<td>Donkoru</td>
<td>298</td>
<td>45</td>
<td>9</td>
<td>5</td>
<td>14</td>
</tr>
<tr>
<td>5</td>
<td>Bienye</td>
<td>535</td>
<td>67</td>
<td>16</td>
<td>5</td>
<td>21</td>
</tr>
<tr>
<td>6</td>
<td>Zanko</td>
<td>249</td>
<td>30</td>
<td>10</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>7</td>
<td>Siriyiri</td>
<td>835</td>
<td>95</td>
<td>28</td>
<td>2</td>
<td>30</td>
</tr>
<tr>
<td>8</td>
<td>Charile</td>
<td>870</td>
<td>100</td>
<td>31</td>
<td>1</td>
<td>32</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>4716</td>
<td>623</td>
<td>162</td>
<td>34</td>
<td>196</td>
</tr>
</tbody>
</table>

Source: Authors construct, 2018

In-depth interview was conducted on twenty-five (25) key informants from the sampled communities and Institutions, communities comprising Chiefs, Tendamba and kazie/Queen Mothers as well as one (1) representative each from The Wa West District Assembly, Department of Food and Agriculture, The Ghana Police Service and Agriculture and Natural Resource Management (AgNRM).

Sources of Data Collection

To be able to address the research questions, the researcher gathered both primary and secondary data for analysis. According to Yelsang (2010), data are referred to as those facts that any particular situation affords or gives information or impressions to an observer. For Neuman (2012), data are the empirical evidence or information that one gathers carefully according to rules and regulations. Secondary data were collected through reviews of relevant literature to the topic and study area from both published and unpublished sources. The published sources covered journals, books, articles, research publications, policies and frameworks for land resource management, conflicts and food security. The unpublished
sources include records and reports relevant to the core issues of land conflicts and food security.

Primary data were obtained from the field using household heads, key informants (e.g. chiefs, land priests [Tendaamba], Makazies) from the sampled communities and Queen Mother (Pognaa) of Dorimon. Heads of relevant institutions also served as sources of primary data. Methods adopted for this study were through interviews, focus group discussions, and questionnaire survey.

**Primary Data Collection Method**

**3.8 Interviews**

Twenty-five (25) key informants comprising of Traditional leaders from the 8 study communities and one representative each from the District Assembly (DA), District Agricultural Development Unit (DADU), AgNRM and the Ghana Police Service were interviewed with the aid of semi-structured guides. Persons for the interviews from the communities included community leaders (chiefs, Land Priest [Tendamba], Queen mother Pognaa] and Makazie) Interviews mainly bothered on the mandate of their organizations, their challenges and expectations with regard to land resource management and food security at the community level.

**3.8.2 Questionnaire Survey**

Structured questionnaires made up of both closed and open ended questions were administered to 196 household heads in all sampled communities. The open ended questions allowed for further probing of respondents. Respondents making up of both males and females from each community were selected to include indigene farmers and settler farmers. The questionnaire sought to elicit information on the following areas: the socio-demographic characteristics of households; the situation of land conflicts and food security, beliefs and
experiences on the relationship between land conflicts and food insecurity and recommendations on ways of resolving land conflicts to improve food security.

### 3.3.7.3 Focused Group Discussions

Eight separate focus group meetings were organized (one in each survey community) for women and men in to discuss land conflict management and food security issues. The meetings discussed emerging issues on food security and land conflicts in their respective communities. Each focus group discussions include participants of not more than seven.

Table 3.3 gives a summary of the data collection sources and methods adopted in collection the information.

**Table 3.3: Summary of Data sources and collection techniques**

<table>
<thead>
<tr>
<th>Objectives of the study</th>
<th>Research questions</th>
<th>variables (required data)</th>
<th>Data sources</th>
<th>Collection Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>To assess the land conflict situation in the Wa West District</td>
<td>What is the situation of land conflicts in the Wa West District?</td>
<td>-Nature of conflicts -Actors in conflicts -causes of conflicts -effects of conflicts -levels of conflicts</td>
<td>-household heads, traditional authorities. Governmental and non-governmental agencies -published and unpublished data</td>
<td>-interviews with household heads and key informants, questionnaire survey and Focus Group Discussion. -review of related literature from published and unpublished data.</td>
</tr>
</tbody>
</table>
| To assess the food security situation in the Wa West District | What is the food security situation in the Wa West District? | -Food availability -food access -food utility -food stability | House-hold heads, traditional authorities. Governmental and non-governmental agencies | -interviews with household heads and key informants, questionnaire survey and Focus Group Discussion. -review of related
To examine the effect of land conflicts on food security in the Wa West District

How do land conflicts affect food security in the Wa West District?

Underlying threats of land conflicts to food security such as how conflicts affect;
- Food availability
- Food access
- Food utilization and
- Food stability

Household heads, traditional authorities, Governmental and non-governmental agencies

-interviews with household heads and key informants, questionnaire survey and Focus Group Discussion.

- review of related literature from published and unpublished data.

To explore conflict resolution mechanisms suitable for managing land conflicts in the Wa West District?

What conflict resolution mechanisms are suitable for the management of land conflicts in the Wa West District?

- Conflict resolution styles and mechanisms
- Institutions for conflict resolution
- Peace building

Household heads, traditional authorities, Governmental and non-governmental agencies

-interviews with household heads and key informants, questionnaire survey and Focus Group Discussion.

- review of related literature from published and unpublished data.

Source: Authors construct, 2018

### 3.9 Data Analysis and Presentation

Both qualitative and quantitative data were analysed concurrently using the concurrent triangulation method. Here, the researcher collects both qualitative and quantitative data concurrently and compared them to determine if there was convergence, differences or combinations (Creswell, 2009). According to Castro et al (2011), the concurrent triangulation method allows the use of both qualitative and quantitative data to more accurately define relationships among variables of interest. This method was adopted for the analysis as a
means to offset the inherent weaknesses of one method with the strengths of the other (Creswell, 2009).

Qualitative data were analysed using Content Analysis (CA) technique. Data were broken down into smallest meaningful units of information and categorized into common themes and assigned descriptive values such as words with observed data presented and analyzed manually. On the other hand, quantitative data collected were checked for completeness and edited in the field before they were coded and entered into Statistical package for social sciences (SPSS) for analysis. Descriptive statistics, such as percentages, were obtained and used for the analyses of the phenomena of land conflicts and food security. Cross tabulation was used to draw relationships between experiences of households involved in incidences of land conflicts and their food security situation as against people who did not experience land conflicts directly.
4.1 Introduction

This chapter provides an in-depth understanding of the study’s objectives. The data has been analysed and presented under the themes inductively derived from the research questions. The issues covered consist of general demographic characteristics and economic activities of the people, the food security situation which include food availability, accessibility, utilization and stability of food in the Wa West District. The chapter also presents the general situation of land conflicts which assesses the causes, nature, levels and stakeholders in the West District. Data on the nexus between land conflict and food security as well as ways land conflicts can be managed in the Wa West District have also been presented.

Demographic and Socio-Economic Characteristics of Households

This sub-section provides an overview of the defining socio-economic characteristics of the households surveyed in the study communities in the Wa West District. Issues specified for discussion under this section include age, sex, education, livelihood activities and specific characteristics of the sampled households in the study area.

4.2.1 Age and Sex Characteristics of Household Heads

The data revealed that there are more male household heads than that of females. From Table 4.1 below, of the 196 household heads interviewed, 126 (64.3%) were males while 70 (35.7%) were females.

<table>
<thead>
<tr>
<th>Sex</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>MALE</td>
<td>126</td>
<td>64.3</td>
</tr>
<tr>
<td>FEMALE</td>
<td>70</td>
<td>35.7</td>
</tr>
<tr>
<td>Total</td>
<td>196</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Field survey, October 2018
The age structure of household heads was; 18-24 years 6 (3.1%), 25-31 years 22 (11.2%), 32-38 years 44 (22.4%), 39-45 years 34 (17.3%), 46-52 years 23 (11.7%), 53-59 years 23 (11.7) and 60 and above 44 (22.4%), (see table 4.2).

Table 4.2: Age of respondents

<table>
<thead>
<tr>
<th>Age</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-24</td>
<td>6</td>
<td>3.1</td>
</tr>
<tr>
<td>25-31</td>
<td>22</td>
<td>11.2</td>
</tr>
<tr>
<td>32-38</td>
<td>44</td>
<td>22.4</td>
</tr>
<tr>
<td>39-45</td>
<td>34</td>
<td>17.3</td>
</tr>
<tr>
<td>46-52</td>
<td>23</td>
<td>11.7</td>
</tr>
<tr>
<td>53-59</td>
<td>23</td>
<td>11.7</td>
</tr>
<tr>
<td>60+</td>
<td>44</td>
<td>22.4</td>
</tr>
<tr>
<td>Total</td>
<td>196</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Field survey, October 2018.

Though, in the Wa West District, there are more females than males (GSS, 2014), the survey revealed that male household heads far out-number that of the female household heads. This could be due to the culture where men dominate the families and wield much influence than men in the house (Auma, 2016; Bebelleh, 2008). The study also indicate that majority of household heads are within the economic active bracket of between 18 and 59 years. This group constituted 77.6% whilst the aged (i.e., 60 years and above) constituted 22.4%.

4.2.2 Respondents’ Native Status, Ethnicity and Religion

Majority of respondents from the surveyed communities were indigenes. Of the 196 households surveyed, 162 (82.7%) were indigenes while 34 (17.3) were non-indigenes (see Table 4.3). The indigenes are made up of the Waala and Dagaaba, who constitute 126 (64.3%) and 36 (17.3%) respectively. The non-indigenes consist of the Daga-wulee and others which include Fulani, Moshi, Wangara and Hausa.
Table 4.3: Native status and ethnicity of respondents

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waala</td>
<td>126</td>
<td>64.3</td>
</tr>
<tr>
<td>Dagaaba</td>
<td>36</td>
<td>18.4</td>
</tr>
<tr>
<td>Daga-wulee</td>
<td>27</td>
<td>13.8</td>
</tr>
<tr>
<td>Others</td>
<td>7</td>
<td>3.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>196</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Source: Field survey, October 2018

The survey also revealed that Islam is the leading religion in the survey communities with 94 (48.0%) households. This is followed by Christianity with 52 (26.5%) households, Traditional religion with 41 (20.9%) of households and 9 (4.6%) of household heads belong to no religion (see Table 4.4).

Table 4.4: Respondents’ religious status

<table>
<thead>
<tr>
<th>Religion</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traditional religion</td>
<td>41</td>
<td>20.9</td>
</tr>
<tr>
<td>Islam</td>
<td>94</td>
<td>48.0</td>
</tr>
<tr>
<td>Christianity</td>
<td>52</td>
<td>26.5</td>
</tr>
<tr>
<td>None</td>
<td>9</td>
<td>4.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>196</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Source: Field survey, October 2018

4.2.3 Marital Status

The survey revealed that majority (88%) of the respondents were married, 3 (1.5%) never married, 5 (2.5%) divorced and 16 (8%) widowed (Table 4.5)
Table 4.5: Respondents’ marital status

<table>
<thead>
<tr>
<th>Marital Status</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Married</td>
<td>172</td>
<td>87.8</td>
</tr>
<tr>
<td>Unmarried</td>
<td>3</td>
<td>1.5</td>
</tr>
<tr>
<td>Divorced</td>
<td>5</td>
<td>2.6</td>
</tr>
<tr>
<td>Widowed</td>
<td>16</td>
<td>8.2</td>
</tr>
<tr>
<td>Total</td>
<td>196</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: field survey, October 2018

4.2.4 Household Size

The computation of household size was done for the households surveyed with the results presented in Table 4.6 below.

Table 4.6: Respondent Household Size

<table>
<thead>
<tr>
<th>Household size</th>
<th>Frequency</th>
<th>per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>One-two</td>
<td>38</td>
<td>19.4</td>
</tr>
<tr>
<td>Three-four</td>
<td>35</td>
<td>17.9</td>
</tr>
<tr>
<td>Five-six</td>
<td>33</td>
<td>16.8</td>
</tr>
<tr>
<td>Seven and above</td>
<td>90</td>
<td>45.9</td>
</tr>
<tr>
<td>Total</td>
<td>196</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: field survey, October, 2018

From Table 4.6 above, the household sizes were: one-two members 38 (19.4%); three – four 35 (17.9%); five-six 33 (16.8%) and seven and above 90 (45.9%). The results indicate that majority of households had size above the national average household size of 4.6 members and consistent with the average household size of seven in the Wa West District (GSS, 2014). The implication is that, each household had many people to feed.
4.2.5 Educational Levels

Household heads’ educational status was also computed for the survey. The results, as presented in Table 4.7, indicate that majority of the household heads do not have any form of formal education. According to the survey, 45 (23%) of them have basic education, 9 (4.6%) had secondary, technical or vocational education, with 7 (3.6%) attaining tertiary education whilst 135 (68.9%) did not have any form of formal education.

Table 4.7: Educational status

<table>
<thead>
<tr>
<th>Level of education</th>
<th>Frequency</th>
<th>per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic Education</td>
<td>45</td>
<td>23.0</td>
</tr>
<tr>
<td>Secondary, Tech/Voc.</td>
<td>9</td>
<td>4.6</td>
</tr>
<tr>
<td>Tertiary Education</td>
<td>7</td>
<td>3.6</td>
</tr>
<tr>
<td>Non Formal Education</td>
<td>135</td>
<td>68.9</td>
</tr>
<tr>
<td>Total</td>
<td>196</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Field survey, October, 2018.

The survey further revealed the fact that majority of the people lack the requisite education and skills to get alternative employment apart from peasant farming.

4.2.6 Source of Livelihood

Agriculture has been found to be the life wire of people in the Wa West District. The survey revealed that 170 (86.7%) of the respondents were crop farmers, 10(5.1%) were petty traders, 5(2.6%) were public sector workers whilst 11(5.6%) of the respondents were engaged in other trades such as masonry, carpentry, weaving or hairdressing. The results are presented in Table 4.8 below.
Table 4.8: Respondents Main Occupation

<table>
<thead>
<tr>
<th>Livelihood activities</th>
<th>Frequency</th>
<th>Per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crop Farmer</td>
<td>170</td>
<td>86.7</td>
</tr>
<tr>
<td>Petty Trader</td>
<td>10</td>
<td>5.1</td>
</tr>
<tr>
<td>Public Servant</td>
<td>5</td>
<td>2.6</td>
</tr>
<tr>
<td>Others</td>
<td>11</td>
<td>5.6</td>
</tr>
<tr>
<td>Total</td>
<td>196</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: field survey, October 2018

4.2.7 Income levels

Establishing the income levels of households in the Wa West District is important in this study as that determines their ability to access quality food all year round and also access health services. Table 4.8 indicates that, 92 (46.9%) of the household heads’ average income was less than GHC100.00, 41 (20.9%) earn between GHC101.00 and GHC200.00 whilst 25 (12.8%) earn between GHC201.00 and GHC300.00 as average monthly income and 38 (19.4%) average monthly income was above GHC300.00.

Table 4.9: Household Monthly Income Level

<table>
<thead>
<tr>
<th>Level of income</th>
<th>Frequency</th>
<th>Per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than GHC100</td>
<td>92</td>
<td>46.9</td>
</tr>
<tr>
<td>GHC101-GHC200</td>
<td>41</td>
<td>20.9</td>
</tr>
<tr>
<td>GHC201-GHC300</td>
<td>25</td>
<td>12.8</td>
</tr>
<tr>
<td>Above 300</td>
<td>38</td>
<td>19.4</td>
</tr>
<tr>
<td>Total</td>
<td>196</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Field Survey, October 2018

The results of the survey revealed that majority of the respondents earn below GHC 300.00 as monthly income. This is reflective of the fact that majority of the people do not have formal education and are engaged in crop farming on subsistence basis. It must also be made clear that majority of respondents struggled to tell their average monthly income because their
earning from crop production was seasonal and their inability to keep record of production was manifested. Considering the income levels, main occupation and the large sizes of households, it will have grave implications for food security.

4.3 Land Conflict Situation in the Wa West District

To understand the land conflict situation, the researcher first established the land ownership situation of households. It was revealed that majority of respondents own land, at least for farming purposes (see Table 4.10)

<table>
<thead>
<tr>
<th>Ownership of land</th>
<th>Frequency</th>
<th>per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>35</td>
<td>17.9</td>
</tr>
<tr>
<td>Yes</td>
<td>161</td>
<td>82.1</td>
</tr>
<tr>
<td>Total</td>
<td>196</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Field survey, October 2018

The results indicate that 161 (82.1%) own land while 35 (17.9%) do not own land in the survey communities. All respondent who own land attained that ownership status either by being a member of the land owning family, by marriage (in the case of women) or by long occupancy (in the case of settlers). These are the common statements that run through responses from respondents on how they owned land:

*My ancestors were the first to settle here and owned all the lands in this area; therefore being a member of the family means I am a land owner*” (a 44-year old farmer, Bienye community).

*The land was given to my grandfather by the land lords for farming. It has passed through my parents and I am farming on it now. For occupying it for that long time, I think I own it so long as I am using it for farming* (a 35-year old settler, Donkoru community).

*I am part of my husband’s family, so I also own my husband’s family lands* (a 45-year old woman, Dorimon community).
Respondents that do not own lands indicated they enjoy rights to their usage through the customary freehold system.

*The land I am farming on belongs to the landlords, but they have given it to me. I did not pay; I only gave the elders cola* (52 year old man, Dorimon community).

Respondents in all the communities indicated that the lands are customary and communally owned and individuals are just to exercise user rights. All respondents also identified the customary freehold as the land tenure system in the communities for agricultural purposes. However, in-depth interview from key informants from Dorimon, Siriyiri, Kogle and Zanko indicated that people could privately acquire land for residential purposes from the customary owners.

The situation in the survey communities does not depart from what pertains in other parts of Ghana, where lands are communally owned with the customary freehold system as the tenure commonly practiced (Kpieta and Bonye, 2014; Kuusaana et al., 2013; Bebelleh, 2008). Aside the few instances where people acquire land privately for residential purposes, there is no individual ownership of lands in the study area.

The study also revealed the prevalence of land conflicts in the area. Of the 196 household interviewed, 88 (44.9%) responded to have experienced land conflicts and 77 of these respondents were people who are land owners while 11 do not own land but were land users (see Table 4.10). The people who experienced land conflicts consist of 62 males and 26 females. Even though the affected respondents were less than 50% nonetheless the results revealed that land conflict in the study area is no respecter of status; both land owners and land users were affected. It also affects both men and women.
Table 4.11: Household land conflict situation

<table>
<thead>
<tr>
<th>Involvement in conflict</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>108</td>
<td>55.1</td>
</tr>
<tr>
<td>Yes</td>
<td>88</td>
<td>44.9</td>
</tr>
<tr>
<td>Total</td>
<td>196</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Field survey, October 2018

Despite the fact that less than half of respondents reported of personally experiencing land conflicts, majority of the respondents responded to be aware of incidences of land conflicts in their communities and other communities. One hundred and seventy respondents, representing 86.7% of the respondents were aware of other incidences of land conflicts in the district. The results are presented in Table 4.12 below.

Table 4.12: Awareness of incidences of land conflicts in the community.

<table>
<thead>
<tr>
<th>Awareness of conflict incidences</th>
<th>Frequency</th>
<th>per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>26</td>
<td>13.3</td>
</tr>
<tr>
<td>Yes</td>
<td>170</td>
<td>86.7</td>
</tr>
<tr>
<td>Total</td>
<td>196</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Field survey, October 2018

The above table indicates some degree of presence of land conflicts in the area. Some of these conflicts have been resolved satisfactorily while others are still pending. All the key informants also confirmed the existence of land conflicts and some have even played various roles in one way or the other. The Dorimon Police has had to refer a number of land conflict cases to the traditional authorities for resolution as reported. The area, therefore, had not been spared the canker of land conflicts that has gain notoriety all over the world (Marfo, 2013). It
is not surprising that, the study revealed the prevalence of land conflicts as majority of the people depend on crop farming as their source of livelihood. Land is, therefore, a necessity to the people and any attempt to deny one access to land means denial of ones access to food production. Burton (1990) contend that, needs are often ontological and non-negotiable. Hence, any attempt to scuttle peoples’ access to land is likely to trigger negative reactions.

4.3.1 Stakeholders of Land Conflicts

Obtaining understanding of the various stakeholders’ interest and role is very relevant in reciating land conflicts in the Dorimon Traditional Area. To effectively resolve conflicts, understanding of the various variables and dimensions need to be obtained (Galtung, 2009). In order to obtain this understanding, the various stakeholders need to be identified (UN-EU, 2).

ntifying them as stakeholders will let them own and approve any conflict resolution cess (Marfo, 2013). A number of key stakeholders/actors were identified by key ornaments and household heads in the Dorimon Traditional Area. Their interest in land ization and management as well as their role in conflict management processes were luated. The category of stakeholders were identified as follows; traditional authorities (193), government agencies (123), land users (184) and Non-governmental Organizations (116), religious bodies (65) and Media (58). Table 4.13 provides summary of responses from household heads, key informant interviews and focus group discussions outlining the various stakeholder interests and roles in land resource management and conflict management processes in the District.
Table 4.13: Stakeholder analysis matrix for land use, management and conflicts in the Wa West District

<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>Interest/needs</th>
<th>Fears/Threats</th>
<th>Role in land conflict management</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Government agencies</td>
<td>Overall development in the district</td>
<td>Reduction in productivity</td>
<td>Development of land use plans and regulatory statutes of land use in the district.</td>
</tr>
<tr>
<td>District Assembly</td>
<td>Increased food production.</td>
<td>Low food production and food insecurity.</td>
<td>Collaborate with stakeholders to develop land use plans</td>
</tr>
<tr>
<td>Department of Food &amp; Agriculture</td>
<td>Protection of land as their spiritual heritage and symbol of authority</td>
<td>Loss of ancestral &amp; spiritual heritage and authority</td>
<td>Administering customary lands and managing/resolving conflicts</td>
</tr>
<tr>
<td>The police</td>
<td>Safety of lives and properties</td>
<td>Destruction of lives and properties.</td>
<td>Maintenance of law and order.</td>
</tr>
<tr>
<td>2 Traditional Authorities</td>
<td>Protection of land as their spiritual heritage and symbol of</td>
<td>Loss of ancestral &amp; spiritual heritage and authority</td>
<td>Protection of properties.</td>
</tr>
<tr>
<td>Chiefs (paramount &amp; sub-chiefs), Clan/family</td>
<td>Administration of customary lands and managing/resolving conflicts</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 4.13 identified the District Assembly to be in charge of the overall development of the area and see land conflicts as a threat to sustainable development. Therefore, its role is to facilitate the development of land use plans and regulatory statutes on land usage. In the view of a key informant from the District Assembly, it is also responsible for supporting other state stakeholders.

<table>
<thead>
<tr>
<th>Stakeholder Group</th>
<th>Designation</th>
<th>Objectives</th>
<th>Functionality</th>
</tr>
</thead>
<tbody>
<tr>
<td>heads (Yidamba), Land priests</td>
<td>authority</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Tendamba) &amp; Princes (Nabiisi)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Land Users</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crop Farmers</td>
<td>Access to land for livelihood and shelter</td>
<td>Loss of livelihood and forced migration</td>
<td>Collaborate with other stakeholders</td>
</tr>
<tr>
<td>Pastoralists</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private developers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Civil Society Organizations</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NGOs</td>
<td>Provision of alternative livelihood to households</td>
<td>Loss of livelihood for households</td>
<td>Facilitate alternative dispute resolution processes</td>
</tr>
<tr>
<td>Religious Bodies</td>
<td>Spiritual and social development</td>
<td>Social and moral breakdown</td>
<td>Alternative dispute resolution</td>
</tr>
<tr>
<td>The Media</td>
<td>Well informed society</td>
<td>Social disorder</td>
<td>Public education</td>
</tr>
</tbody>
</table>

Source: Author’s construct, 2018
and non-state actors to minimize land conflicts. The Department of Agriculture is concerned with increased food production to ensure food security in the area in which land conflicts may lead to food insecurity. Its role is to collaborate with other stakeholders to develop land use plans in the District.

All respondents recognize the fact that the Traditional Authorities are the custodians of the land who see the land as a symbol of authority, spiritual and ancestral legacy. Any form of alienation is viewed as loss of authority and disconnecting them from their ancestors and gods. Their role is to collaborate and ensure the promotion of customary processes of land administration.

The interest of ordinary land users, according to household respondents is to have access to land for livelihood and shelter. To them, land conflicts pose threats to their survival as it affects food production and income. It has the potential of increasing food insecurity and forced migration. Land users, therefore, need to play the role of collaborating with other stakeholders in conflict resolution processes while also respecting the customary structures.

Civil Society Organizations, like NGOs, Religious Bodies and the Media, it was revealed that, their interest lies in providing alternative livelihoods, spiritual and social development and also ensuring a well-informed society. Land conflicts are potential threats to the livelihoods and investment of the people. According to respondents, it can lead to spiritual and moral breakdown and also social disorder. These Civil Society Organizations, therefore, are expected to play a major role in facilitating Alternative Dispute Resolution and Public education.

Analysing the various stakeholder interest, fears and roles in the land conflict situation in the study area gives an indication that land is a necessity to the land users as it is a values and object of interest to the traditional authorities like chiefs and Tendamba. As ordinary land
users will do everything possible to protect their source of livelihood, traditional authorities who view land as symbol of authority, spiritual and ancestral heritage will do everything possible to protect that interest and value. The other governmental and non-governmental agencies will always do everything possible to ensure that land usage does not affect their interest.

4.3.2 Forms of Land Conflicts

It has been established that the most common forms of land conflicts in Africa and, for that matter, Ghana are; land boundary and ownership conflicts between clans, boundary conflicts between neighbouring land users, ownership conflicts due to inheritance, land use conflicts between crop farmers and pastoralists, limited access to land by women and settlers due to discrimination by law, custom or practice (Auma, 2016; Bob, 2010; Wehrmann, 2008; NRM, 2017; Bebelleh, 2008). Table 4.14 presents the forms of land conflicts in the Dorimon Traditional Area that are experienced by respondents.

Table 4.14: Forms of Land Conflicts in the Dorimon Traditional Area

<table>
<thead>
<tr>
<th>Forms of Land Conflicts</th>
<th>Number of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land ownership conflicts between clans</td>
<td>56</td>
</tr>
<tr>
<td>Land boundary conflicts between clans/communities</td>
<td>49</td>
</tr>
<tr>
<td>Land boundary conflicts between individuals</td>
<td>34</td>
</tr>
<tr>
<td>Land user conflicts between crop farmers and Fulani herdsmen</td>
<td>29</td>
</tr>
<tr>
<td>Discrimination against women and settlers</td>
<td>11</td>
</tr>
<tr>
<td>Farm land inheritance conflict</td>
<td>6</td>
</tr>
</tbody>
</table>

Source: Field Survey, 2018
From table 4.14 above, the following forms of land conflicts were identified to prevalent in the area; land ownership conflicts between clans (56 respondents), land boundary conflicts between clans/ communities (49 respondents), land boundary conflicts between individuals (34 respondents), land user conflicts between crop farmers and Fulani herdsmen (29 respondents), Discrimination against women and settlers (11 respondents) and farm land inheritance conflict (6 respondents)

Prominent land conflicts that featured through all discussions with household heads, key informants and Focus Group discussions were the land boundary conflict between the Guse clan and that of Dontanga clan, land ownership conflict between the Guo-Nayiree and Guo-Kumee clans and that of Charile community lands in which the Nyinbali village is claiming ownership.

An in-depth interview with a key informant from Bienye community which was corroborated by another from Donkoru, the land conflict between the Guse and Dontanga clans covers about fifteen communities in the area where five of the survey communities; Dorimon, Donkoru, Dontanga, Kogle and Bienye with either clan claiming ownership of the surrounding lands. This was occasioned by conflicting and overlapping land boundaries shown by these conflicting parties. There have been a stand-off between the two clans as to where the actual boundary of their land is for well over a decade. According to their narrations, attempts to resolve this matter through the customary structures were not yielding the required results due to non-cooperation by the other party. They accused the Dorimon-na of taking side with the Dontanga clan. The key informant backed allegation with a letter the Dorimon-na wrote apparently supporting the position of Dontanga clan in response to correspondences between the two gates on the issue of parties invoking the ritual of “cutting fowl” to determine ownership of the land. The Dorimon-na’s letter (see appendix VI)
supported the position of Dontanga insisting the matter be sent to court. These key informants were of the view that the Dorimon-na was supporting the Dontanga clan, because is affiliated as well as conniving with them to be engaging in indiscriminate land sales in the disputed territory. They sighted a filling station that has been put up by Petrosol Company as an example in Dorimon.

A key informant from Dontanga confirmed the existence of the conflict which has been long standing between the two clans. He would rather prefer the court to determine the matter than resorting to the customary ritual of “nour-ngmaabo”. The land conflict between the Guo-nayiri (Nabiisi) and that of Katung/Katunee (Tendamba) is an issue of who holds the right and control of the land domains (Gaarra) of Guo. While the Tendamda are arrogating ownership and control of the land to themselves, the Guo-nayire claims that the Tendamba role was to act as Land priest. The Royals (Nayire) claim their ancestors were first to settle on land by defeating the original occupants and driving them out of the land. To them, the Katunee (Tendamba) only came later to join and were given the role of land priest to be in charge of sacrificing to the gods and also leading hunting expeditions in the land territory called “gaara ngmaabo”. This was obtained from an oral account by a key informant from the Guo-nayiri.

However, a key informant from the Katung faction maintain their position of being owners of the land and dispute the claim of first settlement by the Guo-nayiri. He argues that, they had settled and controlled the land long before the Nayiree came to settle and that the Nayiree had no business in claiming ownership. According to both respondents, the matter was sent to the Dorimon-na for customary resolution which was not successful. However, it was not successful and the Dorimon-na is accused by the Guo-nayiri clan of taking sides with the Katung clan. The matter according to the two key informants was sent to the Wa High Court
which ruled in favour of the Katung clan. The Guo-Nayiri clan had given notice of appeal while efforts were being made to resort back to the customary resolution processes. These are oral accounts by respondents from both sides of the conflict.

On the Charile land conflict issue, it was revealed that the people of Nyimbale in the Nadowli-Kaleo District are laying claim to Charile lands and often trespass to undertake some customary rituals such as pacifying the land known as “Tengzeng peeroo” (blood cleansing) when there is accident or death on the land without recourse to them. The Charile people, according to the Tendaana, have challenged the Nyimbale people to submit themselves for ritual of “Nuo ngmaabo” which they are not willing to comply. The issue, according to ords, has been reported to the Dorimon-na but his intervention is yet to be realized. The people of Asse are accused by the Charile community of collaborating with the Nyimbale amunity to fuel this land conflict (that is an account from Tendaana of Charile).

Evaluation of the accounts of respondents reveal that land conflicts in the Dorimon ditional Area are mainly about land boundary issues between clans and or villages, ndary conflicts between neighbouring land users and, in a few cases, conflict over eritance of farm land, conflicts between Fulani Herdsmen and crop farmers. Women and settlers in isolated cases suffer some form of discrimination due to the customs where land is controlled by indigenous men. Consistent with the African culture, property rights of women in the research communities are tied to that of the men as they are considered properties of men (Kpieta and Bonye, 2014.).

It emerged that because lands are customary owned, like in many parts of Africa, the conflicts over lands are mainly over ownership. This is happening because the people attach so much value to the land as they see it as medium of interactions between them and their
ancestors (Millar, 2004) and for that matter losing ownership of the land means losing your identity and authority (Paaga and Dandeebo, 2014).

**4.3.3 Causes of Land Conflicts**

The main drivers of land conflicts have been identified as selfish individual interest, breakdown of traditional institutions, population pressure, unclear boundaries and increase in land value. Majority of respondents believe that, the upsurge of land conflicts is as a result of greed and selfish interest of individuals and other stakeholders. This selfishness, many of the respondents believe, has led to the breakdown of traditional institutions, such as Chieftaincy, Tendamba and Yidamba, which are no more respected because they are often accused of being compromised, leading to indiscriminate sale of lands. Many respondents also blamed increasing population as a factor as there is pressure on the land both for residential development and agricultural purposes.

Table (4.15) provides details on how respondents believe were the main drivers of land conflicts in the area.

**Table 4.15: Main Drivers of Land Conflict in the Dorimon Traditional Area**

<table>
<thead>
<tr>
<th>Drivers of land conflicts</th>
<th>No. of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Population pressure</td>
<td>110</td>
</tr>
<tr>
<td>2 Selfishness and greed</td>
<td>167</td>
</tr>
<tr>
<td>3 Breakdown traditional institutions</td>
<td>87</td>
</tr>
<tr>
<td>4 Increase in land value</td>
<td>64</td>
</tr>
<tr>
<td>5 Unclear land boundary</td>
<td>144</td>
</tr>
<tr>
<td>6 Quest for chieftaincy</td>
<td>89</td>
</tr>
</tbody>
</table>

Source: Field Survey, 2018
Majority of the respondents also blame the boundary conflicts between clans on unclear land boundaries. The case of the boundary conflicts between Guse and Dontanga and that of Charile and Nyimbale are clear cases of overlapping and unclear boundaries. These situations often give rise to people attempting to reinvent history like in the Nkonya-Alavanyo land conflicts in the Volta Region of Ghana (Gariba, 2015).

Some respondents also attributed the causes of land conflicts to the quest for chieftaincy in communities that are found in the lands in question.

*My brother, this whole issue of land conflict here and there is not necessarily about the land, it is about chieftaincy. You see a land priest (Tendaana) aspiring to be a chief because they claim they own the lands. Other princes also claim to become chiefs in communities that fall within lands they claim to be in their territories. The logic is that the communities do not hung on the air, but on the land. If one owns the land, then you own the community* (Excerpt from key informant interviews).

The fact that many lands have no clear boundaries, titles or documentation has given rise to claims and counter claims by many families over lands which has always been a cause of the numerous conflicts in the area. This agrees with the findings of Auma (2016) and Wahremann (2008) that unclear and undocumented land boundaries are the main drivers of conflicts in many parts of Africa.

### 4 Nature of Land Conflicts

Respondents reported of occasional rising of tempers over land conflict situations. However, none of the respondents reported of ever experiencing violence over land dispute. They reported that some of the conflicts are manifested through verbal confrontations, sometimes leading to rising tempers. Respondents from Dorimon(5), Donkoru(3), Dontanga(2), Bienye (2) and Kogle (1) all gave accounts of a violence that nearly broke in the Dorimon-na’s palace between the Guse and Dontanga clans when they met to deliberate on land issues in 2017. On that day, according the accounts by respondents, it took the intervention of Police to
ensure that there were no casualties. In some cases, parties do not confront each other but keep the conflict at the background.

Land conflicts in this community are always verbal confrontations between parties. Some people do always keep quite but harbour hatred for each other. I am yet to see or hear violence over land in this community, but there are times the youth of the clans in conflict always try to face each other (a 63-year old farmer, Dorimon Community).

The effect of these conflicts on the society is not healthy as it has affected social and economic functions of conflicting parties. Conflicting parties do not participate actively in funeral rites of opponents in some cases. For example, the people of Bienye who are mainly the Guse clan and the Dontanga clan people settled in Piisie have stopped burying each other’s dead as a result of the protracted conflicts.

I will not bury my enemy or allow my enemy to bury my relatives (a 28-year old man, Bienye community).

This has also led to disloyalty to some traditional leaders by their followers. In Siriyiri, for example, a faction refused to pay homage to the chief;

During the heat of the conflict, when you summon a community meeting, they won’t come. It is through these meetings that we can plan to see how we make sacrifices and ask for peace and bumper harvest (Chief of Siriyiri).

The nature of the conflicts in the area, generally, is non-violent, unlike in the Cote D’Ivoire-Liberia borderer Region where over 50% of land related conflicts are violent (NRC, 2012). In the Ubudu state of Nigeria, these conflicts often result in loss of lives (Uyang et al et al., 2013) and in the southern part of Ghana where land conflicts have led to the emergence of private security, called ‘land guards’, which has perpetuated violence on so many people and even leading, sometimes, to killings (Darkwa and Attuquayefio, 2012). The only violence or destructive activities are the destruction of farm produce at the farm by adversaries or Fulani herdsmen.
4.3.5 Levels of Land conflicts

The study revealed that land conflicts are generally between individuals, families, clans or villages as evident in the forms of land conflicts. The land boundary conflicts between neighbouring land users and that of farmers and pastoralist are mainly between individuals, except in some few cases, especially in Donkoru and Charile, where one incident each was recorded of land conflicts between individuals escalating to include their respective families. All boundary and ownership conflicts are between clans or between villages, as in the case of Guse-Dontanga land conflicts, the Guo-nayiri-Guo-Katung land conflicts and that of the Charile-Nyimbale land conflicts. The issue of Fulani herdsmen and crop farmers was reported to always be between the individual crop farmer and the particular Fulani Herdsman. This study confirmed the findings of Bebelleh (2012) that, there were outstanding land conflicts in the Dorimon Traditional Area of which the research communities’ fall. The study ealed the existence of land conflicts in all communities in the area. Corroborating the findings of Paaga (2013) that, women and settlers are not allowed to cultivate some types of ps due to cultural discrimination in the area, such limitations exist. Women and settlers are ed with some resistance in their attempt to cultivate tree crops like cashew and mango ntations as highlighted by one respondent each from Bienye, Kogle, Charile and Dorimon. Twenty-nine (29) respondents also confirmed the worrying effect of the activities of Fulani herdsmen in the area (AgNRM, 2017), where their animals often destroy farm crops. Proactive measures need to be taken in order to avoid the situation where crop farmers and pastoralists will take up arms against each other like the situation in the Agogo area of the Ashanti Region of Ghana (Opoku, 2015).

4.4 Food Security Situation

This section assesses the food security situation in the Wa West District. The researcher began by establishing the local knowledge of the people on food security because rural
people’s decision on land use and food production is still based on their local knowledge (Millar, 2004). This has to do with what constitute food security, juxtaposing that with the standard definitions of food security. The section then goes on to analyse the situation of the various dimensions of food security which include food availability, food access, food utilization and food stability of households and for that matter the population in the surveyed communities.

4.4.1 Respondents Understandings of Food Security

Respondents have different understanding for food security. As one respondent belief food security is the ability of one’s farm production (grains) to feed the family from the time of harvest to the next harvest or the ability of households to purchase enough food from other resources of income aside farm productions to stock are food secured.

*To say you are food secured depends on the ability of your farm produce to feed your family from one harvest to another or your ability to buy enough food to stock for the family which can feed them all year round. If your harvest is poor and you can sell an animal to buy food, then no one can say you are food insecure* (a 51-year old man, Siriyiri community)

According to the Makazie of Siriyiri, food insecurity, “Kong” as referred to in the Waale language is:

*When there is shortage of grains in the house from farm production and there is no money to purchase it from the market.* (Makazie, Siriyiri)

The understanding of the people on food security is the availability of food from farm production and in the market and the ability to access food by families all year round. This understanding fall short of the worldwide definition of food security as ‘a situation in which all people at all times have physical and economic access to sufficient, safe and nutritious food which meets their dietary needs and food preferences for an active and healthy life’ (World Food Summit, 1996). It does not also satisfy the Ghana’s Ministry of Food and...
Agriculture definition of food security as ‘the presence of good quality nutritious food hygienically packaged, attractively presented, available in sufficient quantities all year round and located at the right place at affordable prices’ (Nkegbe et al., 2017). Their definition does not cater for utility which emphasize on quality, dietary diversity and preferences.

4.4.1.1 Food availability

Various factors account for food availability for households. These include household food production and the availability of food in the market for sale or exchange. It can also include food aid (Helland and Sørbø, 2014). People in the Wa West District depend much on farm production as a source of food than they rely on purchases from the market (WFP, 2012). All 27 key informants interviewed agreed that there are no sufficient foods for all households year round from their own farm production. This is contrary to the findings of the reports that households have enough stalks of grains from their farm harvest in the Wa West District (FP, 2012). They, however, agreed that there were sufficient quality amount of food availability in the market. 57.2% of households also run out of food at some point in the year preceding the survey due to lack of money or other resources. Though there is reasonable amount of food in the market all year round, 114 (58.2%) of the respondents do not have food available to them all year round while 82 (41.8%) revealed that they have food available to them all year round. Some households have to skip meals at sometimes in the year due to the fact that they do not have enough food available and also lack of money or other resources.

4.4.1.2 Households’ Access to Food

Access to food hinges on the ability of the individual to acquire appropriate nutritious diet by possessing adequate resources, in other words known as entitlements (Helland and Sørbø, 2014), which can either be physical or economic (Simmons, 2013). However, the survey revealed that, despite the fact that there is sufficient food in the market; households are unable to access them due to lack of money and other resources. There are times households...
go hungry without eating because they do not have enough money or other resources. The figures in Table 4.14 revealed that 104 (53.1%) of the respondents at some time in the year did not have enough money or other resources. This poor access to food all hinges on the low economic status of households in the Wa West District.

Table 4.16: Respondents lacking food some times in the year

<table>
<thead>
<tr>
<th>Lack of food</th>
<th>Frequency</th>
<th>per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>92</td>
<td>46.9</td>
</tr>
<tr>
<td>Yes</td>
<td>104</td>
<td>53.1</td>
</tr>
<tr>
<td>Total</td>
<td>196</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Field survey, October 2018

The economic status of households coupled with their ability to produce enough to feed their families and also earn additional income affect their ability to acquire the set of entitlements (Sen, 1986) required to be food secured.

4.4.1.3 Households’ Food Utilization

This subsection assesses the extent of households’ food utilization in the Wa West District. It sought to ascertain whether individuals are able to maintain healthy diet that meet human requirement in terms of nutrition, energy, proper usage and hygiene or not. It was discovered that majority of households are unable to eat healthy food because of lack of money and other resources. Majority of households also eat less variety of food during the past year because they do not have enough money or other resources. However, there was no single household that will go hungry the whole day without eating. It was revealed that the people have a lot of coping measures to sustain their families. A woman indicated that, when it becomes critical, they prepare vegetable soup termed as “Zekore” and share as a meal.

The survey revealed that 142 (72.4) households are unable to eat healthy food because they did not have enough money or other resources. Also, 161(82.1%) households eat less variety of food during the year because they do not have enough money or other resources. Again,
majority (62.2%) of households’ food consumption was below the acceptable food consumption bracket (see Table 4.17).

Table 4.17: Food consumption groups

<table>
<thead>
<tr>
<th>Group</th>
<th>Frequency</th>
<th>per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor</td>
<td>44</td>
<td>22.4</td>
</tr>
<tr>
<td>Borderline</td>
<td>78</td>
<td>39.8</td>
</tr>
<tr>
<td>Acceptable</td>
<td>74</td>
<td>37.8</td>
</tr>
<tr>
<td>Total</td>
<td>196</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: field survey, October 2018

Using the food consumption score (FCS), it was revealed that 44 (22.4%) of households fall within the poor food consumption group, 78(39.8%) fall in the borderline while only 74 (37.8%) of the households were in the acceptable food consumption group.

The World Food Programme (2012) the FCS is a continuous variable with a range from 0 to 112 that provide meaningful descriptive analysis of food consumption than reporting average scores. With this, households are categorized into food consumption groups based on their FCS. The standard food consumption groups are poor, borderline, and acceptable food consumption. The ranges are as follows; 0-21 is poor; 21-35 is borderline and above 35 is acceptable. The World Food Program, under the Comprehensive Food Security and Vulnerability Analysis, further put the borderline food consumption group into moderate food insecure and mildly food insecure, describing the poor consumption group as severely food insecure while the group with acceptable food consumption is classified as food secure (WFP, 2012). Under these circumstances, it is difficult to do this categorization of the borderline into moderate and mildly food insecure households because, from the study, multiple factors determine household food consumption. The researcher agrees with the fact that both moderately and mildly food insecure households are unacceptable (Nkegbe et al.,
2017) and for that matter all are food insecure. This places 62.2% of households in the study area as food insecure households.

Qualitative data from focus group discussions reveal that people did not really care about the nutritional aspect of their meals and did not actually demonstrate their knowledge on its application to ensure proper child health (Simmons, 2013). Many of them were concerned with quantity and not the nutritional value and considered meat, egg, fish and milk as luxurious food reserved for the rich. A respondent had this to say:

*My son, when I struggle to get grains to feed my family, you are asking me of meat, egg and milk. If not those teachers who can afford to be buying milk because they are paid by government, how can a poor farmer like me afford milk always? A tea leave and sugar are enough to make good tea for me. As for meat, on festive occasions, even if I don’t have I will have to borrow to buy meat for the family* (a 60-year old man, Charile).

Respondents in all the study communities did not, however, see processing or storage of food as a problem. There are corn mills in every community that process grains into flour, the main staple food for communities and the people have their indigenous ways of preserving food, both cooked and uncooked.

### 1.4 Food Stability

Food stability depends on predictability, stability and certainty of the availability, accessibility and utility of food all year round (Simmons, 2013). However, the survey revealed that there was no certainty, predictability or stability of any of the three dimensions of food security in the survey communities. Majority of households were worried that they will run out of food because of lack of money, poor farm production or lack of other resources. The results revealed that 152 (77.6%) of the respondents were worried that their households will run out of food because of lack of money, poor farm production or lack of
other resources. Even households that have good harvest were worried of running out of food at some time of the year and indeed actually run out of food.

All the respondents agree that at some time of the year, availability, access and utility of food is always low even if it does not affect them directly. The months of June, July and August were the months many households experience food insecurity. According to the Chief of Charile, during this period, many households are always busy cultivating crops and there exist not enough grains left. For the Makazie of Dontanga, during this time, women are also engaged in farm activities and cannot burn charcoal to sell and buy food. Meanwhile, at that e, they would have exhausted the Shea nut gathered in exchange for food.

2012, the Wa West District recorded the highest food insecurity situation in the entire rthern Ghana with 42% rate of household food insecurity (WFP, 2012). The District was ong the top ten food insecure districts in Northern Ghana with 27.1% in 2016 (WFP, .6). The studies revealed that the food security situation is not getting better as 62.2% of households were still food insecure despite the numerous efforts by both governmental and -governmental agencies. This confirms the report by Nkegbe et al. (2017) that the food urity situation in the SADA zone was still worrisome with an average of 36.64% food security.

4.5 Effects of Land Conflicts on Food Security

The nexus of conflict and food security has become that of a vicious cycle or a double edge sword. Food security has been a major cause of social unrest in Nepal (Upreti et al., 2010) and was the cause of over 40 food riots in 2008/09 and also what has become the famous Arab spring (Helland and Sørbo, 2014; Simmons, 2013). Food security crisis in the Middle East, Northern Nigeria, Central and Eastern Africa have all been attributed to land resource-
related conflicts in those regions (FAO, 2017; FSIN, 2017; Auma, 2016; Désiré et al., 2015). There is, therefore, a strong relationship between food security and land conflicts worldwide.

Assessing the nexus between land conflict and food security, majority of respondents interviewed believed that land conflicts have negative effects on food security. The results reveal that, 154 (78.6) of the households interviewed agreed that land conflicts have effects on food security while 42 (21.4%) disagreed that land conflicts affect food security.

### 4.4.2 Effects of Land Conflicts on Food Availability

Table 4.18 reveals that 187 household respondents cultivated crops the previous year and out of that, 88 (47%) were respondents who have experienced land conflicts while the remaining (53%) were respondents that did not experience land conflicts. On the nature of harvest of respondents, the study revealed that 36 (41%) of respondents who experienced land conflicts indicated their harvest was very poor as against 9 (9.09%) of those who said they did not experience land conflicts. 45 (51%) of those who experienced land conflicts responded to have had poor harvest while 15 (15.2%) of those who did not experience land conflicts said they had poor harvest. On those who responded to have had good harvest, 5 (5.7%) and 40 (40.4%) of respondents indicated they had good harvest respectively for those who experienced land conflicts and those who did not experience land conflicts. Finally only 2 (2.3%) of respondents who experienced land conflicts indicated they had very good harvest while 35 (35.4%) of respondents who did not experience land conflicts responded to have had very good harvest.
Table 4.18: Land conflicts experience and household farm production

<table>
<thead>
<tr>
<th>Have You Experienced Land Conflict?</th>
<th>Household Nature of Harvest</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>Very</td>
<td>Poor</td>
</tr>
<tr>
<td>9</td>
<td>15</td>
<td>40</td>
</tr>
<tr>
<td>Yes</td>
<td>26</td>
<td>45</td>
</tr>
<tr>
<td>Total</td>
<td>45</td>
<td>60</td>
</tr>
</tbody>
</table>

Source: Field Survey, 2018

Figure 4.1 reveal how land conflicts affects respondent’s agricultural production in the study communities.

Figure 4.1: Effects of land conflicts on farm productivity of respondents

From figure 4.1 above, 68 (77.3) of respondents believe land conflicts lead to reduction in farm size, restriction to infertile land 43 (48.9%), loss of farm land 35 (39.8%), destruction of crops 26 (29.5%), destruction of farm produce 9(10.2%) and waste of time15 (17%)

The findings from table 4.18 and figure 4.1 reveal the negative effects of land conflicts on agricultural production in the area. Like many other communities in Northern Ghana food crops constitute the biggest source of livelihood for majority of the people in the area. These
people rely heavily on their farm produce to feed their families (Marfo, 2019). This situation of land conflicts have obviously contributed to the poor farm production in the area.

Land conflicts, according to some respondents, waste a lot of productive time by parties. Many people spend a lot of time engaging each other in resolving these conflicts which result in poor maintenance of farm, late cultivation and even reduction of farm size. In some cases, farmers are forced to abandon a portion of their farm land or even the whole land. This situation sometimes forces people to move out of the community.

*Just as my husband had finished clearing the land and we were waiting to get tractor to plough, he was reported to the elders by a cousin for trespassing. All his efforts to be allowed to cultivate just for the season failed. He was asked to vacate the land. He abandoned the land and left the community for galamsey.... (43 years old woman, Charile).*

Qualitative data indepth discussions also revealed that 65% of respondents belief that the land is a ‘god’ which does not like conflicts, therefore, land conflicts angers the spirits of the land. When the spirits are angered, they refuse to bless the land with bumper harvest.

*Every land deity hates conflict, when there is conflict on it, the spirits get angered and will not bless the land with bumper harvest* (53 year old widow, Dorimon community).

Respondents revealed that, at the beginning of every season, families used to come together to make sacrifices to the land gods (“Tungbama”), asking for good rainfall and bumper harvest. They will also do that at the end of the season to thank the gods for blessing them with good harvest. However, as a result of land conflicts, these practices no longer exist in some communities such as Siriyiri and Dorimon community.

Apart from Bienye, Kogle and Charile, where communal labour (helping in farming) is still effective, in all the other communities, people hardly help each other in farming;
Why will your enemy help you to get food? A person in land conflict with me doesn’t want me to get food. I can’t also wish he gets food. (54 years old widow, Donkoru community).

These were the words from a respondent on why conflicting farmers no longer support each other in farming. All this, the respondents believe, contribute to low production of crops in the area and for that matter result in poor food availability. Respondents in all communities during focus group discussions revealed that poor food production also affects the income of families since farming is their main source of livelihood. The activities of pastoral Fulani herdsmen were also identified to be affecting the cultivation of annual crops like cassava in the area as these animals always destroy them.

Respondents from Siriyiri, Zanko, Donkoru and Dorimon reported of incidences, as a result of land conflicts, where their’ crops are destroyed under the cover of darkness. People to the extent of setting fire on their opponents’ harvested grains in the farm. A respondent from Siriyiri reported of an incident where their yam barn was set on fire in the farm. Three (3) respondents from Charile and Siriyii also reported of their grains being set on fire after vesting and storing them in the farm. These were all attributed to the land conflicts. All these, the respondents suspect, were caused by their adversaries who perpetuated these acts.

This revelation confirm the globally accepted view that conflicts and, for that matter, land conflicts disrupts food production (FAO, 2017) as it leads to loss of farm lands, waste of productive time, reduction in farm sizes, investments and forced migration by people from production areas (Simmons, 2013; Auma, 2016). Previous studies by the World Food Program in 2012 and 2016 and that of Nkegbe et al. (2017) were all silent on the effects of land conflicts on food availability or low food production. 58 respondents attributed low production from farms to climate change as a factor but did not discount the effects land conflicts on the climate change. Findings from this study did not discount the effect of
climate change but re-echoed the belief that land conflicts are partly to blame on the poor rainfall pattern in the area since they believe it is the land gods that give rains.

It must however be noted that efforts to obtain data of farm production from the study communities from the Department of Agriculture were not successful. Statistics for the last three years were not readily available. However, according to the key informant from the Department of Agriculture, the phenomenon of land conflicts affected government flagship program of Block Farming for Siriyiri, Dorimon and Zanko after the first year of implementation in 2009. Under the Block Farm Project, communities allocate large portion of land where government assist in ploughing, supply of seed and fertilizer on credit. Community members are allocated plots to cultivate and make payment after harvest in kind or in cash. This said had to stop in those communities because people were in conflict over who really owns the lands and some cases some claimants were demanding royalties from beneficiary farmers.

**4.3 Effects of Land Conflicts on Food Access**

Access to food is a very important determinant of food security. As argued by Helland and Sørbø (2014), if there is abundance of food in the market or farm and one cannot access it, then you cannot say there is food security.

Figure 4.2 represents how experiences of land conflicts affects respondents access to food in the research communities.
Assessing the effects of land conflict on food accessibility, it was revealed that all respondents (100%) indicated that the experience of land conflict led to loss or reduction in income, 23.8 percent indicated that it affects food trade in their communities as adversaries would neither sell nor buy food from their opponent. It also revealed that 34 percent of respondents indicated that land conflicts affect food gift in the communities. People who could not cultivate certain crops used to help others and receive food gifts in return. However, adversaries will not give or receive food gifts from each other. This is what a respondent has to say:

.....after fighting with me over land, why should I sell/give you food from that same piece of land? I don’t also see why I should be buying/receiving food from someone who doesn’t want me to farm ...my family would rather starve to death than me receiving food or buying food from my enemy (44 years old man, Zanko).

Land conflicts, generally, according to the respondents, reduce income and, therefore, affect peoples’ ability to access food from the market. Some families have to sell food stuff or other properties to pursue land conflicts thereby reducing their ability to access other variety of food from the market as well as loss of income. For instance, all the households of the Guo-
nayiri section were levied in Siriyiri to contribute monies towards pursuing the land conflict case at the Wa High Court, the survey revealed.

From the survey, the reduction in income as a result of low productivity affects the set of bundles of the individual (Sen, 1986), which affects peoples’ access to food. It was also revealed that adversaries do not trade food among themselves; they do not receive or give food gifts to each other.

4.4.4 Effects of Land Conflicts on Food Utilization

This sub-section established the effects of land conflicts on the utility dimension of food security in the Dorimon Traditional Area. All respondents revealed that, because land conflicts lead to reduction in income and availability of food from farm production, it affects their ability to get quality nutritious food. This is as a result of the inability to buy the right ingredients that will give one a balance diet. Other revelations on the effects of land conflicts food utility and health service delivery are presented in figure 4.3.

Source: Field Survey, 2018

Figure 4.3: Effects of land conflicts on food system and health service delivery
The findings from figure 4.3 reveal that 45 percent of respondents who experienced land conflict said it led to the household restricted to less variety of food as they are confined to cultivate fewer variety which deny them the privilege of varying their diets as their income levels were also low. 17 percent of respondents indicated that land conflicts affect herbal medicine delivery, while 13 percent mentioned other effects like food alcohol poisoning (bêraa), spiritual attacks or charming on farm production and even human health. However, 25 percent of respondents indicated that land conflict do not have direct effect on their food utilization and health service delivery.

In-depth discussions with key informants and respondents reveal that in all research amenities, herbal medicine treatment is affected among adversaries. According some a informant, sickness is seen as more spiritual than physical. Some sicknesses are blamed spiritual attacks by enemies or as punishments for wrongdoings to adversaries in retaliation for evil intentions and for that matter people will not administer it or go to their enemies for same.

....do you know who is responsible for the sickness? Someone, who will wish you dead, you send yourself to him? ........sometimes, you are sick, but you wouldn’t even want your opponent to know you are sick (34 years old man, Zanko community).

This is what a respondent has to say on the issue of accessing herbal treatment from an adversary. Another respondent also had this to say about treating opponents:

......healing your enemy is like giving him arrows in the battle field. ........ Sometimes, the gods have a way of speaking, if you don’t take time, you will entangle yourself (42 years old man, Charile community).

This situation, therefore, affects their health since their incomes are low that they cannot access orthodox health services all the time.
A respondent also indicated that land conflicts restrict them to a particular piece of land which may not be able to cultivate some types of crops and does not promote variety in diet.

*I would have wished to cultivate yam, but the land suitable for yams has been hijacked and sold out to private developers against my will and without any compensation* (35 years old farmer, Zanko community).

Land conflicts, which lead to low food availability and low access to food, have compelled some respondents to adopt unhealthy coping mechanisms such as skipping of meals and feeding on vegetable soup and local pito as substitutes for meals. A 55 years old widow of Kogle with two children revealed that, as a result of her inability to farm the previous year and not having money to buy food, the family sometimes prepare only green vegetable leaves as meal. This she revealed is a normal coping mechanism for many households.

*One pot of pito each is able to sustain me and my old woman from morning to evening, where a meal is prepared* (55 years old man, Kogle community).

The above statement reveal how respondents resort to excessive drinking of local beer (called pito) in place of meals and to get rid of their problems of not being able to feed the family.

5 Effects of Land Conflicts on Food Stability

Food stability depends on the stability of food availability, access and utility. Respondents believed that land conflicts cause a lot of uncertainty in terms of food availability since it affects production. Respondents during focus group discussions were emphatic that land conflicts raise a lot of anxiety as to yield of crops since it is believed that it affects rains and crop yield. They also believed that it causes instability in the market resulting in high food prices.

Land conflicts sometimes lead to depletion of food stalk. Litigants are tempted to sell their food stalk in pursuit of the conflict, thereby increasing the uncertainties. All the respondents
who agreed that land conflicts affect food security also agreed that it is as well a threat to peace. They believed that, when there is breakdown of peace, food systems are affected which can lead to hoarding of food.

From the survey, it has been established that there is a strong connection between land conflicts and food security; hence land conflicts influence food insecurity in the Dorimon Traditional Area. The findings of this research did not depart from the worldwide position that land conflicts and conflicts in general, remain a great threat to food security (Désiré et 2015; Opoku, 2015). It, however, points to the fact that the findings of earlier researchers, which have all blamed low agricultural production and, for that matter, low income as an effect of climate change is problematic. These researchers did not explore the local knowledge and belief systems of the people. The people attaché spirituality to climate change they belief that it is the land gods that bring rains and when the land gods are angered, as a result of land conflicts, they refuse to bless the land with good rains. The failure of the people to come together to make sacrifices to these gods for rains and bumper harvest, as a result of land conflicts, also attest to this fact.

**Conflict Resolution Mechanisms suitable for Managing Land Conflicts**

analysing the various conflict resolution mechanisms available for the resolution of land conflicts in the Wa West District, the researcher explored the local knowledge of the people on land conflict resolution. This has to do with the existing structures in resolving land conflicts in the communities, how they are applied, their strengths and weaknesses. The researcher also obtained the preferences of the people on the structures to use, how it should be made effective, strategies in resolving outstanding land conflicts and recommendations on how land conflicts can be minimized or prevented.
4.5.1 Existing Land Conflict Resolution Structures in the Wa West District

The customary system is the leading structure in land conflict resolution in the survey communities. Respondents in all communities were aware of the existence of the customary structures and how they work, though they also have knowledge of the formal system, especially the courts. Only 6 percent of respondents were aware of the Alternative Dispute Resolution (ADR) mechanisms.

The common structures that exist according to 87 percent were that, land conflicts between individuals are first handled by their family elders. If it fails, they move to the community elders, which include the family elders (Yidandaba), land priest (Tendaana) and the chief. In Yidandaba community, according to a key informant had a committee which intervenes in land conflicts between people from different families before the community elders. When the chief and elders in the respective communities fail to resolve the conflicts, it is referred to the Dorimon-na, Paramount Chief of the Dorimon Traditional Area for determination. For land conflicts that bother on boundary or ownership of lands between clans, the various clan heads attempt to negotiate, when it fails the matter is sent to the paramount chief.

Respondents also identified the formal system, especially the court, as forum for land conflict resolution. However, the formal structure is seen as a last resort when the customary structures are exhausted. The 6 percent of respondents who mentioned ADR indicated that they are yet to experience its application.

4.5.2 Earlier attempts at Resolving Land Conflicts using Existing Structures

According to respondents, most conflicts involving individuals are successfully resolved using existing structures at the community level. There was not any reported incidence of land conflict between individuals going beyond the community. However, in some cases, people are dissatisfied with the way issues are resolved. All respondents who responded to
have experienced land conflicts have to go through the customary structures in resolving them and some have expressed dissatisfaction. From the data, of the 88 households who experienced land conflicts, 24, representing 27.3%, were dissatisfied with the outcome while 64, representing 72.7% were satisfied. This implies that, at the community level the customary structures are respected by the majority, which informs the reason why people do not take matters beyond the community level, even when they are not satisfied with the determination.

Oral accounts from key informant interviews in Donkoru, Siriyiri, Charile, Dorimon and Bienye all revealed that in resolving land conflicts between clans, it starts with negotiations amongst the parties. If it fails, the matter is sent to the Paramount Chief for adjudication. When there is a stalemate, there is a ritual called “Nuo-ngmaabo” (cutting a fowl). According to the respondents, in performing this ritual, the conflicting parties will go and stand in the land in dispute with a cock, one party will hold and the other will also hold the other part. Each of them will vow that he believes the land belongs to his clan and if he was wrong the land should speak the truth, and then the cock will be cut into two. The results, according to key informants, are always strange deaths on the side of the one that is at fault and they will quickly call on the other to admit and the necessary pacification done. These rituals, according to the respondents, have not been performed in the area before in their lifetime but they have heard it was implemented some time past and also elsewhere. However, all respondents who talked about it think it should be a last resort.

Land conflicts that bother on boundary or ownership between clans have also seen the intervention of customary structures but many are yet to be resolved. Three major outstanding land conflicts were mentioned. These are: the land boundary conflict between the Guse and Dontanga clans; the land ownership conflict between Guo-Nayiri (Royals) and Guo-Katume
(Land priests); and the land ownership conflict between Charile in Wa West District and Nyimbale in the Nadowli-Kaleo District.

Key informant accounts from Bienye and Donkoru revealed that resolution of the land conflict between Guse and Dontanga royal clans went through negotiations between the two clans which was not successful. The matter went to the Paramount Chief (Dorimon-na) for mediation. According to reports, the Dorimon-na directed them to show their respective boundaries. This was done and they were overlapping. Neither side was prepared to compromise. The next step in the customary structure after Dorimon-na is to resort to the ritual of cutting a fowl. The Guse clan was insisting on that while the Dontanga clan deferred the matter be sent to court. The Dorimon-na had given a tacit support to the stance of the Dontanga clan by a letter sighted by the researcher (appendix VI). These issues were covered by the researcher in correspondences between the two clans and that of Dorimon-na.

The Guse Clan invited the Dontanga Clan through a letter (appendix IV) for the rituals. In response, the Dontanga Clan challenged them to rather go to court through a letter (appendix V). The conflict between Guo-Nayire and that of Guo-Katung has travelled to the Dorimon-na’s palace after negotiations failed. It could not be resolved. The matter was sent to the Wa High Court which ruled in favour of the Guo-Katung, according to key informant reports. The Guo-Nayiri had served notice of appeal while there were efforts at resorting back to the customary resolution.

According to the Tendaana of Charile, negotiations between Charile and Nyimbali on the ownership of the Charile land have failed. The matter has been reported to the Dorimon-na and, also, Charile people have challenged the people of Nyimbali for the ritual of fowl cutting which they have declined.
Some of the earlier attempts were not successful because respondents blamed it on non-cooperation by parties, weak traditional institutions, greed on the part of traditional authority and the people not recognizing the courts as a proper avenue for resolving land conflicts and the effects of modernization. The Guse and Guo-Nayiri clans also accused the Dorimon-na of not playing a neutral role and not speaking the truth. There are well established structures in resolving land conflicts in the study area. The problem is the compliance by parties to submit themselves to it. According to AgNRM (2017), land conflicts are first handled by the family or clan head in consultation with the council of elders and when it fails, the matter is sent to chief as the final arbiter. However, the findings of this study did no find the chief as the final arbiter in the customary process. It is revealed that the ritual of “nuo ngmaabo” (cutting fowl) is the final option when all the others fail. This is consistent with the structures that exist in neighbouring Wechiau area who also resort to the ritual of “nuo ngmaabo” as the last resort for determination of land ownership (Paaga, 2013). This practice of sacrificing to the gods to determine true ownership is also recognized by the Nkonya and Alavanyo people of the Volta Region of Ghana as an effective way of land conflict resolution (Gariba, 2015). The limitations on the use of these rituals is the non-compliance by parties, especially those who perceived to be at fault.

The neutrality of chiefs and elders was also in doubt as the Paramount Chief, Dorimon-na’s, neutrality has been brought into disrepute. He has been accused in the Guse-Dontanga and the Guo-Nayiri – Guo-Katung land conflicts of being bias towards one party or the other. The situation in the study area is not different from what exist in Uganda where, in most cases, the ruling of the elders and chiefs are not respected by parties (Auma, 2016).

Though the court is seen as a last option, it is not seen as a panacea to the land conflicts since about 87 percent of respondents believe that, whatever be the case, the customary system
should be the right channel. This is evidence in the fact that the Guo-Nayiri and Guo-Katung land conflicts went as far as to the High Court but the matter could not be resolved there, which they have to resort back to the customary procedure. The Nkonya-Alavanyo land conflict has seen several court rulings but that never resolved the matter (Gariba, 2015).

4.5.3 Effectiveness of Land Conflict Resolution Mechanisms

Of the three conflict resolution systems that exist in the area, majority of respondents believe that the customary system is the most effective system (Table 4.16) and would prefer it in resolving land conflicts.

<table>
<thead>
<tr>
<th>Preferred system</th>
<th>Frequency</th>
<th>Per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customary System</td>
<td>171</td>
<td>87.2</td>
</tr>
<tr>
<td>Formal System</td>
<td>14</td>
<td>7.1</td>
</tr>
<tr>
<td>ADR</td>
<td>11</td>
<td>5.6</td>
</tr>
<tr>
<td>Total</td>
<td>196</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: field survey, October 2018

The survey revealed that, 171 (87.2%) of the respondents prefer to use customary land conflict resolution structures while 14 (7.1%) and 11 (5.6%) prefer the formal system and ADR mechanisms respectively. The over 87 percent of respondents who preferred the customary structure indicated that the reason for their preference for the customary system was because the lands are customary owned and administered; therefore conflicts regarding lands should be resolved customarily. They also believe that it promotes peace, unity and reconciliation among parties. These respondents also see the formal system as alien to their culture, very expensive and non-transparent. Respondents revealed that there is strong connection between the living and their ancestors through the lands and every matter concerning the lands should be referred to the gods through the customary way. Going against that, to them, will incur the raphe of the gods and their ancestors.
Respondents who prefer the formal system argued that, the customary system is weak and lacks the power of enforcing its decisions. They also sited their beliefs, either as Muslims or Christians, since the customary system is characterized by sacrifices to smaller gods which their faith does not allow them to engage in. Of the 14 respondents who prefer the formal system, 12 (85.7%) will prefer to go to the court while 2 (14.3%) will prefer sending the matter to the police (see Table 4.17).

### Table 4.20: Preferred formal structure for land conflict resolution

<table>
<thead>
<tr>
<th>Structure</th>
<th>Frequency</th>
<th>Per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Court</td>
<td>12</td>
<td>85.7</td>
</tr>
<tr>
<td>Police</td>
<td>2</td>
<td>14.3</td>
</tr>
<tr>
<td>Total</td>
<td>14</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: field survey, October 2018

Respondents who prefer the ADR argued that, it is less expensive as compared to the formal system. They also feel it does not lend itself to corruption and manipulations. Some of the respondents also preferred the ADR to the customary system because of their religious beliefs which are against associating things with gods. They belief it is blasphemous to refer the lands as gods which they do not want to subscribe to. Table 4.18 revealed that majority of the respondents who prefer the ADR, 6 (54.5%), would prefer mediation as a mechanism, with 3 (27.3%) and 2 (18.2%) preferring arbitration and negotiations respectively as mechanisms for resolving land conflicts.
Table 4.21: Preferred ADR mechanism

<table>
<thead>
<tr>
<th>ADR mechanism</th>
<th>Frequency</th>
<th>Per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negotiation</td>
<td>2</td>
<td>1.0</td>
</tr>
<tr>
<td>Mediation</td>
<td>6</td>
<td>3.1</td>
</tr>
<tr>
<td>Arbitration</td>
<td>3</td>
<td>1.5</td>
</tr>
<tr>
<td>Total</td>
<td>11</td>
<td>5.6</td>
</tr>
</tbody>
</table>

Source: Field survey, October 2018

Despite the inherent weaknesses of the customary system, results of the survey revealed that it is the most effective forum for resolving land conflicts in the study communities. The argument by some respondents that the customary system lends itself to sacrifices to smaller gods as the reason may not fly in the face of their culture and customs since the land in general is considered as a god (Kpieta and Bonye, 2014).

4. Making the Customary Resolution of Land Conflict Effective

To make the customary system of land conflict resolution effective, respondents identified family elders, clan heads (Yidamba), Land priests (Tendamba), Chiefs and the Paramount Chief (Dorimon-na) as major stakeholders that must be involved in conflict resolution processes. With this, they expected them to be truthful, honest, firm and fair and dispense justice without fear or favour.

There was consensus in all the focus group discussions on the need for Yidamba and Tendamba to collaborate in determining actual land boundaries between clans and/or families. These bodies, according to them should together with the chiefs collaborate in administering lands in the area. This position was supported by all key informants in Kogle, Bienye, Donkoru and Zanko. However, the Tendamba of Dorimon and Siriyiri had a different view. They think the chief should have no business in land administration.
Common responses that run through the discussions on the strategies to employ in order to make the customary resolution effective include; a proposal for stiffer sanctions for offenders of land conflicts to serve as deterrent to others and those who disregard the customs should be ex-communicated. Respondents also proposed the setting up of land conflict resolution committees in the communities to assist the elders. It was proposed by respondents that regular sacrifices to the gods should also be sustained.

From the discussions in all the communities, there was consensus on who should be involved in the customary conflict resolution processes and these are the chiefs (including Dorimon-, Yidamba, Tendamba, family elders, the youth and land users in general. Customary negotiation, mediation, arbitration and adjudication were identified as the best ways in solving land conflicts. However, there was divergence on the invoking of the ritual of cutting fowls. While 100 household heads and 10 key informants all agree that it should be considered as the last resort when there is a standoff between two clans or communities, the other respondents think it should not be an option to be considered. One respondent described it as barbaric, evil and murderous. Proponents of this ritual argue that it is the best way in the absence of any alternative. They believe it preserves the sanctity of the land and their customs those who do not support it are those who always want to cheat the system. It must be noted that no woman or settler respondent mentioned it as an option.

4.5.5 Strategies for Resolving Outstanding Land Conflicts

The respondents who preferred the customary resolution expressed their knowledge on what land mean to many people. According to them, they see the land as means of survival, symbol of authority and identity. Any attempt at alienating it means losing their means of survival, symbol of authority and identity. In order to resolve these outstanding land conflicts,
respondents propose collaboration among the various stakeholders to examine the underlying issues and address them.

It was also proposed that where there is conflict between individual land users, the problem can be solved by getting an alternative land for one of the parties or where possible share that portion of land among them or, at worst, stop all parties from accessing that particular land.

When the issue is about farming land between individuals, it is not that difficult resolving. Sometimes the elders will advise them to come to an understanding to demarcate an agreed boundary where each one of them will face an opposite direction. In some instances, an alternative land is found for one of the parties. If any of these alternatives is not applicable, parties are all made to leave the land (65 years elder, Dontanga community).

Eight respondents also believe parties should be prepared to make compromises and also learn to accommodate each other on the land. This, they think, must apply to the conflicts between clans over ownership.

Another suggestion that came up was that parties should confront each other, unearth the issues and the truth will prevail. One respondent had this to say:

By refusing to confront the issues and discover the truth today in the name of peace and development means postponing insecurity, lies, discrimination and under development to our generation (34 years youth respondent, Bienye community).

In the discussions, it was revealed that problem solving, collaboration, compromises, and accommodation are the strategies that can be used to resolve land conflicts. Respondents also believe that, until people are ready to speak and accept the truth, the conflicts will continue.

The intractability nature of land conflicts (Awedoba, 2009) calls for the use of multiple strategies in resolving them. Therefore, in attempting to resolve land conflicts, practitioners should employ more than one strategy.

4.6 Conclusion

This chapter analysed data from households and key informants in the research communities. It was revealed that there are a number of land conflicts in the research communities in the
form of boundary conflicts between individuals over farmland and boundary and ownership conflicts between clans. There were also cases of conflicts between Fulani Herdsmen and crop farmers and, also, isolated cases of women and settlers suffering some form of discrimination. 6 respondents also identified conflicts over inheritance of farm lands among family members as one of the forms of land conflicts. Assessing the food security situation, it was revealed that about 62.2% of household were food insecure. Respondents also agreed and established the relationship between land conflict and food security in the District. They revealed that land conflicts affect food production, reduction in income, stifles health delivery ecially herbal medicine and inability of households to produce and eat variety of food. customary system of conflict resolutions was identified as the most effective system of conflict resolution in the communities. Strategies for managing land conflicts include; parties accommodating each other and making compromises to promote peace, collaboration ween Tendamba and Nabiisi in land administration and developing of land use plans among others. Meanwhile, positions were divided on the use of rituals such as the cutting of "Nuo-ngmaabo" in determining land ownership. Whereas others see it to be effective, others think the consequences are daring, with others seeing it not to conform to their religious beliefs.
SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The main focus of this research was to assess the implication of land conflicts on food security in the Dorimon Traditional Area of Wa West District. The specific objectives set to achieve this goal by the researcher were: to assess the food security situation in the area, assess the land conflict situation in the area, to examine the relationship between land conflicts and food security, and to explore conflict resolution mechanisms suitable for managing land conflicts in the Dorimon Traditional Area. To achieve this goal, empirical data were collected and analysed using the mixed method approach. The findings of the research inform the conclusions and recommendations, which are the focus of this chapter. To put the issues in perspective, presentation of the findings are structured according to the specific objectives of the research.

Summary of Key Findings

5.1 Situation of Land Conflicts

The study revealed that lands in the Dorimon Traditional Area are communally owned and the main tenure system is the customary free hold system. Contrary to reports that lands are owned and administered by land priests in the Upper West Region (Bebelleh, 2008 Kuusaana et al., 2013), the study revealed that chiefs and royal families have laid strong claim of ownership and control of majority of lands in the Dorimon Traditional Area on the basis of first settler or conquest principle (Kpieta & Bonye, 2014.). The role of the Land Priests in the scheme of land administration is the ritual role of sacrificing to the Tungbama (land deities). Non-indigenes are described as settlers or strangers and, therefore, do not own land. However, individuals are allowed to acquire land at least for residential purposes.
There was prevalence of land conflicts in the Dorimon Traditional Area. Respondents (86.7%) in all research communities were aware of the existence of land conflicts and 44.9% of them had actually experienced land conflicts before this study. The main forms of land conflicts in the study area were land boundary conflicts between neighbouring land users, boundary and ownership conflicts between clans or villages and land use conflicts between crop farmers and Fulani herdsmen. There were isolated cases of land conflicts between people of the same family over inheritance of farm lands and also settlers and women, especially widows were facing limited access to land due to some form of discrimination.

Prominent land conflicts were the land boundary conflicts between the Guse and Donta clan, the land ownership conflict between Guo-Nayiri and Guo-Katung clans and that of the Charile and Nyimbale communities’ land ownership conflict. The findings corroborate that of Bebelleh (2008) which revealed that there were pockets of land conflicts in the Dorimon area between gates.

The study also revealed various stakeholders and their interest with regards to land and land conflicts in the study area. The main stakeholders were the Traditional authorities (paramount chief, divisional and sub-chiefs and Tendamba) who are the custodians and administrators of lands. They see land as a symbol of authority, object of identity, ancestral legacy and a spirit which connects them to their ancestry. The traditional authority is pivotal in the customary land conflict resolution processes in the area. The second group of stakeholders were the land users which included; families, settlers, herdsmen and the youth. They are engaged in the day-to-day usage of land. Most often, these people engage each other in conflict over the land. The third group of stakeholders included government agencies (District Assembly, Department of agriculture, and the Police) and Civil Society Organizations such as the Non-governmental Organizations, Religious bodies and the media. They were concerned with the overall development of individuals and communities including
the maintenance of law and order and also ensuring food security. They, therefore, play the role of providing institutional framework for land management and usage as well as facilitating land conflict management processes.

The study further revealed that, the upsurge of land conflicts was as a result of greed and selfish interest of individuals and other stakeholders. This selfishness has led to the breakdown of traditional institutions such as Chieftaincy, the powers of Tendamba and Yidamba, are no more respected because they are often accused of being compromised, leading to indiscriminate sale of lands. Another driver of land conflicts was the increasing population which was giving rise to pressure on the land both for residential and agricultural poses. The case of the boundary conflicts between the Guse and Dontanga and that of the arile and Nyimbale communities were clear cases of overlapping and unclear boundaries. argued by Awedoba (2009), chieftaincy is intricately linked to ownership of lands and people ascend to chief ship and control all other benefits accruing from the lands in communities that fall within their land domains (Gaara), hence the quest for chieftaincy status is partly giving rise to multitude of the land disputes in the area.

The fact that many lands have no clear boundaries, titles or documentation has given rise to claims and counter claims by clans and communities over lands which have always been a cause of the numerous conflicts in the area. This corroborate with the findings of Auma (2016) and Wahremann (2008) that unclear and undocumented land boundaries are the main drivers of land conflicts in many parts of Africa.

5.2.2 Food Security Situation

Majority of people in the Wa West District understood food security as the ability of all families to be able to get enough food from either farm production or buy enough grains from the market to feed the family from the time of harvest to the next harvest. This understanding
places emphasis on food availability, accessibility and stability and partly deviates from the internationally accepted definition of food security which encompasses availability, accessibility, utility and stability of food at all times (FAO, 1995).

It was revealed that food availability to households remain an issue in the study area. Households’ food from farm production was not sufficient to feed the family all year round. About 56.1 per cent of households who cultivated crops the past year recorded poor harvest while only 43.9 per cent had good harvest. This is contrary to earlier reports that households have sufficient grains from farm production (WFP, 2012). Majority of households (58.2 per cent) run out of food at some time of the year and do not have enough money or other sources to acquire food. However, it was revealed that food was available in the market all year round for families who could afford to purchase.

The study further revealed that, the economic status of households, coupled with their ability to produce enough to feed their families and also earn additional income, affect their ability to acquire the set of entitlements (Sen, 1986) required to be food secured. It was revealed that, majority of households do not have access to appropriate food because they do not possess adequate resources despite the fact that there is sufficient food in the market.

It was revealed that majority of households, 142 (72.4%) were unable to eat healthy food because of lack of money and other resources. Majority of households, 161 (82.1%), took less variety of food during the past year because they do not have enough money or other resources. However, there was no single household that went hungry the whole day without eating. It was revealed that the people have a lot of coping measures to sustain their families.

Using the food consumption score, it was shown that 62.2 per cent of households fell within the unacceptable food consumption level while 37.8 per cent of households were within the acceptable food consumption level.
From the results, it was revealed that majority of people did not really care about the nutritional aspect of their meals and did not actually demonstrate their knowledge on its application to ensure proper child health (Simmons, 2013). Many of them were concerned with quantity and not the nutritional value and considered meat, egg, fish and milk as luxurious and a preserve for the rich. Respondents in all the study communities did not, however, see processing or storage of food as a problem. There were corn mills in every community that process grains into flour, the main staple food for households. The people also had their indigenous ways of preserving food, both cooked and uncooked.

According to Simmons (2013), food stability depends on predictability, stability and certainty the availability, accessibility and utility of food all year round. However, the survey revealed that there was no certainty, predictability or stability of any of the three dimensions food security in the survey communities. Majority of households, 152 (77.6%), were worried of running out of food because of lack of money, poor farm production or lack of other resources. Even households that had good harvest from farm production were worried running out of food at some time of the year and indeed actually run out of food.

Findings from the study showed that 62.2 per cent of households in the study communities were food insecure. This is higher than findings of earlier studies in the Wa West District which revealed that, 42 per cent of households were food insecure in 2012 (WFP, 2012) and 27.1 per cent in 2016 (WFP, 2016). It is also higher than the average food insecurity situation of 34.64 per cent of households in the SADA zone as at 2017 (Nkegbe et al., 2017). It was also revealed that food insecurity is always high in the months of June, July and August. This is the time many people were seriously engaged in their farm activities and have exhausted the grains from their farm production.
5.2.3 Relationship between Land Conflicts and Food Security

From the study, it has been established that there is a nexus between land conflicts and food security in the Dorimon Traditional Area like many parts of the world though the situation is not volatile like what pertains in the Middle East and North-Eastern Nigeria (FAO, 2017). The people attach spirituality to every aspect of their lives, they believe that land conflicts affect food production and, for that matter, food availability. They believe that the land is a ‘god’ which does not like conflicts. Therefore, land conflicts anger the spirits of the land. When the spirits are angered, they refuse to bless the land with bumper harvest. They also revealed that, land conflicts have affected the collective sacrifices by families to the land gods (Tungbama) asking for good rainfall and bumper harvest. They believed this situation was contributing to the low rainfall and also low farm production.

It was revealed that land conflicts waste a lot of productive time by parties. Many people spend a lot of time engaging each other in resolving these conflicts which result in poor maintenance of farms, late cultivation and even reduction in farm sizes. In some cases, farmers are forced to abandon portions of their farm lands or even the whole land. This situation sometimes forces people to move out of the community. Farmers in many of the communities no longer help each other in the form of communal labour as a result of the land conflicts. It also emerged that land conflicts restrict some people to be cultivating on one piece of land for a long time making it infertile and unproductive. All these, respondents believe, contribute to low production of food in the area and for that matter result in poor food availability. Poor food production also affects the income of families since farming is their main source of livelihood. The activities of pastoral Fulani herdsmen have also affected the cultivation of annual crops like cassava in the area. Generally, all respondents who agreed that land conflicts affects food security also agreed that it leads to low food availability from farm production and that would also increase the prices of food in the market since they are
always imported. This revelation confirm the globally accepted view that conflicts and, for that matter, land conflicts disrupts food production (FAO, 2017) as they often lead to loss of farm lands, waste of productive time, reduction in farm sizes, loss of investments and forced migration by people from production areas (Simmons, 2013; Auma, 2016). Previous studies by the World Food Program in 2012 and 2016 and that of Nkegbe et al. (2017) on food security in northern Ghana were all silent on the effects of land conflicts on food availability or low food production. They all, however, identified climate change as a factor. Findings from this study did not discount the effect of climate change but majority of the respondents believe that land conflicts are partly to blame on the poor rainfall pattern in the area since they believe it is the land gods that give rains.

Land conflicts generally, according to the respondents, reduce income and, therefore, affect peoples’ ability to access food from the market. Once land conflicts culminate into low productivity, it reduces income of families which affects their ability to have access to food in the market. The little that is even gotten from farm production is often sold by families pursue the conflicts or sometimes to fortify themselves against their adversaries. For instance, all households in Siriyiri were levied to contribute monies towards pursuing the land conflict case at the Wa High Court, the survey revealed.

It was also revealed that land conflicts affect food trade and food aid. Adversaries do refuse to buy food from or sell food to people they are in land conflicts with. These adversaries will not give or receive food gifts from their opponents as well.

It was established that land conflicts reduce incomes of families and therefore affected their ability to purchase quality nutritious food and for that matter unable to get balanced diet. People are restricted to a particular piece of land, and are unable to cultivate some types of crops which do not promote variety in diet. These land conflicts sometimes lead to the
destruction of crops and food systems in farms. In some communities, there were instances where crops and farm produce were set on fire under the cover of darkness as a result of land conflicts.

Respondents also revealed that land conflicts affect health and health services. Some believe that land conflicts, in general, and land conflicts in particular, disturb the peace of mind and for that reason lead to loss of appetite which affects diet. Conflicting parties are also unable to access or administer herbal treatment among themselves as a result of land conflicts. Majority of the respondents believe that sickness is more spiritual than physical. Some sicknesses were blamed on spiritual attacks by enemies or as punishments to adversaries as sanctions for their evil intentions and for that matter people will not administer it to their adversaries or go to see adversaries for same.

Land conflicts, which lead to low food availability and low access to food have compelled some respondents to adopt unhealthy coping mechanisms such as skipping of meals and feeding on vegetable soup as a meal. Some claim they take to excessive drinking of local beer called pito and other alcohol as substitutes for meals and also to get rid of the worries of not being able to feed the family.

As it is established that food security hinges on the stability of food availability, accessibility and utilization all year round (Simmons, 2013), it was revealed that, the people believe land conflicts bring about a lot of uncertainty in terms of food availability since it affects production. Respondents were emphatic that land conflicts raise a lot of anxiety about the yield of crops since it is believed that it affects rains and crop yield. They also believed that it causes instability in the market resulting in high food prices. Land conflicts sometimes lead to depletion of food stock. Litigants are tempted to sell their food stocks in pursuit of the conflict, thereby increasing uncertainties. To the extent that land conflicts pose threat to
peace, respondents believe that when there is breakdown of peace or a threat to it, anxieties are raised and lead to people hoarding food.

5.2.4 Land Conflict Resolution Mechanisms

The study revealed that the customary system of resolving land conflict was the most popular and preferred system of resolving land conflict in the survey communities. There was an elaborate structure of applying the customary conflict resolution system in all communities. Land conflicts between individuals are first handled by their respective family heads. If it was successful, the matter is sent to the community leadership which include family heads (damba), Land Priest (Tendaana) and the chief. In some communities, there were Community Natural Resource Management Committees which intervene before the matter is sent to the Community leadership. When all these fail the matter is sent to the Dorimon-na (paramount Chief) for adjudication. However, there was no instance of land conflict between individuals travelling beyond the community to the paramount chief. For land conflicts that are on boundary or ownership of lands between clans, the various clan heads first attempt to negotiate, when it fails the matter is sent to the paramount chief for mediation. If the intervention of the paramount chief fails, a customary ritual of cutting fowl (Nuo-ngmaabo) is supposed to be resorted to. When there is a stalemate, there is a ritual called “Nuo ngmaabo” (cutting a fowl). Performing this ritual, the conflicting parties stand in the land in dispute with a fowl to vow. Each of them will vow that he believes the land belongs to his clan and if he was wrong the land should speak the truth, and then the cock will be cut into two. The consequences of this ritual are always strange deaths on the side of the one that is at fault and they will quickly call on the other to admit and the necessary pacification done. This practice is recognized by the neighbouring Wechiau Traditional Area in the Wa West District (Paaga, 2013).
The formal structures such as the court and police were also identified as avenues available for land conflict resolution. However, they thought the formal structure is applicable when it is impossible to apply the customary system. Some respondents demonstrated their knowledge of the availability of Alternative Dispute Resolution Mechanism (ADR) but had not seen it being applied in the area.

The study revealed that, all land conflicts involving individual land users that were subjected to the customary system of land conflict resolution were successfully resolved. Parties who dissatisfied with the outcome were not willing to pursue the matter further because of the trust they have for elders in the community. However, land conflicts that bother on boundaries and ownership between clans and communities were outstanding. Negotiations between them had broken down. The land boundary conflict between the Guse and Dontanga clans went through negotiations among them which were not successful. The matter went to paramount chief for arbitration which also resulted in stalemate as a result of overlapping boundaries shown by each clan. The Dontanga Clan had turned down the request by the Guse Clan to submit themselves to the customary ritual of Nuo-ngmaabo (cutting of fowl) while insisting that they should go to the law court. The Dorimon-na was alleged to have taken side with the Dontanga clan against the Guse Clan. He had subsequently given his support to the idea of going to court in a letter sighted by the researcher (appendix VI).

The conflict between Guo-Nayire and that of Guo-Katung is about land ownership and control. After failing to resolve it through the customary structures, the matter was sent to court which outcome could not resolve the matter. This situation has seen parties resorting back to the customary structure. Negotiations between Nyimbale and the Charile communities had broken down but Nyimbale had refused the challenge of Charile to let them resort to the ritual of “Nuo-ngmaabo” (cutting of fowl).
Earlier attempts to resolve the outstanding land conflicts have failed. This was blamed on non-cooperation by parties on submitting themselves to the customary system, greed on the part of traditional authorities, people no longer standing by the truth and the advent of modernization which has weakened the Traditional institutions. The Dorimon-Na, who is supposed to be an impartial final arbiter, had lost that respect in the eyes of some of the parties as the Guse and Guo-Nayiri Clans have all accused him of taking side with their respective opponents. The Charile community had also accused him of being indifferent about their conflict with Nyimbali, though the matter was reported to him. Majority of the people also see the court system as alien to their culture and therefore do not recognize it as proper avenue for land conflict resolution. They however agree that it should be the last option when parties are adamant in submitting to the customary system of resolving the land conflicts. It was also revealed that modern laws have rendered the customary system impotent of its ability to compel parties to submit to it.

Despite the failure of earlier attempts to use the customary system in resolving land conflicts, 87.2% of the people believed it was still the best system in resolving land conflicts while 2% and 5.6% preferred the formal system and the ADR mechanisms respectively.

Reasons espoused for their preference of the customary system was because the lands are customarily owned and administered; therefore conflicts regarding lands should be resolved customarily. They also believe that it promotes peace, unity and reconciliation among parties. Many respondents also see the formal system as alien to their culture, very expensive and non-reconciliatory. Respondents revealed that there is strong connection between the living and their ancestors through the land and every matter concerning this land should be referred to the gods through the customary way. Going against that, is considered sacrilegious which may incur the rap of the gods and their ancestors.
Respondents who prefer the formal system or ADR argued that, the customary system is weak and lacks the power of enforcing its decisions. Some also sited their beliefs, either as Muslims or Christians. Since the customary system is characterized by sacrifices to smaller gods which their faith does not allow them to engage in. It must however be noted that majority of respondents who preferred the customary system were either Muslims or Christians. Those who showed preference for the ADR also argued that, it is less expensive and does not lend itself to corruption and manipulation as compared to the formal system.

To make the customary system of land conflict resolution effective, there was consensus on involvement of all stakeholders in the customary conflict resolution processes and these the chiefs (including Dorimon-Na), Yidamba, Tendamba, family elders, the youth and land users in general. Respondents would want the leaders to employ customary negotiations, mediation, arbitration and adjudication where possible in resolving land conflicts. With this, they expected them to be truthful, honest, firm, and fair and dispense justice without fear or our. However, there was divergence on the invoking of the ritual of nuo-ngmaabo (cutting of fowl). While some agree that it should be considered as the last resort when there is a standoff between two clans or communities, others think it should not be an option to be considered. The customary ritual of nuo-ngmaabo (cutting of fowl) has been recognized as the final or supreme structure in the customary land conflict resolution mechanism. Because of the dare consequences of performing the ritual, some think it should be used sparingly or even not at all. Others think it is the best alternative when there is a stalemate. Proponents of this ritual argue that it is the best way in the absence of any better alternative. They believe it preserves the sanctity of the land and their customs and those who do not support it are those who always want to cheat the system.

The intractability nature of land conflicts (Awedoba, 2009) call for the use of multiple strategies in resolving them. Therefore, in attempting to resolve land conflicts, practitioners...
should employ more than one strategy. Because land means so much to many people as their sustenance depends on it, respondents proposed that where the conflict is between land users, the problem could be resolved by getting an alternative land for one of the parties or where possible share that portion of land among them or at worst, stop all parties from accessing that particular land. Some respondents believe that long standing disputes over land which have been allowed to be latent has not helped matters and therefore suggested that parties should confront each other, unearth the issues and the truth will prevail. Some respondents also believe parties should be prepared to make compromises and also learn to accommodate each other on the land. This, they think, must apply to the conflicts between clans over ownership.

Conclusions

The Dorimon Traditional Area is a cosmopolitan area with the Waala, Dagaaba and the Ga-Wulee being the major ethnic groups. There are other minority ethnic groups consisting the Mosi, Wangara and Hausa. Lands in the Dorimon Traditional Area are customarily owned and the customary freehold system is the land tenure system practiced in the area. The area has a relatively young population with a high illiteracy rate and large household size. Majority of the respondents (80.6%) in this study earn GHC 300.00 as monthly income which means that their average daily earning is less than the 2018 daily minimum wage of the average Ghanaian worker. This is reflective of the fact that majority of the people do not have formal education and are engaged in crop farming on subsistent basis. This situation has grave implications for their food security.

The study concludes that land conflict is pervasive in the Dorimon Traditional Area and of all the forms of land conflicts, land ownership and boundary conflicts between clans and villages, are the most intractable conflicts in the Area. The land conflicts between the Guse and Dontanga clans, Guo-Nayiri and Guo-Katung and that of the Charile and Nyimbale
communities remain a threat to agriculture in general and food security in particular in the area. They further pose threat to peace and security. Despite the fact that they are non-violent in nature, they have affected social relations of the people in the area to the extent that they do not even perform funerals together. It was established that these conflicts were being driven by greed and selfish interest by individuals, the lack of clear land boundaries between clans and weakening of the traditional institutions with the advent of modern religions and laws. The rapid population growth in the area is also a driving force to the numerous land conflicts as there continue to be pressure on the land with competing interests.

Despite the numerous interventions by both governmental and non-governmental agencies towards improving the food security situation, there is still high prevalence of food insecurity in the Dorimon Traditional Area. Though there is sufficient food in the market, food is not available to all households all year round. Despite the fact that majority of the people are food crop farmers, food from own farm production is not always enough to feed the families all year round. This is contrary to earlier findings that households have enough food from farm production (WFP, 2012), but however corroborate with the revelation that their incomes are low which often affects their ability to access food from the market. The low income of families has also affected their ability to acquire quality and well balanced variety of food.

The people do not have adequate knowledge on what constitute food security neither do they appreciate the importance of quality nutritious food as a result of their illiteracy. There is high degree of uncertainty on the availability of food, access and its utilization to families all year round. Therefore the study concludes that quality nutritious food is not available, accessible and affordable to majority of families at all times in the Wa West District.

The prevalence of land conflicts in the Wa West District has exacerbated food insecurity in the area. Land conflicts lead to low food productivity as a result of reduction in farm size,
abandonment of farming and farm lands, forced migration, destruction of food system especially burning of harvested crops in the farm and loss of income. These land conflicts have affected the relationship between parties to the extent that they don’t even trade in food amongst themselves or even practice food gifts as it used to be the case. Health service is also affected as a result of land conflicts. Parties no longer administer or receive herbal medicine from each other. The effect of climate change has not been discounted as a major cause of food security, however, the effect of land conflicts also encompasses climate change as the people believe that it is the land spirits that bring rains and when they are angered by the conflicts, they refuse to bless the land with rain and for that matter, the spirituality effect of conflict on food security cannot be discounted. Therefore, the studies conclude that, there is a strong nexus between land conflicts and food security. Hence, land conflicts are major cause of food insecurity in the Dorimon Traditional Area.

Despite the availability of formal and semi-formal system of land conflict resolution mechanisms like the courts and that of ADR, the customary system remains the most potent system of land conflict resolution in the Dorimon Traditional Area. The study concludes that strengthened customary system would be a key to the numerous land conflicts in the district. However, any efforts without clearly defining and documenting land boundaries and ownership titles will always push the people through the vicious cycle of counter claims. It is also important for the issues to be confronted now and the truth established than to keep on suppressing the issues in the name of peace. The researcher dare say that continuously postponing confronting the issues to unravel the truth means postponing insecurity to the future which consequences will be pervasive. The customary ritual of nuor-ngmaabo (cutting of fowl) would have being the best way of scaring illegitimate claimants from igniting land conflicts in the area. However, there is no guarantee that parties will always be willing to submit themselves to it considering the consequences. The growing loss of confidence on the
impartiality and honesty of elders and people in authority in determining land issues remain a threat the effectiveness of customary land resolution system.

The court has never being a proper forum and would continue not to be the proper forum for land conflict resolution in the area. This is evident in the case of the Guo-Nayiri and Guo-Katung land case which went to the High Court but could not resolve the matter. The Nkonya and Alavanyo people in the Volta Region have been in and out of the law courts so many times but that has not resolved the matter (Gariba, 2015).

**Recommendations**

These recommendations are intended at providing measures to improve on the efforts of managing land conflicts and mitigating their effects on food security in the Dorimon Traditional Area. They provide suggestions on actions that should be taken to minimize land conflicts and also strengthen the customary land administration system in the Dorimon Traditional Area.

- The economic weaknesses of households need to be addressed as majority of people are low income earners. This can be done by providing alternative source of livelihood to the people. NGOs in partnership with the District Assembly should focus on supporting women and the youth with skills training as well as support with start-up kits for them to set up small businesses. The Department of agriculture should also expose the people to improved agricultural practices to enable them make effective and efficient use of limited land to maximize production. This can be done by introducing them to improved variety of seed, irrigation farming and mechanized agriculture. It will also address the growing demand for large track of land for food production.
• There is the urgent need for the Dorimon Traditional Council to ensure that land boundaries between clans are clearly defined, demarcated and documented. In the ancient times, notable land marks like streams, mountains, hills, big trees or grooves were used as boundaries for clans land domains (gaara). Some of these land marks were not permanent and no longer exist. It is, therefore, important for these boundaries to be demarcated with visible and permanent landmarks. Clans should collaborate in determining these boundaries, where there are overlapping, consensus should be built and compromises made. All clans should be made to sign on to the documentations. The land commission should provide technical support to the traditional authorities to ensure that the land boundaries are properly demarcated and documented.

• The Dorimon Traditional council, led by the Paramount Chief should promote collaboration between chiefs and land priest in the control of land in the Wa West District. Land allocation should be jointly done by the Tendamba and Nabiisi (royals) with approval from the chiefs and benefits accruing from the land should be shared accordingly. It has been the practice that the leg of game from the gaara was always sent to the Yidaamba and chiefs. To make this collaboration effective, land owning families should set up land management committees to manage land resources. This will check indiscriminate land sales. The District Assembly should, as matter of urgency and in collaboration with other government agencies and traditional authorities, assist communities to develop land use plans. That will allocate portions of the land for residential, crop farming, animal grazing and also land reserves for future development. The plan should also cater for schools, hospitals, market and other critical social facilities.
Lands should continue to be communally owned and administered through the customary system. However, in communities that are inhabited by different clans, some concessions should be extended by allocating portions of the land to the different clans or families for use with the allodia ownership remaining with the original land owners. This will resolve the structural conflicts that often arise between land owners and those described as settlers.

There is also the need for chiefs and elders to demonstrate neutrality in order to be able to intervene between parties in times of conflicts over land. Where there is no consensus and there is stalemate, the customary adjudication by the Paramount Chief should be sought. The customary ritual of cutting fowl may be the last option, but it must be avoided as much as possible. However, under extreme circumstances, if that will bring lasting resolution, the Dorimon-na should put his feet down and ensure that conflicting clans comply by resorting to the ritual of cutting fowl (nuo-ngmaabo). The performance of the ritual of nuo-ngmaabo (cutting of fowl) and its consequences will scare away unnecessary and false claims of land ownership in the area.

There is also the need for government to empower the traditional institutions to deal with land conflicts through the customary structures like the Traditional councils have been empowered to deal with chieftaincy disputes. This can be done by enacting legislation which will compel all land related issues to be handled first customarily before getting to the formal court system. The legislation should recognize all the customary processes of every locality. Specialized courts should be set up under this legislation to expeditiously deal with land conflicts.

Finally, further studies is recommended to deeply interrogate the concept of land ownership and the customary system of land conflict resolution in the Dorimon Traditional Area in particular and the Upper West Region in general. This study
evaluate all the various perspectives on who really owns lands and also explore mechanisms for making the customary system land administration and conflict resolution in the region.

www.udsspace.uds.edu.gh


Paaga, D. T. (2013). Customary Land Tenure and Its Implications for Land Disputes in Ghana: Cases from Wa, Wechau And Lambussie. *International Journal of Humanities and Social Science Vol. 3 No. 18; October*, 263-270.

Paaga, D. T., & Dandeebo, G. (2014). Assessing the Appeal of Traditional Dispute Resolution methods in Land Dispute Management: Cases from the Upper West Region. *Developing Country Studies ISSN 2224-607X (Paper) ISSN 2225-0565 (Online)*, 1-10.


APPENDICES

APPENDIX I

UNIVERSITY FOR DEVELOPMENT STUDIES
FACULTY OF INTEGRATED DEVELOPMENT STUDIES
DEPARTMENT OF AFRICAN AND GENERAL STUDIES

Land Conflicts and Food Security in the Dorimon Traditional Area Questionnaire for
house-hold heads

Introduction:
The purpose of this questionnaire is to examine the implication of land conflicts on food
security in the Wa West District of Ghana. It would be extremely appreciated if you could
find time out of your busy schedule to complete this questionnaire. The information you
provide would be solely used for academic purposes. Your anonymity is highly guaranteed.
Thank You in advance.

SECTION A: SOCIO DEMOGRAPHIC CHARACTERISTICS

1. Place of residence:
   a. Dorimon [ ] b. Donkoru [ ] c. Dontanga [ ] d. Bienye [ ]
   e. Kogle [ ] f. Siriyiri [ ] g. Zanko [ ] h. Charile [ ]

2. Native status:
   a. Indigene [ ] b. Non indigene [ ]

3. Sex:
   a. Male [ ] b. Female [ ]

4. Age of respondents:
   a. 18-24 [ ] b. 25-31 [ ] c. 32-38 [ ]
   d. 39-45 [ ] e. 46-52 [ ] f. 53-59 [ ] g. 60+ [ ]

5. Marital status:
   a. Married [ ] b. Unmarried [ ] c. Divorced [ ] d. Widowed [ ]
6. Respondents main occupation: **a. Crop farmer** [ ]  **b. Fishing** [ ]  **c. Petty trader** [ ]  **d. Public servant** [ ]  **e. Others, specify**... 

7. Educational level: **a. Basic level** [ ]  **b. Secondary, Technical or Vocational level** [ ]  **c. Tertiary level** [ ]  **d. No formal education** [ ]  **e. Others, specify**...

a. Religion: **a. Traditional** [ ]  **b. Islam** [ ]  **c. Christianity** [ ]  **d. None** [ ] 

b. **Others, specify**...

8. Ethnicity of respondent: **a. Waala** [ ]  **b. Dagarti** [ ]  **c. Daga-Wulee** [ ]  **e. Fulani** [ ]  **f. Others, specify** [ ] 

e. **Fulani** [ ]  
f. **Others, specify** [ ] 

9. Household size: **a. One – two** [ ]  **b. Three- four** [ ]  **c. Five- six** [ ]  **d. Seven and above** [ ] 

10. Average monthly income: **a. Less than GHC100.00** [ ]  **b. GHC101.00-GHC200.00** [ ]  **c. GHC201.00-GHC300.00** [ ]  **e. above GHC300.00** [ ]

SECTION C: THE SITUATION OF LAND CONFLICTS IN THE WA DORIMON TRADITIONAL AREA

1. Do you own land? **a. yes** [ ]  **b. No** [ ]

2. If yes, how did you get it?

........................................................................................................................................................................

........................................................................................................................................................................

3. If you do not own land, how do you get land to farm?

........................................................................................................................................................................

........................................................................................................................................................................
4. How is land owned in your community?  
   a. Communal ownership [ ]  
   b. Private ownership [ ]  
   c. State ownership [ ]  
   d. Vested ownership [ ]

5. What land tenure system are you practicing in this community?  
   a. Customary freehold system [ ]  
   b. Leasehold system [ ]  
   c. Renting [ ]  
   d. Share cropping [ ]  
   e. Privately acquired [ ]

6. Have you ever experienced land conflict before?  
   a. yes [ ]  
   b. No [ ]

7. If yes what was the nature and cause of it?  
   ……………………………………………………………………………………………
   ……………………………………………………………………………………………

8. How did the land conflict affect you productivity?  
   ……………………………………………………………………………………………
   ……………………………………………………………………………………………

9. How was the land conflict resolved?  
   ……………………………………………………………………………………………
   ……………………………………………………………………………………………
   ……………………………………………………………………………………………
   ……………………………………………………………………………………………

10. Were you satisfied with the outcome of the settlement?  
    a. yes [ ]  
    b. No [ ]

11. Are there any incidences of land conflicts in your community?  
    a. Yes [ ]  
    b. No [ ]

12. If yes, what forms of land conflicts exist in the community? (Please tick as many as applicable)  
    a. Boundary conflicts between neighbouring land users [ ]  
    b. Ownership conflicts due to inheritance conflicts [ ]  
    c. Boundary conflicts between clans or villages [ ]  
    d. Land use conflicts between farmers and pastoralists [ ]
e. Limited access to land by women due to discrimination by law, custom or practice [ ]

f. Limited access to land by settlers due to discrimination by law, custom or practice [ ]

g. Others (specify)…………………………………………………………………………………………

13. What are the main drivers of land conflicts in the community? (please tick as many as applicable)

a. Population increase [ ] b. Breakdown of traditional institutions [ ]

c. Selfish individual interests [ ] d. Introduction of foreign institutions that are not popularly accepted [ ]

e. Others (specify)……………………………………………………………………………………………………

14. Who are the key actors involved in land conflicts in the community? What is the identity groups involved? How do they define themselves, and what are the core features that make up their identity?

a. Family members [ ] b. Farming neighbours c. Clans [ ] d. Women [ ]

e. Settlers [ ] f. Orphans [ ] g. Government officials or agencies [ ]

h. Chiefs [ ] i. Land priest [ ] j. Others (specify)…………………………………………………………………………………………

15. How will you describe the nature of relationship between the adversaries of land conflicts in the community?
SECTION C. THE FOOD SECURITY SITUATION IN THE WA WEST DISTRICT.

1. Did you cultivate any crops during the last farming season?  a. YES [ ]  b. NO [ ]

2. How would you describe your harvest from the last season cultivation?

3. In the past one year, were you worried you would run out of food because of lack of money, poor production or other resources?  a. YES [ ]  b. NO [ ]

4. In the past one year, was there any time you were unable to eat healthy foods because of lack of money or other resources?  a. YES [ ]  b. NO [ ]

5. In the past one year, was there any time when you had to eat less than you thought you should because of lack of money or other resources?  a. YES [ ]  b. NO [ ]

6. In the past one year, was there any time when you had to skip a meal because of lack of money or other resources?  a. YES [ ]  b. NO [ ]

7. In the past one year, was there a time when your household ran out of food because of lack of money or other resources?  a. YES [ ]  b. NO [ ]

8. In the past one year, was there a time when you were hungry but did not eat because there was not enough money or other resources for food?  a. YES [ ]  b. NO [ ]

9. In the past one year, was there a time when your household went without eating for a whole day because there was not enough money or other resources for food?  a. YES [ ]  b. NO [ ]
10. Did you eat a smaller variety of foods during the past year than you would have liked to because there was not enough money or other resources for food?  
   a. YES [ ]  
   b. NO [ ]

11. In the last seven days did your household eat each of the following food types? What was the source of each food item? Write 0 if no consumption of that food group. Write 1 if there was consumption of the food item.

<table>
<thead>
<tr>
<th>#</th>
<th>CONSUMPTION</th>
<th>NO. OF DAYS</th>
<th>SOURCE OF FOOD ITEM</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Rice</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>maize / Other Cereals</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Pulses / Beans / Nuts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Milk / Milk Products</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Meat, poultry</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Fish &amp; Seafood (Fresh / Dried)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Eggs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Fruits</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Potato (including Sweet Potato)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Dark Green Vegetables – Leafy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Other Vegetables</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Sugar / Honey</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Source of food item**
<table>
<thead>
<tr>
<th>Number</th>
<th>Source of Food</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Own production (crops, animals)</td>
</tr>
<tr>
<td>2</td>
<td>Purchased with own money from market</td>
</tr>
<tr>
<td>3</td>
<td>Purchased by using loaned money</td>
</tr>
<tr>
<td>4</td>
<td>Purchased on credit</td>
</tr>
<tr>
<td>5</td>
<td>Hunting, fishing, gathering</td>
</tr>
<tr>
<td>6</td>
<td>Borrowing food</td>
</tr>
<tr>
<td>7</td>
<td>Receiving food from relatives and neighbours</td>
</tr>
<tr>
<td>8</td>
<td>Food aid (government or NGOs...)</td>
</tr>
<tr>
<td>9</td>
<td>Receiving food as payment for work done</td>
</tr>
<tr>
<td>10</td>
<td>Other sources</td>
</tr>
</tbody>
</table>

12. During which months of the year do you experience food insecurity?

THE EFFECTS OF LAND CONFLICTS ON FOOD SECURITY IN THE WA WEST DISTRICT

1. Is there any relationship between land conflict affect food securities?  
   Yes [ ]  No [ ]

2. How does a land conflict affect the availability of food in your community? (From own production and in the market)

2. How does a land conflict affect people access to food in your community?

3. How does a land conflict affect food systems and health services in the community?

4. What effect do land conflicts have on the stability of food in the community all year round?

........................................................................................................................................
........................................................................................................................................
........................................................................................................................................

E. CONFLICT RESOLUTION MECHANISMS SUITABLE FOR MANAGING LAND CONFLICTS IN THE WA WEST DISTRICT.

1. What structures exist in resolving land conflicts in the community?

........................................................................................................................................
........................................................................................................................................
........................................................................................................................................

What attempts have been previously used to resolve land conflicts in the community? Why were they not successful?

........................................................................................................................................
........................................................................................................................................
........................................................................................................................................

Which structure would you prefer following for resolution of land conflicts in the community?

a. Customary system [ ] b. Formal system [ ] c. Alternative Dispute Resolution [ ]

4. What informs your choice above?

........................................................................................................................................
........................................................................................................................................
........................................................................................................................................
........................................................................................................................................
5. If customary system of conflict resolution, in what way do you think it should be resolved?
Who should be involved?

…………………………………………………………………………………………………
…………………………………………………………………………………………………
…………………………………………………………………………………………

6. If your choice is the formal system which agency would you prefer to go to?
a. court [ ]  b. the lands commission [ ]  c. the Police [ ]  d. Others, specify:

…………………………………………………………………………………………………

If Alternative Dispute Resolution, which mechanism would be suitable for resolving land conflicts in the community?

What strategies must be put in place to resolve outstanding land conflicts in your community?

…………………………………………………………………………………………………
…………………………………………………………………………………………………
…………………………………………………………………………………………

7. What strategies do you suggest must be put in place to prevent potential land conflicts in your community?

…………………………………………………………………………………………………
…………………………………………………………………………………………………
…………………………………………………………………………………………

www.udsspace.uds.edu.gh
Appendix II

UNIVERSITY FOR DEVELOPMENT STUDIES
FACULTY OF INTEGRATED DEVELOPMENT STUDIES
DEPARTMENT OF AFRICAN AND GENERAL STUDIES

Land Conflicts and Food Security in the Wa West District of Ghana

In-depth Interview Guide for Key Informants

Introduction:

The purpose of this questionnaire is to examine the implication of land conflicts on food security in the Wa West District of Ghana. It would be extremely appreciated if you could take time out of your busy schedule to complete this questionnaire. The information you provide would be solely used for academic purposes. Confidentiality is highly guaranteed. Thank You in advance.

SECTION A: IDENTIFICATION

1.1 Guide code: …………………
1.2 Name of Institution/ community: …………………
1.3 Position: ………………………
1.4 Contact: ……………………………………………...
1.5 Date of Interview: ………………………………………………………..
SECTION B: THE SITUATION OF LAND CONFLICTS IN THE DORIMON TRADITIONAL AREA.

1. How is land owned in the Wa West District?

   a. Communal ownership [ ]   b. Private ownership [ ]   c. State ownership [ ]
   d. Vested ownership [ ]

2. What land tenure system is commonly practiced in the Wa West District?

   a. Customary freehold system [ ]   b. Leasehold system [ ]   c. Renting [ ]
   d. Share cropping [ ]   e. privately acquired [ ]

3. What forms of land conflicts exist in the community? (Please tick as many as applicable)

   a. Boundary conflicts between neighbouring land users [ ]
   b. Ownership conflicts due to inheritance conflicts [ ]
   c. Boundary conflicts between clans or villages [ ]
   d. Land use conflicts between farmers and pastoralists [ ]
   e. Limited access to land by women due to discrimination by law, custom or practice [ ]
   f. Limited access to land by settlers due to discrimination by law, custom or practice [ ]
   g. Others (specify)

   ……………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………....
foreign institutional structures that are not popularly accepted [ ] e. Others (specify)

How will you describe the levels of land conflict in the Wa West District? a. inter-personal [ ] b. intra-organizational [ ] c. Inter-organizational [ ]

4. Who are the key actors involved in land conflicts in the community? What is the identity groups involved? How do they define themselves, and what are the core features that make up their identity?
   a. Family members [ ] b. Farming neighbours [ ] c. Women [ ] d. Settlers [ ] e. Orphans [ ] f. Government officials or agencies [ ]
   g. Chiefs [ ] h. Land priest [ ] i. Clans (specify) ………
   j. Others (specify)………………………………………………………………………………

5. How will you describe the nature of relationship between the adversaries of land conflicts in the community? A) violent/destructive [ ] b) non-violent/constructive [ ] c) both [ ]

6. If the nature of conflict is non-violent, what form does it take? a. Protest [ ] b. Non-cooperation [ ] c. Intervention [ ] d. Others, please indicate…………………………..

7. If the nature of conflict is violent, which form does it take? a. Physical damage [ ] b. Psychological damage [ ] c. Social damage [ ] d. Environmental damage [ ] e. Economic damage [ ] f. Others, please indicate…………………………..

8. What positions/role have you taken/played to safeguard your interest in the Wa West District?
9. Please indicate other stakeholders’ interest and roles in the phenomenon of land conflicts in the Wa west District

SECTION C. ASSESSING THE FOOD SECURITY SITUATION IN THE DORIMON ADDITIONAL AREA.

1. Are there sufficient quantities of food from farm production that will make food consistently available to house-holds all year round? a. yes [ ] b. No [ ]

2. Are there sufficient foods in the market that will make food available to house-holds all year round? a. yes [ ] b. No [ ]

3. Does each household have physical, social and economic access to enough food to meet its needs all year round? a. yes [ ] b. No [ ]

4. Does house-holds food meet their specific dietary and nutritional needs? This includes proper food system, as well as adequate health and sanitation services. a. yes [ ] b. No [ ]

5. Is there reasonable degree of stability in the food availability, access and utilization during the year? a. yes [ ] b. No [ ]
Do you believe and agree that land conflicts have any implication on food security?  

a. Yes [  ]  

No [  ]  

11. How will you assess the effects of the land conflicts in the Wa West District on the following dimensions of food security?

a. Food availability (own production and/or availability in the market)

b. Food access (affordability)

c. Food utilization (quality food, health and sanitation)

d. Food stability. (Certainty of food availability, accessibility and utility all year round)
SECTION E: CONFLICT RESOLUTION MECHANISMS SUITABLE FOR MANAGING LAND CONFLICTS IN THE WA WEST DISTRICT.

1. What form of land conflict resolution methods exist in the Wa West District?
   a. Customary system [ ] b. Formal system [ ] c. Alternative Dispute Resolution [ ]

2. What are some of the indigenous ways of land conflict resolution in the area?
   ……………………………………………………………………………………………
   ……………………………………………………………………………………………
   ……………………………………………………………………………………………

3. Have there ever been attempts to resolve land conflicts in the area? a. Yes [ ] b. No [ ]

4. If yes, what attempts have been previously used to resolve land conflicts in the community? Why were they not successful?
   ……………………………………………………………………………………………
   ……………………………………………………………………………………………
   ……………………………………………………………………………………………

5. Which structure would you prefer following for resolution of land conflicts in the community? a. Customary system [ ] b. Formal system [ ] c. Alternative Dispute Resolution [ ]

6. What informs your choice above?
   ……………………………………………………………………………………………

How would you assess the effectiveness of customary land conflict resolution structures in the area?
   ……………………………………………………………………………………………
   ……………………………………………………………………………………………
   ……………………………………………………………………………………………
7. Which of the following conflict management styles would you propose to be used in addressing land conflicts in the Wa West District?  
   a. **Conflict avoidance** [ ]  
      b. **compromise** [ ]  
      c. **confrontation** [ ]  
      d. **problem solving** [ ]  
      e. **collaboration** [ ]  
      f. **accommodation** [ ]

8. Which of the following conflict management mechanism would you propose to be used in addressing land conflicts in the Wa West District?  
   a. **Negotiation** [ ]  
      b. **Mediation** [ ]  
      c. **Arbitration** [ ]  
      d. **Adjudication** [ ]

9. What do you propose to be done to manage and minimize incidences of land conflicts in the Wa West District?  
   ……………………………………………………………………………………………
   ……………………………………………………………………………………………

10. What should be done to maintain peace in the Wa West District?  
    ……………………………………………………………………………………………
    ……………………………………………………………………………………………
    ……………………………………………………………………………………………

11. Outline the role of the following agencies in managing land conflicts in the Wa West District;  
    a. **Traditional authorities**………………………………………………………
    b. **District assembly**………………………………………………………………
    c. **The Police**………………………………………………………………………
    d. **The media**………………………………………………………………………
    e. **Non-governmental Organization**…………………………………………..
12. What role has your outfit played in the resolving land conflicts in the Wa West District?
Appendix III

UNIVERSITY FOR DEVELOPMENT STUDIES
FACULTY OF INTEGRATED DEVELOPMENT STUDIES
DEPARTMENT OF AFRICAN AND GENERAL STUDIES
Land Conflicts and Food Security in the Wa West District of Ghana
Guide for focus group discussions

Introduction:

The purpose of this discussion is to examine the implication of land conflicts on food security in the Wa West District of Ghana. The information you provide would be solely used for academic purposes. Your active participation is highly anticipated. Thank You in advance.

Content

1. How will you describe the land ownership and acquisition in the Wa West District? Does the current system of land ownership and acquisition promote fairness in access to land for all groups (settlers, women, poor and orphans) in the society?

2. Are there instances of land conflicts among the various land user groups in the Wa West District? What is the nature of land conflicts? Who are the parties involved in the land conflicts?

3. What are the issues involved in the land conflicts? What are the causes of land conflicts in the Wa west District? What are the effects of these land conflicts in the Wa west District?

4. Are households able to produce sufficient food from farm production to feed the family all year round? Are there sufficient foods available in the market all year round?
5. Do house-holds have access to sufficient food either through their own production or from the market all year round?

6. Are there times that family members vary their dieting system at sometimes of the year? E.g., reducing the number of meals, changing the diets, reducing the quantities and quality of food or even sometimes going hungry because there was no food.

7. What relationship do land conflicts have on the following dimensions of food security in the Wa West district?
   A. availability (own production or market)
   B. accessibility (ability to acquire either physically or economically)
   C. utilization ( nutritional and health value of diets)
   D. stability of food (certainty of food availability, accessibility and utilization of food)

8. What attempts have been made previously to resolve land conflicts and how will you assess these previous attempts? What forms of land conflict resolution are available in the Wa West District and which one will you recommend? What conflict resolution mechanisms are suitable for land conflict resolution in the Wa West District?

9. What measures should be put in place to manage land conflicts and promote peace in the Wa West District?
Appendix IV: Guse Yidaana’s Invitation to Dontanga Yidaana the Cutting of fowl

GANGOYIRI CLAN

c/o P. O. BOX 15

9TH JULY 2017

Dear Colleague,

DETERMINATION OF BOUNDARY OF WONG-NYAGNA LAND DOMAIN (GAARA)

I wish to on behalf of The Gangoyiri Clan invite you to participate in the rituals of determining the ownership of the land in dispute. In other words, to establish the truth of the claims of either the Guse or Dontanga clans to the actual boundary of land domain (gaara).

It would be recalled that in June 2014, that the Dorimona directed all clans to determine the boundaries of their land domains (gaara). This directive was given after all clans contributed to make sacrifices at SANWARA (the land deity) to seek permission and guidance. In giving the directive, the Dorimona indicated that all clans who share common boundaries should go through, where there are stalemates, the traditional rituals of slaughtering a fowl (nuorangmaabo) should be observed to determine the truth.

After this directive, my side led in going through as far as the boundary bequeathed to us by our ancestry is concerned. Your side after dragging your feet for almost two years finally came to also go through where you believed is your boundary. This happened after we capped our several unhonoured invitations and reminders with an ultimatum. We totally reject your version of the boundary as your delegation has gone through.

You would again recall that on the 30th of April we met at the instance of Dorimona to discuss the issue which he requested a meeting of four representatives each from either side on the 10th of May 2017 on the same issue. On this said meeting, you would agree that consensus was not reached as to who was right since we all still had entrenched positions. At that point, we were left with no practical option, but to resort to the ultimate ritual of “nuorangmaabo”. I proposed to you via a delegation, 22nd May for the rituals to be carried out. Dorimona was also accordingly notified.
Appendix V: Dontanga Yidaana’s Response to Guse Yidaana’s Invitation for Cutting of fowl
Appendix VI: The Paramount Chief of Dorimon Traditional Areas Response on the
Guse-Dontanga Clans Land Conflict Issue

DETERMINATION OF LAND BOUNDARY BETWEEN THE GUSE CLAN OF GANGOYIRI
AND THE DONTANGA CLAN OF DAKPANYIRI

I am in receipt of my copy of a letter from the Yidaana of the Guse clan of the Gangoyiri gate
endorsed by Mr. Pageyela Jatore as the Yidaana of Gangoyiri and dated 8/06/2017. A few days
later, I received my copy of another letter from the Yidaana of the Dontanga clan of Dakpanyiri
(Mr. Jackolee) in reaction to the one from the Guse Gangoyiri Yidaana.

I wish to set the record straight by indicating that the land issue is between the Guse clan of
Gangoyiri and the Dontanga clan of Dakpanyiri and not between the Gangoyiri royal gate and
the Dakpanyiri royal gate. The matter should therefore be left to the two (2) parties to resolve
amicably so as to avoid any unnecessary confrontation.

As far as the "cutting of a fossil" is concerned, I completely dissociate myself from it since our
Traditional Courts do not recognize trial by ordeal. If the two (2) parties agree to embark on it, I
have no objection to the exercise.

Any of the aggrieved parties is at liberty to proceed to the courts to seek justice in the matter.
The Judicial Committee of the Traditional Council has no jurisdiction to handle land cases. For
the avoidance of doubt, I am attaching photocopied of a presentation made by a retired Eminent
Justice of the Supreme Court of Ghana, Justice S.A. Brobbey for your study and to possibly
advise yourselves. I wish to state further that I personally attended that workshop at the Kofo
Anne International Peacekeeping and Training Centre (KAIPTC) at Tema, Accra.

Additionally, you should refer to the Public Notice that has been issued by our Government.

I wish the two (2) parties all the best.

(Signed)

[Signature]

(President Dorimon Traditional Council)