

UNIVERSITY OF CAPE COAST



COMPULSORY LAND ACQUISITION AND LIVELIHOOD
ADAPTATION ALONG THE WESTERN CORRIDOR GAS
INFRASTRUCTURE DEVELOPMENT PROJECT IN GHANA

WISDOM QUAIKU

2023



©Wisdom Quaiku
University of Cape Coast

UNIVERSITY OF CAPE COAST



COMPULSORY LAND ACQUISITION AND LIVELIHOOD
ADAPTATION ALONG THE WESTERN CORRIDOR GAS
INFRASTRUCTURE DEVELOPMENT PROJECT IN GHANA

BY

WISDOM QUAIKU

Thesis Submitted to the Department of Integrated Studies, School for
Development Studies, College of Humanities and Legal Studies, University of
Cape Coast, in partial fulfillment of the requirements for the award of Doctor
of Philosophy Degree in Development Studies

NOVEMBER 2023

DECLARATION

Candidate's Declaration

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

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

Name:

Supervisors' Declaration

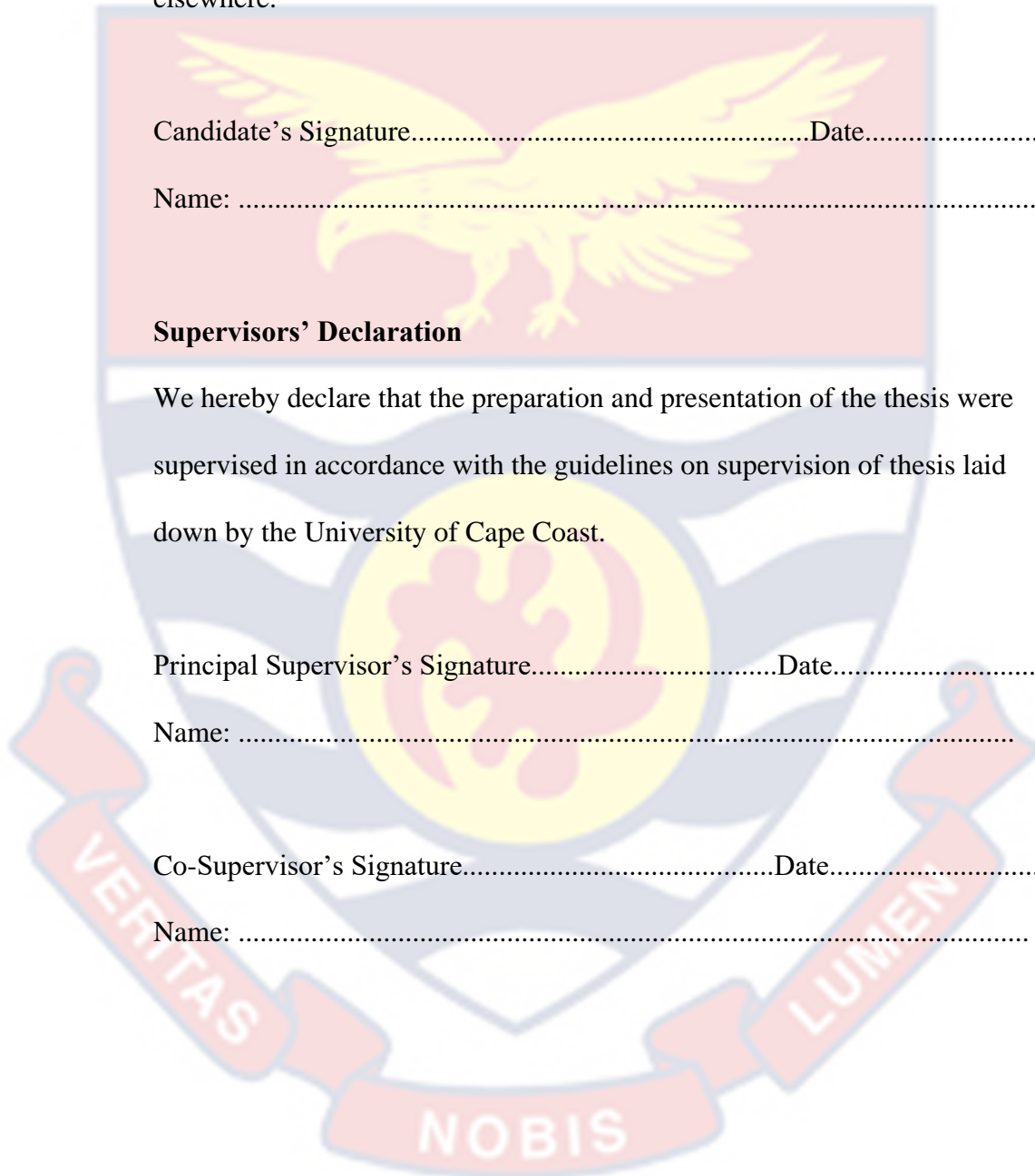
We hereby declare that the preparation and presentation of the thesis were supervised in accordance with the guidelines on supervision of thesis laid down by the University of Cape Coast.

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

Name:

Co-Supervisor's Signature.....Date.....

Name:



ABSTRACT

The study investigated compulsory land acquisition for the Western Corridor Gas Infrastructure Project and livelihood adaptation within Nzema East Municipality and Ellembelle District in Ghana. A mixed methods research approach was adopted. Data was collected using interview schedule and interview guide. Analysis of data involved the application of descriptive statistics, chi-square test, Mann-Whitney U test and thematic analysis. The study found that displaced persons largely used the cash compensation in consumption of basic needs; farm was the main livelihood strategy for displaced persons, and fifty one percent of displaced persons could not submit their land compensation claims. The major challenges facing compulsory land acquisition were: multiple claims to parcel(s) of land, inadequate knowledge about the acquisition before the work began, non-completion of the legal processes, delay in the payment of compensation, and delay in the adjudication of land disputes. The study concludes that both the project affected persons and acquiring agency encountered challenges. It is, therefore, recommended that the Lands Commission should improve upon the decision-making processes on the expropriation order, enhance the sensitization of project affected persons on the acquisition processes, and also educate the displaced persons on the channels for reporting challenges.

KEY WORDS

Acquisition

Adaptation

Compulsory

Expropriated owner

Land

Livelihood



ACKNOWLEDGMENTS

I owe gratitude to a number of people who have been valuable to me during the course of undertaking this research. Firstly, my greatest appreciation goes to Prof. John Victor Mensah, and Dr. Joseph Boateng Agyenim, my principal supervisor and co-supervisor respectively, for the high degree of enthusiasm, resourcefulness and tactful manner in which they guided me from the start to the end of the work.

Secondly, I register my sincere thanks to Dr. Moses Naiim Fuseini, and Dr. Ibrahim Abdulai of Wa who proof read my work and made invaluable inputs. Thirdly, my appreciation goes to all the research assistants who helped me to collect data. Fourthly, I am grateful to Nana Boateng, the Vice Chancellor of Takoradi Technical University, my Head of Department, and all my colleagues at the Estate Management Department, and School of Business Studies of Takoradi Technical University.

Fifthly, I am most grateful to Paulina Bowah, Shirley Yankey, Deborah Onsonyameye, Rebecca Nunoo, Gladys Amoah, Dinah Asante, Benedicta Darko, Seth Owusu and family members for their invaluable support. Finally, my thanks go to the chief of Anochie, staff and Directors of Nzema Manle Rural Bank Plc, staff of WIZBIZ Guest House, and staff of UCSOND who supported me in diverse ways throughout this thesis work.

DEDICATION

To my children



TABLE OF CONTENTS

	Page
DECLARATION	ii
ABSTRACT	iii
KEY WORDS	iv
ACKNOWLEDGMENTS	v
DEDICATION	vi
TABLE OF CONTENTS	vii
LIST OF TABLES	xv
LIST OF FIGURES	xix
LIST OF ACCRONYMS/ABBREVIATIONS	xx
CHAPTER ONE:INTRODUCTION	
Background to the Study	1
Statement of the Problem	8
Research Objectives	12
Research Questions	13
Significance of the Study	14
Delimitations	15
Organization of the Thesis	15
CHAPTER TWO: THEORETICAL AND CONCEPTUAL REVIEW	
Introduction	17
Theoretical Framework	17
Eminent Domain Theory	17
Structural Theory of Poverty	20
Entitlement Theory	22
Citizen Participation Theory	26

Interrelationship Among the Four Theories: EDT, ET, STP, and CPT	29
Conceptual Review	31
Land and Land Tenure	31
Compulsory Land Acquisition	39
Compensation Payment	42
Livelihoods	45
Livelihood Adaptation Strategies	48
Households' Income Portfolios	50
CHAPTER THREE: EMPIRICAL REVIEW AND CONCEPTUAL FRAMEWORK	
Introduction	53
Empirical Review	53
Central Vietnam	54
Pakistan	55
Ninh Thuan Province, Vietnam	56
Nyandeni Local Municipality, South Africa	57
The Third Nairobi Water Supply Project, Kenya	59
The Atuabo Gas Project in Ghana	60
The Suame-Buoho Road Reconstruction in Kumasi, Ghana	62
Land Delivery in Customary Areas in Ghana	63
Summary of Empirical Studies	65
Lessons Learnt from the Empirical Review	69
Conceptual Framework of Compulsory Land Acquisition and Livelihood Adaptation	71

CHAPTER FOUR: METHODOLOGY

Introduction	75
Research Design	75
Profile of the Study Area	79
Study Population	82
Sampling Procedure	82
Data Collection	84
Design of Data Collection Instruments	85
Pre-Testing	90
Actual Field Work	90
Data Processing and Analysis	91
Limitations	94
Ethical Considerations	95
Chapter Summary	95
CHAPTER FIVE: DISPLACED PERSONS' PARTICIPATION IN THE COMPULSORY LAND ACQUISITION PROCESSES	
Introduction	97
Background Characteristics of Respondents	97
Sex of Respondents	97
Age of Respondents	99
Marital Status of Respondents	99
Educational Attainment of Respondents	100
Major Occupation of Respondents	102
Household Size of Respondents	104
Asset Ownership Status of Respondents	105

Displaced persons' Participation in the Compulsory Land Acquisition Processes	106
Knowledge of Executive Instrument	107
Sources of Information on the Executive Instrument	109
Mode of Engagement	111
Mode of Communication	113
Participation in Land Acquisition Activities	114
Valuation of the Expropriated Parcels of Land	115
Valuation of Crops	116
Displaced Persons' Satisfaction with Crop Valuation Done by the Lands Commission	117
Chapter Summary	120
CHAPTER SIX: UTILIZATION OF DISPLACED PERSONS' FINANCIAL COMPENSATION CLAIMS	
Introduction	121
Submission of Compensation Claims	121
Receipt of Compensation for Crops	125
Receipt of Compensation for Land	127
Compensation Amount for Crops and Land	127
Satisfaction Derived from Compensation	131
Prompt Payment of Compensation	135
Decision Makers for the Utilisation of Compensation	137
Utilisation of Cash Compensation	139
Uses of Cash Compensation for Consumption	141
Assets Acquired with Compensation	143

Use of cash compensation for Income Generating Activities	144
Chapter Summary	146

CHAPTER SEVEN:HOUSEHOLDS' INCOME PORTFOLIOS BEFORE

AND AFTER EXPROPRIATION

Introduction	147
Sources of Income Before and After Expropriation by Location	147
Farm Sources of Income Before and After Expropriation	149
Non-farm Sources of Income Before and After Expropriation	152
Off-farm Sources of Income Before and After Expropriation	154
Annual Income Before and After Expropriation	157
Access to Other Sources of Income	161
Other Sources of Income	163
Annual Receipt from Other Sources of Income	163
Chapter Summary	166

CHAPTER EIGHT: AFFECTED HOUSEHOLDS' LIVELIHOOD

STRATEGIES BEFORE AND AFTER

EXPROPRIATION

Introduction	167
Livelihoods Strategies Before and After Expropriation	167
Farm Livelihood Sources Before and After Expropriation	169
Non-farm Livelihood Sources Before and After Expropriation	172
Off-farm Livelihood Sources Before and After Expropriation	176
Reasons for the Choice of Livelihood Strategies	178
Alternative Livelihood Provided by Ghana Gas Company Limited	181
Land Ownership Status	181

Means of Acquiring Land for Farming	182
Registration of Title to Land	185
Land Holdings	187
Land Use of Compulsorily Acquired Land	188
Crops that were Affected	191
Use of Unacquired Portion of the Land	193
Chapter Summary	193
CHAPTER NINE: CHALLENGES ASSOCIATED WITH THE IMPLEMENTATION OF COMPULSORY LAND ACQUISITION ORDER	
Introduction	195
General Challenges Associated with the Implementation of Compulsory Land Acquisition Order	195
Challenges Facing Displaced persons	196
Inadequate Knowledge about the Acquisition before Work Started	197
Non-Completion of the Legal Processes	198
Delay in the Payment of Compensation	199
Delay in the Adjudication of Land Disputes by the High Courts	200
Challenges Facing Implementing Institutions	201
Knowledge of Mechanisms for Reporting Challenges	202
Channels for Reporting Challenges	203
Status of Complaints Resolution	204
Chapter Summary	205

CHAPTER TEN: SUMMARY, CONCLUSIONS AND
RECOMMENDATIONS

Introduction	206
Summary	206
Key Findings of the Study	206
Conclusions	209
Recommendations	210
Contribution to Knowledge	212
Suggestions for Further Research	213
REFERENCES	214
APPENDICES	238
APPENDIX A: INTERVIEW SCHEDULE FOR EXPROPRIATED HOUSEHOLD HEADS	238
APPENDIX B: DISCUSSION GUIDE FOR EXPROPRIATED COMMUNITY MEMBERS (WOMEN, MEN, TRADITIONAL AUTHORITIES)	252
APPENDIX C: INTERVIEW GUIDE FOR OFFICIALS OF GHANA GAS COMPANY	256
APPENDIX D: INTERVIEW GUIDE FOR OFFICIAL(S) OF LAND COMMISSION	259
APPENDIX E: INTERVIEW GUIDE FOR TRADITIONAL AUTHORITIES	262
APPENDIX F: INTERVIEW GUIDE FOR OFFICIALS OF THE DISTRICT/MUNICIPAL ASSEMBLY	266

APPENDIX G: INTERVIEW GUIDE FOR OFFICIAL (S) OF NON- GOVERNMENTAL ORGANISATIONS	269
APPENDIX H: APPLICATION FOR ETHICAL CLEARANCE	273
APPENDIX I: LETTER OF APPROVAL	275
APPENDIX J: ETHICAL CLEARANCE	276



LIST OF TABLES

Table	Page
1 Western Corridor Gas Infrastructure Development Project Acquisitions	7
2 Summary of Empirical Reviews	66
3 Sample Distribution of expropriated household heads in the study area	83
4 Summary of Study Objectives, Type of Data, Measurement Scale, Source of Data, Target Population, Methods of Data Collection, Instrument for Data Collection, and Analytical Method	87
5 Age of Respondents by Location, Sex and Major Occupation	98
6 Educational Attainment of Respondents by Sex	102
7 Major Occupation of Respondents by Location	103
8 Major Occupation of Respondents by Sex	104
9 Household Size of Respondents by Location	105
10 Asset Ownership Status of Respondents by Location	106
11 Knowledge of Executive Instrument by Location and Educational Level	108
12 Sources of Information on the Executive Instrument by Location	110
13 Mode of Engagement by Location	112
14 Participation in Land Acquisition Activities by Location	115
15 Submission of Land Compensation Claims by Location and Educational Level	122
16 Receipt of Crop Compensation by Location and Educational Level	126
17 Receipt of Land Compensation by Location and Educational Level	128
18 Compensation amount for Crops and Land by Location and Sex	130

19	Satisfaction Derived from Compensation by Location and Major Occupation	133
20	Payment of Compensation by Location and Sex	136
21	Decision Makers for the Utilisation of Cash Compensation by Location and Marital Status	138
22	Utilisation of Cash Compensation by Location and Marital Status	140
23	Uses of Cash Compensation for Consumption by Location	142
24	Assets Acquired with Compensation by Location	143
25	Use of Cash Compensation for Income Generating Activities by Location	145
26	Sources of Income Before and After Expropriation by Location	148
27	Farm Sources of Income Before and After Expropriation by Location	150
28	Farm Sources of Income Before and After Expropriation by Sex	151
29	Non-farm Sources of Income Before and After Expropriation by Location	152
30	Non-farm Sources of Income Before and After Expropriation by Sex	154
31	Off-farm Sources of Income Before and After Expropriation by Location	155
32	Off-farm Sources of Income Before and After Expropriation by Sex	156
33	Annual Income for Displaced persons Before and After Expropriation by Location and Sex	158

34	Access to Other Sources of Income by Location and Educational Level	162
35	Displaced persons Other Sources of Income by Location and Major Occupation	164
36	Annual Receipt from Other Sources of Income by Location and Sex	165
37	Livelihood Strategies Before and After Expropriation by Location	168
38	Farm Livelihood Sources Before and After Expropriation by Location	169
39	Farm Livelihood Sources Before and After Expropriation by Sex	171
40	Non-farm Livelihood Sources Before and After Expropriation by Location	173
41	Non-farm Livelihood Sources Before and After Expropriation by Sex	175
42	Off-farm Livelihood Sources by Location Before and After Expropriation	176
43	Off-farm Livelihood Sources Before and After Expropriation by Sex	178
44	Reasons for the Choice of Livelihood Strategies by Location and Sex	179
45	Land Ownership Status by Location	182
46	Means of Acquiring Land for Farming by Location and Sex	183
47	Registration of Title to Land by Location and Educational Level	186
48	Land Holdings by Location and Sex	188
49	Land Use of Compulsorily Acquired Land by Location and Sex	190

50	Crops that were Affected by the Compulsorily Acquisition Order by Location and Sex	192
51	Main Challenges Facing Displaced persons	196
52	Knowledge of Reporting Mechanism by Location and Sex	202
53	Channels for Resolving Challenges	203
54	Status of Complaints Resolution by Location	205



LIST OF FIGURES

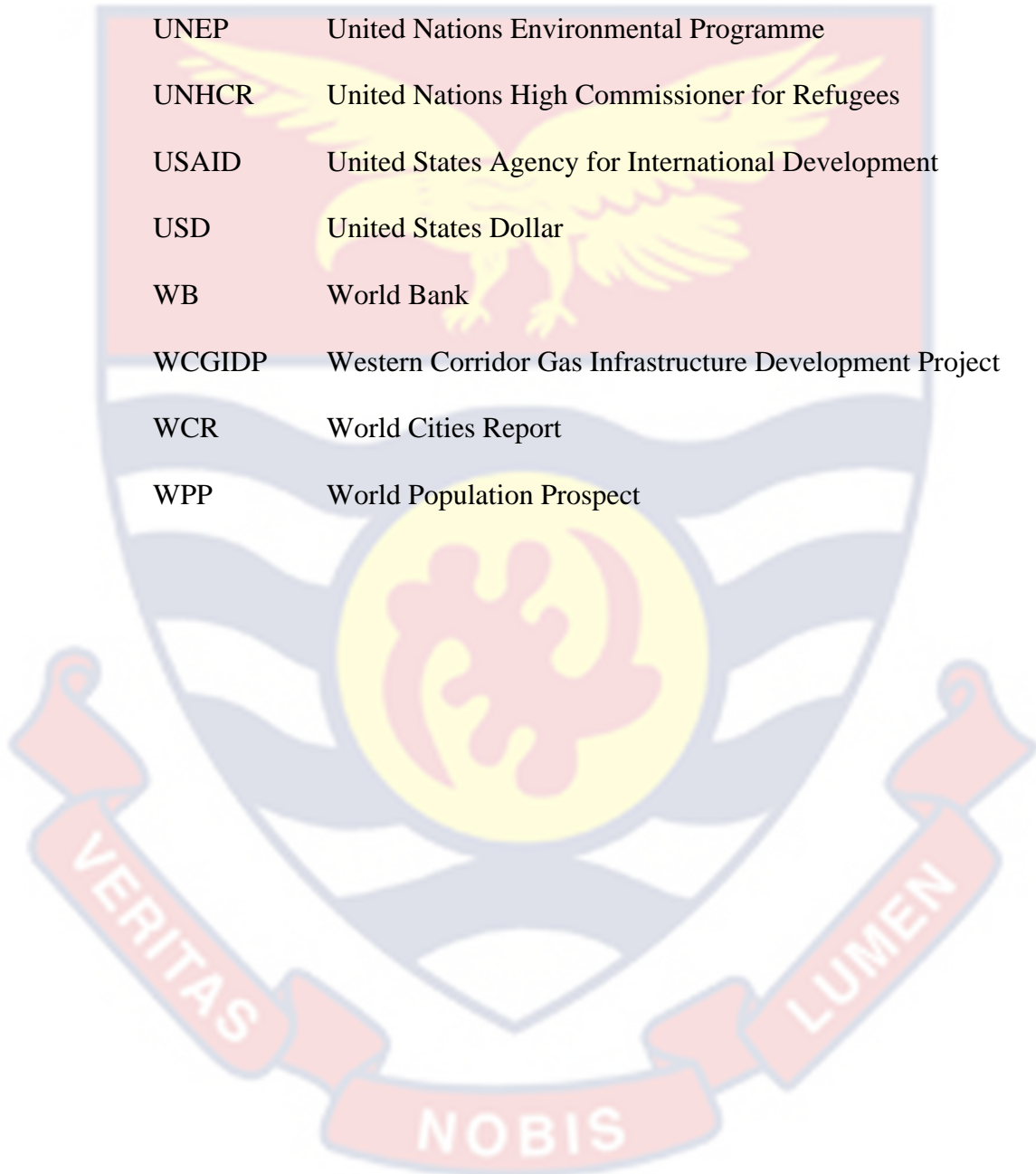
Figure	Page
1 Sustainable Livelihood Framework	47
2 Compulsory Land Acquisition and Livelihood Adaptation Framework	73
3 Map of Ellebelle District and Nzema East Municipality	81
4 Marital Status of Respondents by Location	100
5 Educational Attainment of Respondents by Location	101



LIST OF ACCRONYMS/ABBREVIATIONS

AFRCD	Armed Forces Revolutionary Council Decree
BAC	Business Advisory Centre
CLA	Compulsory Land Acquisition
CPT	Citizen Participation Theory
CSIR	Centre for Scientific and Industrial Research
DfID	Department for International Development
E.I	Executive Instrument
EDT	Eminent Domain Theory
ET	Entitlement theory
FAO	Food and Agriculture Organisation
FPSO	Floating, Production, Storage and Offloading
GSS	Ghana Statistical Service
HCT	Human Capital Theory
IAPP	International Association for Public Participation
IDS	Institute of Development Studies
IFAD	International Fund for Agricultural Development
ILO	International Labour Organization
MMDs	Metropolitan, Municipalities and Districts
NGOs	Non-governmental Organisations
ODI	Overseas Development Institute
PIAC	Public Interest and Accountability Committee
SDG	Sustainable Development Goals
STP	Structural theory of poverty
TDC	Tema Development Corporation

UCSOND	United Civil Society Organisations for National Development
UN	United Nations
UNDP	United Nations Development Programme
UNEP	United Nations Environmental Programme
UNHCR	United Nations High Commissioner for Refugees
USAID	United States Agency for International Development
USD	United States Dollar
WB	World Bank
WCGIDP	Western Corridor Gas Infrastructure Development Project
WCR	World Cities Report
WPP	World Population Prospect



CHAPTER ONE

INTRODUCTION

Land is one of the most essential assets for addressing socio-economic development and poverty alleviation (Gilbert, 2013). The significance of land in the provision of infrastructure such as electricity, roads, hospitals and schools is not in doubt (Adu- Gyamfi, 2012). This is why governments acquire land by negotiating with private land owners or activating compulsory land acquisition power over private land for the public good (Deininger, 2003). However, the exercise of compulsory land acquisition power has sometimes created some challenges for expropriated households (Larbi, 2008) as livelihoods, especially that of the rural poor are affected in the process (Thao, 2016). This has become a social justice issue (Devereux & McGregor, 2014; Viitanen, Falkenbach, & Nuuja, 2010), thereby requiring different strategies to deal with the issues (Ikejiaku, 2009). One of such efforts is the implementation of livelihood adaptation measures (Ellis, 2000). However, few studies have been done to ascertain the effect of households' participation in the compulsory land acquisition processes from the outset. This raises certain philosophical concerns such as the right of expropriated households to participate in the decision-making processes that culminate into the compulsory land acquisition, hence, the motivation to undertake this study.

Background to the Study

Globally, land serves as the backbone for many economies, and a major measuring stick for determining capital and wealth of nations (Ding, 2007). In the developing world, land constitutes about 75 percent of wealth (Deininger, 2003; UNDP, 2005). The FAO (2009) is of the view that access to land has the

potential to reduce, if not eliminate, extreme hunger (SDG one) from the universe since land serves as the major catalyst for food production, clothing and shelter. Landlessness among citizens and even states can create vulnerability and socio-economic insecurity (FAO, 2012).

The importance of land in socio-economic development motivates most governments to exercise the compulsory land acquisition (CLA) power in places where the state has no land (Wilbard, 2010). The CLA is the power governments' exercise to acquire private rights in land without necessarily obtaining the willing consent of its owner for the public good (Jonathan, 2012). The World Bank (2011) reports that between 2001 and 2010, about one million hectares of land worldwide was compulsorily acquired for various developmental projects. Within the same period, an estimated six hundred and thirty thousand households were directly affected (World Bank, 2011). In China, for example, within a period of thirty years (1978-2008), five million hectares of land had been acquired affecting an estimated seventy-three million people that are mainly farmers (Zhang & Lu, 2011). According to Devas and Grant (2003), the situation is not substantially different from that of India, as the state has acquired large tracks of land from people.

Many writers (Deininger, 2003; Viitanen & Kakulu, 2008; Larbi, 2008) have explained compulsory acquisition of private property rights in land. Some of these explanations can be traced to the theory of eminent domain. The main argument in the theory of eminent domain is that the power of the state or sovereign overrides all private property rights within its jurisdiction (Deininger, 2003). This gives the State absolute power to expropriate private property right in land without necessarily obtaining permission from the owner for the public

good (Kasanga & Kotey, 2001; Larbi, Antwi, & Olomolaiye, 2004). The sovereign is, however, enjoined to compensate the displaced persons after the land has been taken (Schultz, 2009). Notwithstanding the explanations for the exercise of the CLA order, government and acquiring agencies are obliged to pay compensation to address livelihood outcome challenges associated with the implementation of expropriation powers (FAO, 2008).

The extent of the curtailment of use right and its associated impact can render the expropriated households' or owners' poor (Vizard, 2006). Poverty refers to the deprivation of basic necessity of life such as food, shelter, education, health as well as limited freedoms and denial of the right people to participate in social activities (Alkire & Santos, 2010; Laderchi, Saith & Stewart, 2003; Romeshun & Mayadunne, 2011). The causes of poverty linked to the exercise of compulsory land acquisition order can be situated within the domain of structural theory of poverty which argues that the economic, political and social systems generate conditions that diminish the possibility and resources to cater for enhanced living condition (Jordan, 2004; Royce, 2009).

The participation of project affected persons, and the acquiring agencies in the acquisition processes is required to not only minimize the negative consequences associated with the CLA exercise but also prevent actions or omissions that can plunge displaced persons into poverty (FAO, 2009). The participation of the project affected people in compulsory land acquisition processes helps to manage adverse effects and severe vulnerability thereby enhancing the chances of affected people to adapt to new places or livelihoods opportunities (Pham, Westen, & Annelies, 2013). The issues associated with project affected persons' participation in the CLA order is underpinned by the

citizens' participation theory which holds that participation involves deliberate process to permit vulnerable citizens in the society to be included in the economic and political process to enable them influence decisions, especially if the decisions border on their well-being (Arnstein 1969; Bryson, Crosby & Bloomberg, 2014; Smith, 2003). The active participation of stakeholders in the compulsory land acquisition processes aids in the compensation determination effort (Larbi, 2008).

The compensation given out to beneficiaries may influence their livelihood choices and hence, their adaption. Livelihood as defined by Chambers and Conway (1991) consists of capabilities, assets, and undertakings needed for living. Livelihood outcomes derive its theoretical underpinning from the entitlement theory. According to the entitlement theory, entitlement failures in terms of pull and response failures make the individual unable to meet his or her livelihood outcomes (Devereux, 2006; Harvey, 2005; Khogali & Thakar, 2001; Lindert, Linder, Hobbs, & De la Brière, 2007; Sen, 1986). Experiences from the world over point to the fact that if compulsory land acquisition is not properly handled, it can negatively affect livelihoods outcomes and cause untold hardships among expropriated households (Ghansah, 2010). This probably explains why compulsory land acquisition of private property right in land is underpinned by the philosophical strands of social justice and human rights.

The philosophical basis for the acquisition of private property right in land has its root in principles of social justice (Devereux & McGregor, 2014; Lindert *et al.*, 2007; UN, 2006). It is unjust, terrible and disturbing to acquire private property right in land for the public good without the payment of just compensation to prevent the widening of the income inequality gap between the

rich and poor (Lindert *et al.*,2007). Consequently, the poor with the least social, legal, political and economic resources bear the cost of compulsory land acquisition (Benson, 2008).

The negative effects of compulsory land acquisition order on the local population or households can be termed as human rights abuses (Raz, 2010; Nickel,2007).). Fukuda-Parr, Lawson-Remer, and Randolph (2008) identify the following rights as those that are often violated by compulsory land acquisition: right to food, rights of household to dispose of their lands, right to shelter, and the right not to be forcibly evicted. These abuses in turn trigger further violations such as lack of access to healthcare and education, cultural rights, procedural rights, right to give, or withhold, prior, free and informed consent, and guaranteed access to effective remedies (Sen, 2009).

The government of Ghana over the years had enacted pieces of legislation to enable the state to exercise its compulsory land acquisition power to acquire land, regulate land use, and ensure efficient administration of land (Asante, 1975; Kasanga & Kotey, 2001), with the view to addressing the inherent human rights abuses associated with the implementation. These laws included the State Lands Act, 1962 (Act 125), which was amended in 2005 as State Lands (Amendment) Act, 2005 (Act 586), and Administration of Lands Act, 1962 (Act 123). However, with the enactment of the Land Act, 2020, Act 1036, the parliament of Ghana has sought to consolidate most of the land related legislations. The parent laws for the administration of land in Ghana are found in the 1992 constitution of the Republic of Ghana. Article 20(1a) of the 1992 Constitution of Ghana permits the State to forcibly acquire private property

rights in land. Article 18(1) of same, recognizes the right of private persons to own property (Government of Ghana, 1992)

Land ownership in Ghana can broadly be classified into three namely: customary, state, and split ownership (Agbosu, et al. 2007; Kassanga & Kotey, 2001; Larbi et al., 2004; Sarpong, 2006). Customary lands are owned and controlled by either stools/skins or clans/families (Agbosu, et al. 2007). Customary lands are governed by customary and traditional norms and practices (Sarpong, 2006). Kotey and Kasanga (2001) indicate that the control of customary land is vested in the traditional ruler normally called chief by the Akan, and Tendana (Earth Priest) by the Northern communities. Individual rights to land are obtained through inheritance or community leadership (FAO, 2012).

The customary authorities made up of stools/skin, families and clans own 78 percent of the total land area. The state follows with 20 percent, and the remaining 2 percent jointly owned by the state and customary authorities (Larbi, 2008; Adu-Gyamfi, 2012). The main option left for the State to increase its percentage land holding, with this tenure arrangement, is to resort to compulsory land acquisition order, and in the process, livelihoods of displaced persons are affected.

Table 1 presents Western Corridor Gas Infrastructure Development Project acquisitions. Table 1 was constructed by the author with data from Lands Commission (Lands Commission, 2014). The Gas Processing Plant with

Table 1: Western Corridor Gas Infrastructure Development Project Acquisitions

Acquisitions	Locations	Metropolitan /Municipality/District	Land Size (Acres)	Percentage
Gas Processing Plant Site	Atuabo	Ellembelle	982.637	48.31
Landfill Site	Atuabo	Ellembelle	2.393	0.12
Distribution Station	Esiama	Ellembelle	63.694	3.13
Block Value Station No. 1	Nduabesa	Nzema East	9.894	0.49
Block Value Station No. 2	Kwekutsiakrom	Ahanta West	9.914	0.49
Regulating and Metering Station	Inchaban	Shama	65.621	3.23
Leaf way (Gas Pipeline)	Atuabo to Aboadzi	Ellembelle, Nzema East, Ahanta west, Tarkwa-Nsuaem, Prestea Hun-valley, Sekondi-Takoradi, Effia-Kwesimintsim, and Shama	910.03	44.74
Total			2,034.183	100

Source: Author's Construct (2018)

its landfill site at Atuabo and the Distribution Station at Esiama in the Ellembelle District constitute about 52 percent of the total acquisitions. The Leaf way (pipeline) which represents about 45 percent of the total acquisitions not only stretches from Atuabo to Aboadzi covering a distance of 111 km by 35 m but also includes 75 km pipeline connecting the gas distribution station in Esiama to a regulating and metering station in Prestea. Undoubtedly, the Ellembelle District hosts more than half of the WCGIDP acquisitions.

Furthermore, the Public Interest and Accountability Committee (PIAC) reports that the WCGIDP acquisitions have affected 2,378 crop farmers in 58 communities, and spans nine Metropolitan, Municipalities and Districts (MMDs) in the Western Region of Ghana namely: Ellembelle, Nzema East, Ahanta West, Wassa East, Tarkwa Nsuaem, Prestea Huni-Valley, Effia Kwesimintsim, Sekondi/Takoradi and Shama (PIAC, 2014). Out of this number, the Ellembelle District and Nzema East Municipality (Study district) recorded 741 affected farmers representing 31 percent, and 25 communities representing 45 percent respectively. On the issue of compensation, the same report has it that the affected farmers have been paid Eight Million, Seven Hundred Thousand Ghana Cedis (GH ₵ 8,700,000.00) as financial compensation package for crops destroyed. This compensation package, according to the report, did not include payment for the acquired land.

Statement of the Problem

The implementation of compulsory land acquisition order is often met with challenges such as the displacement of expropriated owners. For instance, the construction of both Akosombo (1965-1968) and Kpong dams (1978-1981), in the Eastern Region, and Bui dam (2008-2013) in the Brong Ahafo Region

displaced over 80,000; 6000; and 1200 people respectively (Jonathan, 2012). The deprivation of use of land amounts to the denial of economic and beneficial use of land or limitation of use rights (Hilson, 2004). Depending on the extent of curtailment, deprivation can either be partial, where a particular use rights or part of the land of the lawful occupier are affected or total, where all the use rights of the lawful occupier are affected (Innes, 2000). Hilson (2002) categorizes the end results of CLA order into physical and/or economic displacement of the affected households. Hilson (2004) opines that physical displacement leads to loss of people homes while with that of economic displacement, it leads to loss of assets.

The payment of compensation is required to indemnify displaced persons. Article 20 (2) of the 1992 Constitution of the Republic of Ghana requires that compulsory acquisition of property by the State shall only be made under a legislation that makes provision for the prompt payment of fair and adequate compensation to expropriated owners (Larbi, 2008). The implementation of this constitutional provisions has been fraught with challenges. For example, the adequacy of compensation has often been a subject of dispute (Akrofi and Witthal, 2013). Though valuation officers have attempted to address the challenges associated with compensation determination through the principle of equivalence (Botchway, 1998), the issue of promptness as prescribed by the 1992 constitution has largely been discretionary. As a result, the implementation of compulsory land acquisition has been characterized by delays and/or non-payment of compensation (Akrofi and Witthal, 2013).

Compulsory land acquisition has a huge socio-economic impact on people who have lost their parcels of land, their dependents, and landowners

(FAO, 2008). Such impact is usually observed in changes in income levels, land ownership structure, land utilization and farming practices, familial composition, cultural and social values, norms, and bonds (Syagga & Olima, 1996). Though the Western Corridor Gas Infrastructure Development Project acquisitions started in 2011, the publication of the Executive Instrument for the compulsory land acquisition order was done in June 13, 2014. The acquisitions included mostly agricultural land for the construction of the gas processing plant at Atuabo, laying of pipelines to transport gas from Atuabo to Aboadze, and the construction of block value stations. The delay implies that the displaced households or persons were denied the opportunity to submit the claims on their land for compensation to be paid on time which defeats the constitutional provision of promptness.

The Western Corridor Gas Infrastructure Development Project arguably is one of the large-scale acquisitions for the energy sector in Ghana. Although some prior researches have assessed the impact of acquisition of land by the State on livelihoods, they appear to mainly focus on hydropower (Asiama, 2015; Tuu Ty, Westen & Zoomers, 2013), nuclear power (Thao, 2016), and biofuel (Aha & Ayitey, 2017). Besides, studies that seek to investigate the effects of compulsory land acquisition on the livelihoods of affected people is very essential, as previous studies evaluating such outcomes have revealed contradictory results (King & Sumbo 2015; Zhou, 2012). Studies such as Syagga & Olima (1996) and Thao (2016) have shown that compulsory land acquisition has negative impact on the livelihoods of affected people. However, some studies (Nguyen, van Westen, & Zoomers, 2017; Zhang & Lu, 2011) have produced results that showed that people's livelihoods improved

after compulsory acquisition of their land. This study, therefore, intends to contribute to the on-going debate.

Secondly, previous studies (Ablo & Asamoah, 2018), on the Western Corridor Gas Infrastructure development appeared not to have examined the effects of compulsory land acquisition on the livelihood adaptation of expropriated households. Instead, the studies assessed the impact of the Ghana Gas project on the livelihoods of affected farmers in Atuabo, Anochie and Asemda Suazo which are predominantly fishing communities. The following empirical gaps are, therefore, noted: the scope of the study was limited to just affected farmers within three fishing communities without regard to the rest of the over sixty communities composed of both inland and coastal inhabitants with perhaps differences in the types of crops cultivated. Other affected land users who were not farmers were also not covered by the study.

Thirdly, previous investigations on compulsory land acquisition for gas infrastructure appeared not to have centered on examining how affected households participate in the compulsory land acquisition processes from the outset to the end (Ablo & Asamoah, 2018). Such studies only indicate participation in determining compensation claims (Aha & Ayitey, 2017; Ablo & Asamoah, 2018) but do not clearly indicate the extent of participation of households in the acquisition processes from the beginning to the end which produces a knowledge gap.

Fourthly, studies on compulsory land acquisition (Syagga & Olima, 1996; Thao, 2016) appear to place little attention on changes in affected households' income portfolios. However, it is critical because rural households in developing countries engage in diversified income sources (Taruvinga,

Gumpo, Mudemba & Ngarava, 2018). The determination of households' income portfolios is useful in particular, to understand the sources and the differences in income among households (Batool, Babar, Nasir & Iqbal, 2017). Fifthly, some empirical studies have revealed that the implementation of compulsory land acquisition is fraught with challenges (King & Sumbo 2015; Larbi et al, 2004; Syagga & Olima, 1996). These challenges comprise human right abuses, loss of income, and non-payment of compensation (Akrofi & Whittal, 2013; Larbi, 2008). The gap is that these challenges are commonly from displaced persons or implementing agencies perspectives only, not from both making the present study imperative.

Sixthly, from the theoretical perspective, the eminent domain theory basically indicates that the state may expropriate private property for public consumption but such an act must be accompanied by the payment of just compensation (Arya, 2019; Bhattacharyya, 2015; Saxer, 2005; Schultz, 2009). This theory, however, fails to specify whether such financial compensation payment for the compulsorily acquired land should be spent on consumption only or on both consumption and investment in productive activities to facilitate livelihood adaptation. On the aggregate, these empirical and theoretical gaps have motivated the researcher to examine compulsory land acquisition for the Western Corridor Gas Infrastructure Project and livelihood adaptation within the Nzema East Municipality and the Ellembelle District in Ghana.

Research Objectives

The general research objective was to investigate compulsory land acquisition for the Western Corridor Gas Infrastructure Project and livelihood

adaptation within Nzema East Municipality and Ellembelle District in Ghana.

Specifically, the study sought to:

1. Examine the extent of participation in the compulsory land acquisition processes by affected households;
2. Analyse displaced persons' utilization of financial compensation claims;
3. Examine differences in affected households' income portfolios before and after expropriation;
4. Describe changes in affected households' livelihood strategies before and after expropriation;
5. Ascertain key challenges that limit the implementation of compulsory land acquisition power, and
6. Make recommendations as to how to improve the administration of compulsory land acquisition.

Research Questions

To be able to achieve the stated objectives, the researcher attempted to answer the following questions:

1. How do affected households participate in the compulsory land acquisition processes?
2. How do displaced persons utilize financial compensation claims?
3. What are the differences in affected households' sources of income portfolio before and after expropriation?
4. What are changes in affected households' livelihood strategies before and after expropriation?

5. What key challenges limit the implementation of compulsory land acquisition order?

Significance of the Study

In Ghana, the implementation of compulsory land acquisition order has always attracted the displeasure of some of the affected persons (Larbi, 2008). Therefore, the results from this study on compulsory land acquisition and its implication for livelihood adaptation are crucial. The study's findings on the level of participation of affected households in the compulsory land acquisition processes would encourage inclusive decision-making from the outset of CLA to limit controversies surrounding the unfairness, promptness, and inadequacy of compensation amount paid to affected households.

The findings of the study on the usage of the compensation amount would enable the displaced persons to spend the financial compensation on either consumption or investment, or both consumption and investment in productive endeavors to facilitate livelihood adaptation efforts. Furthermore, the results on the changes in income portfolios of affected households are useful in particular, to understand the major sources and the differences in income among households to enable displaced persons to develop a comprehensive livelihood adaptation strategy to sustain or increase their income portfolios.

The results of livelihood strategies adopted by households would aid in the development of a comprehensive livelihood adaptation plan as part of the compensation package for expropriated households. Finally, the findings of this study on the probable challenges that might hinder the compulsory land acquisition processes would enable key stakeholders to develop guidelines to deal with the occurrence of the challenges should they surface. Consequently,

such challenges would not limit the potential gains of compulsory land acquisition.

Delimitations

Thematically, this thesis examines the extent of participation of affected households in the compulsory land acquisition processes; analyses the utilization of financial compensation, examines changes in households' income portfolios, describes the livelihood strategies of displaced persons, and ascertains challenges that hinder the implementation of compulsory land acquisition.

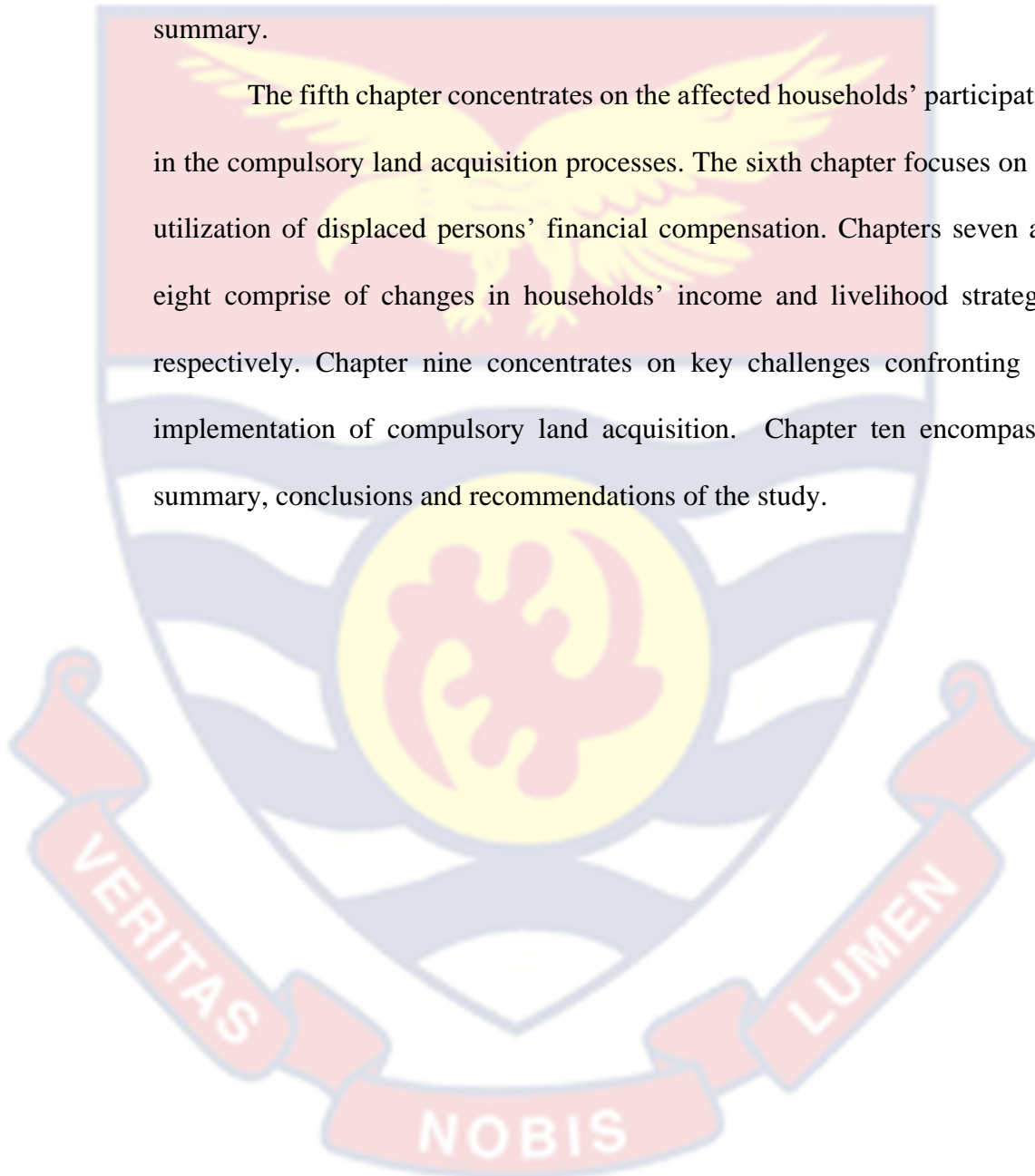
Geographically, this study is undertaken in the Ellembelle District and Nzema East Municipality of the Western Region of Ghana. It focuses on communities within the study area that have been affected by the operations of the Western Corridor Gas Infrastructure project. Regarding the target population, this encapsulates the affected households in the study district and municipality, officials of Ghana Gas Company, Lands Commission and Traditional rulers in the affected communities. For the time dimension, it covers the period from 2011 when acquisition commenced to 2020.

Organization of the Thesis

This thesis is composed of ten chapters. Chapter one, which is the introduction, encompasses the background to the study, statement of the problem, research objectives, research questions, hypotheses, significance of the study, delimitations and organization of the thesis. The theoretical and conceptual review constitutes chapter two. Chapter three centers on the empirical review, lessons learnt and conceptual framework while the fourth

chapter covers the methodology. Specifically, it focuses on the introduction, profile of the study areas, research design, study population, sample size and sampling procedures, data collection, instrument design, pre-testing, actual field work, data processing and analysis, ethical procedure as well as chapter summary.

The fifth chapter concentrates on the affected households' participation in the compulsory land acquisition processes. The sixth chapter focuses on the utilization of displaced persons' financial compensation. Chapters seven and eight comprise of changes in households' income and livelihood strategies respectively. Chapter nine concentrates on key challenges confronting the implementation of compulsory land acquisition. Chapter ten encompasses summary, conclusions and recommendations of the study.



CHAPTER TWO

THEORETICAL AND CONCEPTUAL REVIEW

Introduction

Theoretical and conceptual reviews constitute two essential parts of a research. The theoretical perspective forms the basis for knowledge construction in research (Grant & Osanloo, n.d.; Neuman, 2011). Theoretical framework provides the structure that supports the research rationale, the problem statement, the purpose for the study, the significance of the study, and research questions. It also serves as the basis for reviewing literature, and informs the choice of data collection methods and analysis (Grant & Osanloo, n.d.; Kumar, 2011; Lysaght, 2011). In essence, the theoretical perspective provides the plan for the research study (Kumar, 2011). The conceptual review, on the other hand, helps in identifying key variables, and sharpens the problem statement (Griffiee, 2012; Sekaran, 2003; Walliman, 2011).

Theoretical Framework

The theory of eminent domain (TED), the structural theory of poverty (STP), the entitlement theory (ET), and the citizen participation theory (CPT) form the theoretical framework of the study. The combination of these theories is necessary because each one of them alone is insufficient for explaining compulsory land acquisition and livelihood adaptation. They, therefore, complement each other in explaining the phenomenon.

Eminent Domain Theory

Many writers (Deininger, 2003; Viitanen & Kakulu, 2008; Larbi, 2008) have explained compulsory acquisition of private property rights in land. Some of these explanations can be traced to the theory of eminent domain. The

eminent domain theory (EDT) holds that the sovereign may acquire private property for public use, but coupled with a duty to pay just compensation (Arya, 2019). The idea that the sovereign's power to take private property should be limited is credited to Grotius, a seventeenth century jurist, who contends that the state possesses the power to take or destroy private property for the public's benefit, but further stated that the state is obligated to compensate the displaced persons for the losses (Saxer, 2005). Schultz (2009), notes that the eminent domain theory was formulated to authorize the state to undertake compulsory acquisition of private property for the common welfare such as safety or health. Bhattacharyya (2015) opines that the payment of just compensation is needed to alleviate the financial burden suffered by the property owner. This submits that the payment of compensation adulterates the absolute power of the state to take private property. A variety of property rights such as water, and land are subject to eminent domain (Saxer, 2005).

The eminent domain theory has as its key tenets, namely: private property; taking; public use; and just compensation (Schultz, 2009). The property earmarked for acquisition must be private (Saxer, 2005). Private property includes land as well as fixtures, leases, stocks, and other items (Reale, 2009). Taking involves the acquisition of physical property, or a portion thereof as well as the reduction in value of private property by the state (Tayal & Jacob, 2005). Reduction in property value may occur due to noise, accessibility challenges or other agents (Arya, 2019). For instance, timber or rocks from a person's land is taken property for which compensation must be paid (Reale, 2009). Compensation is also paid when restriction on the use of property is so extensive that it may amount to confiscation of the property (Bhattacharyya,

2015). Schultz (2009), indicates that actions such as regulation of private property by the state, and the publication of plans, plotting, and locating do not constitute taking. Same applies to laying out of public improvements such as streets, highways, and other public works (Tayal & Jacob, 2005). However, in 1922, the Supreme Court of the United States of America held that compensation must be paid when the state regulation "goes too far" in diminishing the value of private property (Bhattacharyya, 2015).

The eminent domain theory requires that the acquired property is used to satisfy the public instead of specific persons. Schultz (2009), reports that what is considered as public has always been determined by the courts, especially in situations where the legislature has not made such declaration. Initially, the criterion used by the courts to determine "public" was when the property was to be used by a large section of the public; it was later broadened to include anything that benefited the public such as trade centers and airport expansions; and further expanded to include aesthetic and economic considerations (Reale, 2009). For example, in *Berman* (Bhattacharyya, 2015), the court held that slums could be cleared to make the city look attractive (Tayal & Jacob, 2005).

The eminent domain theory posits that the amount of compensation paid when private property is acquired, seized or damaged must be fair and adequate to the property owner (Reale, 2009). The challenge with the above proposition is that there is no exact formula for determining just compensation. The courts, however, tend to emphasize the rights of private property owners in compulsory land acquisition proceedings (Tayal & Jacob, 2005). The measure of damages is often the fair market value of the property that is taken for public use. Schultz (2009) refers to market value as the price arrived at as a result of negotiations

between an owner who intend to sell and a buyer who plans to purchase the property in question. The amount of compensation paid should place the displaced person in a sound financial position as he or she would have been had the property not been sold (Saxer, 2005). The amount of compensation is determined as of the date title changes hands, and also interest should be paid on the award until payment is made (Schultz, 2009). Reale (2009) declares that EDT requires compensation to be paid in cash. However, present day compensation payment includes both cash and non-cash payment (Zimmermann, 2008).

Various researchers ((Bhattacharyya, 2015; Reale, 2009) have critiqued the eminent domain theory. For instance, the eminent domain theory is criticized for being economically unsound as it distorts the operations of the free market economy (Tayal & Jacob, 2005). Furthermore, the eminent domain theory has been condemned as it has been proven to be incompatible with individual's rights to own property (Bhattacharyya, 2015). Regardless of the above critiques of the eminent domain theory, it is still one of the major theories that serve as the foundation for the implementation of compulsory acquisition order (Bhattacharyya, 2015; Tayal & Jacob, 2005). For example, Saxer (2005) reports that EDT proffers a concrete theoretic pedestal for the acquisition of private property right in land. In conclusion, the EDT has the potential to cause structural poverty among displaced persons if compensation matters are not adequately addressed.

Structural Theory of Poverty

The causes of poverty linked to the exercise of compulsory land acquisition order can be situated within the domain of structural theory of

poverty which argues that households or individuals are poor for the fact that certain economic, political and social systems result in circumstances in which these households or individuals are left with inadequate opportunities and resources to enjoy improved standard of living (Abdulai & Shamshiry, 2014; Bradshaw, 2006; Jordan, 2004; Rank, 2005). The causal factors are beyond the control of the households or individuals, implying that actions and decisions of government or duty bearers are normally responsible for such poverty (Cotter, 2002; Royce, 2009). This signifies those decisions of governments such as compulsory land acquisition which deprives displaced persons of their land, may be a source of poverty (Schiller, 1998).

Two schools of thought have been cited for the origin of structural theory of poverty (Spicker, Leguizamón & Gordon, 2006). The first school of thought (the Anglo-Saxon development studies, economic approaches and livelihood analyses) observes that inadequate access to income and basic assets is responsible for both extreme and structural poverty. The second school of thought, however, perceives poverty as a multidimensional and structural occurrence (Spicker et al., 2006) because in their view structural poverty results from long-term practice of inequality, exclusion, systematic violation of fundamental social and political human right as well as inadequate access to resources (Donaldson et al., 2014; Holmes & Jones, 2009; Osei-Hwedie, 2004). Demographic characteristics and inadequate well-paying jobs are also some of the other factors (Brady, 2006).

Various studies (Abdulai & Shamshiry, 2014; Hickey & Bracking, 2005; Richardson & London, 2007) have proffered varied policy alternatives to addressing challenges associated with structural poverty. It has been argued that

any attempt at solving structural poverty should include equal opportunity for acquiring resources and its redistribution (Abdulai & Shamshiry, 2014). Similarly, Hickey and Bracking (2005) recommend the redistribution of resources and changing of state's policies that perpetuate poverty. Richardson and London (2007) advocate that the resolution of structural rural poverty should be done by providing the needed basic facilities and resources. The state, private individuals, and NGOs have, however, been identified as key stakeholders required to deal with structural poverty either collectively, separately or both (Chêne, 2010; Fonteneau, Vaes & Huysse, 2014; Omilola & Kaniki, 2014).

The structural theory of poverty has suffered some critiques. The theory was silent on how human capital, sex, and race influence the reward system in the labour market (Alkire, 2007; Darling, 2002). The theory also assumes that individuals are best placed to make rational economic decisions, which in reality does not suffice (Lawson, Moores & Jones, 2000). Moreover, Brady (2009) opposes the idea of the theory's exclusive reliance on increases in poverty figures without giving much attention to variations in poverty levels. Notwithstanding, the structural theory of poverty provides the platform for identifying suitable approaches for resolving poverty occasioned by state actions such as compulsory acquisition order. Compulsory acquisition order undoubtedly affects individuals' entitlement, hence the entitlement theory.

Entitlement Theory

Livelihood outcomes derive its theoretical underpinning from the entitlement theory. According to the entitlement theory, entitlement failures in terms of pull and response failures make the individual unable to meet his or

her livelihood outcomes (Devereux, 2006; Harvey, 2005; Khogali & Thakar, 2001; Lindert, Linder, Hobbs, & De la Brière, 2007; Sen, 1986). Experiences from the world over point to the fact that if compulsory land acquisition is not properly handled, it can negatively affect livelihoods outcomes and cause untold hardships among expropriated households (Ghansah, 2010).

The entitlement theory, according to Versteegen (2001), tend to associate livelihood outcome challenges to the crumble of households' entitlement. Resource availability is critical in addressing livelihood issues. To avert livelihood outcome challenges that may emerge as a result of compulsory acquisition order, acquiring agencies should provide resources in the form of financial and resettlement compensation for expropriated households (Adger, 2006).

In Sen's attempt to explain livelihood outcome concerns and poverty in the world as well as the necessity for external support, Sen (1990) developed the entitlement theory. The ET focuses on the rights and individual's entitlement to things (Vizard, 2001). Entitlement refers to a set of diverse alternative commodity bundles that a person or household can obtain using the various legal options of acquirement available to someone in her or his position (Sen, 1990). In contributing to the entitlement discourse, Adger (2006) perceives it as sources of welfare or income attained or unexploited. The basic fact is that entitlement entails resources that are used to obtain goods and services.

Entitlement theory, generally, hinges on the following core tenets: endowment set, entitlement mapping, entitlement set and entitlement failure (Mogaka, 2013; Osmani, 1993; Sen, 1990; Sultana, 2002). Endowment set comprises a combination of all legally acquired resources by an individual or

household (Osmani, 1993; Sen, 1984, 1986; Sultana, 2002). Sen (1990) conceives endowment set as the bundle of resources owned by an individual or a household. These resources comprise animals, skills, equipment, land, and money as well as social networks (Osmani, 1993; Sultana, 2002). These endowments afford the individual or household the opportunity to obtain different bundles of commodities the person or household desires (Sen, 1986). Therefore, inadequacy of endowment makes an individual or household dispose to famine, and susceptible to poverty.

Entitlement mapping prescribes the relation that details the set of possible commodity bundles that are lawfully obtainable from any given endowment (Sen, 1981, 1986). Entitlement mapping, thus, mirrors the rules, conditions and processes that influence how individuals or households obtain their entitlements from their endowments. Entitlement mapping, generally, denotes the frequency at which the resources of the endowment set are converted into goods and services, and other amenities in the entitlement set (Sen, 1981, 1986). Entitlement set signifies the set of all possible blends of commodities that individuals or households can lawfully obtain by applying resources of their endowment set and opportunities (Osmani, 1993).

Entitlement deficit describes a situation where production is quite inadequate (Devereux, 2006). Entitlement failure may, therefore, occur in two ways namely: pull or direct entitlement and response or trade entitlement failures (Sen, 1986; Vizard, 2001). The pull failure occurs where individuals or households lose their sources of income that subsequently affect their means of purchasing goods and services (Khogali & Thakar, 2001; Sen, 1986); thus, making them vulnerable and prone to poverty. Response failure, on the other

hand, happens when traders hoard goods or there is non-availability of goods for traders to supply (Khogali & Thakar, 2001), and consequently, making individuals or households susceptible to poverty.

In order to address the challenges associated with response failure, vouchers can be used to give basic needs to individuals or households that experience limited supply while financial compensation paid to displaced persons may assist to deal with pull failure by giving households the means to acquire basic necessities of life (Holmes & Bhuvanendra, 2013; Jaspars et al., 2007; Mogaka, 2013). With functional market (Bailey, 2013; Devereux, 2002; Jaspars et al., 2007), financial compensation can be used by displaced persons or households to acquire their needs, food and non-food, when they are readily available.

The Entitlement theory has come under some criticisms. The theory is criticized for emphasizing economic determinants of poverty thereby ignoring issues of power dynamics and politics (Devereux, 2001; Harvey, 2005). In addition, the entitlement theory is condemned for not accounting for situations where the relationship between persons and resources is mediated by non-market institutions (Devereux, 2001).

Regardless of the criticisms, the entitlement approach still serves as one of the major theories that underpin livelihood outcomes of expropriated households (Mogaka, 2013; Peppiatt, Mitchell, & Holzmann, 2001; Tiwari, 2007). For example, Peppiatt et al. (2001) are of the view that the entitlement approach offers a concrete theoretic base for financial compensation payment as it offers proof of direct cash payment, accompanied by the right livelihood adaptation strategies, which can empower people to obtain whatever they want

including food and non-food commodities. Besides, many studies (Jaspars et al., 2007; Peppiatt et al., 2001; Tiwari, 2007) depict the relevance of the entitlement theory in empirical evidence gathering. Even though the entitlement approach proffers that individuals or households' conditions would be maintained or improved with the payment of financial compensation to displaced persons, it does not spell out the participation of displaced persons in the entire acquisition processes. This has, therefore, necessitated the need to review the citizen participation theory.

Citizen Participation Theory

The issues associated with displaced person's participation in the CLA order is underpinned by the citizens' participation theory which holds that participation involves deliberate process to permit vulnerable citizens in the society to be included in the economic and political process to enable them influence decisions, especially if the decisions border on their well-being (Arnstein 1969; Bryson, Crosby & Bloomberg, 2014; Smith, 2003). The citizen participation theory (CPT) argues that participation is a process through which members of an organization or community influence decisions that affect their development (Arnstein, 1969; Bevir, 2013; IAPP, 2014). IAPP (2014), view participation as a means of involving individuals or groups in the planning and implementation of activities that can affect their lives. According to Arnstein (1969), participation consists of intentional processes that allow vulnerable citizens who are currently excluded from the economic and political process to be included in future political and economic processes. Beyir (2013), places emphasis on redistribution of power and enabling environment as key ingredients required to facilitate citizen's participation in a deliberative manner.

Arnstein (1969), establishes a typology of citizen's participation known as "A Ladder of Citizen Participation". This typology of citizen's participation is organized as rungs on a ladder, with each rung relating to the extent of control local people have within the process of developing a programme or undertaking activities that affect them (Beyir, 2013). Arnstein (1969) identifies eight rungs of a ladder namely: manipulation, therapy, informing, consultation, placation, partnership, delegated power, and citizen's control, as various levels of citizens' participation in all aspects of planning and decision-making responsibilities. Arnstein (1969) further breaks down the eight rungs into three stages as non-participation, tokenism, and citizen's power.

The non-participation component (first stage) of the ladder of citizen participation consists of manipulation and therapy which are the first and second rungs of the ladder respectively (Arnstein, 1969; Bryson, et. al., 2014). While manipulation involves exerting influence and gaining the support of the public through propaganda (Arnstein, 1969), therapy on the other hand assumes that the public is not able to decide for itself and that those in authority must necessarily subject their citizens to paternalistic education exercises (Bryson, et. al., 2014). This stage suggests that citizens do not make inputs into planning and decision-making processes, rather they are mere passive recipients of what officialdom dumps on them.

The second stage (tokenism) consists of the next three rungs of the ladder namely: informing, consultation, and placation (Arnstein, 1969; Bryson, Crosby & Bloomberg, 2014; Bovaird, 2007). The third rung of the ladder, informing, provides one sided information flow from public officials to citizens without any corresponding channel through which citizens can negotiate or

feedback (Arnstein, 1969; Quick & Feldman, 2011). Consultation, fourth rung on the ladder, though offers a two-way flow of information, citizens input is seldom considered by public officials (Arnstein, 1969; Bovaird, 2007). The fifth rung on the ladder, placation, is where citizens start to exert their influence, but are usually overruled when their opinions do not tie in with that of public officials or professionals (Quick & Feldman, 2011). This second stage implies that although citizens are offered the opportunity to input into planning and decision-making processes, their contributions are usually considered by public officials as substandard or inferior.

The third stage comprises of partnership, delegated power, and citizen's control termed as citizen's power (Arnstein, 1969; Bryson, et. al., 2014; Bovaird, 2007). The sixth rung of the ladder, partnership, is where both citizens and public officials or authorities decide to share planning and decision-making responsibilities, and also develop mechanisms for addressing conflicts (Bovaird, 2007). The seventh rung of the ladder, delegated power, occurs where citizens achieve dominant decision-making power to guarantee accountability of programmes (Arnstein, 1969; Roberts, 2004). Finally, the eighth rung of the ladder, citizen's control, is the desired level of citizens' participation (Arnstein, 1969; Quick & Feldman, 2011). This third stage submits that public officials recognize citizens as partners in development, and are prepared to ultimately seed power to them to initiate, plan and develop their own programmes or events.

The main challenge is fear among officialdom of uncontrolled empowerment of people, and also absence of trust in the abilities of community members to make sensible decisions. This challenge is addressed by

professionals who act as mediators and instructors in exercises such as compulsory land acquisition. The Citizen Participation Theory has also come under some criticisms. The theory is criticized for focusing mainly on citizen's power, and further assumes that the major goal of participation is citizen's control (Bovaird, 2007; Nabatchi, 2012). Bovaird, (2007), suggests that the concentration of the theory on power is not adequate to explain participation at the practice level. Similarly, Nabatchi, (2012), criticizes the citizen participation theory on the grounds that citizens or individuals engage in decision making processes for varied reasons, and not necessarily to acquire control. Irrespective of the above criticisms, the appeal of the theory resides in both its simplicity and ability to unearth the power agenda hidden in many established narratives as well as the differences or dissimilarities in the forms and strategies of participation desired by citizens (Bryson, et al., 2014).

Interrelationship Among the Four Theories: EDT, ET, STP, and CPT

The eminent domain theory is the main theory supporting the study. The other three theories: the entitlement theory, the structural theory of poverty, and the citizen participation theory complement each other. The eminent domain theory allows the government to acquire private rights in land for the public good without the willing consent of the legitimate owner or the occupier of the property (Larbi, 2008). This is done to ensure that the state can secure land in any part of the country for essential infrastructure, a contingency that the land market has always not been able to meet (Jonathan, 2012).

However, the taking of people's land affects their entitlement, hence the entitlement theory which argues that a person's entitlement constitutes all the things the individual or household can have as a right (Vizard, 2001). The

endowment set of most rural and peri-urban communities in developing countries comprises mainly land and its natural resources which afford the people capabilities to achieve decent livelihoods, and escape hunger (Sultana, 2002). Most of the acquisitions usually take place in the rural and peri-urban communities (Larbi, 2008). The EDT has the potential to negatively affect the livelihood assets of project-affected persons which is why the acquiring institutions are obliged to resettle the displaced persons.

The failure on the part of acquiring bodies to resettle (financial or physical) the displaced persons can push them into poverty, a phenomenon which ties in with the proposition of the structural theory of poverty that the economic, political, and social systems practised by the state can cause people to have limited opportunities and resources with which to achieve income and well-being (Bradshaw, 2006). Therefore, the eminent domain which is a government's developmental tool can be retrogressive if its application does not take into consideration the decisions of project-affected persons.

The tendency for the eminent domain to affect the entitlements of individuals and community members, and expose them to poverty requires the active involvement of key stakeholders in the decision-making processes from the conception stage of the acquisition idea to the execution stage, hence the citizen participation theory. The citizen participation theory holds that participation is a process through which members of a community get involved, and influence decisions that concern development activities which can eventually affect their livelihoods or standards of living (Bevir, 2013). The active participation of displaced persons is required to aid in the identification of the land to the determination and payment of just compensation. Indeed,

some level of control of affairs and decisions (CPT) must be seeded to people whose livelihood assets (ET) have been affected as a result of the acquisition order (EDT) so that they do not end up in poverty (STP).

Conceptual Review

The focal concepts reviewed include land and land tenure, compulsory land acquisition, compensation payment and livelihoods. The rest of the concepts examined are utilization of financial compensation claims, livelihood adaptation strategies, household income portfolios, and participation in the compulsory land acquisition processes.

Land and Land Tenure

Land comprises all the physical elements that constitute the wealth a nation is blessed with by nature such as the environment, forests, minerals, rivers, climate, fields and animals (Bugri, 2008). Land also refers to anything on the ground, such as building, crop, fences and water; above the ground such as air and space rights; and beneath the ground such as mineral rights (FAO, 2012). These definitions point to the fact that land indeed serves as a major input in the production of goods and services, without which any nation, society and household cannot exist (Sarpong, 2006).

Land espouses various dimensions as in socio-religious, economic, and political realms (Bugri, 2008; FAO, 2012; Sarpong, 2006). Land as an economic asset serves as an input in the construction of dams, roads, and subsistence agriculture (FAO, 2012). With regard to the socio-religious dimension, land is connected to the unborn, the living and the dead (Sarpong, 2006). Politically, land defines the territorial boundary of a community or a state guarded by a

traditional ruler or head of state (Bugri, 2008). Sarpong (2006) hints that land tenure usually develops overtime from the interaction of socio-political determinant.

Land tenure refers to both legally or customarily defined relationship among individuals or groups with regard to land (Agbosu, et al., 2007). Land tenure is also defined as an institution that regulate how property rights to land are to be assigned or distributed within the society (Sarpong, 2006). Land tenure defines access to use right, control, transfer of land together with its connected responsibilities and constraints (Rünger, 2008). The above definitions of land tenure signify that the proprietary rights to a particular parcel of land is regulated within the institutional and legal framework of a society (Larbi, 2011; Adu-Gyamfi, 2012).

Land tenure also defines a variety of interest in land, namely: overriding interests, overlapping interests, complementary interests and competing interests (Agbosu, et al., 2007; Rünger, 2008; Bugri, 2008; Adu-Gyamfi, 2012). Rünger (2008) reports that overriding interest is held by a sovereign power such as a nation or community, which mandates the sovereign to allocate or reallocate land through compulsory land acquisition orders. The overlapping interest occurs where several parties are allotted different rights to the same parcel of land (Bugri, 2008). For instance, while a party may own a lease right, another may be enjoying a right of way (Adu-Gyamfi, 2012). Adu-Gyamfi (2012) views complementary interest in land as when different parties share the same interest in the same parcel of land. For example, where community members enjoy common rights to grazing pasture (Agbosu, et al., 2007). Competing interest is experienced when different parties vie for the same interests in the same parcel

of land as for example, two parties independently lay claim rights to exclusive enjoyment of a parcel of land (Adu-Gyamfi, 2012). This suggests that the overriding interest supersedes all the other interests in land, and it is this interest that probably allows the state to acquire any piece of land within its jurisdiction.

Land tenure is further classified as private, communal, open access and state tenures (Agbosu, et al., Agbosu, 2007; Bugri, 2008; Larbi, 2008; Sarpong, 2006). Private tenure refers to the assignment of exclusive rights to a private entity such as individual, a group of people, or a corporate organisation (Sarpong, 2006). Holders of such right can exclude others from using the land if their consent is not sought (Bugri, 2008). Agbosu, et al. (2007) report that communal tenure right may exist within a community where each member possesses an independent use right to the land holding of the community such as the right to graze livestock on a common pasture. Open access tenure occurs where no one is vested with specific use rights, and therefore, no one has the right to exclude others (Bugri, 2008). With regards to the state, property rights are vested in a public sector institution whether at a central or decentralized level of government (Larbi, 2008). This implies that the power to exclude someone from interfering in the enjoyment of one's property right in land depends on his or her holding.

Land tenure, at common law, defines the following rights and interest namely: freehold, leasehold, license and easement (Larbi, 2008; Rüniger, 2008). Freehold title holders to land enjoy complete and unrestricted ownership (Jonathan, 2012). A freehold title holder has the right to do whatever she/he wishes to do with the land (Rüniger, 2008). Deininger (2003), however, reports that though freehold titles are the highest interest in land at common law, such

right may not be entirely absolute as holders may have to comply with relevant state legislations and regulations.

Leasehold refers to an interest in land which a person or an entity acquires from a landowner on agreed terms between the two parties (Blocher, 2006). Leasehold connotes an agreement a tenant enters into with a landlord to acquire the exclusive right of occupancy to the land within a specified period of time and, in exchange, the landlord obtains consideration in that respect (Udry, 2011). Both definitions concern the transfer of interest in land from a person or an entity for the exclusive enjoyment of another based on specific terms to be fulfilled by both parties. The difference, however, is that Blocher (2006) is silent on consideration payment. Blocher (2006) also observe that leaseholders obtain interest in the land, and also enjoy the right to exclusive occupation of the land area leased but the leaseholder has obligation to comply with the terms of the lease. Udry (2011) reports that unless otherwise provided in the terms of the lease, the leaseholder can transfer her/his interest in the land, and also the lease in question cannot be revoked

A license refers to the right to use land in a certain manner (Adu-Gyamfi, 2012). A license permits a person or an entity who has obtained the consent of the owner or the landlord to use the land for a specific purpose (Deiningner, 2003). Both explanations indicate that a license connotes the granting of permission to persons to undertake specific tasks. Unlike a leasehold, a license is not transferable because it is personal to the licensee; the licensee does not acquire interest in the land; the license can either be exclusive or not, and can be revoked (Jonathan, 2012). An easement refers to the granting of certain rights in land that have been agreed upon by the parties involved (Sarpong, 2006).

Unlike license which is just a contractual grant, an easement is a conveyance of an interest in the land itself (Adu-Gyamfi, 2012).

The right an individual has in land is considered as property rights to land (Sarpong, 2006). Agbosu, et al. (2007) report of the existence of multiple rights in land, which are usually held by several different individuals or groups known as bundle of rights. The multiple rights to the same parcel of land such as right to: use the land, sell the land, and lease the land is termed as sticks in the bundle (Udry, 2011). For example, a bundle of rights may be shared between the land owner and the tenant to create a leasing contract permitting the tenant the right to use the land (Jonathan, 2012). The tenant according to Udry (2011), refers to a person who with the express consent of the land owner acquires interest in land within a specified period of time. This signifies that a particular piece of land can serve the interest of several individuals or households. Sarpong (2006), however, hint that several forms of land holdings or ownership are observed within a given society or community.

In Ghana, for instance, land ownership or tenure can broadly be classified into three namely: customary, state, and split ownership (Agbosu, et al. 2007; Kassanga & Kotey, 2001; Larbi et al., 2004; Sarpong, 2006). Customary lands are owned and controlled by either stools/skins or clans/family (Agbosu, et al. 2007). Customary lands are governed by customary and traditional norms and practices (Sarpong, 2006). Kotey and Kasanga (2001) indicate that the control of customary land is vested in the traditional ruler normally called chief by the Akan, and Tendana (Earth Priest) by the Northern communities. Individual rights to land are obtained through inheritance or the community leadership (FAO, 2012). Kasanga & Kotey (2001) identify five

rights and interest in customary land namely: Allodial, customary freehold, community's common property rights, alienation holdings and tenancy.

The allodial interest refers to the highest ownership of interest in land with massive bundle of rights, which resides in the stool/skin, clan, family or private individual (Blocher, 2006). The allodial interest is the highest proprietary right or interest that exists in customary land (USAID, 2015). Larbi (2008) argues that apart from statutory restrictions, the allodial interest is not subject to any obligations. The allodial interest is usually transferred from an owner to another through expropriation, purchase or gift (Blocher, 2006).

Ollenu, (1962) and USAID, (2015) refer to customary freehold (usufruct) as a land holding plan or arrangements that offers right to use or occupation that may devolve upon the occupier's successor in perpetuity unless the successor declines or fails to avail herself or himself of such rights. The customary freehold is derived from the allodial interest, and it is an interest in land held by members by virtue of belonging to a particular community, clan or family (Ollenu,1962). However, USAID, (2015) reports of alienation holdings where non-members of the land-owning community acquire land outright for farming and other purposes. Blocher (2006) notes that holders of customary freehold or use right may not be clothed with the right to sell the property as opposed to allodial title holders. FAO (2012) proffers that community's common property rights allow members of a particular community access or rights to: common grazing pasture for livestock; forest produce such as cane and raffia, and water for domestic chores and irrigation purposes.

Tenancy refers to the right to use land for a particular or specified timeframe (Udry, 2011). Tenancy is also created out of allodial or customary

freehold titles (Kasanga & Kotey, 2001; Ollenu, 1962). Share tenancy, also known as share cropping, is the practice whereby through contractual arrangements a tenant farmer offers specified quantity of her/his farm produce to the landlord during each harvest season (Kasanga & Kotey, 2001). Larbi (2008) claims that there are two types of sharing associated with share tenancy namely: Abunu and abusa. While abunu is a type of sharing where both the tenant and the landlord are each entitled to equal share (50:50) of the proceeds from the farm, that of the abusa is a sharing practice that entitles the land owner and the tenant farmer to one-third and two-thirds respectively (Ollenu, 1962; Kasanga & Kotey, 2001).

With regard to share tenancy, USAID (2015) observes that the contribution of each of the parties (tenant and landlord) to the farm enterprise usually determines the sharing principles to be adopted. For instance, if the landowner contributes both land and part of the farm inputs, the abunu sharing is applied, whereas if the land owner contributes just the land without any form of other investment to the farm enterprise, the abusa sharing is accordingly adopted (FAO, 2012). Kasanga and Kotey (2001) posit that sometimes the land instead of the harvests is shared. The implication is that with the customary land ownership, the allodial title is the highest interest in land from which lesser interests such as usufruct and tenancy are derived.

However, the state exercises some amount of control over the management of customary lands in Ghana (Adu-Gyamfi, 2012; Larbi, 2008). Adu-Gyamfi (2012) reports that the granting of stool or skin lands to non-members of the land-owning community requires the concurrence of the Lands Commission to have it validated. Larbi et. al. (2004) also presents that the

granting of freeholds out of stool or skin lands is not permitted. It has also been legislated that a foreigner is not permitted to enjoy more than fifty years leases in both stool and state lands (Government of Ghana, 1992). Jonathan (2012) hints that both customary and common law rights and interests may usually subsist in the same piece of land.

In addition to the control, the state through legislation has also either totally acquired or partly vested ownership of some customary lands in the state referred to as state lands or vested lands respectively (Adu-Gyamfi, 2012; Larbi, 2008). Whereas State lands refer to parcels of land that have been compulsorily acquired by the state (Larbi, 2008), Vested lands (Split ownership) refer to situations in which the state holds the land in trust for a land-owning community, and allocates to itself the legal incidents of ownership such as the right to sell, lease, collect rent and manage parcels of land (Adu-Gyamfi, 2012). Larbi (2008) adduces that with state lands, both legal and equitable rights are held by the state unlike vested lands in which the legal right and equitable right are held by the state and the land-owning community respectively. This implies that legally the state has absolute control over both state and vested lands. Moreover, Sarpong (2006) reports that while boundaries of state lands are expressly demarcated and surveyed, that of vested lands are not.

However, whereas both state and vested lands are managed by the Lands Commission, a state agency charged with the responsibility of managing government lands in Ghana (Adu-Gyamfi, 2012), customary lands on the other hand are managed by chief of land-owning community or head of family or clan with the support of principal elders in the community or family or clan (Larbi, 2008). Bugri (2008) reports that the chief or head of family or clan is just a

custodian and should, therefore, obtain the concurrence of the principal elders before major decisions concerning disposition of rights or interest in customary land are arrived at.

Finally, the enjoyment of any particular use right may be subject to statutory and common law limitations (Kassanga & Kotey, 2006; Sarpong, 2006). For instance, Sarpong (2006) reports that ownership of land is recognized as corporate trust for the living, the dead and generations yet unborn. Similarly, in some countries the nation state appreciates the corporate nature of land ownership through its recognition that socially, land should serve the larger society so managers of land are entreated to ensure that land fulfils its function to the people (Government of Ghana, 1992). The implementation of compulsory land acquisition by the state should not disadvantage displaced persons.

Compulsory Land Acquisition

Compulsory land acquisition is defined as the power of government to acquire private property right in land for the benefit of the society without the willing consent of its legitimate owner or occupant for fair and adequate compensation (FAO, 2008). Jonathan (2012) also refers to compulsory acquisition as depriving legitimate land owners of their right to own property in land in return for equivalent compensation to enable the government to undertake socio-economic development such as the Western Corridor Gas Infrastructure Development Project and the Bui dam projects in Ghana, and also protect the natural environment. Similarly, Ding (2007) considers compulsory land acquisition as the process in which public agency compel land owners or occupiers to alienate part or all their parcels of land to ownership of that agency in the interest of public good for fair compensation. These three definitions

suggest that private individuals or households must have been deprived of the ownership or use of their land by the state for the exercise to qualify as compulsory land acquisition order. This is probably why the government is required to draw a critical balance between the public good, the land tenure security and protection of private property rights in order not to violate the rights of land users or owners (FAO, 2008).

However, there are differences in opinion between the advanced and developing economies as to what the term compulsory acquisition denotes (Ding, 2007; Jonathan, 2012). For instance, in advanced economies, the term is usually used to denote the protection of the natural environment, provision of public facilities, and prevention of land use conflicts (Ding, 2007). In developing countries, on the other hand, the term is used to signify the provision of facilities for public interest and promotion of equity and fairness between the poor and affluent in the society (Jonathan, 2012). Despite the differences in opinion, one cannot deny the fact that compulsory acquisition orders have been exercised by states over the years to provide land for investment; provide schools and hospitals; provide energy projects; supply water and sewerage facilities; protect against flood; resolve land use conflicts; and secure environmentally fragile areas (Larbi, 2008).

Compulsory acquisition is characterized by two main features namely: acquisition of private property for public interest, and the right of displaced persons to fair compensation (FAO, 2008). Viitanen and Kakulu (2008) report of the confusion between the public interest and public purpose in the exercise of compulsory acquisition order. While acquisition for public purposes is expected to directly benefit the public (Reale, 2009; FAO, 2008), that of the

public interest may not always directly benefit the public (Reale, 2009). The FAO (2008) refers to public purpose when land is compulsorily acquired for transportation infrastructure, public utility infrastructure, public facilities and defence. Public purpose also refers to a situation where the state compulsorily acquires land for private companies whose primary business is to provide public goods (Reale, 2009). These three definitions of public purposes indicate that the acquisition is solely for the provision of public goods. The difference, however, is that, Reale's (2009) definition mentioned acquisitions for private companies.

With regard to public interest, compulsorily acquired land is reallocated to private companies with the objective that these companies contribute to the welfare of the public, and also earn profit on their operations (Anim-Odame, 2011). The FAO (2009) reveals that the change in ownership will inure to the benefit of the public through the creation of jobs, and increased tax revenue for the state to provide public good. Examples of public interest projects include shopping malls, private estate development, filling stations and banks (Ding, 2007). This submits that the state may compulsorily acquire land for both public and private institutions provided the motive is for the public good or the welfare of the citizens. However, while the FAO (2008) suggests that compulsorily acquired land for private institutions should be scrutinized to ensure balance between the public need and the protection of private property rights, Zhang and Lu (2011) are of a contrary view. Zhang and Lu (2011) recommend that the state should allow customary land owners to engage these profit-making companies without the state resorting to the use of the compulsory land acquisition order.

In Ghana, the constitution and some acts of parliament provide the legal framework for the implementation of compulsory acquisition order (Adu-Gyamfi, 2012; Larbi, 2008). For example, the State Lands Act, 1962, Act 125 requires that an Executive Instrument is published before acquisition is done, and anyone whose land is affected by the said publication is required to submit claims within six months from the date of publication (Adu-Gyamfi, 2012). Larbi (2008) hints that even before the Executive Instrument is published, the State Lands Regulation L.I 230 requires a site advisory committee to be set up to undertake the feasibility or otherwise of the proposed acquisition. Article 20 (2) of the 1992 constitution also provides that compulsory acquisition shall be carried out under legislation that provides for prompt, fair and adequate compensation payment to displaced persons (Government of Ghana, 1992).

Compensation Payment

The payment of compensation is one of the two major characteristics of compulsory acquisition order (Zhang & Lu, 2011). Compensation refers to specific measures or actions intended to make good the losses incurred by displaced households or individuals for being denied the right to enjoy the interest in their parcels of land (Ayitey, Kidido & Tudzi, 2010). Displacement occurs when households or individuals are compelled to not only physically relocate but also suffer losses in their resource base or assets due to compulsory land acquisition (Pham, Westen & Annelies, 2013). Displacement is made up of both physical and economic (Pham, et. al., 2013). While physical displacement refers to relocation or loss of shelter of expropriated households or individuals, economic displacement on the other hand involves loss of assets or limited access to assets, which results in loss of households' income sources

or means of livelihood (Thao, 2016). This implies that displacement affects the endowment set of households or individuals which must be compensated either through cash payment or resettlement or both.

Resettlement refers to making good direct economic and social losses occasioned by acquisition of land and/or denial of access as well as consequential payment and intended correctional measures (Pham, et. al., 2013). For expropriated households or individuals to qualify for resettlement as a form of compensation, such resettlement should be involuntary (World Bank, 2004). An involuntary resettlement occurs when expropriated households or individuals are not seized with the right of refusal due to the exercise of compulsory land acquisition order, or negotiated settlement in which the acquiring agency or buyer has the backing of the law to acquire the land if negotiations break down (World Bank, 2004). Involuntary resettlement, therefore, includes both provision of housing accommodation as well as reconstructing the livelihoods of the expropriated households or individuals. In the view of Pham, et. al. (2013), implementation of resettlement can offer development opportunities to expropriated households or individuals if the planning is well done.

Financial compensation or cash payment, on the other hand, is the payment of monetary equivalent for lost land and other associated cost to expropriated owners (Anim-Odame, 2011). It also refers to a one-off cash payment extended to the expropriated households or individuals in recognition of the alienation of land to the state through its agencies. Though, Jonathan (2012) concedes to the need for compensation to be paid, Jonathan is also of the view that no amount of monetary compensation can adequately cater for the

subjective value of the acquired property to the displaced individuals or households. With the customary African land, the value does not only include economics but also socio-cultural aspects, and the land is believed to be held in trust for the dead, living and the unborn (Kasanga & Kotey, 2001).

Compensation basically addresses loss of assets, and property with little or no emphasis placed on rights (Zhou, 2012). The basis of compensation hinges on legal title and individual claim (Jonathan, 2012). To qualify for compensation, therefore, the individuals or households should have undisputed legal title to the land (Zhou, 2012). This signifies that tenants, wage-labourers, sharecroppers and squatters who are most vulnerable may not be eligible for compensation for the land acquired, though in some instances, they are compensated for the crops and structures on the land (Larbi, 2008). Pham, et al., (2013) argue that land and natural resources of customary freehold households or individuals affected by expropriation as well as community assets and common resources that tend to be vital to livelihood outcomes and food security of the poor do not qualify for compensation payment.

The FAO (2008) also insists that acquiring agencies adhere to the equivalent compensation principle. The principle of equivalent compensation refers to laws and rules that govern fair and equitable compensation mechanisms (FAO, 2008). Zhou (2012) presents that losses suffered by individuals or households affected by compulsory acquisition orders are often not properly accounted for, hence, unfair and inadequate compensation. On the basis of fairness and equity, Ding (2007) questions the rationale behind the differences in compensation payment for land acquired for commercial purposes, and those for public services with the former attracting higher compensation. Fair

compensation helps to restore households' livelihoods to prevent the occurrence of any economic failures and its resultant poverty (Zhou, 2012). Therefore, services of qualified and efficient quantity surveyors are required to undertake assessment for compensation to enable expropriated households to receive compensation values identical to their acquired properties (Adu-Gyamfi, 2012). The implication is that compulsory acquisition process is said to have ended when expropriated households or individuals have been duly compensated, and livelihoods of displaced persons have not been adversely affected.

Livelihoods

Livelihoods connote income from farm and non-farm business activities for living (Davis, 2006). Similarly, livelihoods signify the means employed to keep up and strengthen life (De Vriese, 2006). Furthermore, livelihoods refer to means of sustenance (Chamber & Conway, 1991). These explications imply that livelihoods consist of activities that promote a living. The livelihood approach originated in the mid-1980s as a new development paradigm which seeks to contemplate over the scope and urgencies for development (Alinovi, et al., 2010). It has been established that the idea of livelihoods is credited to the British development think tanks and organisations such as ODI, IDS and DfID, which was subsequently adopted by International NGOs like CARE International and Oxfam as well as development agencies such as FAO and UNDP (Alinovi et al., 2010 & De Vriese, 2006).

The DfID's sustainable livelihood approach tries to demonstrate how to effectively and efficiently manage poverty (Carney et al., 1999). The sustainable livelihood framework (Figure 1), a key element of the DfID's sustainable livelihood approach, provides an analytical structure for explaining

multiple factors that impede or enhance livelihood outcomes. The framework depicts stakeholders plying in an environment of vulnerability (shocks and stresses) within which they have access to five different categories of livelihood assets. The framework also provides means of analyzing how institutions, policies, organisations and norms fashion out livelihoods, by indicating who accesses which category of asset, and elucidating the range of livelihood strategies available to stakeholders.

The robustness of the sustainable livelihood approach is its ability to provide a complete overview on what resources or combinations of resources are essential to the poor in the society (Hussein & Nelson, 1998; Krantz, 2001). Furthermore, Krantz (2001) and Alinovi et al. (2010) present that the sustainable livelihood approach elicits the causes of poverty by focusing on factors that dictate or compel poor household's or people's access to livelihood assets of various categories. In addition, the livelihoods approach offers a comprehensive framework for analyzing the social and economic impact of poverty alleviation projects or programmes (Krantz, 2001).

A sustainable livelihood approach basically concerns itself with the urgencies of the vulnerable (Sultana, 2002) to safeguard and improve upon their standards of living (Devereux, 2000). Additionally, sustainable livelihood approach focuses on the lives of the vulnerable and the poor households or individuals in the society as well as examining the structural and institutional matters underpinning poverty (Sultana, 2002). Also, Hussein and Nelson (1998) assert that livelihood can recover from stresses and shocks, sustain or improve its capacities and assets now, and in the future without destroying the natural resource endowments. This indicates that when the vulnerable are able to bring

their poverty under control, sustainable livelihood is said to be attained.

Therefore, the livelihood activities a household undertakes to a large extent determines the standard of living of the members of the household.

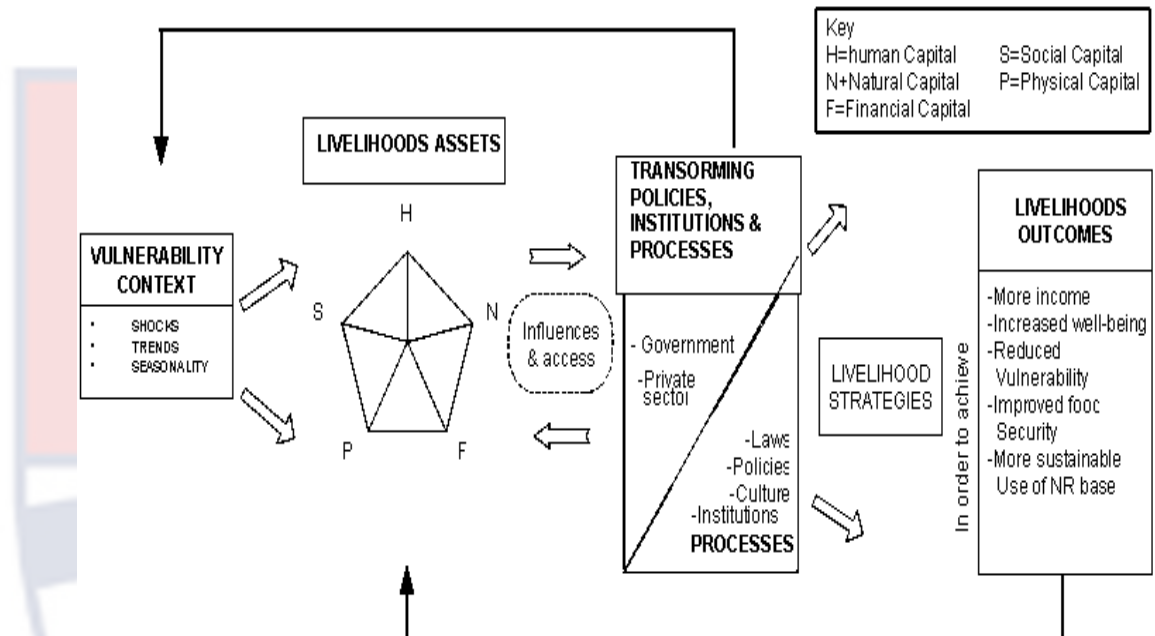


Figure 1: Sustainable Livelihood Framework

Source: Carney et al. (1999)

Human capital: Skills, knowledge, and good health, for example, are essential for the pursuit of diverse livelihood strategies;

Physical capital: Infrastructure (e.g., shelter, communication and energy), production facilities, and means that help individuals to go after their livelihoods;

Social capital: Social resources (e.g., networks, membership of groups, institutions of society) upon which individuals rely in their push for livelihoods;

Financial capital: Financial resources (e.g., savings, remittances, or pensions) which offer diverse livelihood opportunities; and

Natural capital: Natural resource piled up (e.g., land, water, and biodiversity) from which individuals obtain their livelihoods.

Livelihood Adaptation Strategies

Smith et al. (2000) define livelihood adaptation as the process by which households or individuals adjust with the aim of minimizing the actual and expected negative impact of a shock or stress on their livelihoods. This signifies that livelihood adaptation connotes processes aimed at designing multiple strategies to enhance livelihood outcomes. A distinction is, however, made between adaptation strategies and coping strategies (Eriksen et al., 2005; Davis et al., 2017). While adaptation strategies refer to long-term actions taken to ameliorate the adverse effects of a phenomenon (Eriksen et al., 2005), coping strategies on the other hand is linked to short-term planning strategies (Davis et al., 2017). Furthermore, adaptation strategies may call for some transformation of the structures, composition and functioning (Eriksen et al., 2005) whereas coping strategies may metamorphose into adaptive strategies through institutional support (Berman et al., 2014).

Livelihood strategies consist of farm, off-farm and non-farm activities (Alemu, 2012; de Janvry & Sadoulet, 2000; International Fund for Agricultural Development [IFAD], 2011). Alemu (2012) reports on the general consensus of the classification of livelihood strategies as on-farm, off-farm and non-farm. Livelihood sources include farming, fishing, livestock rearing, wage labour, non-farm activities, and migration (IFAD, 2012). This suggests that rural livelihood strategies comprise of both on-farm and non-farm activities. Nonetheless, on-farm or non-farm endeavours may be closely associated with agricultural activities in the rural economy (Davis et al., 2017). Against this

backdrop, Reardon et al. (2001) recommend the inclusion of on-farm or non-farm portfolio activities in the assessment of rural livelihood adaption strategies. This suggestion in my view is very important because of widespread acquisition of rural agricultural land through the exercise of compulsory acquisition (Haggblade *et al.*, 2010).

Livelihood diversification encompasses people's efforts at identifying innovative ways of boosting their incomes and minimizing environmental risk (Hussein & Nelson, 1998). Livelihood diversification according to Ellis (1998), refers to the manner rural households or people develop various undertakings and social support capabilities or schemes as a way of improving their living conditions, and also ensuring their survival. Relying on Hussein and Nelson (1998) and Ellis' (1998) submissions, livelihood diversification is about embarking on variety of ventures simultaneously with the major aim of strengthening the households' or people's income generating capability. Furthermore, livelihood diversification is often undertaken to minimize risk (Khatun & Roy, 2012). In addition, livelihood diversification sums up both on-farm and non-farm attainments (Alemu, 2012).

Livelihood assets are obviously needed for livelihood diversification to be successful. These livelihood assets according to the livelihood framework include human capital, natural, physical, social and financial assets [Figure 2] (de Janvry & Sadoulet, 2000; Devereux & Sabates-Wheeler, 2004). This presupposes that there cannot be any meaningful livelihood diversification effort without the aforementioned livelihood assets. Therefore, the assertion that frail asset base, inadequate credit facilities, unwillingness on the part of households to take risks, inadequate or non-existent rural amenities, poor

training facilities, non-availability of non-farm business opportunities, and inadequate transport infrastructure pose a threat to household income portfolio is a truism (Khatun & Roy, 2012).

Households' Income Portfolios

Households in rural communities participate in diverse income portfolio endeavours broadly classified as; farm activities, non-farm activities and transfers (Davis, Di Giuseppe, & Zezza, 2017; Perret, Anseeuw, & Mathebula, 2005). While the farm activities comprise both crop and livestock production (Davis et al., 2017), that of the non-farm activities include shops, car businesses, hawking, selling beverages, plumbing and carpentry (Perret et al., 2005). IFAD (2011), asserts that about 40 to 70 percent of rural households in sub-Saharan Africa obtain more than 70 percent of their households' income from farm business sources.

However, the contribution of non-farm income to the total household income in sub-Saharan Africa represents between 30 percent and 42 percent (Reardon, Berdegue, & Escobar, 2001). IFAD (2011), also reports that about 10 to 20 percent of rural households in sub-Saharan Africa derive more than three quarters of their household income from non-farm business activities. In Africa, as a whole, it is estimated that the non-farm income constitutes between 35 percent and 50 percent of the total household income (Haggblade, Hazell, & Reardon, 2010; Holden, Shiferaw, & Pender, 2004).

Furthermore, whereas in Asia it is estimated that between 29 percent and 32 percent of non-farm income constitute the proportion of the total household income (Davis, 2006), the situation is slightly different in Latin American. For instance, a little over 70 percent of the people of Mexico, and also a little over

30 percent of the population in Nicaragua earn more than 50 percent of their households' income from non-farm business sources (de Janvry & Sadoulet, 2000). The statistics demonstrates that whereas farm business activities constitute the greater proportion of households' income in sub-Saharan Africa, the situation is quite different in Latin America as households' income sources are basically dominated by non-farm economic activities.

Though traditionally, agriculture income has dominated the rural household income portfolio (Babatunde, 2008; Ibekwe, 2010; Senadza, 2012) in Africa, David et al. (2017) report of relative decline in rural agriculture activities as well as its contribution to the household income portfolio. This reduction has been attributed to the ever-increasing role of non-farm income in the household income mix (Haggblade et al., 2007; Matshe & Young, 2004).

Similarly, Barrett, Reardon, and Webb, (2001), Block and Webb (2001) and Senadza (2012) opine that households generate income from diverse livelihood portfolios. Babatunde (2008) also asserts that very few households earn all their income from a single livelihood source. However, households' ability to engage in diverse income portfolio activities is dependent on the following: individual characteristics, household characteristics, and community variables (Davis, 2003; Matsumoto, Kijima, & Yamano, 2006; Neudert, Goetter, Andriamparany, & Rakotoarisoa, 2015). Individual characteristics, for example, includes age (Matsumoto et al., 2006; Schwarze, 2004), gender (Davis, 2003; Matsumoto et al., 2006), marital status (Sanchez, 2005; Neudert et al., 2015) and level of education (Bryceson, 2002; Davis, 2003).

Households' characteristics comprises access to asset endowments such as land, human capital, physical capital, social capital, and organizational

capital (Holden et al., 2004; Parkin, 2008; Sanchez, 2005). It is argued that the demographic composition of the household as well as transfers (Davis, 2003) offers the capability to engage in on-farm or non-farm or both on-farm and off-farm income generating activities (Machethe, 2004; Matsumoto et al., 2006).

Furthermore, community variables such as distance to market, availability of state support institutions, and infrastructure may encourage household participation in on-farm or non-farm or both on-farm and non-farm income generating activities (Machethe, 2004; Matsumoto et al., 2006).



CHAPTER THREE

EMPIRICAL REVIEW AND CONCEPTUAL FRAMEWORK

Introduction

Empirical review and conceptual framework undoubtedly represent essential components of a research work. The essence of empirical review is to avoid duplication of research work and enhance knowledge of the problem under study (Griffiee, 2012; Neuman, 2011; Sekaran, 2003). Walliman (2011) argues that the empirical review enables the researcher to be conscious of the present condition of knowledge within his or her area of interest. In addition, the empirical review helps the researcher to identify knowledge gaps, and varied research methodologies that can guide the study and also to assist in placing the findings into context (Griffiee, 2012; Neuman, 2011).

The conceptual framework offers a logical structure of related concepts that provides a diagrammatic display of how issues in a research study link with each other as well as how to recognize and explain the concepts in the research problem (Grant & Osanloo, n.d.; Kumar, 2011; Luse, Mennecke & Townsend, 2012). This chapter presents the empirical review that are connected with compulsory land acquisition and livelihood adaptation as well as lessons learnt from the review. The chapter ends with the conceptual framework of compulsory land acquisition and livelihood outcomes which provide the blueprint for this study.

Empirical Review

The empirical studies border on compulsory land acquisition and livelihood adaptation. In all, eight empirical studies were reviewed. These are Nguyen, van Westen and Zoomers (2017) in Central Vietnam; Batool, Babar,

Nasir and Iqbal (2017) in Pakistan; Thao (2016) Ninh Thuan Province of Vietnam; Taruvinga, Gumpo, Mudemba and Ngarava (2018) in South Africa; Syagga and Olima (1996) in Kenya; Ablo and Asamoah (2018) in Ghana; King and Sumbo (2015) in Ghana, and Akrofi and Whittal (2013) in Ghana.

Central Vietnam

Nguyen, van Westen and Zoomers (2017) investigated how farmers reconstructed their livelihoods after losing their parcels of land through compulsory acquisition order in Hue's peri-urban areas in Central Vietnam. The study has as its theoretical foundation, entitlement theory and eminent domain theory. The study employed mixed methods approach. The after only design which is one group post-tests only design was employed because of the absence of comparable baseline data.

The sample size for the study was 170 households selected using simple random sampling techniques. Cluster analysis technique was also used to identify the unique livelihood strategies pursued by households before and after acquisition. The respondents consisted of those who lost their lands without being physically displaced. Primary data was collected through key informant interviews, and household surveys. Primary data analysis was done using descriptive statistics and thematic analysis. The variables measured included: use of compensation payment, change in vocation, livelihood strategies on a nominal scale, and household income levels and changes in farmlands on a ratio scale.

The findings were as follows:

1. Affected households lost 70 percent of their farmlands to the acquisition resulting in the majority (52%) of displaced persons changing vocation from farm to non-farm jobs;
2. Some of the displaced persons diversified their livelihood sources by combining casual employment and farming, self-employment and farming, and stable waged labour and farming while others completely exited farming;
3. Cash compensation was used for children education, setting up of businesses, social spending, savings, rebuilding houses and buying furniture, and also for means of transportation;
4. The majority (84%) of displaced persons had their income levels increased, and
5. Most of expropriated households had turned into net food consumers instead of net food producers.

Pakistan

Batool, Babar, Nasir and Iqbal (2017) explored the diversification of income portfolio patterns among rural households in Pakistan. The study analyzed household characteristics and assets endowments, and how they relate to household income portfolios diversification. The study was underpinned by the entitlement theory.

The study adopted quantitative research approach. The multi-stage stratified sampling technique was employed to collect data from rural households. The total sample size was 2090 households. The analysis of the data was done with logistic regression. The study measured variables such as

composition of income portfolio activities, households' characteristics, asset ownership, information, financial capital and infrastructure on nominal scale.

The study revealed the following findings:

1. Physical and human capital endowment play a significant role in defining a household's choice of diversification. Members of the households with increased average education are able to diversify into multiple income generating activities. Household endowed with land also used it as collateral security for credit;
2. Composition of income portfolio activities comprises farm, non-farm, off-farm, and remittances;
3. Availability of formal banking services for rural households offer them the opportunity to overcome challenges associated with financial credit needed for livelihood empowerment;
4. information availability through access to television, computers and radio offers opportunities for rural households to become responsive to changing market trends to enable them to diversify into non-farm and off-farm activities, and
5. Access to satisfactory public transportation system reduces transactional cost, and improves the linkage between farm and non-farm business activities.

Ninh Thuan Province, Vietnam

Thao (2016) analyzed the impact of compulsory land acquisition on sustainable livelihoods. The study focused on the effects of the nuclear power plant construction on the livelihoods of the affected people in the Ninh Thuan Province in Vietnam. The study adopted mixed methods approach. The

underlying theories were structural theory of poverty, and the entitlement theory. The sample size for the study was 80 households selected using stratified random sampling techniques. Purposive sampling technique was adopted for the selection of key informants. The case study design was employed. Primary data was analysed using descriptive statistics and thematic analysis. The study measured variables such as occupation characteristic, household characteristics, utilization of compensation payment, and income levels of households on a nominal scale.

The following findings were produced:

1. Expropriated households were into agricultural occupations such as crop production and fishing activities as well as non-agricultural occupations such as industry, handicraft, services and construction;
2. Farming, the major occupation (80%) of expropriated households got affected which necessitated a change in careers. However, most of the members of the households could not change careers easily because of old age and/or low educational level since about 75 percent of the respondents' attained education up to the primary level;
3. Affected households had their income levels reduced by half, and
4. Cash compensation was used to pay school fees, job transition training, finding new businesses, buying new land, and purchasing luxury items.

Nyandeni Local Municipality, South Africa

Taruvunga, Gumpo, Mudemba and Ngarava (2018) investigated rural income portfolios in Nyandeni local municipality in South Africa. The study focused on the composition, diversity and the determinants of rural income portfolios. The study was supported by the structural theory of poverty. Mixed

methods research approach was adopted. Primary data was collected through cross sectional survey and interviews. A total of 1261 respondents were randomly selected. Primary data was analysed with descriptive statistics, regression and thematic analysis. The variables measured included rural income portfolio activities, composition of rural income portfolios and determinants of participation in rural local income generating portfolios on nominal scale.

The main findings were:

1. Regression analysis on income portfolio selection choices emphasized the importance of education, employment status, economically active family members, child support grant and gender as significant household socio-economic characteristics;
2. Rural households obtained their major income (98%) from external sources such as government support grants [old age pension (28%) and child support grant (24%)], salaries and wages (34%), and remittances;
3. Household heads who were educated secured employment which enabled them to raise the initial capital required to participate in livestock production, micro-finance and township enterprises;
4. The large household sizes produced more labour units required to participate in hawking activities, and
5. Income generating activities were gendered in that activities such as hawking, sale of liquor and crop production were associated with females because they tend to be labour intensive, and also ensures food security, while spaza shop, lending money and livestock production were usually considered the domain of male.

The Third Nairobi Water Supply Project, Kenya

Syagga and Olima (1996) analyzed the impact of compulsory land acquisition on the displaced households of the Thika Dam project in Kenya by focusing on the socio-economic impact. The theory supporting this study was the eminent domain theory. The study used mixed methods approach. The case study design was used which offered the opportunity for an inquiry into a natural environment where expropriation order had been carried out. It also allowed for the interaction of viewpoints from different stakeholders in order to yield a holistic picture of the situation.

The sample size was 259 households sampled using stratified random sampling. Interview schedules were used to collect primary data from land owners and their dependents. Interview guide was also administered for the collection of qualitative data. The analysis of the primary data was done through the use of Frequencies, percentages and thematic analysis. The study measured the following variables: composition of household income activities, change in income levels, effects of acquisition on partially acquired farmland, effects of acquisition on land holdings, utilization of compensation amount, effects of acquisition on farming practices, familial composition, and cultural and social values on a nominal scale.

The findings were:

1. Affected households had their farmlands decreased to the extent that further use of the farmland had become uneconomical, thereby forcing 12 percent of land owners to rent land from others;

2. Households lost about 82 percent of their previous farm income (major income source) earnings which made it difficult for some parents to pay their wards' school fees and procure other necessities of life.
3. The legal processes on the remaining farmlands had not been completed by the acquiring agencies.
4. The remaining farmlands had not been rehabilitated by contractors, rendered unusable due to the topography or threat of erosion, and also exposed to pipelines making it difficult for displaced persons to utilize the rest of the land to generate income to support livelihoods of the households;
5. Financial compensation was used by displaced persons to purchase plots of land and buildings (45%), pay school fees and maintain the family.
6. Farmers shifted from the production of cash crops such as tea to food crops such as maize, beans, vegetables and potatoes, and
7. Large household sizes (6-15 persons) got split up by the acquisition leading to the disintegration of kinship bounds which adversely affected social-support systems such as labour and sickness support enjoyed by members.

The Atuabo Gas Project in Ghana

Ablo and Asamoah (2018) examined the impact of compulsory land acquisition of the gas processing plant on the livelihoods of affected households in Atuabo community in Ghana. The study focused on the extent to which expropriated farmers participated in compensation determination and whether or not the compensation was adequate to address loss of livelihoods. The study was pivoted on the entitlement theory and the eminent domain theory.

The study adopted mixed method research approach, and a case study design. Primary data was collected through interviews, and field observation. The sample size for the study comprised of 35 farmers selected using stratified sampling technique. Purposive sampling technique was used to select key informants from Eastern Nzema Traditional Council, Ghana Gas Company, the Lands Commission and Imani Ghana. Primary data was analysed with the aid of descriptive statistics and thematic analysis. The study measured the following variables: land tenure system of the area, households' level of participation in the compensation determination processes, fairness and adequacy of compensation payment, and capabilities required to secure employment in non-farm activities on a nominal scale.

The study made the following findings:

1. Households access land through three main avenues namely: stool lands, family lands and the abusa system;
2. Affected households and traditional authorities had little input into decisions bordering on the determination of compensation because they were always informed of decisions that had been made by acquiring agency;
3. Inherent institutional weakness and asymmetric power relationship existing between households, and traditional leaders on one side, and acquiring agency on the other side were exposed;
4. Assessors did not consider the intergenerational significance of cash crops, and the value of farmers' labour in cultivating the crops;
5. Compensation did not address instances where farmlands had been inherited from grandparents, and

6. Displaced persons were mostly crop farmers who did not have the requisite skills and experiences to obtain employment from the highly technical industry of oil and gas operations.

The Suame-Buoho Road Reconstruction in Kumasi, Ghana

King and Sumbo (2015) examined the challenges and prospects associated with the compulsory acquisition order, compensation issues as well as the resultant effects on the affected individuals or households of the Suame-Buoho road reconstruction project in Ghana. The theories underpinning the study were the eminent domain theory and the entitlement theory. The study employed mixed methods approach.

The sample size for the study was 64 households selected using simple random sampling. Interview schedules were employed to collect primary data from heads of households or their representatives. Purposive and snowball non-probability sampling techniques were used to select key informants and members for focus group discussions respectively. Interview and focus group discussion guides were used to collect qualitative data from key informants and focus group discussants. The key informants included staff of Lands Commission, Ghana Highway Authority, and Department of Urban Roads. Primary data analysis involved descriptive statistics and thematic analysis.

The study measured variables such as land use, compulsory land acquisition process, involvement of the affected people in the acquisition processes, properties affected by the acquisitions, submission of claims for compensation, and effects of compulsory acquisition on a nominal scale.

The study produced the following findings:

1. Predominant land uses of the area were commerce and residential with majority (61%) of the affected properties being buildings;
2. Legal processes were not exhausted;
3. Affected households had no knowledge of the executive instrument prior to the marking of the structures;
4. Majority (90%) of the affected households did not submit their claims for compensation within the stipulated legal period;
5. About 31 percent of the respondents used their compensation payment to acquire bigger and better structures than what they inhabited before the acquisition took place;
6. The exercise led to family disunity (because some of the family members relocated due to the fact that part of their buildings had been demolished), created divisions over the sharing of compensation claims, and caused congestion (family members had to move in to join others in their rooms);
7. Compensation payment was done piece-meal or delayed or both, and
8. Majority (66%) of the affected households experienced decline in their living conditions.

Land Delivery in Customary Areas in Ghana

Akrofi and Whittal (2013) investigated compulsory land acquisition, and assessed the effects of expropriation on the peri-urban poor in urban land delivery in Ghana. The purposive sampling technique was used to select key informants including staff of Tema Development Corporation (TDC), Centre for Scientific and Industrial Research (CSIR), and traditional leaders in both Tema and Aprade and clients of TDC. Primary data was collected from key

informant interviews while secondary data was obtained from TDC and CSIR. Both the primary and secondary data were analysed through thematic analysis and documentary analysis respectively.

The qualitative research approach and case study design were adopted for the study. The study was underpinned by the eminent domain theory and structural theory of poverty. The variables measured included encroachment, litigation, government intervention, documentation, infrastructure, boundary demarcation, compensation, and adjudication of records on a nominal scale.

The findings of the study were the following:

1. Parts of the compulsorily acquired parcels of land had been reoccupied, and all efforts at driving the encroachers had proven futile to the extent that the illegal occupiers had on several occasions reconstructed their buildings upon demolition by authorities;
2. Acquiring agencies acquired more than what they required;
3. Encroachers had not only built haphazardly without due regard to planning regulations but also considered the encroachment as a way out to get part of their birth right;
4. Inadequate and non-payment of compensation led to constant battles between acquiring agencies and original land owners;
5. Lump-sum compensation payment to displaced persons left nothing behind for future generations;
6. Boundaries were wrongly demarcated, and
7. Acquisitions were done without adjudication records making it difficult to identify who owned what and where.

Summary of Empirical Studies

The summary of the nine empirical studies from different parts of the world reviewed are presented in Table 2. It covers author, year of publication, issue of study, location of study, research approach, study population, sampling procedure, data collection instrument, findings and data gaps. The review showed that some data gaps exist in literature on compulsory acquisition and livelihood adaptation.

First, the findings on the land compulsory acquisition and livelihood adaptation are inconclusive. Second, earlier studies did not indicate whether the increases or decreases in household income portfolio levels were attributed to investment of the cash compensation in farm and/or non-farm enterprises by displaced persons or merely to the receipt of the cash compensation.

Third, even though studies have identified some livelihood adaptation strategies, they did not prescribe appropriate livelihood strategies to deal with livelihood adaptation by expropriated households. Fourth, little attention has been paid to the issue of participation by the affected households or displaced persons in the acquisition processes. Fifth, few studies have examined challenges faced by the implementation of compulsory acquisition order from the perspectives of both the implementing agencies and the displaced persons simultaneously; in most cases, it has focused on one group only.

Table 2: Summary of Empirical Reviews

No.	Author(s)	Issue of study	Location of Study	Research approach	Study population	Sampling procedure	Data Collection instruments	Major Findings	Gap
1.	Nguyen et al. (2017)	How farmers reconstructed their livelihoods after compulsory acquisition.	Vietnam	Mixed Methods	displaced persons	Purposive and simple random sampling	Interview guide Questionnaire	-Change in vocation from farm to non-farm -Households' income levels increased -Food insecurity	-Failed to prescribe specific livelihood adaptation strategies -Failed to establish the specific uses of cash compensation
2.	Batool et al. (2017)	Exploring diversification of income portfolio patterns among rural households	Pakistan	Quantitative	Heads of rural households	Multi-stage stratified sampling technique	Questionnaire	-Income portfolio comprises farm, non-farm, off-farm and remittances. -Diversification of income is dependent on Physical and human capital endowments.	-Failed to establish household income portfolio levels
3.	Thao (2016)	Impact of compulsory land acquisition on sustainable livelihoods	Vietnam	Mixed Methods	Displaced persons	Purposive and stratified random sampling techniques.	Focus group discussion guide	-Unable to change careers -Income levels decreased -Cash compensation used for school	-Failed to establish whether change in income levels is as a result of the investment of the cash compensation or merely the

4.	Taruvinga et al. (2018)	Composition, diversity and the determinants of rural income portfolios	South Africa	Mixed Methods	Heads of rural households	Simple Random sampling	Questionnaire Interview guide	<p>fees, skill acquisition, etc.</p> <ul style="list-style-type: none"> -Households earned most of their incomes from external sources. - Job acquisition was dependent on education. -Income generation activities were gender-based. 	<p>receipt of the cash compensation.</p> <ul style="list-style-type: none"> -Failed to establish household income portfolio levels
5.	Syagga and Olima (1996)	Impact of compulsory acquisition on displaced households	Kenya	Mixed Methods	displaced persons	Stratified random sampling.	Interview guide Questionnaire	<ul style="list-style-type: none"> -Non-completion of legal processes -Remaining farmlands were rendered unusable. -Shifting from cash crops to food crops production -Disintegration of kinship bounds 	<ul style="list-style-type: none"> -Failed to establish the difference in households' income levels before and after expropriation -Failed to indicate the extent of displaced persons' participation.

6.	Ablo and Asamoah (2018)	Impact of compulsory land acquisition of the gas processing plant on the livelihoods of affected households	Ghana	Mixed Methods	Expropriated households Acquiring agencies and NGO's	Purposive and convenience sampling	Interview guide Observation guide	-Inadequate participation by stakeholders -Institutional weakness -Asymmetric power relationship -Inadequate skills to change vocation	-Failed to investigate acquiring agencies' understanding of what participation entails
7.	King and Sumbo (2015)	Challenges and prospects associated with the compulsory acquisition order	Ghana	Mixed Methods	Displaced persons and acquiring institutions	Purposive and snowball sampling	Questionnaire Focus group discussion guide Observation guide	-Inadequate knowledge of the executive instrument -Non-submission of compensation claims -Delayed in compensation payment	-Failed to establish the compulsory land acquisition challenges from the view point of both displaced persons and acquiring agencies
8.	Akrofi and Whittal (2013)	Effects of compulsory acquisition on the peri-urban poor in urban land delivery	Ghana	Qualitative	Acquiring institutions, and displaced persons	Purposive sampling	Interview guide	-Encroachment -Litigation -Wrong demarcation of boundaries -Inadequate adjudication records	-Failed to establish specific use to which cash compensation is put to

Source: Author's Compilation (2019)

Lessons Learnt from the Empirical Review

The various empirical studies show the use of case study designs to assess the impact of the compulsory acquisition order on the livelihoods of expropriated rural households. The case study design was applied in determining the effects of expropriation on livelihood outcomes, uses of compensation claims, extent of participation by affected households, and challenges associated with the implementation of the compulsory acquisition order. However, quasi experimental design was employed mainly in determining change in income portfolio levels, and livelihood strategies.

It was evident from the review that studies mostly employed mixed methods, involving qualitative and quantitative research approaches, in studying the issues on compulsory acquisition and livelihood adaptation. Mixed methods became the preferred choice because the approach permits the use of both qualitative and quantitative measures concurrently, when it comes to data collection and analysis in a research study.

Furthermore, the review indicated that purposive sampling and stratified random sampling were the predominant sampling procedures adopted. Generally, the purposive sampling was used in studies that relied on the qualitative and mixed methods research approaches. The stratified sampling was also mostly used in studies that employed quantitative and mixed methods approaches. The stratified random sampling was used in selecting expropriated rural households whereas the purposive sampling method was usually used in choosing respondents of implementing agencies, and other key stakeholders involved in the land acquisition processes.

The major data collection instruments used include focus group discussion guide, questionnaire, interview schedule and interview guide. Regarding methods of data collection, the majority of the studies used focus group discussions, interviews and key informant interviews. These methods assisted the researchers to gather data from displaced persons, acquiring agencies and other key informants. The use of varied data collection methods allowed for triangulation, permitted thoroughness in data collection, addressed deficiencies associated with the use of one method, and ensured validity as it facilitated comparison.

Measurement of key issues was on both ratio and nominal scales. Participation in the acquisition processes, government intervention, change in livelihood strategies, and challenges were measured on a nominal scale while issues such as changes in farmlands, and households' income levels were mostly measured on a ratio scale.

The statistical analysis adopted by some of the studies in determining change in household income portfolio levels included descriptive statistics and regression. These were employed in the analysis of variables measured on the ratio and nominal scales. The use of regression might not be appropriate since it does not support the determination of differences. Statistical analytical methods that are appropriate for analyzing differences include: Chi square test and Mann Whitney U test. The main qualitative analysis employed was thematic and content analysis. This was usually applied to data measured on the nominal scale.

Conceptual Framework of Compulsory Land Acquisition and Livelihood Adaptation

The study adapted the DfID's sustainable livelihood framework [Figure 1] (Carney et al., 1999). The key variables in this sustainable livelihood framework were not underpinned by theories. This current study, on the contrary, has provided the theoretical foundation for the major variables (compulsory land acquisition, livelihood assets including compensation, participation, and livelihood strategies) in the conceptual framework. These theories are the eminent domain theory, structural theory of poverty, entitlement theory, and citizen participation theory (Figure 2).

The conceptual framework creates a synergy among the major issues underpinning the study. These key issues are compulsory land acquisition, livelihood assets including compensation, livelihood strategies, participation and livelihood outcomes. From Figure 2, compulsory land acquisition has direct linkage with livelihood assets namely: natural, physical, financial, human and social. This implies that displacement (economic and physical) occasioned by compulsory land acquisition can undermine livelihood assets of expropriated households and communities and cause them to become poor. However, since asset ownership decreases vulnerability and increases ability to withstand shocks, the proper utilization of cash compensation by displaced persons such as investing in income generating ventures may enhance their entitlements.

The livelihood strategies (farm, off-farm, non-farm and migration) displaced persons may adapt can be influenced by the displacement caused by compulsory land acquisition order, and the livelihood assets including compensation they can access. Therefore, the mediation role involving the

active participation of displaced persons, for instance, in demarcating boundaries, identifying assets on the land and determining compensation as well as both formal (Cooperatives, Lands Commission and registered groups) and informal (Kin networks, marriage, and inheritance) institutions, policies and processes in the compulsory land acquisition order is necessary to regulate access and use of assets to achieve the livelihood outcomes of expropriated parties.

Livelihood outcomes of expropriated households and communities are not only influenced by their ability to preserve and accumulate assets after expropriation but also multiple interacting components: livelihood assets including compensation, livelihood strategies, participation as well as transforming structures and processes which together create the livelihood context. Therefore, an improved livelihood outcome may occur when there is improved income, improved assets base, access to health care, increased saving, food security and development of human capital. This may happen since livelihood assets including compensation was able to meet basic needs and to also employ livelihood strategies required to generate enough household income. This may prevent deterioration in the livelihood outcomes of affected households.

Deteriorating livelihood outcomes cover food insecurity, declined income, decrease in saving, inadequate assets, inadequate healthcare, and inadequate development of human capital. These may result from the utilization of livelihood assets for purposes other than the acquisition of basic needs, and adaptation of livelihood strategies required to generate enough income. It could

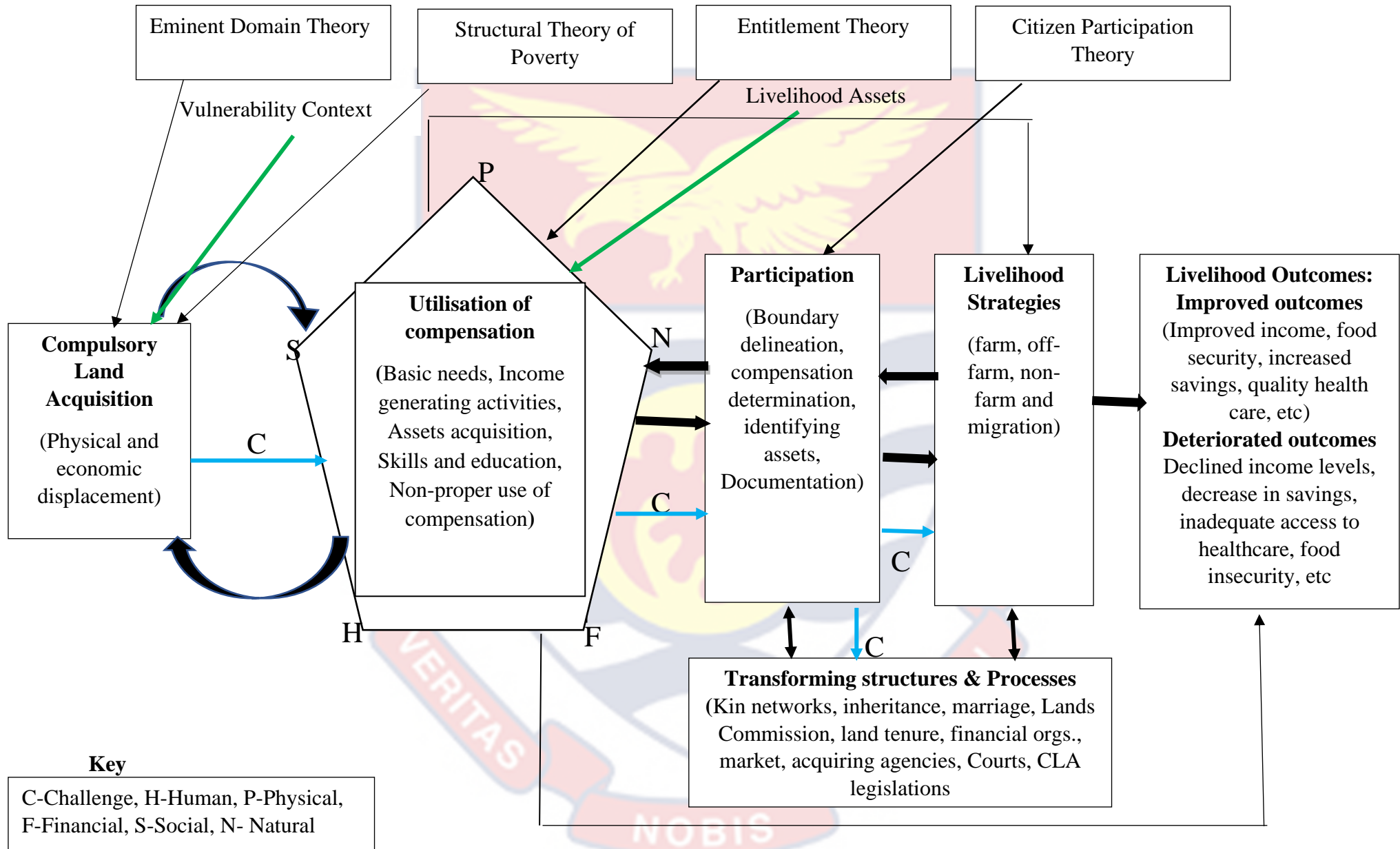
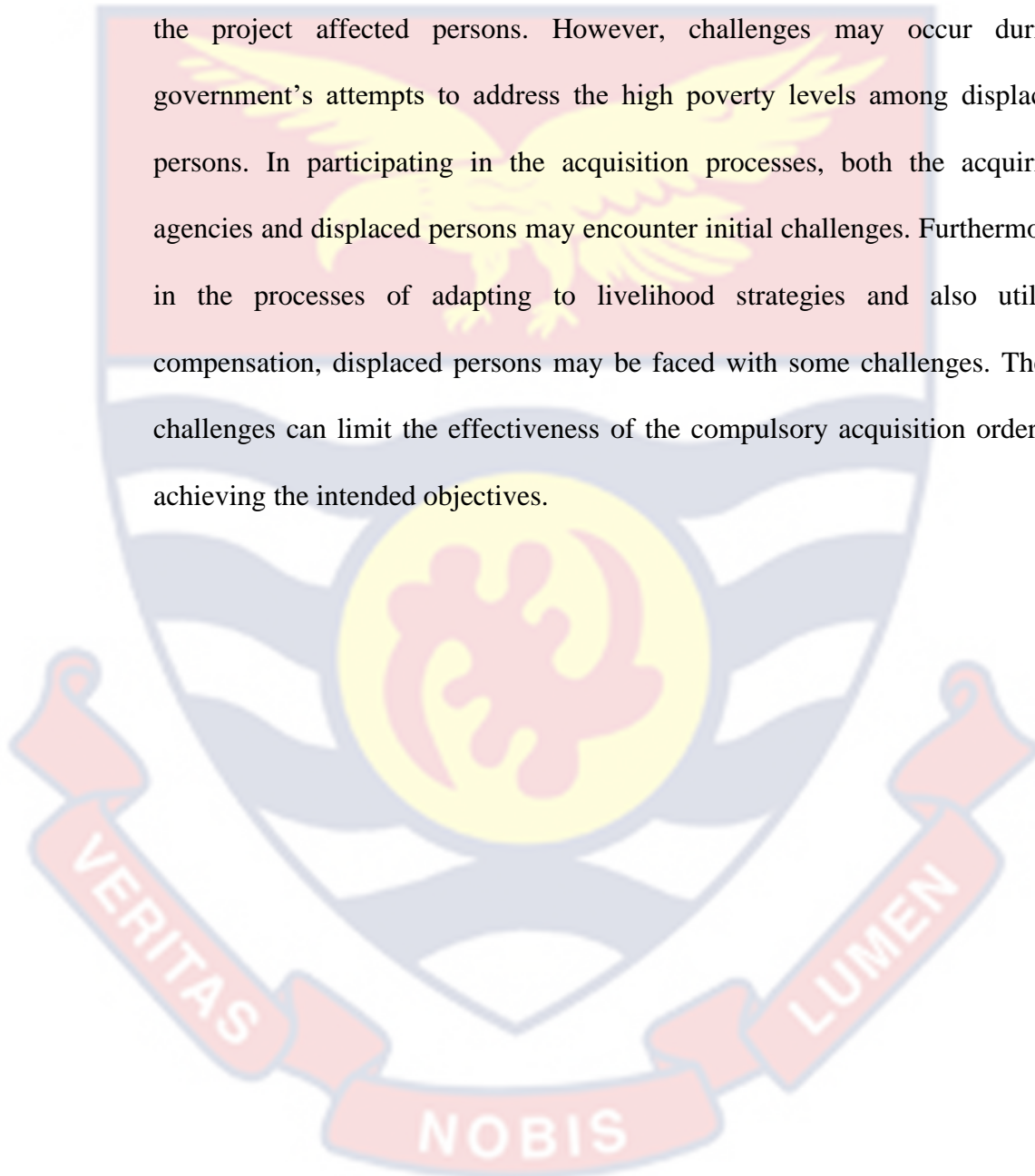


Figure 2: Compulsory Land Acquisition and Livelihood Adaptation Framework
 Source: Adapted from DfID's Sustainable Livelihood Framework (Carney et al., 1999).

also mean that the compensation was inadequate to meet basic needs, or was applied on alcohol, and/or marrying of more wives.

Poverty is usually the aftermath of deteriorating livelihood outcomes, and may have to be addressed by government and other stakeholders including the project affected persons. However, challenges may occur during government's attempts to address the high poverty levels among displaced persons. In participating in the acquisition processes, both the acquiring agencies and displaced persons may encounter initial challenges. Furthermore, in the processes of adapting to livelihood strategies and also utilize compensation, displaced persons may be faced with some challenges. These challenges can limit the effectiveness of the compulsory acquisition order in achieving the intended objectives.



CHAPTER FOUR

METHODOLOGY

Introduction

Research methodology is an analytical approach to resolving the research problem (Kothari, 2004). Its importance lies in its range of logical procedures to scientifically resolve the research problem (Gray & Malins, 2004). It does not only provide direction as to which design, methods, sample and analysis suited for the study but also the logic and the assumptions underlying them (Birley, 2011; Kothari, 2004), thereby serving as a directional map for research.

The chapter focuses on the research procedures adopted for the study. It starts with the profile of the study area, followed by research design, and study population. This chapter also presents the sampling procedures, data collection, and instrument design. It further presents pre-testing, actual field work, data processing and analysis as well as ethical procedures. The chapter concludes with a summary.

Research Design

Philosophical paradigms offer the foundation for conducting research in the field of Social Science. Empirical social researches have largely been informed by positivism, interpretivism and pragmatism philosophical paradigms (Kumar, 1999; Sarantakos, 2005; Scotland, 2012; Uddin & Hamiduzzaman, 2009). The philosophical orientations in social research influence a researcher's ontology, epistemology, methodology, and methods in a research venture (Sarantakos, 2005). Research paradigms, therefore, are the building blocks of social science research and, accordingly propel the entire

research process. Among the three philosophical standpoints namely positivism, interpretivism and pragmatism, the underlining assumptions of pragmatism appear to support this study.

The pragmatic paradigm holds that knowledge claims emanate out of actions, situations and consequences instead of antecedent conditions (Creswell, 2003). Pragmatism does not lend itself to any one philosophical standpoint and reality (Creswell, 2003; Yen, n.d.). In the view of the pragmatists, truth is what works (Creswell, 2003); thereby, rejecting any form of dualisms (Johnson & Onwuegbuzie, 2004). The pragmatists not only believe that the external world is independent but also embedded in the mind. The mixed methods design enables the researcher to draw freely from both quantitative and qualitative assumptions (Creswell, 2003).

The pragmatic researchers are free to choose the methods, techniques and procedures of investigation that appropriately deal with the issues of concern in a study (Creswell, 2003; Johnson & Onwuegbuzie, 2004). Pragmatism promotes methodological pluralism, which in the view of Johnson and Onwuegbuzie (2004) allows for the answering of research questions. Moreover, study designs from both positivism and interpretivism philosophical standpoints are available for use under pragmatism. In the data analysis, both statistical methods that lend itself to generalization of findings, and non-statistical methods that do not avail themselves to generalization of findings are employed (Johnson & Onwuegbuzie, 2004).

Pragmatism paradigm propositions provide the right window to adequately deal with issues such as the participation of affected households in the acquisition processes; displaced persons' utilization of financial

compensation claims; differences in affected households' income portfolios before and after expropriation; differences in affected households' livelihood strategies before and after expropriation, and challenges associated with implementation of compulsory land acquisition which encapsulate the concurrent collection of both quantitative and qualitative data in the study. Moreover, some of the earlier related empirical studies (Syagga & Olima, 1996; Thao, 2016) applied pragmatism paradigm. On that account, this study, therefore, embraces the pragmatic paradigm as the philosophical school of thought underpinning this study.

The study employed the mixed methods research design, which combines both qualitative and quantitative research assumptions (Creswell, 2003; Zohrabi, 2013). Creswell (2006) identifies four major types of mixed methods designs namely: triangulation design, embedded design, explanatory design, and exploratory design. This study, however, adopts the triangulation design where the convergence model, a variant of the triangulation design, is employed to collect and analyze both the quantitative and qualitative data. With regard to the timing, quantitative and qualitative data are collected, analyzed and interpreted concurrently. Even though the researcher intends to assign equal weight to the data collection method, there is a slight shift towards either quantitative or qualitative data depending largely on the research questions. Finally, both quantitative and qualitative data sets emerge during the interpretation phase of the study.

Furthermore, the mixed methods research design affords the researcher some choices since it allows the use of many approaches in answering research questions (Johnson & Onwuegbuzie, 2004), and provides a

comprehensive analysis of the research problem (Creswell, 2003). Investigators have access to options in selecting methods during the conduct of researches. This study tilts slightly towards the qualitative approach because issues such as extent of participation in the compulsory land acquisition processes, and challenges that limit the implementation of compulsory land acquisition order are largely qualitative in nature.

The study applied the concurrent mixed methods design because all the five objectives basically, required the collection of some aspects of qualitative and quantitative data. However, objectives two, three and four were largely quantitative in nature while objectives one, and five were primarily qualitative in outlook. In addition, the concurrent mixed methods approach allows for the combination of methods that could improve the validity and reliability of the data as well as their explanation (Zohrabi, 2013). Moreover, previous researchers (King & Sumbo, 2015; Syagga & Olima, 1996) on related topics employed mixed methods as their research approach which serves as motivation for its adoption in this study. This approach also permits the researcher to employ the use of both statistical and non-statistical methods of analysis concurrently.

Regarding the study design, though the dominant study design from the reviewed empirical studies was the case study design, the unique circumstance of this study would not make its usage appropriate; thus, occasioning the adoption of inferential statistics. The alternative design is descriptive statistics which summarizes and describes the main features of a dataset (Sarantakos, 2005). The main limitation of the descriptive statistics design is that it cannot

say anything about the relationships, causes, or effects of the data (Kumar, 2011).

The inferential statistics design is most appropriate in this circumstance since it will help the researcher draw conclusions and make predictions based on the data (Sarantakos, 2005). The correctness of inferential statistics depends on the accuracy of sample data and its representation of the study population. As a result, non-random samples are usually discarded. The main advantage of the inferential statistics design is that the researcher relies on the sample to make reasonable guesses about the larger population (Kumar, 2011). This makes it less expensive to collect data from the entire study population. The main limitation of the inferential statistics design is that the researcher is providing data about a population that he has not fully measured, and therefore, cannot ever be completely sure of the correctness of the value (Sarantakos, 2005).

Profile of the Study Area

The study area, Ellembelle District and Nzema East Municipality of the Western Region of Ghana, used to constitute the erstwhile Nzema East District. Ghana Statistical Service (2014) provides data on the geographical location, demographic characteristics, occupation, relief, vegetation, crops, livestock, fishing activities and mineral deposits on the study district as captured in subsequent paragraphs.

The study area shares boundaries with Jomoro Municipality to the West, Wassa Amenfi West District to the North, Tarkwa-Nsuaem, Prestea Huni Valley, and Ahanta West Municipalities to the East, and to the South by the Gulf of Guinea with about 79 km stretch of sandy beaches. The population and growth rate of Nzema East Municipality are slightly higher than that of

Ellembelle District. The population of Nzema East Municipality is 88,096 with an annual growth rate of 2.4 while that of Ellembelle District is 87, 501 with an annual growth rate of 2.3 percent. The average household sizes of both the Municipality and District are 4.0 and 4.6 respectively. The Ellembelle District is 79.4 percent rural as compared with 66.0 percent of Nzema East Municipality.

The major occupation of the inhabitants in the study area is agriculture which employs over 65 percent of the economically active population. The area lies within the wet semi-equatorial climatic zone of West Africa, and therefore, experiences rainfall throughout the year with the highest monthly mean occurring in May and June. The northern belt is covered with forest vegetation while that of the southern part is a coastline. Consequently, whereas most people in the northern part grow mainly tree crops such as cocoa, coconut, coffee, rubber, oil palm and food crops such as plantain and cassava, those of the southern belt engage in fishing and coconut farming as their main sources of livelihood. Additionally, the relief and drainage of the Ellembelle District support aquaculture and the cultivation of rice, sugar cane and dry season vegetable farming. Another source of livelihood for the inhabitants is livestock rearing such as cattle, sheep, goats, pigs and poultry. Local poultry, especially chicken is reared by household. Commercial poultry is, however, reared by few farmers.

In addition to the oil and gas reserves off the coast of the Ellembelle District and Nzema East Municipality, the two also have large deposits of minerals such as gold and Kaolin. The gold deposit is mostly mined by both licensed small-scale mining companies and illegal small-scale miners popularly known as “galamseyers”. The illegal mining operations have not only affected

large tracts of agricultural land but also rendered some streams and rivers in the study area unwholesome for domestic consumption. The Kaolin deposits, though in commercial quantities, remain untapped.

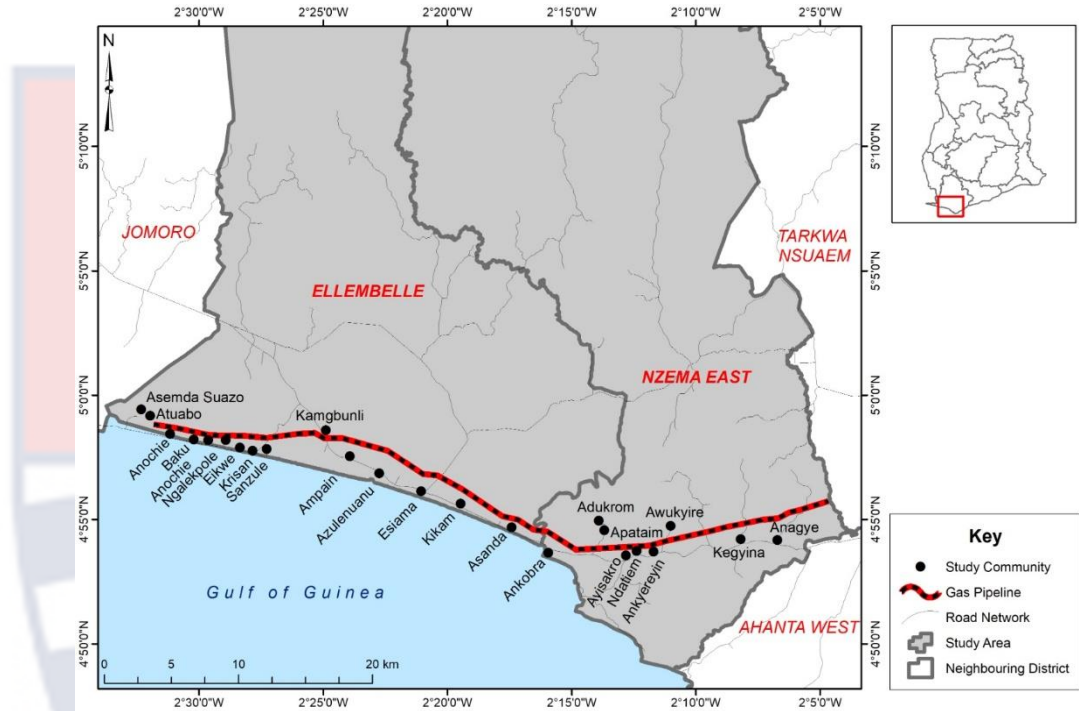


Figure 3: Map of Ellembelle District and Nzema East Municipality

Source: Department of Geography and Regional Planning, University of Cape Coast (2017).

The study area is also a major marine fishing enclave in the country. Out of the 90 landing beaches in the Western Region, the Ellembelle District has 31 and is ranked second in marine fishing in Ghana. The Nzema East Municipality, on the other hand, has 16 landing beaches. Marine fishing is seasonal with the major season occurring between July and September, and the minor season taking place between November and January. Fishing activities are largely traditional with fishermen using dug-out canoes and nets. The seasonality in fishing activities creates seasonal unemployment.

The reason for the selection of the study area is that since the discovery of oil and gas in commercial quantities off the shores of Ghana in 2007,

Ellembelle District and Nzema East Municipality are among the six coastal districts in the Western Region that have been impacted by the oil and gas installations. The intense exploration of petroleum by oil rigs coupled with the operations of Floating, Production, Storage and Offloading (FPSO) platforms off-shore has reduced the fishing space available to artisanal fishermen (Ablo, 2016). Similarly, the acquisition of land on-shore, either through outright purchase or compulsory acquisition orders, for oil and gas installations such as the Western Corridor Gas Infrastructure Development project, Eni Ghana Gas project and Quantum Gas project have also adversely affected households whose livelihoods depend largely on agriculture (van Gyampo, 2011).

Study Population

The study population included expropriated communities and households of the Western Corridor Gas Infrastructure Development project, officials of the Lands Commission, officials of Ghana Gas Company, Traditional authorities, representatives of NGOs and opinion leaders. The expropriated households were mainly farmers. The total number of expropriated households and communities affected by the compulsory land acquisition order in the study area (Ellembelle District and Nzema East Municipality) were 711 and 24 respectively (PIAC, 2014). Samples for the study were from the categories of targeted households identified (Table 3). Invariably, the data for the study were from those that formed part of the sample.

Sampling Procedure

The sample size of 248 for households affected by the compulsory land acquisition was determined by using Krejcie and Morgan (1970). However, to account for attrition, Fernandez *et al.* (2009) recommend that 15 percent of the

sample size should be added to the computed sample size. The computed 15 percent of the 248 is equal to 37.20 or approximately 38 and as such the sample size for this study was 285. Stratified random sampling was used in selecting household heads affected by the compulsory land acquisition for the Western Corridor Gas Infrastructure Development.

Table 3: Sample Distribution of expropriated household heads in the study area

Study District	Expropriated Communities	Target Household Heads	Study Sample
Ellebelle	Atuabo	45	18
	Kamgbunli	43	17
	Eikwe	38	15
	Asemnda Suazo	111	45
	Krisan	21	8
	Azulenoanu	17	7
	Ampain	15	6
	Asanda	30	12
	Ngalekpole	7	3
	Anochie	56	23
	Ngalechi	14	6
	Sanzule	22	9
	Esiama	83	33
	Kikam	28	11
	Baku	11	4
	Ankobra	11	4
	Ayisakro	25	10
Nzema East	Ndatiem	11	4
	Kegyina	29	12
	Ankyeryin	13	5
	Awukyire	39	16
	Apataim	24	10
	Anagye	17	7
	Adukrom	1	0
	Total	711	285

Source: Field Survey (2019)

Project (WCGIDP) from the sampling frame based on the study area. The purpose of stratifying the population according to Ellebelle District and Nzema East Municipality was because of heterogeneity of population.

The stratification ensured that expropriated household heads within all the 24 affected communities were covered except Adukrom due to financial and accessibility constraints. The sample for Adukrom was one person which might not affect the outcome of the study. After the stratification, simple random sampling was employed in selecting the right sample for each stratum on a proportional basis. With the aid of officials of Lands Commission, the sampling frame was developed. The selection process of the respondents involved the use of the lottery method.

The sample for the officials of Lands Commission, and Ghana Gas Company was one each while that of traditional authorities, Ministry of Food and Agriculture and officials of Business Advisory Centres of the Municipal and District Assemblies were two each. In all, a total of eight people were sampled. Purposive sampling was employed in selecting the people because they had adequate knowledge about the acquisition that took place. This category of respondents formed the key informants. Six focus group discussion sections (three for each local government area) were held for women, and men who were not part of the 285 households' heads who participated in the household survey.

Data Collection

Primary data was collected on the extent of participation in the compulsory land acquisition processes by affected households; utilization of financial compensation claims; differences in affected households' income portfolios before and after expropriation; difference in affected households' livelihood strategies before and after expropriation, and key challenges that limit the implementation of compulsory land acquisition order. Both qualitative

and quantitative data were collected. Table 4 contains a summary of study objectives, type of data, measurement scale, source of data, target population, methods, instrument of data collection and analytical method.

Design of Data Collection Instruments

The instruments for primary data collection were interview schedule (Appendix A), focus group discussion guide (Appendix B), and interview guide (Appendix C). An interview schedule assisted in the collection of data from the affected persons and the justification for using this instrument is that most of the affected persons were illiterates and so the researcher and the enumerators administered the instruments. The interview schedule covered issues on the extent of participation in the compulsory land acquisition processes by affected households; utilization of financial compensation claims; differences in affected households' income portfolios before and after expropriation; difference in affected households' livelihood strategies before and after expropriation, and key challenges that limited the implementation of compulsory land acquisition power.

The interview schedule was designed in line with the objectives of the study. The interview schedule had six sections containing both closed and open-ended items. The measurement of variables was based on the nominal and ratio scales (Table 4). Section one covered the background data of the respondents comprising the location of origins of respondents, socio-economic characteristics and household characteristics. The next section covered items on the extent of participation by affected households in the compulsory land acquisition processes. The focus was on the mode of engagement by the acquiring agency, communication between displaced persons and acquiring

agency, institutions that undertook the valuation, and whether displaced persons were satisfied with the acquisition processes or not.

While section three captured issues bordering on displaced persons putting in compensation claims, receiving cash compensation amount of, displaced persons' satisfaction with the compensation amount; receipt of cash compensation on schedule; decision on the usage of cash compensation; income generating activities cash compensation was invested in, and sources of income for the income generating activities, that of section four entailed issues on sources of income before expropriation, current sources of income, household annual income before expropriation, household current annual income, additional sources of income, and incomes from additional sources.

The fifth section contained items on livelihood strategies before expropriation, livelihood strategies after expropriation, ownership of the land, mode of acquisition of the land, processes of acquiring the land, registration status of acquired land, parcels of land compulsorily acquired, displaced persons' land holdings, types of land use of the compulsorily acquired land, crops affected by the acquisition, use of the unacquired portion of the land, and displaced persons interest in the land. The last section, then, captured the challenges that expropriated households encountered. Some of the issues in this section were major challenges, mechanism for reporting challenges, and outcome of complaints.

Table 4: Summary of Study Objectives, Type of Data, Measurement Scale, Source of Data, Target Population, Methods of Data Collection, Instrument for Data Collection, and Analytical Method

Objective	Type of Data	Measurement scale	Source of Data	Target Population	Methods of Data Collection	Instrument for Data Collection	Analytical Method
1.Examine the extent of participation in the compulsory land acquisition processes	Quantitative Qualitative	Nominal	Primary	Expropriated households Officials of Ghana Gas Company and Lands Commission Traditional authorities	Interviews Focus group discussion	Interview guide Interview schedule Focus group discussion guide	Descriptive statistics, Chi-square test for independence, and thematic analysis
2.Analyze displaced persons' utilization of financial compensation claims	Quantitative Qualitative	Nominal Ratio	Primary	Expropriated households Officials of Ghana Gas Company and Lands Commission Traditional authorities	Interviews Focus group discussion	Interview schedule, Interview guide Focus group discussion guide.	Frequencies, percentages, means, standard deviations, Chi-square test for independence Mann-Whitney U test and thematic analysis

Table 4 continued

3.Examine differences in affected households' income portfolios before and after expropriation	Quantitative Qualitative	Nominal Ratio	Primary	Expropriated households Staff of Ministry of Food and Agriculture Staff of Business Advisory Centre	Interviews Focus group discussion	Interview schedule Interview guide Focus group discussion guide.	Frequencies, percentages, means, standard deviations, and Mann Whitney test, and thematic analysis
4. Describe changes in affected households' livelihood strategies before and after expropriation	Quantitative Qualitative	Nominal Ratio	Primary	Expropriated households, officials of Ghana Gas Company and Lands Commission and traditional authorities.	Interviews Focus group discussion	Interview schedule Interview guide Focus group discussion guide	Descriptive statistics- Frequencies, percentages and Mann Whitney test, Chi-square test for independence and thematic analysis
5. Ascertain key challenges that limit the implementation of compulsory land acquisition power	Quantitative Qualitative	Nominal	Primary	Expropriated households, Implementing institutions, and traditional authorities	Interviews Focus group discussion	Interview schedule Interview guide	Descriptive statistics and thematic analysis

Source: Author's Construction (2019)

An interview guide was designed and used to collect qualitative data on themes based on the objectives of the study which covered issues on the extent of participation, utilisation of cash compensation, household's income portfolios, livelihood strategies, and challenges limiting the implementation of the compulsory acquisition order. The key informants comprising the representatives from local government, acquiring/mediating agencies, expropriated households' heads, and traditional authorities responded to this instrument. The motivation for employing this instrument is that it is easy to administer, offers opportunity to observe non-verbal behaviour of respondents, ensures completeness and facilitates the collection of in-depth information.

The discussion guide was employed to direct focus group discussion that was held in five of the affected communities namely: Asemda Suazo, Anochie, and Esiam, of Ellembelle District, and Awukyire and Keqyina of Nzema East Municipality, most of which also host some of the key installations of the WCGIDP. These selected communities were also impacted in terms of number of affected households. Group discussions usually provide the opportunity to elicit a wide range of ideas at a single platform where discussants engage in a debate on the issue of interest. In the context of this study, group discussion was held with groups such as women and men. The group discussion afforded the researcher the opportunity to collect rich and in-depth data that helped in addressing the research objectives. The discussion was structured into the following themes: extent of participation, use of cash compensation, livelihood strategies, income portfolios, and challenges that limited the implementation of the compulsory acquisition order. Furthermore, the group discussion was appropriate because it served the purpose of triangulation of findings.

Pre-Testing

The pre-testing of the interview schedule was done in the Ahanta West Municipality. This was on a similar study population connected with the Western Corridor Gas Infrastructure Development project. The interview schedule was administered to Twenty expropriated households. Pre-testing of the instrument helped to determine the suitability of the instrument. Furthermore, this instrument was pre-tested to ensure face, content and construct validity as well as to guarantee its reliability. The pre-testing, therefore, helped to identify weaknesses and ambiguities in the instrument to aid in reshaping some of the issues. Weaknesses in the construction of the items were identified and worked on before the actual administration of the instrument in the study area.

Actual Field Work

The collection of data for this study covered the months of June and July, 2020, and lasted for about eight weeks. Twelve enumerators were contracted to assist in the data collection. The chosen research assistants were natives of the Ellembelle District and Nzema East Municipality which helped to address any language barrier issues. Each of the local government areas had six enumerators who interviewed the selected respondents. The enumerators were trained on the items on the interview schedule and on ethical behaviours in research.

The training which lasted for two days equipped research assistants with requisite knowledge to interpret the items on the instruments uniformly, and appropriately to ensure ease in the collection of the data as well as prevent unethical behaviours. After the training, the enumerators were moved to the

various local government areas for the data collection exercise. The researcher did not only monitor the progress of work of the enumerators on the field but also personally conducted the key informant interviews. The key informant interviews were conducted alongside the enumerators' field data collection.

Data Processing and Analysis

The data analysis involved the use of both quantitative and qualitative data. The quantitative data was edited, coded, imputed into the computer and cleaned before analyses was undertaken using the Statistical Package for the Social Sciences (SPSS) version 26. The analysis of the data involved the use of statistical techniques such as descriptive statistics, Chi-square test of independence, and Mann Whitney U test. The presentation of the quantitative results was in tables. The qualitative data analysis, on the other hand, was done through a manual process using thematic analysis. The presentation of the qualitative data took the form of texts. There was an integration of both quantitative and qualitative analysis under each of the objectives to provide clearer and general picture of issues.

Objective one was analysed using descriptive statistics, Chi-square test of independence and thematic analysis. Data on sources of information on the executive instrument, mode of engagement by the implementing institutions, communication between displaced persons and implementing institutions, institutions that undertook the valuation, and whether displaced persons were satisfied with the acquisition processes or not are on a nominal scale where variables are categorical and required the use of Frequencies, percentages and Chi-square test of independence. The Chi-square test of independence was at 0.05 alpha level.

The qualitative data on the extent of displaced persons' participation in the compulsory land acquisition order from key informants was analysed with the aid of thematic analysis which followed the inductive approach. The inductive approach is where the themes or codes identified are strongly linked to the data themselves (Thomas, 2006). Interview data was examined where codes were identified and polished. This process continued until no new codes emerged (Yukhymenko et al., 2014). The patterns that emerged helped to develop major themes for the discussion. Overall, the analysis under objective one comprised integration of both qualitative and quantitative data.

Objective two was analyzed using descriptive statistics, Chi-square test of independence, Mann Whitney U test, and thematic analysis. Data on displaced persons putting in compensation claims, receipt of cash compensation, displaced persons' satisfaction with the compensation amount, receipt of cash compensation on schedule, decision on the usage of cash compensation, income generating activities cash compensation was invested in, and sources of income for the income generating activities were on a nominal scale. In view of that their analyses involved Frequencies, percentage, and chi-square test of independence. The cash compensation amount was analysed using Mann Whitney U test, median, means and standard deviations because these were on the ratio scale. The qualitative data on the use of cash compensation from key informants was analysed using thematic analyses. Overall, the analysis under objective two involved a blend of both qualitative and quantitative data.

Objective three was analysed with the aid of descriptive statistics, Mann Whitney U test, and thematic analysis. Data on sources of income before expropriation, current sources of income, and additional sources of income were

analysed using descriptive statistical measures of Frequencies, and percentages because these variables were on a nominal scale. These descriptive statistical measures assisted in describing whether there was a change in the before and after situations. The household annual income before and after expropriation, and additional sources of income were analysed using Mann Whitney U test, means, median and standard deviations because these were on the ratio scale. The qualitative data on household's income portfolio before and after expropriation was analysed with the aid of thematic analysis. Both the qualitative and quantitative were combined to give a holistic picture of the households' income portfolio.

Objective four was analysed using descriptive statistics, Mann Whitney U test, Chi-Square test for independence and thematic analysis. The descriptive statistics such as Frequencies and percentages, and Chi-square test of independence helped in analysing items on livelihood strategies before expropriation, livelihood strategies after expropriation, ownership of the land, mode of acquisition of the land, processes of acquiring the land, registration status of acquired land, parcels of land compulsorily acquired, types of land use of the compulsorily acquired land, crops affected by the acquisition, use of the unacquired portion of the land, and displaced persons interest in the land because these were measured on a nominal scale. Displaced persons' land holdings were analysed using Mann Whitney U test, means and standard deviations because these were on the ratio scale. The qualitative data on the before and after livelihood strategies of displaced persons was analysed using thematic analysis. Qualitative analysis was used to reinforce the quantitative analysis when necessary.

Finally, the analysis for objective five entailed the application of descriptive statistics, and thematic analysis. The descriptive statistics analysis aided in analysing the challenges expropriated households encountered specifically, major challenges, mechanism for reporting challenges, and outcome of complaints on a nominal scale. The qualitative data on challenges both displaced persons and implementing institutions encountered during the implementation of compulsory land acquisition order was analysed using thematic analysis. The challenges were first analysed in an integrated manner, and latter separated to determine the major challenges from the perspectives of displaced persons and implementing institutions.

Limitations

Firstly, one of the respondents in a hard-to-reach community could not be accessed due to bad road and financial constraint. The heavy rains had rendered the road unmotorable. The price quotation from a car rental company was so exorbitant that the researcher could not afford. However, this constituted less than one percent of the total respondents sampled for the study, and it might not negatively affect the outcome of the study.

Secondly, since most of the project affected persons could hardly read or comprehend English, the research assistants had to translate the issues on the interview schedule into Nzema and Fantse. This could result in the likelihood of enumerators offering different interpretations to the issues. Though this challenge was foreseen and attempts were made at remedying it in the training session of the enumerators which preceded the field work, there was still the likelihood of misinterpretation of the issues on the instrument in the process of

translations. The reliability of the instrument can be queried, and therefore, generalisability of the findings must be done with caution.

Ethical Considerations

Ethical clearance was obtained from the University of Cape Coast Institutional Review Board before the actual fieldwork started (Appendix H). The informed consent of the respondents was sought. A statement relating to informed consent formed part of the introduction of the interview schedule requesting for the consent of respondents. This was repeated to the respondents at the beginning of each interview. Informed consent for key informants was sought through a letter of consent. The respondents were informed that their rights were guaranteed and protected if they agreed to be included in the study and that participation in the study was voluntary.

The purpose of the study and procedure of the research was made known to the respondents. Respondents were informed that this study was not in any way injurious to them. Anonymity of participants was possible by numerically coding each returned interview schedule to ensure protection of their privacy and identity. In the case of responses from the key informant interviews, pseudo names were used. Respondents were assured of the confidentiality of the data provided as they were solely to be applied for academic purposes.

Chapter Summary

The chapter addressed the profile of the study area being the Ellembelle District and Nzema East Municipality of the Western Region of Ghana. The Ellembelle District and Nzema East Municipality were selected because they host most of the expropriated households of the Western Corridor Gas

Infrastructure Development project. The study adopted a pragmatic paradigm of research, a philosophical standpoint which led to the embracing of a concurrent mixed methods research design, and the use of the after only design.

The study population included traditional authorities, expropriated households, officials of Ghana Gas Company, Lands Commission, local government. Non-governmental. A sample size of 285 for the expropriated households was statistically determined. Stratified random sampling and purposive sampling assisted in the selection of the study respondents.

The chapter also explained the data collection methods and the instruments used. It described the field work which lasted for a month. Ethical clearance was secured from UCCIRB prior to data collection (field work). The ethical procedure covered informed consent from the respondents, confidentiality and anonymity.

The quantitative analysis consisted of descriptive statistics, Chi-square test of independence, and Mann Whitney U test whereas the qualitative data analysis involved thematic analysis. The subsequent chapters present results and discussion based on the specific objectives of the study.

CHAPTER FIVE

DISPLACED PERSONS' PARTICIPATION IN THE COMPULSORY LAND ACQUISITION PROCESSES

Introduction

The chapter is earmarked to discussing the background characteristics of respondents and finding answers to objective one which focused on displaced persons' participation in the compulsory land acquisition processes. Objective one has its theoretical underpinning rooted in the citizen participation theory, structural theory of poverty, and the entitlement theory. The issues in this chapter were analysed using a blend of descriptive statistics, a Chi-square test for independence, and thematic analysis on some of the issues of participation to provide clarity. The analysis per issue was based on varied sample sizes because of multiple responses, and in some instances, not applicable items.

Background Characteristics of Respondents

The background characteristics provide basic information on the respondents to aid the analysis of the results. The background issues of the respondents examined were sex, age, marital status, educational attainment, occupation, household size and asset ownership. These were followed by findings on the substantive issues on displaced persons' participation in the compulsory land acquisition processes.

Sex of Respondents

The sex variable influences to a large extent, individual's access to resource endowments (Sen, 1990); participation in the decision-making processes (Bovaird, 2007; Bryson, Crosby & Bloomberg, 2014), and

Table 5: Age of Respondents by Location, Sex and Major Occupation

Age	Location				Sex				Major Occupation											
	Ellembelle		Nzema		Male		Female		Farming		Fishing		Trading		Teaching		Health Worker		Artisans	
	Fre	%	Fre	%	Fre	%	Fre	%	Fre	%	Fre	%	Fre	%	Fre	%	Fre	%	Fre	%
20-29	4	2.1	0	0.0	2	1.1	2	2.0	4	2.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
30-39	25	12.9	8	9.0	22	12.1	11	10.8	13	6.8	1	7.7	5	17.9	4	40.0	0	0.0	10	27.0
40-49	40	20.6	23	25.8	38	20.9	25	24.8	41	21.4	1	7.7	9	32.1	2	20.0	1	33.3	9	24.4
50-59	52	26.8	26	29.3	53	29.1	25	24.8	52	27.1	5	38.5	8	28.6	1	10.0	2	66.7	10	27.0
60-69	41	21.1	19	21.3	38	20.9	22	21.8	49	25.5	2	15.4	2	7.1	3	30.0	0	0.0	4	10.8
70+	32	16.5	13	14.6	29	15.9	16	15.8	33	17.2	4	30.7	4	14.3	0	0.0	0	0.0	4	10.8
Total	194	100.0	89	100.0	182	100.0	101	100.0	192	100.0	13	100.0	28	100.0	10	100.0	3	100.0	37	100.0
χ^2 (P-Value)	3.65 (0.602)				1.35 (0.930)				Not applicable											
Phi	0.11				0.07															

Source: Field survey (2020)

Fre=Frequency

involvement in the household's income generating activities (Taruvunga et al., 2018). Analysis of sex of the respondents shows that the majority (64.6%) of the 285 respondents were male while the rest of them were females (See Table 5).

Age of Respondents

The data were analysed based on location of origin, sex and occupation to determine whether differences existed with respect to the age of the respondents. Over 60 percent of the respondents in both the Ellembelle District (64.4%) and the Nzema Municipality (65.2) as well as the male (65.9%) and the female (62.4%) displaced persons were 50 years and above. Differences in age by location and sex are statistically insignificant as indicated by their corresponding chi-square values and p-values (See Table 5).

The analysis of age of the respondents by occupation reveals that the majority (69.8%) of the 192 affected farmers were 50 years and above (See Table 5). Age is critical in this study because not only can it have an influence on displaced persons' willingness and ability to change occupation (Ogujiuba et al., 2011) but also affects their ability to use the cash compensation to engage in productive work (Bailey et al., 2008). The data suggests an ageing population that may not be able to engage in active work, and can slip into poverty if they were not well compensated as indicated by the structural theory of poverty (Cotter, 2002; Royce, 2009), that certain governmental policies can cause some people to become poor.

Marital Status of Respondents

The marital status of the respondents was considered because women usually access land through their sons, brothers and husbands (UNDP, 2005).

The marital status of respondents as presented in Figure 5 shows that 73.0 percent of them were married whilst the remaining were either widowed (14%), divorced (7.4%) or single (5.6%). A further disaggregation of the data according to location of origin returned similar results.

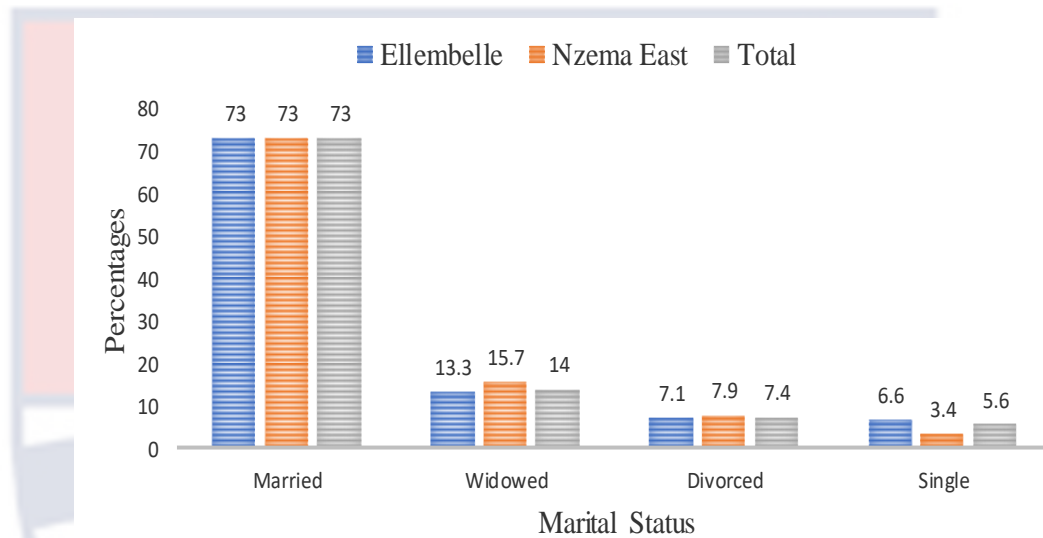


Figure 4: Marital Status of Respondents by Location

Source: Field survey (2020)

The implication is that the occurrence of landlessness due to compulsory land acquisition may not only affect the endowment set of men but also women, and make it difficult for project affected persons (PAPs) to cater for the welfare of their family members as opined by the entitlement theory (Devereux, 2001; Tiwari, 2007) that inadequate resources can deny households of basic consumption needs.

Educational Attainment of Respondents

The educational attainment of the respondents was analysed based on location of origin and the result shows that 34.4 percent of the respondents completed middle school, 19.6 percent ended their formal education at the JHS level, 29.5 percent did not acquire any formal education with 7.4 and 7.0 percent

obtaining tertiary and SHS qualifications respectively (Figure 6). Analysis of educational attainment by location of origin did not reveal much difference except for the JHS and SHS results where 27.0 percent of the respondents in Nzema East Municipality as against 16.3 percent of that of Ellembelle District obtained JHS qualification.

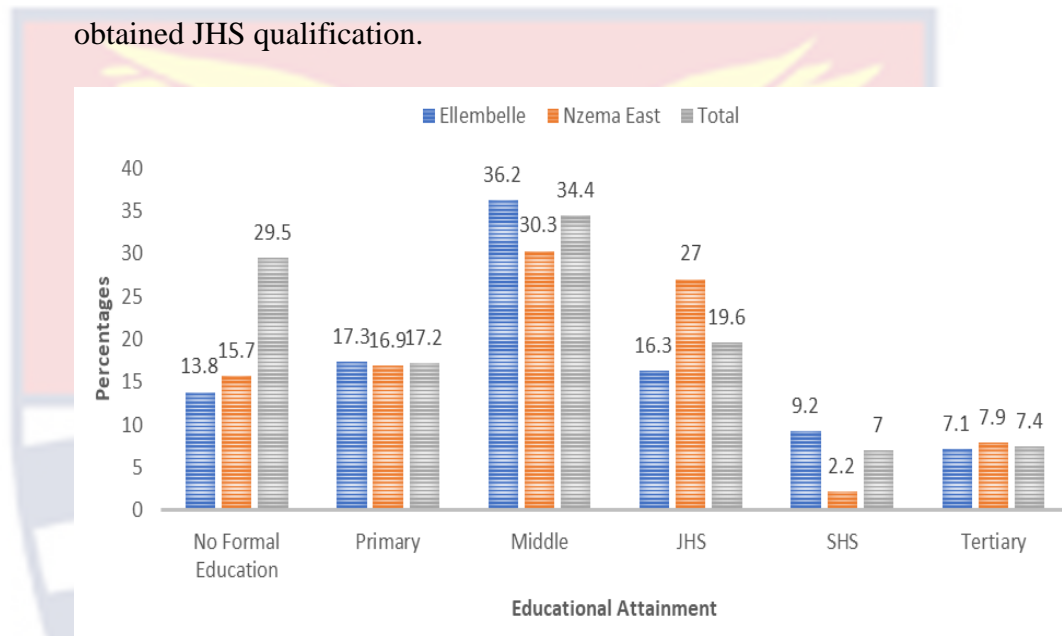


Figure 5: Educational Attainment of Respondents by Location

Source: Field survey (2020)

Notwithstanding the differences, the data on the whole, suggests that the highest educational attainment of most of the respondents in the study area was at the basic education level. The low education attainment of the respondents implies that affected households may not be able to adapt to diverse job opportunities in response to the loss of land occasioned by compulsory land acquisition order.

The analysis of educational attainment of respondents based on sex indicates that 34.7 percent of women unlike that of men (3.3%) did not attain formal education (Table 6). Middle school education was the highest qualification for both men (41.8%) and women (20.8%). The result suggests

that the difference in educational attainment of project affected persons (PAPs) by sex was statistically significant as shown by chi-square value of 68.88 (p-value = 0.000). The implication is that comparatively, men stand a better chance of adapting to alternative livelihood ventures in response to the compulsory land acquisition order.

Table 6: Educational Attainment of Respondents by Sex

Educational Attainment	Male		Female		χ^2 (P-Value)	Phi
	N	%	N	%		
No formal education	6	3.3	35	34.7	68.88*	0.49
Primary	25	13.6	24	23.8	(0.000)	
Middle	77	41.8	21	20.8		
JHS	40	21.7	16	15.8		
SHS	16	8.7	04	20.0		
Tertiary	20	10.9	01	4.8		
Total	184	100.0	101	100.0		

Source: Field survey, 2020 * Statistically significant

Major Occupation of Respondents

The occupational distribution of the respondents (Table 7) was analysed at two levels: aggregate and location of origin. At aggregate level, 67.7 percent of the respondents were engaged in farming, 13 percent in artisanal work, and 10.2 percent in trading. Similar results are observed at the district level as about 85.4 percent and 59.7 percent of the respondents had farming as their major occupation in the Nzema East Municipality and Ellembelle District respectively. Whereas 6.6 and 1.5 percent of the respondents in the Ellembelle

District were into fishing and health work respectively, none of the respondents in Nzema East Municipality were into any of both occupations.

Table 7: Major Occupation of Respondents by Location

Occupation	Ellembelle		Nzema East		Total	
	N	%	N	%	N	%
Farming	117	59.7	76	85.4	193	67.7
Artisan	31	15.8	6	6.7	37	13.0
Trading	24	12.2	5	5.6	29	10.2
Fishing	13	6.6	0	0.0	13	4.6
Teaching	8	4.1	2	2.2	10	3.5
Health worker	3	1.5	0	0.0	3	1.1
Total	196	100.0	89	100.0	285	100.0

Source: Field survey (2020)

This corroborates the findings of Thao (2016) in Vietnam that, the majority (80%) of displaced persons tend to be farmers. The implication is that the affected farmers can be rendered landless, and incapable of satisfying the basic needs of their households which is consistent with the entitlement theory (2014) that people cannot feed themselves because they have been deprived of their livelihood assets.

Farming constituted the major occupation for both male (66.8%) and female (69.3%). While trading (25.7%) was the next important occupation for females, that of their males' counterparts was other businesses (17.9%) [Table 8]. The difference in major occupation of displaced persons by sex was statistically significant as indicated by chi-square value of 58.74 with p-value = 0.000. This indicates that though both men and women can adversely be

affected due to loss of farm land, the effects on project affected persons of either of the sexes may depend on the nature of livelihood endeavours the compensation is invested in.

Table 8: Major Occupation of Respondents by Sex

Major Occupations	Male		Female		Total		χ^2 (P-Value)	Phi
	N	%	N	%	N	%		
Farming	123	66.8	70	69.3	193	67.7	58.74*	0.45
Fishing	13	7.1	0	0.0	13	4.6	(0.000)	
Trading	3	1.6	26	25.7	29	10.2		
Teaching	9	4.9	1	1.0	10	3.5		
Health Worker	3	1.6	0	0.0	3	1.1		
Others	33	17.9	4	4.0	37	13.0		
Total	184	100.0	101	100.0	285	100.0		

Source: Field survey (2020)

*Statistically significant

Household Size of Respondents

The results show that the mean household size of the respondents was 7.18 (Table 9). The average household size is larger than the national figure of 4.5 for Ghana (GSS, 2014). While the mean household size of Ellembelle District was 7.31, that of Nzema East Municipality was 6.89. An independent sample test was conducted to compare the household sizes of Ellembelle District and Nzema East Municipality. There was no significant difference in the household size for Ellembelle District and Nzema East Municipality signifying that households for both locations have similar members. The difference in household size of project affected persons by location of origin

was statistically insignificant as indicated by mean difference of 0.424 with p-value = 0.288 which is higher than 0.05.

Table 9: Household Size of Respondents by Location

Location	Mean	Std. Deviation	Min	Max	Median	P-value	t	Mean Diff.	Eta Squared
Ellembelle (n=196)	7.31	3.09	1	16	7.00	0.288	283	0.424	0.002
Nzema East (n=89)	6.89	3.16	1	15	7.00				
Total	7.18	3.11	1	16	7.00				

Source: Field survey (2020)

Female discussants (15 July, 2020) participating in focus group discussion in the Ellembelle District revealed that the large household size was an asset to them since the members provided support on the farm during weekends, and also on vacations which is consistent with the findings of Batool et. al. (2017) and Taruvunga et al. (2018) that people relied on their large household sizes as farm labour.

Asset Ownership Status of Respondents

The analysis of assets owned by the respondents indicates that the most cited response was cooking utensils (14.6%), followed by clothing (12.0%), and house (10.1%). Displaced persons in the Ellembelle District cited cooking utensils (14.7%), clothing (12.3%), and house (9.8%). Similar trend of responses was observed in the Nzema East Municipality (Table 10). The findings show that the majority (58.1%) of the assets owned by the displaced persons were chattels. This implies that assets of affected farmers are mostly for domestic consumption, and may have limited use in terms of generating income.

Table 10 : Asset Ownership Status of Respondents by Location

Assets	Ellembelle		Nzema East		Total	
	N	%	N	%	N	%
Cooking utensils	192	14.7	88	14.4	280	14.6
Cloth	160	12.3	65	11.3	229	12.0
House	127	9.8	66	10.8	193	10.1
Tools	132	10.1	59	9.6	191	10.0
Mobile phone	126	9.7	60	9.8	186	9.7
TV	123	9.4	45	7.5	169	8.8
Furniture	120	9.2	46	7.5	166	8.7
Land	107	8.2	51	8.3	158	8.3
Coconut farm	82	6.3	35	5.7	117	6.1
Refrigerator	56	4.3	26	4.2	82	4.3
Cocoa farm	13	1.0	24	3.9	37	1.9
Oil palm farm	22	1.7	13	2.1	35	1.8
Bicycle	16	1.2	13	2.1	29	1.5
Motorbike	15	1.2	4	0.7	19	1.0
Car	9	0.7	8	1.3	17	0.9
Tricycle	2	0.4	5	0.8	7	0.4
Total	1,302*	100.0	613*	100.0	1915*	100.0

Source: Field survey (2020)

*Multiple responses

Displaced persons' Participation in the Compulsory Land Acquisition Processes

The participation in the acquisition processes by displaced persons is perhaps the main requirement needed to ensure that their concerns are captured and included in the decisions that facilitate the implementation of the compulsory land acquisition order. The aspects of the acquisition processes that required the active involvement of displaced persons as per the State Lands Act, 1962 (Act 125) as amended were:

1. Serving of notices of the acquisition instrument (Executive instrument)
2. Submission of compensation claims by displaced persons
3. Lands Commission preparing proprietary plans for acquisition
4. Compensation determination and payment
5. Resolution of conflicting claims by Land Tribunal and/or High Courts, if any.

Knowledge of Executive Instrument

The publication of the executive instrument is a formal notice to displaced persons about the acquisition exercise (Larbi, 2008). On aggregate, 62.1 percent of the respondents revealed that they had information on the publication of the executive instrument (acquisition instrument), while the rest indicated that they did not receive any information (Table 11). The finding confirms the views (19th June, 2020) expressed by an official of Lands Commission, Sekondi-Takoradi that:

“The Lands Commission in partnership with Ghana Gas Company shared the information on the executive instrument with the affected farmers and community leaders, and also posted the document on the notice boards of the project affected communities (PAC).”

The official also indicated that the Commission did not only educate the affected farmers on the requirements for the submission of claims, but also admonished them to ensure that the stipulated 60 days for compliance was respected to avoid unnecessary delay that could impact negatively on negotiation for land compensation.

Table 11: Knowledge of Executive Instrument by Location and Educational Level

Executive Instrument	Location		Educational Level															
	Ellembelle		Nzema East		No Formal Education		Primary		Middle		JHS		SHS		Tertiary		Total	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Have knowledge	143	73.0	34	38.2	25	61.0	30	61.2	62	63.3	37	66.1	7	35.0	16	76.2	177	62.1
No knowledge	53	27.0	55	61.8	16	39.0	19	38.8	36	36.7	19	33.9	12	65.0	5	23.8	108	37.9
Total	196	100.0	89	100.0	41	100.0	49	100.0	98	100.0	56	100.0	19	100.0	21	100.0	285	100.0
χ^2 (P-Value)	2.48* (0.000)		2.26* (0.000)															
Phi	0.93		0.87															

Source: Field survey (2020)

*Statistically significant

This suggests that officials of Lands Commission and Ghana Gas Company made efforts to bring to the attention of displaced persons, the publication of the executive instrument to aid them to submit their land compensation claims within the stipulated time which contradicts the finding of King and Sumbo (2015) in Ghana that, affected households were not clothed with information on the publication of the executive instrument before the marking of their structures for demolition.

In the Ellembelle District, 73.0 percent of the project affected persons had information about the publication of the executive instrument while that of Nzema East Municipality recorded 38.2 percent (Table 11). The result indicates that the difference in knowledge of the executive instrument by location of origin was statistically significant as shown by chi-square value of 0.35 with p-value = 0.000 which is lower than 0.05.

The results also show that over 60 percent of displaced persons who never had formal education (61%) and those who obtained primary education (61.2%) got information about the publication of the acquisition instrument. The difference in knowledge of the acquisition instrument by educational attainment of respondents was also statistically significant as revealed by a chi-square value of 2.26 with p-value = 0.000.

Sources of Information on the Executive Instrument

Copies of the Executive Instrument (E.I) are required by law (Section 2 of Act 125 as amended by AFRC 62) to be served as follows: Personally on any person having an interest in the land; Left with any person in occupation of the

land; The traditional authority of the area of acquisition which shall request the chief to notify the people of the area concerned; Affixed at a convenient place on the land; and published on three consecutive occasions in a newspaper circulating in the district where the land is situated and in such other manner as the Minister may direct.

The means through which notice of the E.I was brought to the attention of displaced persons included chief and elders, the electronic media, personal service and notice boards. Table 12 indicates that 56.0 percent of the respondents heard information on the publication of the executive instrument from the chief and elders of their communities while 28.2 percent obtained the information from the electronic media. Similar results were recorded for the Ellembelle District

Table 12: Sources of Information on the Executive Instrument by Location

Source of information	Ellembelle		Nzema East		Total	
	N	%	N	%	N	%
Chief & elders	89	61.8	10	30.3	99	56.0
Electronic media	42	29.1	8	24.2	50	28.2
Personal Service	5	3.5	9	27.2	14	7.9
Assembly member	6	4.2	5	15.2	11	6.2
Notice boards	2	1.4	1	3.1	3	1.7
Total	144	100	33	100	177	100

Source: Field survey (2020)

where 61.8 percent got notice of the executive instrument through chief and elders of the project affected communities. During key informant interviews (22st June,

2020), a member of staff of Ghana Gas Company, Atuabo, indicated that the company through the chief and elders of the project affected communities held series of meetings to create awareness among community members about the expropriation activities.

This suggests that the involvement of traditional rulers in the acquisition activities can mitigate some of the communication challenges that limit participation of displaced persons in the implementation of compulsory land acquisition order. However, just informing displaced persons without the opportunity to negotiate with the acquiring agency corroborates the third rung of Arnstein (1969) citizen participation theory that informing does not offer the respondents the opportunity to feedback.

Mode of Engagement

The main mode of engagement between displaced persons and mediating institutions were information sharing, consultation, decision making, and initiation of action. Table 13 reveals that the acquiring agency shared information with 54.7 percent of the respondents. The rest of the mode of engagements were consultation (21.8%), decision-making (10.9%), and initiation of action (10.2%). While Ellembelle District recorded 51 percent for information sharing, and 25 percent for consultation, that of Nzema East Municipality had 62.9 percent for information sharing and 14.6 percent for consultation.

Chi-square analysis emerging from the study reveals that the difference in mode of engagement between displaced persons and acquiring agency by location of origin was statistically insignificant as indicated by a chi-square value of 16.43

(p-value = 0.006). During focus group discussion with men in the Ellebelle District, the group (15th June, 2020) said that during the acquisition, staff of Ghana Gas Company held community meetings to share information about the expropriation exercise.

Table 13: Mode of Engagement by Location

Mode	Ellebelle		Nzema East		Total		χ^2 (P-Value)	phi
	N	%	N	%	N	%		
Information sharing	100	51.0	56	62.9	156	54.7	16.43	0.24
Consultation	49	25.0	13	14.6	62	21.8	(0.006)	
Decision-making	27	13.8	4	4.5	31	10.9		
Initiation of action	14	7.1	15	16.9	29	10.2		
Others	6	3.1	1	1.9	7	2.5		
Total	196	100.0	89	100.0	285	100.0		

Source: Field survey (2020)

The finding implies that displaced persons involvement in the decisions that informed the implementation of the compulsory land acquisition order was limited which is similar to the finding of Ablo and Asamoah (2018) in Ghana that, displaced persons were always informed of decisions that had been arrived at by the acquiring agency. During key informant interview (20th June, 2020) with an official of Lands Commission, Sekondi-Takoradi, he revealed that some of the decisions on compulsory land acquisition had already been prescribed by statute.

Mode of Communication

The main mode of communication between displaced persons and mediating institutions were community public address system, telephone, and WhatsApp platform (Figure 6). The majority (89%) of the respondents cited community public address system as the main mode of communication. In both Ellembelle District and Nzema East Municipality, community public address system constituted the main mode of communication recording 89.3 percent and 91.0 percent respectively.

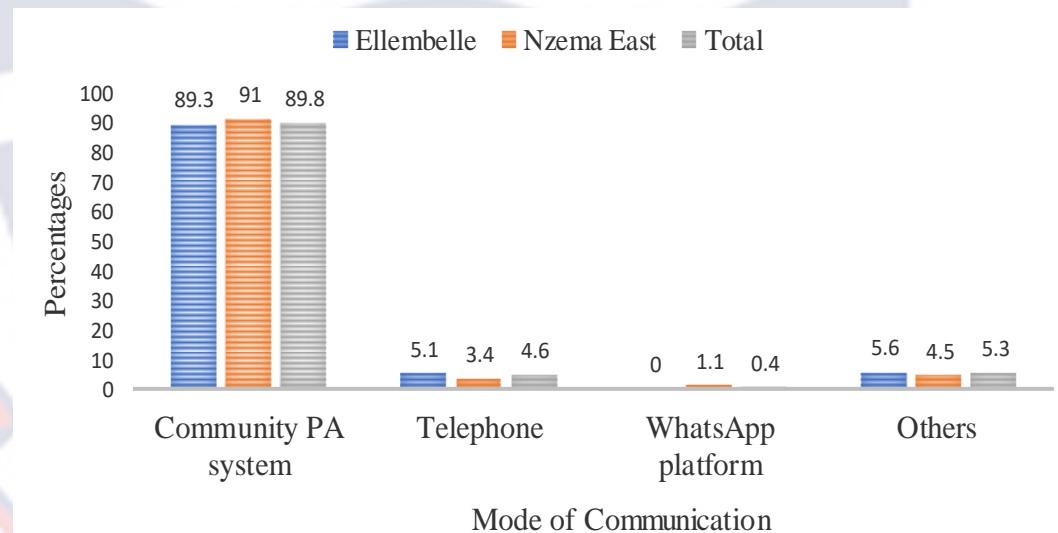


Figure 6: Mode of Communication by Location

Source: Field survey (2020)

During key informant interview (21st June, 2020) with a traditional ruler in the Ellembelle District, the chief intimated that the use of public address system as a medium of communication enabled him and his elders to summon the community members to meetings, where they share with them information from the officials of Ghana Gas Company and Lands Commission. The indication is that the most

accepted mode of getting information across to expropriated community members was through the community's own instituted medium of communication. However, during focus group discussion with men (16th July, 2020) in the Ellembelle District, the group indicated that their understanding of what was communicated was different from what was implemented by the officials of Ghana Gas Company. The suggestion is that though the popular mode of communication was chosen, effective communication was not achieved.

Participation in Land Acquisition Activities

Displaced persons' participation in the acquisition activities is required to ensure transparency as well as minimizing issues of conflicting claims and claimant dissatisfaction (Larbi, 2008). Table 14 shows that out of the 708 multiple responses, the dominant citations were boundary demarcation (32.9%), valuation of crops (15.3%), submission of claims (14.3%), and determination of crop compensation (14.1%). The results of Ellembelle District indicated that, out of the 469 multiple responses, boundary demarcation (34.3%) attracted the most responses, followed by valuation of properties (15.1%), submission of claims (13.0%) and determination of crop compensation (12.6%). Regarding the Nzema East Municipality, with 239 multiple responses reported the following were the results: boundary demarcation (30.1%), determination of crop compensation (17.2%), submission of claims (16.7%) and valuation of properties (15.5%).

During key informant interviews (15th June, 2020), a staff member of Lands Commission, Sekondi-Takoradi, reported that messages were sent to the leaders of the expropriated communities to inform affected farmers to join the team from the

Lands Commission to undertake the boundary demarcation exercise. The implication is that displaced persons were given the opportunity to identify their farms and this is consistent with Arnstein's (1969) citizen participation theory that citizens should be involved in taking decisions on issues that affect them.

Table 14: Participation in Land Acquisition Activities by Location

Activity	Ellembelle		Nzema East		Total	
	N	%	N	%	N	%
Boundary demarcation	161	34.3	72	30.1	233	32.9
Valuation of crops	71	15.1	37	15.5	108	15.3
Submission of claims	61	13.0	40	16.7	101	14.3
Determ. of crop compensation	59	12.6	41	17.2	100	14.1
Determ. of compensation PS	46	9.8	18	7.5	64	9.0
Docum. of affected properties	41	8.7	19	7.9	60	8.5
Determ. of land compensation	30	6.4	12	5.0	42	5.9
Total	469*	100.0	239*	100.0	708*	100.0

Source: Field survey (2020)

* Multiple responses

Determ = Determination, PS = Payment schedule

Valuation of the Expropriated Parcels of Land

The study investigated the entity that undertook the valuation of the expropriated parcels of land for compensation. About 33 percent out of the 285 respondents indicated that they had their land valued by private valuation companies while the majority (67%) said they never sought the services of any

valuer. During a key informant interview (21st June, 2020) with a staff of Lands Commission, Sekondi-Takoradi, he said that: *“The law requires displaced persons to appoint their own valuation companies to determine the value of their parcels of land for compensation. The law has also made provision for the absorption of the valuation fees by the acquiring institution”*.

The implication is that project affected persons who did not have their farmlands valued because they could not engage the services of private valuation firms may have difficulty in negotiating for compensation. The reason is that the stipulated sixty days allowed for displaced persons to put in their compensation claims had expired. This finding is consistent with the assumptions underpinning the structural theory of poverty (Abdulai & Shamshiry, 2014), that certain policies of government can adversely affect the enjoyment of assets of some citizens, and push them into poverty.

Valuation of Crops

Regarding the valuation of crops for cash compensation, the majority (98%) of the respondents indicated that the Lands Commission did the assessment. During focus group discussion with women (15th June, 2021) in the Ellembelle District, the discussants revealed that parts of their farms were destroyed before officials from the Lands Commission and Ghana Gas approached them for the identification of farms. This suggests that displaced persons might have lost some or all the crops on their farms before the crop valuation was done.

An official of Lands Commission, Sekondi-Takoradi, during key informant interview (21st June, 2020) remarked: *“We did the valuation to ensure*

that affected farmers receive prompt compensation for their lost crops". This quotation shows that the Lands Commission wanted to satisfy the statutory requirements provided for by the Fourth Republican Constitution of Ghana in 1992, and also advances the course of the principle of social justice (Nickel, 2007) that the plight of project affected persons should not be worsened. The fact that some of the crops on the farms were not there during the valuation exercise negates the promptness and fairness which the Lands Commission sought to established for the respondents.

Displaced Persons' Satisfaction with Crop Valuation Done by the Lands Commission

The expropriator is usually satisfied when the acquisition is devoid of conflict, just compensation is determined and paid promptly (Larbi, 2008). About 70.0 percent of the 285 respondents indicated they were not satisfied with the valuation. In the Ellembelle District and Nzema East Municipality, 73.0 percent and 72.0 percent of the respondents respectively were not satisfied with the valuation report. They cited issues such as inaccurate recording of expropriation activities, impatience on the part of officials to explain the processes to them, and loss of ancestral land.

The inaccurate recording of expropriation activities was noted by displaced persons as one of the reasons why they were not pleased with the implementation of the compulsory land acquisition order. Evidence from a focus group discussion (17th June, 2020) with women in the Ellembelle District indicates that officials of the Lands Commission undertook the measurements, and

recordings of the crops with limited involvement of displaced persons, and in their view, some of the figures were not accurate. However, during key informants' interview (21st June, 2020), with an official of Lands Commission, Sekondi-Takoradi, the staff disagreed with the respondents' claim of non-involvement, and noted that displaced persons were present during the identification and recording of crops.

The finding suggests that displaced persons' data on the acquisition activities might not be similar to that of the acquiring institution since there seems to be disagreement between displaced persons and officials of Lands Commission on the accuracy of data on crops. The implication is that since the Commission's records served as the basis for crop compensation, then any discrepancy that occurred could negatively affect displaced persons and push them into poverty, a finding which is consistent with the proposition of structural theory of poverty (Abdulai & Shamshiry, 2014) that some actions of duty bearers can negatively impact on the resource base of affected citizens, and render them susceptible to poverty.

Another issue of concern raised by displaced persons was the impatient attitude exhibited by some officials of the Lands Commission. The focus group discussion (18th June, 2020) with women in the Ellembelle District revealed how requests for explanation of the content of a document that was given to them by an official of the Lands Commission was refused. An official of Lands Commission, Sekondi-Takoradi, during key informant interview (21st June, 2020) admitted that there could be issues with the behaviour of some of their staff but he indicated that

complaint mechanisms were put in place to address those concerns. This suggests that the attitude of some officials did not promote the involvement of displaced persons during the implementation of the compulsory land acquisition order, an act that does not agree with the tenets of citizens participation theory (Bryson, Crosby & Bloomberg, 2014), that citizens must be offered the chance to participate in any endeavour that can affect their livelihoods.

Regarding loss of ancestral land, the female discussants (16th June 2020) of the focus group discussion in the Nzema East Municipality indicated that they did not have any piece of land to bequeath to their children, even though they were privileged to inherit parcels of farmland from their grandparents. The results indicate that the discussants have failed in their responsibility to ensure that future generations have access to land for farming purposes. However, it should also be noted that with rapid urbanization and economic growth, agricultural land use is likely to succumb to residential, commercial and industrial land uses which corroborates the findings of Nguyen et al. (2017) in Central Vietnam that, 70 percent of agricultural lands were lost to residential and infrastructure development.

It emerged during a key informant interview (21st June, 2020) with an official of the Lands Commission, Sekondi-Takoradi, that the determination of compensation does not have any specific component that represents the share of future generations. This implies that displaced persons have the responsibility to ensure that part of the compensation is used to obtain similar parcels of land elsewhere which agrees with the findings of Syagga and Olima (1996) that

displaced persons who lost their land holdings replaced them with their compensation.

In practice, compensation determination takes into account the produce on the land, the owner of the land and the loss of opportunity to use the land for future production. Perhaps, what the compensation may not be able to address is the emotional attachment, and apparent break in the line of succession with regard to the notion that land is held in trust for the dead, living and unborn generations (Kasanga & Kotey, 2001)

Chapter Summary

The chapter dwelt on displaced persons' participation in the compulsory land acquisition processes. The background characteristics of displaced persons such as age, sex, educational level, major occupation and household size were analysed to put the discussion into perspective. Displaced persons mostly participated in the boundary demarcation exercise. Project affected persons were usually informed of decisions that had been taken by officials with little opportunity for feedback.

CHAPTER SIX

UTILIZATION OF DISPLACED PERSONS' FINANCIAL COMPENSATION CLAIMS

Introduction

The chapter is devoted to addressing objective two of the study with its focus on displaced persons' utilization of financial compensation claims. The utilization of cash compensation is meant to ensure that displaced persons do not suffer any deterioration in their livelihoods. The specific issues dealt with include whether displaced persons were able to put in compensation claims; received their compensation; amount of money received; displaced persons' satisfaction with the compensation amount, and what the cash compensation was used for.

Submission of Compensation Claims

Displaced persons are required by law to submit their compensation claims within sixty days upon the publication of the executive instrument (State Lands Act, 125). Table 15 shows that the majority (51.6%) of the respondents were not able to submit their compensation claims. While in the Ellebelle District 44.4 percent of the respondents put in claims for their land compensation, 57.3 percent of displaced persons in Nzema East Municipality did same. The difference in submission of compensation claims by location was statistically significant as shown by chi-square value of 2.92 (p-value = 0.000) which is higher than 0.05.

Over 50 percent of displaced persons who attained primary (51.0%) and middle (54.1%) school qualifications were able to submit their claims for land

Table 15: Submission of Land Compensation Claims by Location and Educational Level

Land Compensation Claims	Location		Educational Level												Total					
	Ellembelle		Nzema East		No Formal Education		Primary		Middle		JHS		SHS		Tertiary					
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%		
Submitted	87	44.4	51	57.3	20	48.8	25	51.0	53	54.1	27	48.2	9	45.0	4	19.0	138	48.4		
Not Submitted	109	55.6	38	42.7	21	51.2	24	49.0	45	45.9	29	51.8	11	55.0	17	81.0	147	51.6		
Total	196	100.0	89	100.0	41	100.0	49	100.0	98	100.0	56	100.0	20	100.0	21	100.0	285	100.0		
χ^2 (P-Value)	2.92* (0.000)				2.97* (0.000)															
Phi	1.01				1.02															

Source: Field work (2020)

*Statistically significant

compensation. On the contrary, less than 50 percent of the respondents with JHS (48.2%), SHS (45.0%) and tertiary (19.0%) qualifications were able to submit their land compensation claims. A chi-square value of 2.97 with p-value = 0.000 revealed statistically significant association between submission of land compensation claims and educational qualification of the respondents.

The implication is that those who could not submit their claims on time may find it difficult to negotiate for their land compensation which can affect members of the expropriated households' ability to cater for their consumption needs, a finding which is consistent with the assertion of the entitlement theory (Tiwari, 2007; Verstegen, 2001), that households who have lost their assets are susceptible to hunger.

However, during key informant interviews with an official of Lands Commission on why some displaced persons could not submit their claims, the following key reasons were adduced: improper or absence of documentation on the land; multiple claims, and inability on the part of some claimants to meet the executive instrument stipulated deadline.

Improper or absence of documentation on the land was one of the issues that prevented displaced persons from submitting their land compensation claims. An interview (19th June, 2020) with an official of the Lands Commission, Sekondi-Takoradi, indicated that some of the allodial title holders (stool or family) to the land had not done the statutory declaration. This implies that legally, members of the affected stools or families are likely to lose the land and its associated compensation which can push both present and future generations into poverty if

the state does not give them the opportunity to regularize the documentation. This finding is consistent with the proposition of structural theory of poverty (Bradshaw, 2006), that the implementation of some of the state laws such as compulsory land acquisition order can adversely affect the endowment base of citizens and render them poor.

There was also the issue of multiple claims to some particular pieces of land. It emerged during a key informant interview (19th June, 2020) with an official of Lands Commission, Sekondi-Takoradi, that in some instances, more than one expropriator, usually from the same family or stool, submitted claims for a particular parcel of land. In such situations, the acquiring institution could only admit the claim when the dispute was resolved and the rightful owner is identified. The implication is that the misunderstanding arising out of the implementation of the compulsory land acquisition order can cause disunity among family members and/or community members who prior to the acquisition have enjoyed social cohesion. This result corroborates the finding of Syagga and Olima (1996) in Kenya that, displaced persons suffered from family disintegration.

The inability on the part of project affected persons to complete documentation on the expropriated parcels of land within the sixty days contributed to the large number of displaced persons who could not submit their claims. During a key informant interview (19th June, 2020), with an official of the Lands Commission, Sekondi-Takoradi, it emerged that some project affected persons were not able to comply with the requirements for the submission of compensation claims. The implication is that depending on the length of time for which the

executive instrument had lapsed, displaced persons may be entitled to “ex-gratia.” This finding is consistent with King and Sumbo (2015) in Ghana that, the majority (90%) of affected households were not able to meet the stipulated legal period for the submission of claims.

Receipt of Compensation for Crops

Displaced persons were expected to receive cash compensation for the affected crops. Virtually all (90.2%) of the project affected persons received cash compensation for their crops (Table 16). Similar results were obtained at the local level as displaced persons in the Ellebelle District and Nzema East Municipality recorded 87.9 percent and 95.0 percent cash compensation receipt, respectively. Similarly, over 80 percent of displaced persons from those with no formal education (88.6%) to those at the tertiary level (94.1%) received their crop compensation.

During an interview (20th June, 2021) with an official of Ghana Gas Company Limited, he indicated that the acquiring institution had paid most of the crop farmers since the valuation of the crops was done by the Lands Commission (A staff of Ghana Gas Company, Ellebelle District). This implies that if expropriated households use the cash compensation to engage in income generating activities, they are likely to cater for the consumption needs of the members which is consistent with the entitlement theory (Ikejiaku, 2009) that endowed households are able to deal with hunger.

Table 16: Receipt of Crop Compensation by Location and Educational Level

Crop Compensation	Location		Educational Level														Total			
	Ellembelle		Nzema East		No Formal Education		Primary		Middle		JHS		SHS		Tertiary		N	%		
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%				
Received	145	87.9	76	95.0	31	88.6	35	85.4	82	94.3	41	83.7	16	100.0	16	94.1	221	90.2		
Not Received	20	12.1	4	5.0	4	11.4	6	14.6	5	5.7	8	16.3	0	0.0	1	5.9	24	9.8		
Total	165	100.0	80	100.0	35	100.0	41	100.0	87	100.0	49	100.0	16	100.0	17	100.0	245	100.0		
χ^2 (P-Value)	22.02* (0.000)				Not applicable															
Phi	0.28																			

Source: Field survey (2020)

*Statistically significant

Receipt of Compensation for Land

Displaced persons who submitted their land claims were paid compensation. The receipt of compensation for the parcels of land shows that 82.7 percent of the respondents indicated that they did not receive their land compensation (Table 17). In both Ellembelle District and Nzema East Municipality, about 78.9 percent and 89.7 percent of the respondents did not receive their land compensation. The analysis based on the educational level of displaced persons revealed that over 60 percent of the respondents from those with primary (85.3%) to tertiary (94.1%) levels of education as well as those with no formal (73.3%) education did not receive their land compensation.

During a focus group discussion (26th June, 2021) with men in the Nzema East Municipality, it came up that multiple claims contributed partly to the large number of displaced persons who could not receive their land compensation. The suggestion is that project affected persons' risk slipping into poverty if the rightful owner is not determined for compensation, a finding that concurs with structural theory of poverty (Abdulai & Shamshiry, 2014) that, state sanctioned projects can push people into poverty.

Compensation Amount for Crops and Land

Displaced persons received various cash amount as compensation for their lost crops and land. The amount of compensation displaced persons had for crops ranged from GH¢ 190.00 to GH¢ 8,000.00 with a median of GH¢ 1,000.00 (Table 18). While in the Ellembelle District the maximum amount of compensation was



Table 17: Receipt of Land Compensation by Location and Educational Level

Land Compensation	Location		Educational Level												Total			
	Ellembelle	Nzema East	No Formal Education	Primary	Middle	JHS	SHS	Tertiary										
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Received	31	21.1	8	10.3	8	26.7	5	14.7	12	14.6	8	17.4	5	31.2	1	5.9	39	17.3
Not Received	116	78.9	70	89.7	22	73.3	29	85.3	70	85.4	38	82.6	11	68.8	16	94.1	186	82.7
Total	147	100.0	78	100.0	30	100.0	34	100.0	82	100.0	46	100.0	16	100.0	17	100.0	225	100.0

Source: Field survey (2020)

*Statistically significant



GH¢ 2,500.00, with a minimum amount of GH¢ 190.00 and a median of GH¢ 1,000.00, that of the Nzema East Municipality recorded compensation amounts ranging from GH¢ 400.00 to GH¢ 8,000.00 with a median of GH¢ 2,000.00. In comparing the medians, it is noticed that the Nzema East Municipality (GH¢ 2,000.00) had had the highest median compared to Ellembelle (GH¢ 1,000.00). The differences in crops compensation amount by location was statistically insignificant as shown by Mann Whitney U value of 5288 with p-value = 0.865 which is higher than 0.0.

The amount of crop compensation received by males ranged from GH¢400.00 to GH¢8,000.00 with a median of GH¢ 2000.00, while the minimum and maximum crop compensation obtained by females were GH¢ 190.00 and GH¢ 8,000.00 respectively with a median of GH¢1,000.00. In comparing the median between men (GH¢ 2000.00) and women (GH¢1,000.00), men had the highest. However, the difference in crops compensation by sex was statistically insignificant as shown by Mann Whitney U value of 4759.5 with p-value = 0.0128 which is higher than 0.05.

The land compensation ranged from GH¢ 1,000.00 to GH¢ 50,000.00 with a median of GH¢ 2,500.00 (Table 18). In the Ellembelle District, the highest compensation received for land was GH¢ 40,000.00 with the lowest amount of GH¢ 1,000.00 and a median of GH¢ 2,500.00. On the other hand, the maximum compensation amount received for land in the Nzema East Municipality was GH¢ 50,000.00 with the minimum amount of GH¢ 1,000.00 and a median of GH¢ 2000. In comparing the medians, it is observed that Ellembelle District had the highest median compared to Nzema East Municipality. A Mann-Whitney U value of 128.5 (p-value = 0.946) revealed

Table 18: Compensation amount for Crops and Land by Location and Sex

Comp	Respondents	Min	Max	Mean	Median	Std Dev.	U	r	
	Characteristics	(Gh¢)	(Gh¢)	(Gh¢)	(Gh¢)	(Gh¢)	P(Value)	(z)	
Crop	Location	Ellembelle	190	2500	606.4	1000	2700	5288	0.011
		Nzema East	400	8000	3117	2000	1236	0.865	-0.171
	Sex	Male	400	8000	1716	2000	1880	4759	0.0128
		Female	190	2500	1995	1000	1464	0.062	-1.885
		Total	190	8000	1477	1000	7660		
Land	Location	Ellembelle	1000	40,000	6924	2500	1204	128.5	0.01
		Nzema East	1000	50,000	1212	2000	1021	0.946	-0.069
	Sex	Male	1000	40,000	6190	2500	1302	111.5	0.31
		Female	1000	50,000	1160	2000	1049	0.056	-1.98
		Total	1000	50,000	3870	2500	1280		

Source: Field survey (2020)

Comp = Compensation

Note: Before acquisition (USD 1 = GHS 1.49) After acquisition (USD 1 = GHS 5.90)

statistically insignificant association between land compensation amount and location of origin of displaced persons.

Men received between GH¢ 1,000.00 and GH¢ 40,000.00 as land compensation with a median of GH¢ 2500.00. On the hand, women received a minimum of GH¢1,000.00 and a maximum of GH¢50,000.00 with a median of GH¢2,000.00. In comparing the medians, men (GH¢ 2500.00) as opposed to women (GH¢2000.00) had the highest. The difference in crop compensation by sex was statistically insignificant as shown by a Mann Whitney U value of 111.5 with p-value=0.056.

Satisfaction Derived from Compensation

The study attempted to analyse the satisfaction displaced persons derived from the compensation received. The results show that 78.9 percent of the respondents (223) were not satisfied with the compensation received (Table 19). Analysis of the results by location revealed that while in the Ellembelle District, 82.2 percent of the respondents were not satisfied with their compensation, about 72.7 percent of the respondents in Nzema East Municipality were equally not satisfied. The results reveal that the difference in satisfaction displaced persons derived from compensation by location was statistically significant as shown by chi-square value of 18.36 with p-value of 0.001 which is lower than 0.05. Similarly, 78.9 percent of displaced persons engaged in various occupations were not satisfied with the compensation.

The reasons for the dissatisfaction were inadequacy of compensation amount, loss of inherited or ancestral land; inability to use adjoining parcels of land, and intergenerational equity. Displaced persons cited inadequate compensation amount as one of the reasons why they were not happy with the compensation regime. During focus group discussion (28th June, 2021) with women in the Ellembelle District, it emerged that the compensation amount was too small to procure the basic needs of the affected farmers.

A similar focus group discussion (29th June, 2020) with men in the Nzema East Municipality confirmed that the compensation amount was inadequate to secure comparable parcels of land to continue with their trade. In practice, a committee composed of key stakeholders is usually put in place to prepare a comprehensive compensation package which is acceptable to all interested parties but that was not the case of the Ghana Gas acquisitions. This is imperative since the adequacy of compensation amount is subjective. It is, therefore, not surprising that displaced persons complained about the inadequacy of compensation amount which is consistent with the findings of Syagga and Olima (1996) in Kenya, that compensation was insufficient. The implication is that displaced persons can be worse-off which ties in with the assertion of the structural theory of poverty (Abdulai & Shamshiry, 2014) that, project affected persons are likely to slip into poverty if the acquiring institution does not provide alternative livelihood support for them.

The next issue was the inability of displaced persons to put to use parcels of land around the gas pipelines. It emerged during focus group discussion (1st

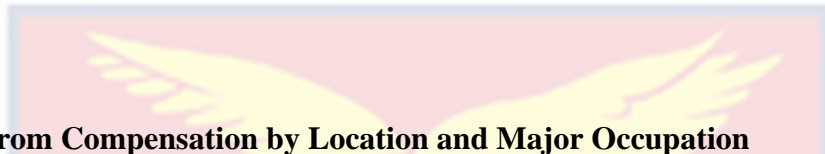


Table 19: Satisfaction Derived from Compensation by Location and Major Occupation

Compensation	Location		Major Occupation															
	Ellembelle		Nzema		Farming		Artisan		Trading		Fishing		Teaching		Health		Total	
	N	%	Fre	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Satisfied	26	17.8	21	27.3	35	23.3	6	20.0	3	15.0	1	9.1	2	22.2	0	0.0	47	21.1
Not Satisfied	120	82.2	56	72.7	115	76.7	24	80.0	17	85.0	10	90.9	7	77.8	3	100.0	176	78.9
Total	146	100.0	77	100.0	150	100.0	30	100.0	20	100.0	11	100.0	9	100.0	3	100.0	223	100.0
χ^2 (P-Value)	18.36* (0.001)				Not applicable													
Phi	0.25																	

Source: Field survey (2020)

*Statistically significant



June, 2020) with women in the Nzema East Municipality that displaced persons have been warned not to cultivate on the adjoining parcels of land bordering the gas pipelines. However, a key informant interview (16 July, 2020) with an official of Ghana Gas Company revealed that the demarcated areas formed part of the compensation claims. The decision to keep expropriated farmers away from the gas pipelines was perhaps to avoid eminent explosion which ties in with the findings of Syagga and Olima (1996) in Kenya that, displaced persons were asked not to farm close to the gas pipelines. The finding is consistent with the assertion of the eminent theory (Schultz, 2009) that, compulsory land acquisition is undertaken to address safety and health concerns.

Displaced persons were also not satisfied with the compensation regime on the grounds that the amount could not pay for the value of ancestral lands they inherited. At a focus group discussion (30th June, 2020) with women in the Ellembelle District, it emerged that displaced persons were of the view that no amount of compensation could replace the parcels of land they inherited from their great grandparents. The implication is that cash compensation may not be adequate to address the psycho-social sentiments individuals attached to the land which agrees with the finding of Kassanga and Kotey (2001) that no amount of cash can be substituted for the subjective value project affected persons attach to their property. The result is, however, inconsistent with the assertion of the eminent domain theory (Schultz, 2009) that payment of just compensation satisfies the taking of private property.

The issue of intergenerational equity was one of the concerns displaced persons expressed. During focus group discussion (30th June, 2020) with women in the Ellebelle District, displaced persons indicated that the valuers did not consider the intergenerational significance of their coconut cash crop. They were also of the view that the lump sum compensation regime did not cater for the share of future generations. A key informant interview (7th July, 2020) with an opinion leader in the Ellebelle District revealed that officials of the Lands Commission solely undertook the valuation of the crops while private valuation firms did that of the land. The opinion leader indicated that some farms were cleared before the valuation of crops commenced. The implication is that displaced persons never had the opportunity to negotiate for the crop compensation.

This suggests that compulsory land acquisition order can terminate the varied interest future generations hold in land which is consistent with the findings of Ablo and Asamoah (2018), and Akrofi and Whittal (2013) in Ghana that, cash compensation cannot address intergeneration equity. The result is also consistent with the structural theory of poverty (Abdulai & Shamshiry, 2014; Bradshaw, 2006) that project affected persons can perpetuate poverty, if laws authorising the acquisition is not implemented to the letter.

Prompt Payment of Compensation

The constitution of the Republic of Ghana requires the acquiring agency to ensure prompt payment of compensation to displaced persons (Government of Ghana, 1992). The majority (72.9%) of the respondents indicated that they had received their crop compensation on the scheduled date (Table 20). In the

Table 20: Payment of Compensation by Location and Sex

Payment of Compensation	Location				Sex				Total	
	Ellembelle		Nzema East		Male		Female		N	%
	N	%	N	%	N	%	N	%		
Prompt	111	77.1	50	64.9	108	73.0	53	72.6	161	72.9
Delayed	33	22.9	27	35.1	40	27.0	20	27.4	60	27.1
Total	144	100.0	77	100.0	148	100.0	73	100.0	221	100.0
χ^2 (P-Value)	19.84* (0.001)				12.43 (0.014)					
Phi	0.26				0.21					

Source: Field survey (2020)

*Statistically significant

Ellembelle District, 77.1 percent of displaced persons had their crop compensation on schedule while 64.9 percent of the respondents in the Nzema East Municipality got their crop compensation on the agreed date. The difference in prompt payment of crop compensation by location was statistically significant as indicated by chi-square value of 19.84 (p -value = 0.001) which is lower than 0.05.

Similarly, 73 percent and 72.6 percent of men and women respectively had their crop compensation paid on schedule. A chi-square value of 12.43 (p -value = 0.014) revealed statistically significant association between prompt payment of compensation and sex of the respondents. An interview (3th July, 2020) with a traditional ruler in the Ellembelle District indicated that crop compensation was received on the scheduled date which is consistent with the assertion of the eminent domain theory (Schultz, 2009) that payment of compensation should be prompt. This result contradicts the finding of King and Sumbo (2015) in Ghana that, payment of compensation to displaced persons was delayed.

Decision Makers for the Utilisation of Compensation

The study identified husband, wife or both as well as the acquiring institution as those who took decisions on the usage of compensation. The majority (51.2%) of the respondents mentioned husband with 33.8 percent citing both husband and wife as household members who took decisions on the utilisation of compensation (Table 21). About 55.1 percent and 44.1 percent of the respondents in Ellembelle District and Nzema East Municipality respectively, mentioned husband as the key decision maker. The difference in

Table 21: Decision Makers for the Utilisation of Cash Compensation by Location and Marital Status

Decision Makers	Location				Marital Status								Total	
	Ellembelle		Nzema East		Married		Single		Divorced		Widow(er)		N	%
	N	%	N	%	N	%	N	%	N	%	N	%		
Husband (Men)	76	55.1	33	44.1	82	50.3	9	81.8	7	46.7	11	45.8	109	51.2
Husband & Wife	44	31.9	28	37.3	72	44.2	0	0.0	0	0.0	0	0.0	72	33.8
Wife (Women)	18	13.0	13	17.3	8	4.9	2	18.2	8	53.3	13	54.2	31	14.1
Acquiring Agency	0	0.0	1	1.3	1	0.6	0	0.0	0	0.0	0	0.0	1	0.9
Total	138	100.0	75	100.0	163	100.0	11	100.0	15	100.0	24	100.0	213	100.0
χ^2 (P-Value)	19.06 (0.015)													
Phi	0.26													

Source: Field survey (2020)

decision makers for utilization of compensation by location was statistically significant as revealed by chi-square value of 19.06 (p-value = 0.015).

The analysis by marital status revealed that while 50.3 percent of husbands had the opportunity to solely take decisions on the usage of the compensation amount, 4.9 percent of wives got a similar chance. At a focus group discussion (5th July, 2020) with women in the Ellembelle District, it emerged that most female crop farmers obtained their parcels of land from their husbands or sometimes male members of the family or community. They revealed that the decision on the usage of the proceeds was mostly taken by their husbands.

This suggests that women inputs into the decisions which accompanied the usage of the cash compensation was minimal since their husbands held most of the productive resources, and therefore, economic power to decide on consumption matters. This affirms the findings of Ablo and Asamoah (2018) in Ghana that, asymmetric power relations existed within expropriated households.

Utilisation of Cash Compensation

The main uses to which the cash compensation was put were consumption, assets acquisition, and income generating ventures. The results (Table 22) show that about 46.5 percent of the respondents indicated consumption with 25.3 percent going for consumption and assets acquisition. In the Ellembelle District, the respondents used the cash compensation on consumption (49.3%), consumption and assets (25.7%) and assets (11.3), and in the Nzema East Municipality the respondents utilised their cash compensation on consumption (41.6%), consumption and assets (24.7%) and

Table 22: Utilisation of Cash Compensation by Location and Marital Status

Compensation Usage	Location				Marital Status								Total	
	Ellembelle		Nzema East		Married		Single		Divorced		Widow(er)		N	%
	N	%	N	%	N	%	N	%	N	%	N	%		
Cons	69	49.3	32	41.6	70	44.0	10	90.9	7	36.8	14	50.0	101	46.5
Cons & assets	36	25.7	19	24.7	39	24.5	0	0.0	8	42.1	8	28.6	55	25.3
Asset	16	11.3	8	10.4	24	15.1	0	0.0	0	0.0	0	0.0	24	11.1
Cons & IGAs	4	2.9	12	15.6	10	6.3	1	9.1	1	5.3	4	14.2	16	7.4
IGAs	11	7.9	1	1.3	9	5.7	0	0.0	2	10.5	1	3.6	12	5.5
Cons, assets & IGAs	4	2.9	5	6.4	7	4.4	0	0.0	1	5.3	1	3.6	9	4.2
Total	140	100.0	77	100.0	159	100.0	11	100.0	19	100.0	28	100.0	217	100.0
χ^2 (P-Value)	35.15* (0.000)													
Phi	0.35													

Source: Field survey (2020)

*Statistically significant

Cons = Consumption IGAs = Income Generating Activities

consumption and income generating activities [IGAs] (15.6%). The difference in the utilisation of cash compensation by location was statistically significant as shown by chi-square value of 35.15 with p-value = 0.000 which is lower than 0.05.

The marital status analysis of the results (Table 22) shows that people who were single spent 90.9 percent of their cash compensation on consumption with widow(er) (50.0%), married (44.0%), and divorced (36.8%) following each other in descending order. The following were the shares of the cash compensation that went into income generating activities: Divorced (10.5%), married (5.7%), widow(er) (3.6%) and single (0.0). Generally, displaced persons spent more of their cash compensation on consumption with about 11 percent or less going into income generating activities.

At a focus group discussion (25th June, 2020) with men in the Ellembelle District, they revealed that displaced persons spent most of their cash compensation on school needs and foodstuff. This implies that displaced persons spent their cash compensation on basic households needs which is consistent with the findings of Nguyen et al. (2017) in Central Vietnam that cash compensation was used to pay for school fees and procure foodstuff.

Uses of Cash Compensation for Consumption

Consumption of goods and services is a primary measure of standard of living (Batool et. al., 2017). Out of 520 multiple responses (Table 23), displaced persons indicated school supplies (33.7%), foodstuff (23.3%), healthcare (19.6%), and search for jobs (16.9) as some of the uses to which the cash compensation were put to. In the Ellembelle District, displaced persons cited school supplies (34.8%),

Table 23: Uses of Cash Compensation for Consumption by Location

	Ellembelle		Nzema East		Total	
	N	%	N	%	N	%
School supplies	105	34.8	70	32.1	175	32.1
Foodstuff	68	22.5	53	24.3	121	24.3
Healthcare	60	19.9	42	19.3	102	19.3
Search for Jobs	46	15.2	42	19.3	88	19.3
Water	10	3.3	5	2.3	15	2.3
Marriage	6	2.0	4	1.8	10	1.8
Alcohol	2	0.7	3	1.4	5	1.4
Lotto	1	0.3	1	0.5	2	0.5
Others specify	1	0.3	1	0.5	2	0.5
Total	302*	100.0	218*	100.0	520*	100.0

Source: Field survey (2020)

*Multiple responses

foodstuff (22.5%), healthcare (19.9%) and search for jobs (15.2%) as major uses of cash compensation for consumption. Similar results were obtained for displaced persons in the Nzema East Municipality as school supplies (32.1%), foodstuff (24.3%), healthcare (19.3%) and search for jobs (19.3%) were the dominant responses.

During focus group discussion (18th July, 2020) with women in the Nzema East Municipality, they revealed that most of the displaced persons used their cash compensation to purchase school items for their children. This result is not only consistent with the findings of Syagga and Olima (1996) in Kenya that, displaced

persons used the compensation to cater for their children's educational needs but also the assertion of the entitlement theory (Ikejiaku, 2009), that households which do not intend to be poor invest in their children's education.

Assets Acquired with Compensation

Assets are a store of value which represent series of benefits accruing to the household or individual by holding the entity over a period of time (Batool et.

Table 24: Assets Acquired with Compensation by Location

Assets	Ellembelle		Nzema East		Total	
	N	%	N	%	N	%
Clothing	38	18.8	37	24.0	75	21.0
Tools	25	12.4	30	19.2	50	14.0
Cooking utensils	21	10.4	19	12.2	40	11.2
Mobile phone	19	9.4	17	11.0	36	10.0
Television	21	10.4	9	5.8	30	8.4
Others specify	20	10.0	5	3.2	30	8.4
Furniture	17	8.4	6	4.0	23	6.4
Bed	13	6.4	6	4.0	19	5.3
House	12	6.0	3	2.0	15	4.2
Land	6	5.9	7	4.5	13	3.6
Refrigerator	4	2.0	4	2.6	8	2.2
Coconut farm	2	1.0	4	2.6	6	1.7
Motorbike	1	0.5	5	3.2	6	1.7
Cocoa farm	1	0.5	3	2.0	4	1.0
Car	1	0.5	1	0.6	2	0.6
Bicycle	1	0.5	0	0.0	1	0.3
Total	202*	100.0	156*	100.0	358*	100.0

Source: Field survey (2020)

*Multiple responses

al., 2017). Out of 358 multiple responses, displaced persons mentioned clothing (21.0%), tools (14.0%), and cooking utensils (11.2%), as some of the assets they acquired with the cash compensation (Table 24). In the Ellembelle District, clothing (18.8%), tools (12.4%) and cooking utensils (10.4%) dominated the responses of the respondents. Clothing (24.0%), tools (19.2%) and cooking utensils (12.2%) were the major assets acquired by the displaced persons in the Nzema East Municipality.

Women participants at a focus group discussion (5th July, 2020) in the Nzema East Municipality indicated that they used the cash compensation to obtain cloths, and cooking utensils. This implies that displaced persons acquired households' chattels which is inconsistent with the findings of Syagga and Olima (1996) in Kenya, that project affected persons used the cash compensation to secure landed properties such as plots of land, and buildings.

Use of cash compensation for Income Generating Activities

Income generating ventures comprise economic activities which provide livelihoods for the inhabitants, and they may include farming, livestock, fishing, processing, trading, manufacturing, wage and casual local employment (Khatun, & Roy, 2012). Out of 176 multiple responses by displaced persons, investment of cash compensation in non-farm income generating activities dominated with 61.9 percent (Table 25).

In both the Ellembelle District and Nzema East Municipality, investment in non-farm income generating activities topped the responses with 62.4 percent and 60.8 percent respectively. This suggests that displaced persons had either shifted

from farm to non-farm or enhanced their non-farm income generating activities with the receipt of cash compensation. At a focus group discussion (6th July, 2020) with women in the Ellembelle District, they indicated that the cash compensation was mostly invested in trading. This result agrees with the findings of Nguyen et al. (2017) in Central Vietnam that, the cash compensation was used to set up businesses as a form of livelihood reconstruction.

Table 25: Use of Cash Compensation for Income Generating Activities by Location

IGAs	Ellembelle		Nzema East		Total	
	N	%	N	%	N	%
Non-farm	78	62.4	31	60.8	109	61.9
Farm	31	24.8	13	25.5	44	25.0
Both	16	12.8	7	13.7	23	13.1
Total	125	100.0	51	100.0	176	100.0

Source: Field work (2020)

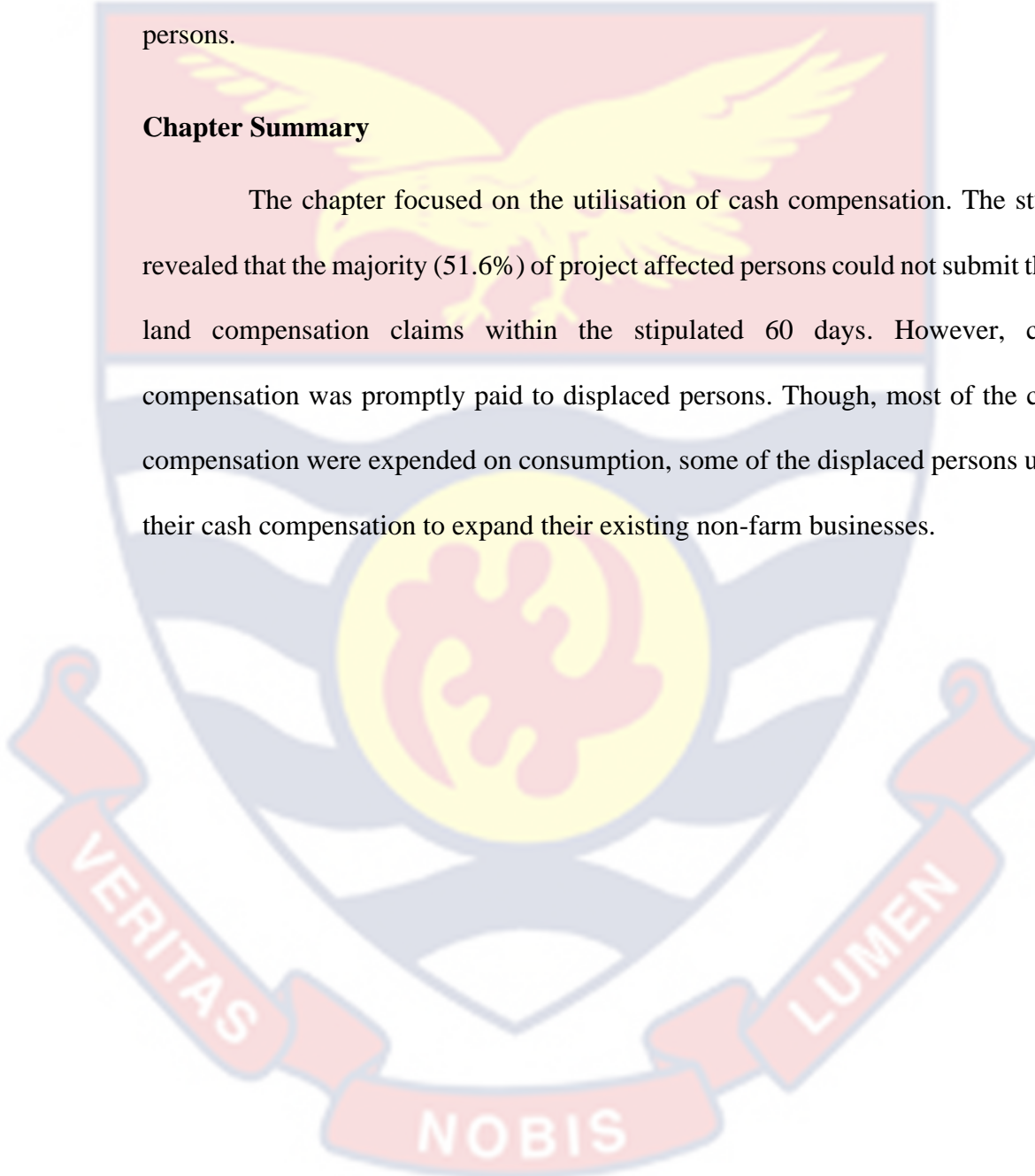
IGAs = Income Generating Activities

The study examined whether the investment in non-farm enterprises started with the receipt of the cash compensation or from other sources. This is essential in determining the extent to which the cash compensation stimulated the desire of displaced persons to engage in non-farm productive activities. About 75 percent of the respondents revealed that they did not start their non-farm income generating activities with the receipt of the cash compensation. During focus group discussion (7th July, 2020) with women in the Nzema East Municipality, they indicated that the start-up capital was sourced from rural banks and micro-finance institutions operating in the Municipality. This result is consistent with the finding

of Batool et al. (2017) in Pakistan that, households obtained credit facilities from banks to diversify their income generating activities. This implies that the cash compensation served as capital injection into the existing businesses of displaced persons.

Chapter Summary

The chapter focused on the utilisation of cash compensation. The study revealed that the majority (51.6%) of project affected persons could not submit their land compensation claims within the stipulated 60 days. However, crop compensation was promptly paid to displaced persons. Though, most of the cash compensation were expended on consumption, some of the displaced persons used their cash compensation to expand their existing non-farm businesses.



CHAPTER SEVEN

HOUSEHOLDS' INCOME PORTFOLIOS BEFORE AND AFTER EXPROPRIATION

Introduction

This chapter focuses on examining the affected households' income portfolios before and after expropriation, and providing answers to objective three. The specific issues dealt with include sources of income before expropriation, current sources of income, household annual income before expropriation, household current annual income, additional sources of income, and frequency of receipt of additional sources of income.

Sources of Income Before and After Expropriation by Location

Rural households engage in income portfolio activities classified as farm, off-farm and non-farm income sources (Davis et al., 2017; Perret et al., 2005). In view of that, the study sought to analyse project affected persons households' income portfolios before and after expropriation. The analysis per issue was based on varied sample sizes because of multiple responses and in some instances, none applicable items. The sources of household income before expropriation were farm (55.2%), non-farm (26.3%), and off-farm (18.5%) with the after-expropriation results of farm (50.2%), non-farm (28.9%) and off-farm (20.9%) (Table 26). The farm source of income reduced by 5 percent while non-farm and off-farm sources increased by 2.6 percent and 2.6 percent respectively.

Table 26: Sources of Income Before and After Expropriation by Location

Sources of Income	Period	Ellembelle		Nzema East		Total	
		N	%	N	%	N	%
Farm	Before	505	55.3	235	55.1	740	55.2
Non-farm		233	25.5	120	28.1	353	26.3
Off-farm		176	19.3	72	16.9	248	18.5
Total		914*	100.0	427*	100.0	1341*	100.0
Farm	After	363	47.9	211	55.0	574	50.2
Non-farm		225	29.6	105	27.3	330	28.9
Off-farm		171	22.5	68	17.7	239	20.9
Total		759*	100.0	384*	100.0	1143*	100.0

Source: Field survey (2020)

*Multiple responses

In the Ellembelle District, farm was the highest source of income before (55.3%) and after (47.9%) expropriation. Farm was also the dominant source of income before (55.1%) and after (55.0%) for project affected persons in the Nzema East Municipality. In both the Ellembelle District and the Nzema East Municipality, farm source of income lost by 7.4 percent and 0.1 percent respectively. The drop in the farm income source did not largely affect the structure of the household income mix since it still constitutes about 50 percent of the total income portfolio.

It emerged during the focus group discussion (27th July, 2020) with women in the Ellembelle District that displaced persons derived most of their incomes from the sale of their farm produce. This result contradicts the finding of Syagga and

Olima, (1996) in Kenya that, project affected persons lost about 82 percent of their previous farm income earnings.

Farm Sources of Income Before and After Expropriation

The farm income-mix consists of crops and livestock production (Davis et al., 2017) which included food crops, tree crops, farm animals, and poultry. The more dominant farm sources of income before expropriation were food crops (55.9%) and tree crops (28.0%) [Table 27]. The farm sources of income after expropriation were food crops (58.2%) and tree crops (23.2%). The food crops sources of the farm income-mix increased by 2.3 percent while tree crops dropped by 4.4 percent. In the Ellembelle District, the farm sources of income before expropriation were food crops (54.0%) and tree crops (28.1%), with the after-expropriation results of 56.8 percent of food crops 20.9 percent of tree crops. Similarly, in the Nzema East Municipality, the dominant farm sources of income before expropriation were food crops (60.0 %) and tree crops (27.7%) with the after-expropriation results of 61.3 percent of food crops, and 27.0 percent of tree crops.

The food crops sources of farm income-mix for displaced persons in both the Ellembelle District and the Nzema East Municipality increased by 2.8 percent and 6.3 percent while tree crops sources decreased by 7.2 percent and 0.7 percent respectively. The drop in tree crops sources of income by about 7 percent might appear to be a minor change but tree crop sources of income are generally predictable and stable as compared to food crop sources of income. During focus group discussion (26th June, 2020) with men in the Ellembelle District, they

indicated that the acquisition affected their coconut and oil palm farms. This probably explains why there was a drop in tree crop sources of farm income.

Table 27: Farm Sources of Income Before and After Expropriation by Location

Farm Sources	Ellembelle		Nzema East		Total	
	N	%	N	%	N	%
	Period					
	Before					
Food crops	273	54.0	141	60.0	414	55.9
Tree crops	142	28.1	65	27.7	207	28.0
Farm animals	53	10.5	8	3.5	61	8.2
Fish farming	21	4.2	9	3.8	30	4.1
Poultry	16	3.2	12	5.0	28	3.8
Total	505*	100.0	235*	100.0	740*	100.0
	After					
Food crops	206	56.8	129	61.3	335	58.2
Tree crops	76	20.9	57	27.0	133	23.2
Farm animals	49	13.5	12	5.6	61	10.7
Fish farming	18	5.0	7	3.3	25	4.4
Poultry	14	3.8	6	2.8	20	3.5
Total	363*	100	211*	100.0	574*	100.0

Source: Field survey (2020)

*Multiple responses

The farm sources of income for males before expropriation were 53.1 percent of food crops and 29.7 percent of tree crops while the after-expropriation results were 54.7 percent of food crops and 25.0 percent of tree crops (Table 28). Females recorded farm sources of income before expropriation of 61.2 percent of

food crops and 24.7 percent of tree crops with after expropriation results of 65.5 percent of food crops and 19.6 percent of tree crops. The food crops sources of income for males and females shot up by 1.6 percent and 4.3 percent while that of the tree crops sources declined by 4.7 percent and 5.1 percent respectively.

Table 28: Farm Sources of Income Before and After Expropriation by Sex

Farm Sources	Before				After			
	Male		Female		Male		Female	
	N	%	N	%	N	%	N	%
Food crops	258	53.1	156	61.2	208	54.7	127	65.5
Tree crops	144	29.7	63	24.7	95	25.0	38	19.6
Farm animals	43	8.8	18	7.1	34	8.9	16	8.2
Poultry	21	4.3	7	2.7	28	7.4	8	4.1
Fish farming	19	3.9	11	4.3	15	3.9	5	2.6
Total	485*	100.0	255*	100.0	380*	100.0	194*	100.0

Source: Field survey (2020)

*Multiple responses

The results show that women got more of their incomes from food crops sources than men which is consistent with the findings of Doss (2002) that, food crop sources of income constitute the highest proportion of farm-based income sources for women.

During focus group discussion (28th June, 2020) with females in the Nzema East Municipality, they indicated that most of their farm sources of income were derived from the proceeds of cassava and pepper which might have contributed to the increase in food crop sources of farm income. This result does not agree with

the findings of Syagga and Olima (1996) in Kenya that, income from food crop sources dropped.

Non-farm Sources of Income Before and After Expropriation

Non-farm sources of income include trading, local manufacturing, construction and public service (Perret et al., 2005). Trading was the dominant non-farm source of income before (48.7%) and after (48.1%) expropriation (Table 29).

Table 29: Non-farm Sources of Income Before and After Expropriation by Location

Non-farm Sources	Period	Ellembelle		Nzema East		Total	
		N	%	N	%	N	%
Trading	Before	107	45.9	65	54.1	172	48.7
Local manufacturing		50	21.6	18	15.0	68	19.3
Artisan		23	9.9	13	10.8	36	10.2
Transportation		20	8.6	7	5.8	27	7.6
Beautician business		13	5.6	13	10.9	26	7.4
Public service		11	4.7	4	3.3	15	4.3
Mining		9	3.9	0	0.0	9	2.5
Total		233*	100.0	120*	100.0	353*	100.0
Trading	After	104	46.2	55	52.5	159	48.1
Local manufacturing		49	21.8	15	14.3	64	19.4
Artisan		24	10.7	14	13.4	38	11.5
Transportation		8	3.5	6	5.6	14	4.2
Beautician industry		16	7.1	6	5.6	22	6.7
Public service		16	7.1	4	3.8	20	6.2
Mining		8	3.6	5	4.8	13	3.9
Total		225*	100.0	105*	100	330*	100.0

Source: Field survey (2020)

*Multiple responses

There was a decrease of 0.6% in trading sources of income. In the Ellembelle District, trading was the highest non-farm sources of income before (45.9%) and after (46.2%) expropriation. Trading also constituted the main non-farm sources of income before (54.1%) and after (52.5%) expropriation for project affected persons in the Nzema East Municipality. Trading sources of income for displaced persons in the Ellembelle District and the Nzema East Municipality rose by 0.3 percent and 1.6 percent respectively. The composition of the non-farm sources of income did not change drastically.

It emerged during key informant interview (26th July, 2020) with an official of the Business Advisory Centre (BAC), Ellembelle District, that between 45 and 60 percent of persons who had registered with the BAC were petty traders. The implication is that probably, displaced persons found it not too difficult to engage in petty trading.

Trading was the dominant source of income before (39.1%) and after (40.5%) expropriation for males (Table 30). Similarly, trading was the main non-farm source of income before (69.5%) and after (66.0%) expropriation for women. Over 25 percent more of women compared with men derived their non-farm income from trading.

During focus group discussion (28th June, 2020) with men in the Ellembelle District, they indicated that with just some little capital, women could engage in a variety of petty trading income generating activities. This signifies that females are able to generate income to support the consumption effort of households which is

Table 30: Non-farm Sources of Income Before and After Expropriation by Sex

Non-farm Sources	Before				After			
	Male		Female		Male		Female	
	N	%	N	%	N	%	N	%
Trading	93	39.1	80	69.5	93	40.5	66	66.0
Local manufacturing	51	21.4	12	10.4	44	19.1	11	11.0
Artisan	36	15.1	5	4.3	33	14.4	5	5.0
Transportation	23	9.7	4	3.5	20	8.7	2	2.0
Beautician business	16	6.7	10	8.7	15	6.5	8	8.0
Public/civil service	12	5.0	3	2.6	17	7.4	3	3.0
Mining	7	2.9	1	0.9	8	3.5	5	5.0
Total	238*	100.0	115*	100.0	230*	100.0	100*	100.0

Source: Field survey (2020) *Multiple responses

consistent with the assumption underlying the entitlement theory (Sen, 1990) that endowment set assists individuals to produce goods and services for the household.

Off-farm Sources of Income Before and After Expropriation

The off-farm sources of income include pension, hiring of farm labour, savings and investment (Perret et al., 2005). Labour was the dominant off-farm source of income before (41.5%) and after (41.4%) expropriation (Table 31). Investment was the second highest off-farm source of income before (27.0%) and after (23.4%) expropriation. Labour was the main off-farm source of income before (42.6%) and after (43.9%) expropriation for project affected persons in the Ellebelle District. In the Nzema East Municipality, investment (37.5%) topped

the off-farm sources of income with labour (29.2%) occupying the second spot before expropriation. However, labour (35.3%) displaced investment (29.4%) to be the dominant off-farm source of income after expropriation.

Table 31: Off-farm Sources of Income Before and After Expropriation by Location

Off-farm Sources	Period	Ellembelle		Nzema East		Total	
		N	%	N	%	N	%
Labour	Before	82	42.6	21	29.2	103	41.5
Investment		40	22.7	27	37.5	67	27.0
Renting		30	17.0	17	23.6	47	19.0
LEAP		11	6.2	3	4.2	14	5.6
Pension		9	5.1	3	4.2	12	4.8
Others		4	2.3	1	1.4	5	2.0
Total		176*	100.0	72*	100.0	248*	100.0
Labour	After	75	43.9	24	35.3	99	41.4
Investment		36	21.1	20	29.4	56	23.4
Renting		28	16.1	20	29.4	48	20.1
LEAP		14	8.2	0	0	14	5.9
Pension		10	5.8	2	2.9	12	5.0
Others		8	4.7	2	2.9	10	4.2
Total		171*	100	68*	100	239*	100

Source: Field survey (2020)

*Multiple responses

At a focus group discussion (29th June, 2020) with men in the Nzema East Municipality, they revealed that some displaced persons earned their incomes from working on cocoa and rubber farms as labourers. This implies that project affected persons basically relied on their manpower to earn income which is consistent with the assertion of the entitlement theory (Ikejiaku, 2009), that households who fail to do investment in their members may find it difficult to earn incomes from skill driven jobs.

Labour was the main off-farm source of income before (38.0%) and after (39.8%) expropriation for males (Table 32). Similarly, labour was the highest off-farm source of income before (49.4%) and after (44.9%) expropriation for female. There was a drop of 1.8 percent and 4.5 percent in labour source of income for males

Table 32: Off-farm Sources of Income Before and After Expropriation by Sex

Non-farm Sources	Before				After			
	Male		Female		Male		Female	
	N	%	N	%	N	%	N	%
Labour	65	38.0	38	49.4	64	39.8	35	44.9
Investment	47	27.5	20	26.0	39	24.2	17	21.8
Renting	37	21.6	10	13.0	34	21.1	14	17.9
Pension	10	5.8	2	2.6	11	6.8	3	3.8
LEAP	9	5.3	5	6.5	7	4.3	5	6.5
Others	3	1.8	2	2.6	6	3.7	4	6.4
Total	171*	100.0	77*	100.0	161*	100	78*	100

Source: Field survey (2020)

*Multiple responses

and females respectively. Similarly, investment source of income for both male and female dropped by 3.3 percent and 4.2 percent respectively. Renting of houses and

shops by people who need accommodation source of income for males increased by 0.5 percent while the female's share went up by 4.9 percent. Renting of houses and shops source of income appeared to compliment the decline in income from labour and investment sources experienced by females. The influx of workers into the area might have accounted for the rise in renting of accommodation source of income. In spite of the changes that occurred, labour still dominated the composition of the off-farm income-mix for both males and females.

Annual Income Before and After Expropriation

The study investigated the before and after annual incomes of displaced persons to ascertain if the expropriation exercise led to decline or rise in incomes. The Cedi to Dollar equivalent in the year 2010 (1.4865 GH¢ =1 USD) and 2020 (5.8995 GH¢=1 USD) [BOG, 2010] has been quoted to aid the determination of the annual incomes for the two periods under consideration. The maximum annual income for the respondents before expropriation was GH¢7,500.00 (5,045.41USD) with a minimum income of GH¢ 2,000.00 (1,345.44 USD), and a mean income of GH¢2,634.00 (1,771.95 USD) (Table 33). The maximum income after expropriation was GH¢18,500.00 (3,135.86 USD) with a minimum income of GH¢3,000.00 (508.52 USD) and a mean income of GH¢5,856.00 (992.63 USD). The nominal value of the Cedi for the maximum and minimum annual incomes of displaced persons increased by 59.5 percent and 33.3 percent respectively. In real terms (Dollar denominated), however, the maximum and minimum annual incomes of displaced persons declined by 37.9 percent and 62.2 percent respectively. This implies that displaced persons' purchasing power might not be able to afford similar

Table 33: Annual Income for Displaced persons Before and After Expropriation by Location and Sex

Ann. In.	Respondents Characteristics	Min	Max	Mean	Median	Std Dev.	U	r	
		(Gh¢)	(Gh¢)	(Gh¢)	(Gh¢)	(Gh¢)	P(Value)	(z)	
Before	Location	Ellembelle	2000	7500	2712	2100	1151	8470	0.023
		Nzema East	2000	5900	2462	2200	605	0.690	-0.399
		Total	2000	7500	2634	2100	1018		
	Sex	Male	2000	7500	2649	2100	1077	9099	0.017
		Female	2000	6500	2606	2100	905	0.767	-0.296,
		Total	2000	7500	2634	2100	1018		
After	Location	Ellembelle	3000	18500	6169	4800	3948	6955.5	0.16
		Nzema East	3000	16000	5168	3500	3415	0.06	-2.749
		Total	3000	18500	5856	4000	3812		
	Sex	Male	3000	18500	6139	4250	4035	8108	0.0108
		Female	3000	17500	5340	3600	3326	0.074	-1.785
		Total	3000	18500	5856	4000	3812		

Source: Field survey (2020) Ann=Annual In=Income

quantities of goods and services they were enjoying before the expropriation took place.

In the Ellembelle District, the maximum annual income of the respondents before expropriation was GH¢7,500.00 with a minimum income of GH¢2,000.00 and a mean of GH¢2,712.00. The Nzema East Municipality reported before-expropriation maximum annual income of GH¢5,900.00 with a minimum income of GH¢3,000.00, and a mean of GH¢2,462.00. In comparing the means, it was noticed that there was a difference between that of Ellembelle District and Nzema East Municipality with Ellembelle District having the higher figure. The difference in annual income before expropriation by location was statistically insignificant as shown by a Mann Whitney U value of 8,470 with $p\text{-value} = 0.690$ which is higher than 0.05.

In the Ellembelle District, the highest annual income of the respondents after expropriation was GH¢18,500.00 with a minimum income of GH¢3,000.00 and a mean of GH¢6,169.00. The Nzema East Municipality recorded after-expropriation highest annual income of GH¢16,000.00 with the lowest income of GH¢3,000.00, and a mean income of GH¢5,168.00. In comparing the mean incomes, it was realised that the respondents of Ellembelle District had more than their counterparts in Nzema East Municipality. A Mann-Whitney U value of 6,955.5 ($p\text{-value} = 0.06$) revealed statistically insignificant association between annual income after expropriation and location of origin of displaced persons.

The before-expropriation maximum annual income for men was GH¢7,500.00 with a minimum income of GH¢2,000.00, and a mean income of

GH¢2,649.00. Regarding the annual income for women before expropriation, the results show that the maximum income was GH¢6,500.00 with a minimum income of GH¢2,000.00, and a mean of GH¢2,606.00. When the means were compared that of men was higher than women. The difference in annual income before expropriation by sex was statistically insignificant as shown by a Mann Whitney U value of 9,099 with p-value = 0.767 which is higher than 0.05.

The highest annual income for men after expropriation was GH¢18,500.00 with the lowest income of GH¢3,000.00 and a mean income of GH¢6,139.00. The women recorded after-expropriation highest annual income of GH¢17,500.00 with the lowest income of GH¢3,000.00 and a mean income of GH¢5,340.00. In comparing the means, it was detected that the mean income of men was higher than the mean income of women. Comparing these results with the “before expropriation” the data indicated that the mean income for men was higher than women. The differences in annual income after expropriation by sex was statistically insignificant as shown by Mann Whitney U value of 8,108 with p-value = 0.074.

The implication is that the income inequality gap that existed between men and women over the years can be widened, and push women into poverty if the acquiring institution does not deliberately empower them through its corporate social responsibility fund which agrees with the assumption underlying the structural theory of poverty (Abdulai & Shamsiriy, 2014), that implementation of some state policies can worsen the plight of sections of the society.

Access to Other Sources of Income

The study sought to investigate if the displaced persons had access to other sources of income. The results show that 68.9 percent of the 285 respondents indicated that they had no access to other sources of income (Table 34). In the Ellembelle District, 74.5 percent of the respondents said they did not have access to other sources of income. Similar results were obtained from the displaced persons in the Nzema East Municipality as 56.3 percent of the respondents indicated that they had no access to other sources of income.

The educational analysis shows that 47.6 percent of displaced persons with tertiary qualification indicated that they had access to other sources of income while between 25.0 percent and 32.7 percent of displaced persons with no formal education to SHS level revealed they had access to other sources of income. The displaced persons with tertiary educational background appeared to have access to other sources of income to complement their regular incomes.

The differences in access to other sources of income by location and educational background were statistically significant as shown by chi-square value of 1.83(p-value = 0.000) and 1.76 (0.000) which are lower than 0.05. The implication is that the majority (68.9%) of displaced persons relied on their main source of income for sustenance. The implication is that any action that destabilised this favourable living conditions for the project affected persons could result in poverty which is consistent with the proposition of the structural theory of poverty (Abdulai & Shamshiry, 2014), that certain state policies can deprive people of their source of income, and make them poor.

Table 34: Access to Other Sources of Income by Location and Educational Level

Other Sources of Income	Location		Educational Level												Total			
	Ellembelle		Nzema East		No Formal Education		Primary		Middle		JHS		SHS		Tertiary		Total	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Access	50	25.5	38	43.7	12	29.3	16	32.7	29	29.9	16	29.1	5	25.0	10	47.6	88	31.1
Do not access	146	74.5	49	56.3	29	70.7	33	67.3	68	70.1	39	70.9	15	75.0	11	52.4	195	68.9
Total	196	100.0	87	100.0	41	100.0	49	100.0	97	100.0	55	100.0	20	100.0	21	100.0	283	100.0
χ^2 (P-Value)	1.83* (0.000)				1.76* (0.000)													
Phi	0.80				0.78													

Source: Field survey (2020)

*Statistically significant

Other Sources of Income

The other sources of income available to displaced persons were remittances, gifts, and loans. The results show that remittances (63.4%) constituted the major source of other incomes to project affected persons with gifts and loans recording 23.6 percent and 13.0 percent respectively (Table 35). In the Ellembelle District, the respondents sourced more of their other incomes from remittance (63.5%). Similarly, in the Nzema East Municipality, 63.2 percent of the respondents obtained their other sources of income from remittance. The difference in other incomes by location of origin was statistically insignificant as indicated by a chi-square value of 0.44 (p-value = 0.804). The analysis of the major occupation of displaced persons revealed that with the exception of teaching (33.3%), project affected persons who are into fishing (100%), farming (63.3%), trading (71.4%) and artisans (58.8%) received between 58.8 percent and 100 percent of their other incomes from remittance. The implication is that displaced persons relied on remittances as additional source of income which is consistent with the findings of Batool et al. (2017) in Pakistan that, households whose members migrate benefit from diversified sources of income.

Annual Receipt from Other Sources of Income

Incomes from other sources tend to supplement the main incomes earned by displaced persons. The results show that the maximum income from additional sources was GH¢7,000.00, with a minimum income of GH¢200.00 and a mean income of GH¢966.00 (Table 36). In the Ellembelle District, the maximum income from additional sources was GH¢7,000.00 with a minimum income of GH¢200.00

Table 35: Displaced persons Other Sources of Income by Location and Major Occupation

Other Incomes	Location		Major Occupation												Total	
	Ellembelle		Nzema		Farming		Fishing		Trading		Teaching		Artisans		N	%
	N	%	Fre	%	N	%	N	%	N	%	N	%	N	%		
Remittances	54	63.5	24	63.2	55	63.3	2	100.0	10	71.4	1	33.3	10	58.8	78	63.4
Gifts	19	22.4	10	26.3	23	26.4	0	0.0	3	21.4	1	33.3	2	11.8	29	23.6
Loans	12	14.1	4	10.5	9	10.3	0	0.0	1	7.2	1	33.3	5	29.4	16	13.0
Total	85	100.0	38	100.0	87	100.0	2	100.0	14	100.0	3	100.0	17	100.0	123	100.0
χ^2 (P-Value)	0.44 (0.804)		Not applicable													
Phi	0.06															

Source: Field survey (2020)

Table 36: Annual Receipt from Other Sources of Income by Location and Sex

Respondents		Min	Max	Mean	Median	Std Dev.	U	r	
Characteristics		(Gh¢)	(Gh¢)	(Gh¢)	(Gh¢)	(Gh¢)	P(Value)	(z)	
Annual Receipt	Location	Ellembelle	200	7000	995	500	1273	1610	0.002
		Nzema East	200	5000	900	500	1068	0.978	-0.028
		Total	200	7000	966	500	1210		
	Sex	Male	200	4000	904	500	931	1691	0.07
		Female	200	7000	106	500	1535	0.419	-0.880
		Total	200	7000	966	500	1210		

Source: Field survey (2020)

and a mean income of GH¢995.00. The Nzema East Municipality recorded maximum additional income of GH¢ 5,000.00 with a minimum income of GH¢ 200.00 with a mean of GH¢900. The income from additional sources was higher in the Ellebelle District than in the Nzema East Municipality but the difference was statistically insignificant as shown by a Mann Whitney U value of 1,610 with $p\text{-value} = 0.978$.

The males received maximum additional income of GH¢4,000.00 with a minimum income of GH¢200.00, and a mean income of GH¢904.00. The females received additional income ranging from GH¢200.00 to GH¢7,000 with a mean of GH¢ 1056.00. The comparison of means showed that the females had more income from additional sources than the male but the difference as evidenced by a Mann-Whitney U value of 1,691 ($p\text{-value} = 0.419$) was statistically insignificant.

Chapter Summary

The chapter examined changes in income portfolio activities (farm, non-farm and off-farm) displaced persons were engaged in before and after expropriation. The changes that occurred were not drastic as farm sources of income dominated the household income portfolio before and after expropriation. Though, in nominal terms displaced persons appeared to have experienced a rise in incomes, the real value of their incomes got reduced. Displaced persons earned additional incomes to supplement their household income through remittances.

CHAPTER EIGHT

AFFECTED HOUSEHOLDS' LIVELIHOOD STRATEGIES BEFORE AND AFTER EXPROPRIATION

Introduction

The chapter describes affected households' livelihood strategies before and after expropriation. Among the key issues discussed include livelihood strategies before expropriation, livelihood strategies after expropriation, ownership of the land, mode of acquisition of the land, parcels of land compulsorily acquired, sizes of compulsory acquired parcels of land, and types of land use of the compulsorily acquired land.

Livelihoods Strategies Before and After Expropriation

Households in rural communities engage in diverse livelihood strategies classified as farm, off-farm and non-farm (Alemu, 2012). As a result of that, the study sought to examine differences in affected households' livelihood strategies before and after the compulsory acquisition order was issued. The analysis per issue was based on varied sample sizes because of multiple responses and in some instances, non-applicable items. The livelihood strategies households adopted before expropriation were farm (55.2%), non-farm (26.3%), and off-farm (18.5%) with the after-expropriation results of farm (50.3%), non-farm (28.8%) and off-farm (20.9%) (Table 37). Farm livelihood strategy lost 4.9 percent to non-farm (2.5%) and off-farm (2.4%) after expropriation. In the Ellebelle District, farm was the major livelihood strategy before (55.3%) and after (47.8%) expropriation. Farming was the major livelihood strategy households in the Nzema East Municipality adopted before (55.1%) and after (55.1) expropriation.

Table 37: Livelihood Strategies Before and After Expropriation by Location

Livelihood Strategies	Period	Ellembelle		Nzema East		Total	
		N	%	N	%	N	%
Farm	Before	505	55.3	234	55.1	749	55.2
Non-farm		233	25.5	120	28.2	352	26.3
Off-farm		175	19.2	71	16.7	248	18.5
Total		913*	100.0	425*	100.0	1338*	100.0
Farm	After	361	47.8	211	55.1	572	50.3
Non-farm		224	29.7	104	27.2	328	28.8
Off-farm		170	22.5	68	17.7	238	20.9
Total		755*	100.0	383*	100.0	1143*	100.0

Source: Field survey (2020)

The locational results show that while farm livelihood strategy dropped by 7.5 percent in the Ellembelle District, that of Nzema East remained unchanged. Farming still dominated with over 50 percent share of the livelihood strategies of project affected persons. This result is similar to the finding of Thao (2016) in Vietnam that, farming constituted the main livelihood strategy for displaced persons. The implication is that the structure of expropriated households' livelihood strategies did not change.

Livelihood sources according to IFAD (2012) include fishing, livestock farming, crop farming, wage labour, and food vending among others. The study, therefore, examined the livelihood sources under the broad livelihood strategies of farm, non-farm and off-farm.

Farm Livelihood Sources Before and After Expropriation

The farm livelihood activities broadly consist of crops and livestock production (Davis et al., 2017). The dominant farm livelihood sources before expropriation were food crops (56.3%) and tree crops (27.8%) out of multiple responses of 739 (Table 38). The rest were farm animals (8.3%), fish farming (4.1%) and poultry (3.5%). The after-expropriation farm livelihood sources were food crops (58.6%) and tree

Table 38: Farm Livelihood Sources Before and After Expropriation by Location

Farm livelihood sources	Period	Ellembelle		Nzema East		Total	
		N	%	N	%	N	%
Food crops	Before	273	54.3	143	60.6	416	56.3
Tree crops		142	28.2	64	27.1	206	27.8
Farm animals		52	10.3	9	3.8	61	8.3
Fish farming		22	4.4	8	3.4	30	4.1
Poultry		14	3.8	12	5.1	26	3.5
Total		503*	100.0	236*	100.0	739*	100.0
Food crops	After	206	56.9	129	61.4	335	58.6
Tree crops		76	21.0	57	27.1	133	23.3
Farm animals		40	11.1	9	4.3	49	8.6
Fish farming		14	3.9	5	2.4	19	3.3
Poultry		26	7.1	10	4.8	36	6.2
Total		362*	100	210*	100.0	572*	100.0

Source: Field survey (2020)

*Multiple responses

crops (23.3%) out of multiple responses of 572. The rest were farm animals (8.6%), fish farming (3.3%), and poultry (6.2%). There were after-expropriation increases in food crops (0.5%), farm animals (0.3%) and poultry (2.7%) while decreases were experienced in tree crops (4.5%) and fish farming (0.8%). The changes that happened did not alter the composition of the farm livelihood sources as crops (81.9%) showed dominance over livestock production (18.1). This result is similar to the findings of Thao (2016) in Vietnam that crop farming accounted for about 80 percent of the affected households' jobs.

In the Ellebelle District, the farm livelihood sources before expropriation were food crops (54.3%) and tree crops (28.2%), with the after-expropriation results of 56.9 percent of food crops and 21.0 percent of tree crops. In the Nzema East Municipality, the dominant farm livelihood sources before expropriation were food crops (60.6 %) and tree crops (27.1%) with the after-expropriation results of 61.4 percent of food crops, and 27.0 percent of tree crops. In the Ellebelle District and Nzema East Municipality, food crops went up by 2.6 percent and 0.8 percent while tree crops declined by 7.2 percent and 0.1 percent respectively. Though, the drop in tree crops might not be drastic (between 0.1% and 7.2%), they are a more reliable and stable form of farm livelihood source when compared with food crops.

The before-expropriation farm livelihood sources for the males were 52.6 percent of food crops and 29.6 percent of tree crops while the after-expropriation results were food crops (54.8%) and tree crops (25.1%) (Table 39). The changes were 2.2 percent increase in food crops and 4.5 percent decrease in tree crops. The females recorded before-expropriation farm livelihood sources of food crops (64.1%) and tree crops (25.1%)

Table 39: Farm Livelihood Sources Before and After Expropriation by Sex

Farm Sources	Before				Female			
	Male		Female		Male		Female	
	N	%	N	%	N	%	N	%
Food crops	254	52.6	164	64.1	208	54.8	127	65.8
Tree crops	143	29.6	64	25.0	95	25.1	38	19.7
Farm animals	45	9.3	14	5.5	33	8.7	16	8.3
Poultry	22	4.6	6	2.3	28	7.4	8	4.1
Fish farming	19	3.9	8	3.1	15	4.0	4	2.1
Total	483*	100.0	256*	100.0	379*	100.0	193*	100.0

Source: Field survey (2020)

*Multiple responses

while after expropriation results were food crops (65.8%) and tree crops (19.7%). The males experienced 2.2 percent increase in food crops and 4.5 percent decrease in tree crops while the females recorded 1.7 percent rise in food crops and 5.3 percent drop in tree crops. Crop farming represents a major job for both males (79.9%) and females (85.5%).

The results did not only show that females lost more of their tree crops and gained less of food crops jobs when compared with their male counterpart but also male dominance in tree crops cultivation. During focus group discussion (17th June, 2020) with men in the Nzema East Municipality, it was revealed that the men clear the land and plant the tree crops, and afterwards allocate portions to the women to cultivate food crops. The discussants indicated

that this arrangement enables the women to have access to parcels of land to grow food crops to feed the household, and also cater for their basic necessities while at the same time maintaining the tree crops on the farms. The implication is that the practice addresses the issue of women access to land, and also affords the men free labour.

Non-farm Livelihood Sources Before and After Expropriation

The non-farm livelihood sources comprise manufacturing, handicrafts, processing, repairs, construction, mining, transportation, and trade in the rural areas (Davis et al., 2017). Trade was the highest non-farm livelihood source before (48.6%) and after (48.5%) expropriation (Table 40). The next two dominant non-farm livelihood sources before expropriation were artisans (19.3%) and local manufacturing (10.2%), with the after-expropriation results of 19.3 percent of artisans and 8.5 percent of local manufacturing. The changes that occurred were 0.1 percent increase in trade, none for artisans, and 1.7 percent drop in local manufacturing. The structure of the non-farm livelihood sources did not change as trade still captures the highest share of about 48 percent. This may be due to the fact that changing from trade to any of the other non-farm sectors might require the acquisition of some special skills that might take some time to achieve which is consistent with the assertion of the entitlement theory (Ikejiaku, 2009), that individuals' capacity determines the kinds of job they can undertake.

In the Ellembelle District, trade was the dominant non-farm livelihood source before (45.7%) and after (46.4%) expropriation. Trade also constituted the major non-farm livelihood source before (54.2%) and after (52.9%) expropriation for project affected persons in the Nzema East Municipality. The

Ellembelle District recorded after expropriation increases in trade (0.7%), artisans (0.7%) and formal (2.4%) and decreases in transportation (1.5%), beautician business (2.0%) and mining (0.3%). The increases in trade and artisan non-farm sources may be attributed to the various capacity building interventions displaced persons have had from oil and gas companies and NGOs as well as job opportunities that have been created by some oil and gas companies in the formal sector of the local economy.

Table 40: Non-farm Livelihood Sources Before and After Expropriation by Location

Non-farm Sources	Period	Ellembelle		Nzema East		Total	
		N	%	N	%	N	%
Trade	Before	106	45.7	65	54.2	171	48.6
Artisan		49	21.2	19	15.8	68	19.3
Local manufacturing		24	10.3	12	10.0	36	10.2
Transportation		20	8.6	7	5.8	27	7.7
Beautician business		13	5.6	13	10.8	26	7.4
Formal sector		11	4.7	4	3.4	15	4.3
Mining		9	3.9	0	0.0	9	2.5
Total		232*	100.0	120*	100.0	352*	100.0
Trade	After	104	46.4	55	52.9	159	48.5
Artisan		49	21.9	14	13.5	63	19.3
Local manufacturing		23	10.3	5	4.8	28	8.5
Transportation		16	7.1	6	5.8	22	6.7
Beautician business		8	3.6	15	14.4	23	7.0
Formal sector		16	7.1	4	3.8	20	6.0
Mining		8	3.6	5	4.8	13	4.0
Total		224*	100.0	104*	100.0	328*	100.0

Source: Field survey (2020)

*Multiple responses

At a focus group discussion (8th June, 2020) with women in the Ellembelle District, it emerged that the discussants and some members of their

households have benefitted from alternative livelihood training programmes in soap making, pastries, and beadmaking from UCSOND (an NGO) and Eni Ghana (Oil and Gas Company). An interview (6th July,2020) with an assemblyman in the Ellebelle District revealed that some of the community members have been employed by Eni Ghana, Quantum Ghana, and Ghana Gas Company. He, however, indicated that the number of people that were employed by these oil and gas companies were far below expectations.

In the Nzema East Municipality, after expropriation, increases were observed in beautician business (3.6%), formal sector (0.4%), and mining (4.8%) with decreases in trade (1.3%) artisans (2.3%) and local manufacturing (5.6%). The rise in the mining activities can be attributed to the small-scale mining operations in the Municipality.

During focus group discussion (9th June,2020) with men in the Nzema East Municipality, the discussants revealed that the delay in land compensation payment and non-availability of land for tree crops farming was due to the fact that large tracks of their land had been occupied by the Ghana Rubber Estate Plantations have pushed some of them into small scale mining and “galamsey” operation. Displaced persons had been compelled to engage in “galamsey” due to the fact that the acquisition had compounded the existing non-availability of land issue.

Trade was the major non-farm livelihood source before (38.8%) and after (40.6%) expropriation for the males (Table 41). Similarly, trade constituted the dominant non-farm livelihood source before (69.6%) and after (66.7%) expropriation for the females. The males recorded 1.8 percent increase in trade while female experienced a drop of 2.9 percent. Mining recorded after

expropriation increase of 4.3 percent for the female and 0.5 percent for the male. The suggestion is that the female entered into the domain of the male dominated mining sector.

The analysis also shows that over 25 percent of females more than males derived their non-farm income from trade. During focus group discussion (10th June, 2020) with women in the Nzema East Municipality, the discussants revealed that most of them engaged in food vending and other businesses to complement their farm livelihood jobs. The implication is that women engaged in diversified livelihood strategies to earn a living which is consistent with the outcome of the conceptual framework that displaced persons may experience improved livelihood outcomes.

Table 41: Non-farm Livelihood Sources Before and After Expropriation by Sex

Non-farm Sources	Before				After			
	Male		Female		Male		Female	
	N	%	N	%	N	%	N	%
Trade	92	38.8	80	69.6	93	40.6	66	66.7
Artisan	59	24.9	9	7.8	53	23.1	10	10.0
Local manufacturing	28	11.8	8	7.0	23	10.0	5	5.1
Transportation	23	9.7	4	3.5	20	8.7	2	2.1
Beautician business	16	6.8	10	8.7	15	6.6	8	8.0
Public/civil service	12	5.0	3	2.6	17	7.4	3	3.0
Mining	7	3.0	1	0.8	8	3.5	5	5.1
Total	237*	100.0	115*	100.0	229*	100.0	99*	100.0

Source: Field survey (2020)

*Multiple responses

Off-farm Livelihood Sources Before and After Expropriation

Off-farm livelihood sources comprise all agricultural-related activities that occur beyond the farm (Davis et al., 2017). Labour was the major off-farm livelihood source before (41.3%) and after (41.6%) expropriation (Table 42). This was followed by investment, with before and after expropriation results of 27.1 percent and 23.5 percent, respectively. There were after expropriation increases in labour (0.3%) and renting (1.2%) with a decrease in investment (3.6%). The changes did not alter the composition of the off-farm livelihood strategies as labour constituted over 41 percent of the portfolio.

Table 42: Off-farm Livelihood Sources by Location Before and After Expropriation

Off-farm Sources	Period	Ellembelle		Nzema East		Total	
		N	%	N	%	N	%
Labour	Before	82	46.6	20	28.2	102	41.3
Investment		40	22.7	27	38.0	67	27.1
Renting		30	17.1	17	23.9	47	19.0
Others		24	13.6	7	9.9	31	12.6
Total		176*	100.0	71*	100.0	247*	100.0
Labour	After	75	44.1	24	35.3	99	41.6
Investment		36	21.2	20	29.4	56	23.5
Renting		28	16.5	20	29.4	48	20.2
Others		31	18.2	4	5.9	35	14.7
Total		170*	100	68*	100	238*	100

Source: Field survey (2020) *Multiple responses

Labour emerged as the dominant off-farm livelihood source before (46.6%) and after (44.1%) expropriation in the Ellembelle District. In the Nzema East Municipality, before-expropriation results show that investment (38.0%) dominated the off-farm livelihood sources with labour (28.2%) taking the second spot. However, labour (35.3%) overtook investment (29.4%) to be the dominant off-farm livelihood source after expropriation. The dominance of labour in both the Ellembelle District and the Nzema East Municipality may be attributed to the presence of rubber plantations, coconut farms and oil palm which offer jobs to the inhabitants.

In the Ellembelle District, there were decreases in labour (0.5%), investment (1.5%) and renting (0.6%) while the Nzema East Municipality encountered increases in labour (7.1%) and renting (5.5%) with drop in investment (8.6%). The increase in labour in the Nzema East Municipality can be linked to the presence of Ghana Rubber Estate Ltd which offers direct employment such as clearing and tapping, and indirect jobs such as nursing and supply of seedlings to out grower rubber farmers. At a focus group discussion (16th June, 2020) with women in the Nzema East Municipality they revealed that some of them did not only farm but also offered their services on rubber plantation farms for a fee. This result agrees with the findings of Nguyen et., al (2017), in Central Vietnam that displaced persons diversified their livelihood sources by engaging in farming and other casual jobs.

Labour was the major off-farm livelihood source before (38.0%) and after (40.0%) expropriation for males (Table 43). Similarly, labour was the highest off-farm livelihood source before (50.0%) and after (44.9%) expropriation for females. There were after expropriation increase in labour

(2.0%) and decreases in investment (3.1%) and renting (3.7%) for the male while decreases were observed in labour (5.1%) and investment (3.2%) with renting (4.7%) recording a rise.

Table 43: Off-farm Livelihood Sources Before and After Expropriation by Sex

Non-farm Sources	Before				After			
	Male		Female		Male		Female	
	N	%	N	%	N	%	N	%
Labour	65	38.0	38	50.0	64	40.0	35	44.9
Investment	47	27.5	19	25.0	39	24.4	17	21.8
Renting	37	21.6	10	13.2	34	21.2	14	17.9
Others	22	12.9	9	11.8	23	14.4	12	15.4
Total	171*	100.0	76*	100.0	160*	100	78*	100

Source: Field survey (2020)

*Multiple responses

Reasons for the Choice of Livelihood Strategies

The endowments (tangible and intangible) of households determine, to a large extent, the choice of livelihood strategies they may adopt (Hanrahan, 2015). The results show that displaced persons indicated physical ability (20%), ability to raise funds (17.4%), presence of opportunity (12.4%), sex (10.3%), and job experience (10.0%) (Table 44), as some of the reasons for selecting certain livelihood strategies. The displaced persons in the Ellembelle District recorded physical ability (18.6%), ability to raise funds (18.6%), presence of opportunity (14.2%), and sex (11.2%), as some of the major reasons that informed their choice of livelihood strategies. In the Nzema East Municipality, the main considerations that went into the decision for the selection of

Table 44: Reasons for the Choice of Livelihood Strategies by Location and Sex

Reasons	Location				Sex				Total	
	Ellembelle		Nzema East		Male		Female		N	%
	N	%	N	%	N	%	N	%		
Physical ability	67	22.5	168	20.0	113	20.3	55	19.4	101	18.6
Ability to raise funds	45	15.5	146	17.4	96	17.2	50	17.6	101	18.6
Presence of opportunity	28	9.4	104	12.4	77	13.8	27	9.5	76	14.0
Sex	26	8.7	87	10.3	58	10.4	29	10.2	61	11.2
Job experience	36	12.1	84	10.0	54	9.7	30	10.6	48	8.8
Age	31	10.4	75	8.9	45	8.1	30	10.6	44	8.1
Ownership of assets	31	10.4	60	7.1	33	5.9	27	9.5	29	5.3
Technical training	15	5.0	43	5.1	33	5.9	10	3.5	28	5.2
Education	12	4.0	33	3.9	26	4.7	7	2.5	21	3.9
Wage	2	0.7	28	3.5	16	2.9	12	4.2	26	4.8
Others	5	1.7	13	1.3	6	1.1	7	2.5	8	1.5
Total	543*	100.0	298*	100.0	557*	100.0	284*	100.0	841*	100.0

Source: Field survey (2020)

*Multiple responses

livelihood activities were physical ability (22.5%), ability to raise funds (15.5%), job experience (12.1%), age (10.4%), and ownership of assets (10.4%).

Physical ability dominated the reasons that were given by project affected persons for choosing a particular livelihood strategy over the others. During focus group discussion (17th June, 2020) with males in the Nzema East Municipality, they revealed that most of them did not either attend school or ended their schooling at the basic level to support their parents on the farm. They indicated that, if you are illiterate, the cutlass is your pen, and the farm is your office. This probably explains why most of the displaced persons adopted farm as their main livelihood strategy over non-farm and off-farm livelihood strategies since they already have the required skills.

This result is consistent with the assumption underpinning the entitlement theory (Ikejiaku, 2009), that households which refuse to invest in the education of their members may not have the capability to engage in livelihood activities that require certain skill sets aside one's physical ability.

Male displaced persons chose physical ability (20.3%), ability to raise funds (17.2%), presence of opportunity (13.8%), and sex (10.4%) as some of the main reasons for selecting livelihood strategy (Table 44). Similarly, female project affected persons indicated physical ability (19.4%), ability to raise funds (17.6%), job experience (10.6%), age (10.6%), and sex (10.2%) as some of the considerations for choosing certain livelihood strategies. Physical ability represented the main reason for the choice of livelihood strategies for both males and females which is consistent with the findings of Batool et al. (2017)

in Pakistan, that human capital outweighs all other considerations involved in livelihood adaptation.

Alternative Livelihood Provided by Ghana Gas Company Limited

Companies are expected to purchase their social license through the provision of basic amenities, direct jobs and other livelihood opportunities to the community members in their areas of operation. The results show that 90.2 percent out of the 285 respondents indicated that they had not benefitted from any alternative livelihood ventures that had been put in place by Ghana Gas Company Ltd. Additionally, over ninety percent (94.7%), out of the 285 respondents revealed that none of their family members had been offered jobs by Ghana Gas Company Ltd.

During key informant interview (20th July,2020) with a staff of Ghana Gas Company Ltd in the Ellembelle District, he indicated that most of the displaced persons did not have the required skills to participate in the oil and gas sector. He, however, noted that the Company had made efforts to employ some inhabitants who met the minimum qualification requirements. The results affirm the findings of Ablo and Asamoah (2018) in Ghana that, displaced persons were without the requisite skills and experiences to secure jobs in the highly technical oil and gas industry. The inability of members of expropriated households to secure jobs due to the implementation of the compulsory land acquisition order is against the principle of social justice (UN, 2006).

Land Ownership Status

The Western Corridor Gas Infrastructure project affected mostly stool and family lands. Table 45 indicates that 69.0 percent of land expropriated was

owned by stools with the remaining 31.0 percent going for family ownership. While the Ellebelle District recorded 75 percent of stool lands, and 25 percent of family lands, that of Nzema East Municipality captured 58.4 percent of stool lands and 41.6 percent of family lands. The difference in land ownership status by location was statistically significant as indicated by chi-square value of 0.13 (p-value= 0.005) which is equivalent to 0.05.

Table 45: Land Ownership Status by Location

Land ownership	Ellebelle		Nzema East		Total		χ^2 (P-Value)	Phi
	N	%	N	%	N	%		
Stool	147	75.0	52	58.4	199	69.0	13.00*	0.21
Family	49	25.0	37	41.6	86	31.0	(0.005)	
Total	196	100.0	89	100.0	285	100.0		

Source: Field survey (2020)

*Statistically significant

At a key informant interview (20th June, 2020) with a staff of Lands Commission, Sekondi-Takoradi, he indicated that with the exception of Ghana Rubber Estate's expropriated land, the rest of the acquisitions were stool and family lands. The results affirm the findings of Ablo and Asamoah (2018) in Ghana, that most of the expropriated parcels of land were stool and family lands.

Means of Acquiring Land for Farming

The means through which displaced persons acquired land for farming purposes were through the chief, head of family, inheritance, gift, "abunsa", and abunu. The results show that inheritance (70%) was the major means of acquiring land. In both Ellebelle District and Nzema East Municipality, inheritance recorded 74.5 percent and 58.4 percent respectively (Table 46). At

Table 46: Means of Acquiring Land for Farming by Location and Sex

Means of Acquiring Land	Location				Sex				Total	
	Ellembelle		Nzema East		Male		Female		N	%
	N	%	N	%	N	%	N	%		
Inheritance	146	74.5	52	58.4	130	70.7	68	67.3	198	69.5
Head of Stool	24	12.2	13	14.6	22	12.0	15	14.9	37	13.0
Head of Family	10	5.1	9	10.1	12	6.5	8	7.9	19	6.7
Gift	8	4.1	8	9.0	11	6.0	4	4.0	16	5.6
Abusa	6	3.1	0	0.0	4	2.2	3	3.0	6	2.1
Abunu	1	0.5	4	4.5	3	1.6	2	2.0	5	1.8
Others	1	0.5	3	3.4	1	.5	1	1.0	4	1.4
Total	196	100.0	89	100.0	184	100.0	101	100.0	285	100.0

Source: Field Survey (2020)

a key informant interview (17th July, 2020) with a traditional ruler in the Ellembelle District, he indicated that in the past, land was in abundance so the indigenes mostly men appropriated to themselves any acreage of land their physical strength and resources could permit with little or no drink to the chief or the head of the family provided the person was either an indigene or a member of the land-owning family.

The suggestion is that most of the affected farmers held customary freehold title which provides use or occupation rights that devolve upon the occupier's successor, in perpetuity (Ollenu, 1962; Kassanga & Kotey, 2001). The implementation of compulsory land acquisition order can terminate the inherent succession plan, and deprive future generations of the use of the land which is consistent with the assertion of the eminent domain theory (Arya, 2019) that, the state has the authority to acquire private property for the common welfare of citizens, of course with the payment of compensation. However, the land compensation is paid to the chief or family head of the expropriated land by virtue of being the legal owner (though in trusteeship position) of the land.

Table 46 depicts that 70.7 percent and 67.3 percent of both males and females respectively, acquired their land holdings through inheritance. It was detected during focus group discussion (20th June, 2020) with women in the Ellembelle District that females mostly bequeathed their farmlands to their daughters and granddaughters. The discussants revealed that their grandmothers bequeathed to their mothers' parcels of land which were subsequently passed on to them which they also intended to give to their eldest daughters. Sadly, these parcels had been lost to the Ghana Gas acquisition. This implies that farmlands of women are mostly inherited by their female off-springs and that

compulsory land acquisition order can terminate this inheritance practice that makes farmland available to women to pursue their livelihood endeavours, and subsequently widen the inequality gap of access to land between men and women. This result ties in with the assumption underlying the structural theory of poverty (Abdulai & Shamsiriy, 2014), that some state policies can perpetuate marginalisation among sections of the society.

Registration of Title to Land

Land owners as well as companies and individuals who have interest in land are expected to register them with the Lands Commission of Ghana. About 80.2 percent out of the 283 respondents revealed that they had not registered their parcels of land with the Lands Commission (Table 47). In both the Ellembelle District and Nzema Municipality, 80.5 percent and 79.5 percent respectively had not registered their parcels of land with the Lands Commission. The analysis of the results based on the educational qualification of the respondents showed that over 70 percent of displaced persons had not registered their parcels of land. However, displaced persons with no formal education (29.3%) top the list of those who have registered their parcels of land. This is followed by project affected persons with tertiary (28.6%) and SHS (25.0%) qualifications. The implication is that the registration of parcels of land did not depend on the educational qualification of the person. The difference in registration of land by location and educational qualification were statistically significant as shown by chi-square values of 1.72 (p-value = 0.000) and 1.79 (p-value = 0.000) respectively.

During an interview (28th July, 2020) with an official of Lands Commission in Sekondi-Takoradi, he noted that some stools or families had not

**Table 47: Registration of Title to Land by Location and Educational Level**

Registration of Land	Location		Educational Level												Total			
	Ellembelle	Nzema East	No Formal Education	Primary	Middle	JHS	SHS	Tertiary										
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Registered	38	19.5	18	20.5	12	29.3	6	12.5	17	17.3	10	18.2	5	25.0	6	28.6	56	19.8
Not Registered	157	80.5	70	79.5	29	70.7	42	87.5	81	82.7	45	81.8	15	75.0	15	71.4	227	80.2
Total	195	100.0	88	100.0	41	100.0	48	100.0	98	100.0	55	100.0	20	100	21	100.0	283	100.0
χ^2 (P-Value)	1.72* (0.000)		1.79* (0.000)															
Phi	0.77		0.79															

Source: Field survey (2020)

*Statistically significant



done the statutory declaration for their parcels of land. The suggestion is that the issue of non-registration of parcels of land is not only limited to the displaced persons but also the owners of the land (stool or family).

However, an interview (7th July, 2020) with an opinion leader in the Nzema East Municipality revealed that apart from the fact that many of the people were ignorant of the consequences of non-registration of their interest in the parcels of land they held, the registration process was cumbersome as it took a lot of effort, time and money to have a parcel of land worked on. He also indicated that the Lands Commission's offices were sited at the regional capitals thereby depriving a large number of people access to their services. These issues might have accounted for the large number of displaced persons who could not submit their claims.

Land Holdings

The land holdings of displaced persons were examined to ascertain the extent of land loss to expropriated households. The maximum landholding was 120 acres with a minimum of 1 acre and a mean of 4 acres (Table 48). In the Ellembelle District, the maximum landholding was 120 acres with a minimum of 1 acre and a mean of 4 acres while in the Nzema East Municipality, the maximum landholding was 20 acres with a minimum of 1 acre and a mean of 3.2. In comparing the maximum, it is realised that the respondents of Ellembelle District had more Landholdings (120 acres) than the respondents in Nzema East Municipality (20 acres). However, the difference in displaced persons' landholdings by location was statistically insignificant as indicated by a Mann-Whitney U test value of 7,571 with $p =$ value of 0.09 which is higher than 0.05.

Table 48: Land Holdings by Location and Sex

	Respondents	Min.	Max.	Mean	Median	Std Dev.	U	r
	Characteristic	Acres	Acres	Acres	Acres	Acres	P(Value)	(z)
Location	Ellembelle	1.0	120.0	4.0	2.0	11.9	7,571	0.10
	Nzema East	1.0	20.0	3.2	2.0	3.5	0.09	-1.7
	Total	1.0	120.0	4.0	2.0	10.0		
Sex	Male	1.0	120.0	5.0	2.0	4.5	8162	13.6
	Female	1.0	39.0	3.2	2.0	4.5	0.107	-1.6

Source: Field survey (2020)

Landholdings were considered based on gender, and the results show that while the male respondents held maximum landholding of 120 acres with a minimum of 1 acre and a mean of 5 acres, the female respondents held maximum landholding of 39 acres with a minimum of 1 acre and a mean of 3.2 acres. In comparing the maximums, it is noticed that males have more landholdings (120 acres) as compared with female (39 acres). However, the difference in displaced persons' landholdings by sex was statistically insignificant as indicated by a Mann-Whitney U test value of 8162 with p-value of 0.107.

Land Use of Compulsorily Acquired Land

Farming, commercial and residential uses were identified as some of the land uses that were affected by the expropriation. Farming was the major (86.7%) land use that was affected by the compulsory land acquisition order. About 80.6 percent and 100 percent of the respondents in the Ellembelle and Nzema East Municipality respectively said that farming was the main land use that was affected by expropriation. This result is consistent with the findings of

Thao (2016) in Vietnam, that expropriation affected about 80 percent of farmlands.



Table 49: Land Use of Compulsorily Acquired Land by Location and Sex

Land Use	Location				Sex				Total	
	Ellembelle		Nzema East		Male		Female		N	%
	N	%	N	%	N	%	N	%		
Farming	158	80.6	89	100.0	159	86.4	88	87.1	247	86.7
Commercial	17	8.7	0	0.0	9	4.9	8	7.9	17	6.0
Unused	9	4.6	0	0.0	8	4.3	1	1.0	9	3.2
Residential	7	3.6	0	0.0	5	2.7	2	2.0	7	2.3
Others specify	5	2.6	0	0.0	3	1.6	2	2.0	5	1.8
Total	196	100.0	89	100.0	184	100.0	101	100.0	285	100.0

Source: Field survey (2020)

The gender-based results indicated that farming was the main land use for both males (86.4%) and females (87.1%) [Table 49]. This suggests that livelihoods of most expropriated households could be negatively affected if compensation payment was not sufficient which concurs with the assertion of the entitlement theory (Sen, 1986), that individuals that lose their income generating assets are likely to experience hunger.

Crops that were Affected

The study examined crops that were affected by the compulsory acquisition order. The results show that cassava (28.7%), plantain (19.2%), vegetable (19.2%), and oil palm (12.3%) were the major crops affected by expropriation (Table 50). In the Ellembelle District, cassava (30.8%), plantain (19.7%), vegetable (20.5%), and oil palm (15.0%), dominated crops that were affected by the compulsory land acquisition order while the respondents in the Nzema East Municipality recorded cassava (24.3%), plantain (18.3%), rubber (18.3%), and vegetable (16.5%) as the major crops.

During key informants' interview (22nd June, 2020) with an official of Ghana Gas Company in the Ellembelle District, he indicated that cassava was the most affected crop. The result is consistent with the findings of Nguyen et al. (2017) in Central Vietnam that, food crops suffered most of the destruction. This shows that implementation of compulsory land acquisition order can cause food shortage which agrees with the proposition underlying the entitlement theory (Verstegen, 2001), that households may experience hunger due to inadequate supply of food.

Male displaced persons indicated cassava (27.2%), plantain (17.9%), vegetable (17.9%), and oil palm (15.3%) are some of the crops that were

Table 50: Crops that were Affected by the Compulsorily Acquisition Order by Location and Sex

Crops	Location				Sex				Total	
	Ellembelle		Nzema East		Male		Female		N	%
	N	%	N	%	N	%	N	%		
Cassava	72	30.8	28	24.3	64	27.2	36	31.6	100	28.7
Plantain	46	19.7	21	18.3	42	17.9	25	21.9	67	19.2
Vegetable	48	20.5	19	16.5	42	17.9	25	21.9	67	19.2
Oil Palm	35	15.0	8	7.0	36	15.3	7	6.1	43	12.3
Rubber	11	4.7	21	18.3	22	9.4	10	8.8	32	9.2
Coconut	18	7.7	3	2.6	16	6.8	5	4.4	21	6.0
Cocoa	3	1.3	13	11.3	10	4.3	6	5.3	16	4.6
Others Specify	1	0.4	2	1.7	3	1.3	0	0.0	3	0.9
Total	234*	100.0	115*	100.0	235*	100.0	114*	100.0	349*	100.0

Source: Field Survey (2020)

*Multiple responses

affected by the compulsory land acquisition order (Table 50). Similar results were obtained for women as cassava (31.6%), plantain (21.9%), vegetable (21.9%), and rubber (8.8%) dominated crops that were affected by the expropriation. The results revealed that female crop farmers were more affected than males which can widen the economic inequality gap between men and women. This result is inconsistent with the principle of social justice (Devereux & McGregor, 2014).

Use of Unacquired Portion of the Land

The dangers associated with gas installations have meant that displaced persons keep their distance from the pipelines. The acquiring agencies usually pay the necessary compensations to ensure that displaced persons are kept away from possible danger that can occur. The issue is the usage of the unacquired portions that were not covered by the compensation claims. The results show that 95.0 percent out of the 285 respondents revealed that they did not put the unacquired portion of land to use. During an interview (22nd June, 2020) with a staff of Ghana Gas Company Limited in the Ellembelle District, he revealed that displaced persons had been advised to keep their distance from the gas pipeline in order to avoid possible explosion (A staff of Ghana Gas Company, 2020). The result is consistent with the findings of Syagga and Olima (1996) in Kenya that, displaced persons could not utilize the adjoining parcels of land because of exposure to gas pipelines.

Chapter Summary

Project affected persons' livelihood strategies were examined to ascertain if any changes had occurred as a result of the expropriation exercise.

It was found out that farm livelihood strategy was the most dominant with crops production constituting over eighty percent of the farm livelihood mix.



CHAPTER NINE

CHALLENGES ASSOCIATED WITH THE IMPLEMENTATION OF COMPULSORY LAND ACQUISITION ORDER

Introduction

The chapter deals with the key challenges that confronted the execution of compulsory land acquisition order particularly, issues that arose during the implementation of acquisition activities; mechanisms for addressing those issues, and outcomes of resolution of some of the concerns encountered.

General Challenges Associated with the Implementation of Compulsory Land Acquisition Order

The presence of challenges of any kind and/or magnitude encountered in implementing projects have the potential to adversely impact on the project beneficiaries or residents of host communities (Chiwele, 2010). These challenges may differ from the perspective of both the displaced persons and the implementing agencies (Ghana Gas and Lands Commission).

During key informant interview (19th June, 2020), an official of Lands Commission, Sekondi-Takoradi, indicated that staff of the Commission and displaced persons did not always concur on the acquisition issues sometimes from the identification of project affected persons to the payment of compensation. This implies that both displaced persons and implementing institutions faced challenges which is consistent with the findings of Akrofi and Whittal (2013) in Ghana that, the acquiring agencies and the land owners disagreed on a number of issues. The results agree with the conceptual

framework that challenges abound at every stage in the implementation of the compulsory land acquisition order.

Challenges Facing Displaced persons

The study sought to ascertain whether displaced persons were confronted with challenges or not. The results show that the majority (77.5%) of displaced persons encountered challenges during the implementation of the compulsory land acquisition order. In both the Ellembelle District (74.5%) and Nzema East Municipality (84.3%), the respondents indicated that they faced challenges.

Challenges associated with the implementation of compulsory land acquisition order have the potential to deprive displaced persons of their assets, and render them poor (Schiller, 1998). The main challenges displaced persons faced were inadequate knowledge about the acquisition before the work began, non-completion of the legal processes, delay in the payment of compensation and delay in the adjudication of land disputes (Table 51).

Table 51: Main Challenges Facing Displaced persons

Challenges	N	%
Inadequate knowledge before commencement	124	43.5
Non-completion of legal processes	67	23.5
Delay in compensation payment	53	18.6
Delay in Adjudication of dispute	41	14.4
Total	285	100.0

Source: Field survey (2020)

Inadequate Knowledge about the Acquisition before Work Started

Inadequate knowledge about the acquisition order was the main challenge displaced persons faced. Table 51 shows that 43.5 percent of project affected persons were not privy to the compulsory land acquisition order before the implementation commenced. During focus group discussion (26th June, 2020) with women in the Ellembelle District, it was revealed that the acquisition order first came to their notice when they saw earthmoving machines clearing the crops on their parcels of land. An official of Ghana Gas Company Limited during an interview (22nd June, 2020) in the Ellembelle District indicated that the scheduled date for the construction of the gas processing plant delayed leading to the crashing of some of the project activities, and in the process some of the works started without the active involvement of displaced persons. This implies that the Ghana Gas Company did not comply with the provisions of the State Lands Act, 1962, Act 125, and in the process abused the rights of displaced persons to the peaceful enjoyment of their property and food security.

Section 1 of the State Lands Act, 1962, Act 125, requires acquiring institutions to give a month's notice to the project affected persons before entering the acquired land. The displaced persons, according section 4 of the same act, have three months from the date of the publication of the acquisition instrument to submit in writing to the Minister responsible for Lands and Natural Resources indicating among other things the breaches that had happened. However, the project affected persons did not take advantage of this provision in the law to remedy the situation.

At a key informant interview with an Assemblyman in the Ellembelle District it was revealed that the officials of Ghana Gas Company Limited had contacted the Paramount Chief of Eastern Nzema Traditional Area about their intention to clear the land. This suggests that farmers who had their crops on the land were not contacted before their crops were destroyed. This result ties in with the findings of King and Sumbo (2015) that, structures were marked for demolition before the acquisition was brought to the attention of displaced persons. The result is inconsistent with the assertion of the citizens' participation theory (Smith, 2003) that, citizens must be actively involved in decisions that affect their livelihoods.

According to section 1 of the State Lands Act, 1962, Act 125, Ghana Gas Company was required by law to give a month's notice to the project affected persons before entering the land. The displaced persons, according section 4 of the same act, have three months from the date of the publication of the acquisition instrument to submit in writing to the Minister responsible for Lands and Natural Resources indicating the breaches that had happened. However, the project affected persons did not take advantage of this provision in the law to remedy the situation.

Non-Completion of the Legal Processes

The Lands Commission and Ghana Gas Company Limited have the responsibility to ensure that all the legal processes governing the acquisition of the land is implemented to the letter. About 23.5 percent of displaced persons revealed that the legal processes were not completed before work started on the land (Table 51). A key informant interview (11th July, 2020) with a chief in the Ellembelle District revealed that the Lands Commission delayed the publication

of the executive instrument for three years. The chief remarked: *“Isn’t it against our fundamental human right for Ghana Gas Company Limited to acquire our parcels of land in 2011 and have the Executive Instrument published in 2014?”*

This result concurs with the finding of Syagga and Olima (1996) in Kenya that, legal processes were not exhausted before occupation occurred.

A key informant interview (20th June, 2020) with an official of Lands Commission, Sekondi-Takoradi, revealed that the delay in the publication of the executive instrument was due to the fact that, initially a number of acquisition options were assessed of which expropriation was considered the most feasible. The implication is that the legal processes were not concluded before the acquiring agency moved in to occupy the land which is inconsistent with the propositions underlying the eminent domain theory (Schultz, 2009) that, occupation of the land must succeed date title changes hands to enable fair assessment of compensation.

Delay in the Payment of Compensation

Compensation is expected to restore displaced persons to the original position they were before the acquisition took place. Over 18 percent of the respondents indicated that compensation payment was delayed (Table 51). At a focus group discussion (12th July, 2020) with men in the Nzema East Municipality, the participants indicated that some of the displaced persons did not receive their compensation on time, while others had still not received their compensation which affirms the finding of King and Sumbo (2015) in Ghana that, compensation payment was delayed. The value of the cash compensation can depreciate with prolonged delay which may affect the purchasing power of displaced persons.

At a key informant interview (20th June, 2020) with an official of Lands Commission, Sekondi-Takoradi, it was indicated that the delay in the payment of compensation was due to the non-cooperative attitude of some displaced persons during the implementation of the acquisition order. This suggests that both displaced persons and the implementing institutions concede to the fact that delay occurred which is inconsistent with the assertion of the eminent domain theory (Reale, 2009) and the Constitution of Ghana (Government of Ghana, 1992) that, compensation payment must be prompt.

Delay in the Adjudication of Land Disputes by the High Courts

Dispute bordering on expropriation is expected to be expeditiously handled to enable project affected persons to receive their cash compensation on time to avoid unfavourable livelihood outcomes. About 14.4 percent of the respondents indicated that the cases at the High Court have been unduly delayed (Table 51). Men at a focus group discussion (11th July, 2020) in the Ellembelle District revealed that the court cases were characterised by rampant adjournments and high filing and legal fees. This was corroborated by an official of Lands Commission during key informant interview (20th June, 2020) in Sekondi-Takoradi. The official expressed similar sentiments, and hinted at efforts made by the Lands Commission to prevail on the litigants to opt for out of court settlement to enable them access their compensation.

This suggests that project affected persons can experience financial difficulty if the litigation persists which is consistent with the assumption underlying the structural theory of poverty (Jordan, 2004) that, state policies can create livelihood challenges for citizens.

Challenges Facing Implementing Institutions

Two main challenges facing implementing institutions were conflicting claims to same parcel(s) of land, and non-identification of title holders to some of the expropriated parcels of land. During key informants' interviews (19th June, 2020) with an official of Lands Commission in Sekondi-Takoradi, it was revealed that there were conflicting claims to the same parcel (s) of land by stools, families, and sometimes by members of the same family or stool which impeded progress of work. This might have contributed to the delay in compensation payment.

During focus group discussion (9th July, 2020) with men in the Ellembelle District, it was revealed that most of the cases in the High Court were as a result of conflicting claims between stools or families or among members of the same lineage. The implication is that there can be divisions among family members which ties in with the finding of King and Sumbo (2015) in Ghana that, compensation claims created disunity among family members. This suggests that the issue of conflicting claims is a challenge to both displaced persons and implementing institutions.

The issue of non-identification of title holders to some of the expropriated parcels of land was another challenge that confronted implementing institutions. An official of Lands Commission, Sekondi-Takoradi, noted that title holders to some of the expropriated parcels of land could not be traced for the processing and payment of claims. This implies that such title holders might not be able to negotiate for compensation since the period for the submission of claims had elapsed. The result is consistent with

the assertion of the structural theory of poverty (Bradshaw, 2006) that, state actions can deny citizens of opportunities.

Knowledge of Mechanisms for Reporting Challenges

The study sought to examine displaced persons' knowledge about mechanisms for reporting challenges. The results show that majority (72.2%) of the respondents had no knowledge about any mechanisms for reporting challenges (Table 52). The location and gender analysis as presented in Table 52 revealed that differences in knowledge of reporting mechanism by location and sex were statistically insignificant as shown by their respective chi-square values and p-values of 0.28 ($p = 0.594$) and 3.31 ($p = 0.069$). During key informant interview (20th June, 2020) with an official of Lands Commission, Sekondi-Takoradi, it was observed that several community meetings were held to sensitize project affected persons on the expropriation.

Table 52: Knowledge of Reporting Mechanism by Location and Sex

Respondents Characteristics	Have Knowledge		Have no Knowledge		Total		χ^2 (P- Value)	Phi	
	F	%	F	%	F	%			
	<hr/>								
Location	Ellembelle	52	26.5	142	73.5	196	100.0	0.28 (0.594)	-
	Nzema East	26	29.2	61	70.8	89	100.0		
	Total	78	27.8	203	72.2	281	100.0		
<hr/>									
Sex	Male	44	24.2	138	75.8	184	100.0	3.31 (0.069)	-
	Female	34	34.3	65	65.7	101	100.0		
	Total	78	27.8	203	72.2	281	100.0		

Source: Field survey (2020)

The implication is that the acquiring institutions shared information with displaced persons, which is consistent with the assertion of the third rung of citizen's participation theory (Beyir, 2013) that, public officials provide one-sided information without the opportunity for feedback. It might be possible that most displaced persons never understood the information that was communicated to them. This implies that displaced persons and implementing institutions never concurred on the knowledge of reporting mechanisms.

Channels for Reporting Challenges

The channels for reporting challenges were the chief's palace, the Lands Commission, the High Court, and the assembly members of the affected communities. Table 53 shows that the chief's palace was the major (53.8%) channel for reporting challenges. During key informants' interview (22nd June, 2020) with an official of Ghana

Table 53: Channels for Resolving Challenges

Channels	N	%
Chief's Palace	42	53.8
Lands Commission	18	23.1
High Court	13	16.7
Assemblyman	5	6.4
Total	78	100.0

Source: Field survey (2020)

Gas Company in the Ellebelle District, it was revealed that the official channels for reporting challenges were provided, which included the Complaints Unit of the Lands Commission and the High Court. The official said the chief's palace was added because of its proximity to the project affected persons. This suggests that both displaced persons and implementing

institutions agreed on the chief's place as the main channel for reporting challenges.

It was revealed that about 53.2 percent of the respondents availed themselves of the channels for resolving challenges to complain about some aspects of the implementation of the compulsory land acquisition order. During key informant interview (22nd June, 2020) with an official of Lands Commission in Sekondi-Takoradi, it came up that that, issues bordering on demarcation of boundaries to the payment of compensation were received from displaced persons. This implies that both displaced persons and implementing institutions concurred that complaints were made.

Status of Complaints Resolution

The speedy resolution of complaints by implementing institutions can enable displaced persons to have access to their compensation. Table 54 shows that some of the respondents had their complaints either partially resolved (42.2%) or not resolved (42.9%). While in the Ellembelle District, 46.7 percent of the respondents had their complaints partially resolved, the respondents in the Nzema East Municipality had 50 percent of their complaints not resolved. This suggests that most of the complaints that were made by project affected persons were not been addressed.

During focus group discussion (9th July, 2020) with men in the Ellembelle District, it was revealed that most of the complaints were partially resolved. However, an official of Ghana Gas Company indicated that with the exception of the cases in court, all other complaints were resolved. This implies that displaced persons and implementing institutions never concurred on the outcome of the complaint's resolution status.

Table 54: Status of Complaints Resolution by Location

Outcome	Ellembelle		Nzema East		Total	
	N	%	N	%	N	%
Partially resolved	14	46.7	4	33.3	18	42.9
Not resolved	12	40.0	6	50.0	18	42.9
Resolved	4	13.3	2	16.7	6	14.2
Total	30	100.0	12	100.0	42	100.0

Source: Field survey (2020)

Chapter Summary

Challenges associated with the implementation of the compulsory acquisition order were ascertained. The study revealed that displaced persons and acquiring institutions were confronted with challenges, some of which they both concurred and others, they disagreed. While inadequate knowledge before the acquisition exercise took place was one of the main challenges that confronted displaced persons, multiple claims to parcel(s) of land was a key challenge to the acquiring institution. Most of the issues the displaced persons complained about were either partially or not resolved.

CHAPTER TEN

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Introduction

The chapter presents summary, conclusions and recommendations of the study. It also presents contribution to knowledge, limitations of the study and suggestions for further research.

Summary

The study investigated compulsory land acquisition for the Western Corridor Gas Infrastructure Project and livelihood adaptation within Nzema East Municipality and Ellembelle District in Ghana. A mixed methods research approach was adopted for the study. The sample size comprised 285 respondents chosen through stratified random sampling whereas eight informants comprising chiefs, assembly members, officials of the Lands Commission, Ghana Gas Company Limited, and Business Advisory Centre were selected using purposive sampling. Data collection was by the use of interview schedule and interview guide. The analysis of data comprised the application of descriptive statistics, chi-square test of independence, Mann-Whitney U test and thematic analysis.

Key Findings of the Study

Based on the first objective, the key findings were:

- i. The mode of engagement between displaced persons and mediating institutions were mostly (54.7%) information sharing. The other means of engagement were decision-making and initiation of action.

- ii. The key land acquisition activities displaced persons got involved were boundary demarcation, valuation of properties, submission of claims, and determination of crop compensation.

The main findings of the second objective focusing on the displaced persons' utilization of financial compensation claims were:

- i. The usage of the cash compensation covered consumption (basic needs: school supplies, foodstuff and healthcare, and non-basic needs: job search, marriage, alcohol and lotto); Assets acquisition (tools, cooking utensils, and mobile phone), and income generating activities (non-farm, and farm). Husbands mostly (51.2%) took decisions on how the cash compensation could be utilised.
- ii. The majority (90.2%) of the displaced persons received their crop compensation. On the contrary, eighty-two (82%) percent of the displaced persons did not receive their land compensation. The acquiring institutions cited multiple claims as the main contributory factor to the non-payment of the land compensation.

The key findings related to the third objective included:

- i. Farming was the major source of household income before and after the compulsory land acquisition order. The majority (68.9%) of the respondents did not have access to other sources of income. Remittances represented the major source (63.4%) of other incomes to displaced persons.
- ii. The annual income for the respondents before expropriation ranged from 2,000.00 GH¢ (1,345.44 USD) to 7,500.00 GH¢ (5,045.41 USD) while that of after expropriation ranged from 3,000.00 GH¢ (508.52 USD) to 18,500.00 GH¢ (3,135.86 USD).

Related to objective four, the main findings were as follows:

- i. Farming was the main livelihood strategy before (55.2%) and after (50.3%) expropriation. Crop (food and tree) production constituted the main farm livelihood source before (84.1%) and after (81.9%) expropriation.
- ii. The key determinants for engaging in any of the main livelihood strategies were physical ability, capacity to raise funds, presence of opportunity, sex, and job experience.
- iii. Over 90 percent of the displaced persons indicated that Ghana Gas Company had not provided the project affected persons with alternative livelihood ventures or direct jobs.
- iv. The majority (69.0%) of the expropriated parcels of land were stool lands but these had not been registered with the Lands Commission.

The main findings related to the fifth objective were as follows:

- i. The majority (77.5%) of the displaced persons encountered challenges during the implementation of the compulsory land acquisition order such as inadequate knowledge about the acquisition before the work began, non-completion of the legal processes, delay in the payment of compensation, delay in the adjudication of land disputes, and limited knowledge about the mechanisms for reporting challenges.
- ii. Implementing institutions were faced with conflicting claims to same parcel(s) of land, and non-identification of title holders to some of the expropriated parcels of land.

Conclusions

The project affected persons participation in the land acquisition processes was through information shared by the acquiring institutions. The information was mostly transmitted through the community public address system. Even though displaced persons were involved in boundary demarcation, valuation of properties, submission of claims, and determination of land and crop compensations, they were dissatisfied with the processes and attitudes of the officials. The mode of engagement between the displaced persons and the acquiring institutions was restricted to information sharing which limited the participation of affected households to the first rung of the citizens participation theory.

The cash compensation was used for consumption, assets acquisition, and income generating ventures but consumption purposes were dominant. Husbands took decisions on the utilization of the cash compensation. Consumption covered both basic and non-basic needs with most of the displaced persons spending on items such as school supplies, foodstuff, and healthcare. This closes the gap created by the eminent domain theory as the use to which the cash compensation should be put to.

The composition of the households' income portfolios recorded a marginal change with the farm source of income dominating both the non-farm and off-farm before and after expropriation. In nominal terms, displaced persons had their incomes increased but in real terms, they were worse off. A few displaced persons received remittances to complement their incomes.

Farming was the main livelihood strategy for the affected households before and after expropriation. Most of the project affected persons obtained

their farmlands through inheritance. Project affected persons were of view that physical ability, capacity to raise funds, presence of opportunity, sex, and job experience motivated their choice of their livelihood strategy. This affirms the entitlement theory proposition that the household's endowment set affords it the opportunity to obtain the necessary goods and services.

The principal challenges that impeded the implementation of the compulsory land acquisition order were captured from the viewpoint of both the displaced persons and the acquiring institutions. The displaced persons cited acquisition challenges such as inadequate knowledge about the acquisition before the work began, non-completion of the legal processes, delay in the payment of land compensation, delay in the adjudication of land disputes, and little knowledge about the reporting mechanisms. The officials of the acquiring institutions mentioned conflicting claims and non-identification of title holders to expropriated parcels of land as the main challenges.

Recommendations

Based on the main findings and conclusions, the following recommendations are made to the Lands Commission and the displaced persons:

1. The Lands Commission should:

- i. Improve decision making processes on the expropriation order to enhance community participation, especially information flow and feedback at any stage of the acquisition processes.
- ii. Enhance the sensitization of displaced persons on compulsory land acquisition processes to elicit the buy-in from project affected persons. The sensitization should cover all the key activities of the acquisition process to ensure maximum participation from displaced persons.

- iii. Ensure that the existing livelihood strategies of displaced persons are enhanced to improve on their standard of living.
- iv. Suggest to the Ministry for Lands and Natural Resources to sign a memorandum of understanding with the Ministry of Food and Agriculture to liaise with the acquiring agency to provide extension services to displaced persons to improve on their yields. This could ensure that displaced persons enjoy committed services as and when they were required.
- v. Educate the project affected persons on the channels for reporting challenges. The displaced persons require education on the presence of mechanisms for reporting challenges. The sensitization, among others, should highlight the chief's palace as one of the main channels for reporting challenges.

2. Displaced persons should:

- i. Invest part of their cash compensation in income generation livelihood enterprises to boost non-farm businesses. The extra income received from these investments could help displaced persons to meet their basic consumption needs and improve on their standard of living.
- ii. Enquire about the compulsory land acquisition processes to enable them to fully participate in the exercise. The enquiries could be done through the community leadership such as the assembly members and chiefs.
- iii. Enquire about conflict resolution mechanism to enable them minimize prolonged litigations over land compensation claims. Knowledge about the available reporting mechanism would eliminate undue delay in the processing of claims and facilitate prompt payment of compensation.

The enquiries could be done at the offices of Ghana Gas Company and Lands Commission.

Contribution to Knowledge

1. There is an on-going debate on whether compulsory land acquisition contributes to improved livelihood outcomes or not. While some studies found that compulsory land acquisition impacted negatively on the livelihoods of displaced persons, others reported that expropriation contributed positively. The finding of this study that expropriation resulted in litigations which delayed compensation payment tend to support the school of thought that argues that expropriation impact negatively on the livelihoods of project affected persons.
2. This study contributes to knowledge by filling in the gap created by the eminent domain theory that expropriation must be accompanied by the payment of just financial compensation but falls short of mentioning how the compensation should be put to use to improve on livelihood outcomes. This gap is closed because the cash compensation displaced persons received was mostly spent on the provision of their basic needs while others invested into assets, and income generating activities.
3. Previous investigations appeared not to have fully examined how displaced persons participated in the compulsory land acquisition processes from the outset to the end. This study filled this grey area as it finds that overall, displaced persons participation in the compulsory land acquisition processes from boundary demarcation to compensation determination and payment was very minimal. Project affected persons were mostly informed of decisions on acquisition which qualifies for the

first the stage of citizen participation theory where citizens are merely passive recipient of what officialdom dumps on them.

4. Studies on compulsory land acquisition appeared to have placed little attention on changes in displaced persons' income portfolios. This is critical because rural households engage in diversified income sources. The study makes up for this grey area as it not only finds that the sources of rural households' incomes are farm, non-farm and off-farm with farm being the dominant but also compulsory land acquisition reduces the real value of displaced persons income.

Suggestions for Further Research

Based on the findings and conclusions of the study, further research is required to investigate:

- i. The effects of compulsory land acquisition on income portfolios of displaced persons comparing the situation in the predominantly rural agriculture economies to the urban economies, and
- ii. The effects of compulsory land acquisition on rural poverty while taking cognisance of the counterfactual by adopting the control group designs.

REFERENCES

- Abdulai, A. M., & Shamshiry, E. (2014). Linking sustainable livelihoods to natural resources and governance: The scale of poverty in the muslim world. Singapore: Springer Science+Business Media Singapore.
- Ablo, A.B. (2016). From local content to local participation? Exploring Entrepreneurship in Ghana's oil and gas industry, Department of Geography, University of Bergen.
- Ablo, A.D., & Asamoah, V. K. (2018). A Local participation, institutions and land acquisition for energy infrastructure: The case of the Atuabo gas project in Ghana: Energy Research and Social Science, Elsevier.
- Adger, W. N. (2006). Vulnerability. *Global Environmental Change*, 16, 268 – 281.
- Adu-Gyamfi, A. (2012). An Overview of Compulsory Acquisition in Ghana: Examining its Applicability and Effects. *National Research Center for Settlement*, 1(2), 187-203
- Agbosu, L., Awumbila, M., Dowuona-Hammond, C. & Tsikata, D. (2007) Customary and Statutory Land Tenure and Land Policy in Ghana, technical publication No. 70, Institute of Statistical Social and Economic Research (ISSER), University of Ghana, Accra.
- Aha, B., & Ayitey, J. Z (2017). Biofuels and Hazards of Land Grabbing: Tenure (in)Security and Indigenous Farmers' Investment Decisions in Ghana. *Land Use Policy* 60:48–59.

- Akrofi, O. E., & Whittal, J. (2013). Compulsory Acquisition and Urban Land Delivery in Customary Areas in Ghana: *South African Journal of Geomatics*, 2(4), 280-295
- Alemu, Z. G. (2012). Livelihood strategies in rural South Africa: Implications for poverty reduction. Paper for presentation at the International Association of Agricultural Economists (IAAE) Triennial Conference,
- Alkire, S. (2007). Choosing dimensions: The capability approach and multidimensional poverty (CPRC Working Paper No. 88).
- Alkire, S., & Santos, M. E. (2010). Multidimensional poverty index (OPHI Research Brief). Retrieved from <http://www.ophi.org.uk/wp-content/uploads/OPHI-MPI-Brief.pdf>
- Alinovi, L., D'Errico, M., Mane, E., & Romano, D. (2010). Livelihoods strategies and household resilience to food insecurity: An empirical analysis to Kenya. Paper presented at the Conference on "Promoting Resilience through Social Protection in sub-Saharan Africa", Dakar, Senegal, 28-30 June, 2010.
- Anim-Odame, W. (2011). Compulsory acquisition and compensation in Ghana: principles and practice, American Real Estate Society Conference in Seattle, Washington, USA, 2011.
- Arnstein, S. R. (1969). A ladder of citizen participation. *Journal of the American Institute of Planners*, 35(4), 216- 224.
- Arya J. T., (2019). "A Comparative Perspective of Eminent Domain Laws in the United States & China". *Tsinghua China Law Review*. 12:115 (12): 115–141.

- Asante, S. K. B. (1975) Property Law and Social Goals in Ghana 1884-1966, Ghana Universities Press, Accra.
- Asiama, K.O. (2015). Governance in Resettlement from Compulsory Land Acquisition: A Case of the Bui Dam Project. Researchgate, <https://www.researchgate.net/publication/314464610>
- Ayitey, J. Z., Kidido, J. K. and Tudzi, E. P. (2010). Compensation for Land Use Deprivation in Mining Communities, the Law and Practice: Case Study of Newmont Gold Ghana Limited. *The Ghana Surveyor*, 4 (1):32-40
- Babatunde, R.O. (2008). "Income portfolios in rural Nigeria: Composition and Determinants", *Trends in Agricultural Economics*, Vol. 1 No. 1, pp 35-41.
- Bailey, S. (2013). The impact of cash transfers on food consumption in humanitarian settings: A review of evidence. Retrieved from <http://reliefweb.int/sites/reliefweb.int/files/resources/cfgb---impact-of-cash-transfers-on-food-consumption-may-2013-final-clean.pdf>.
- Bailey, M. L, Shilton, B. H., Brandl C. J., & Litchfield, D.W., (2008). The dual histidine motif in the active site of Pin1 has a structural rather than catalytic role. *Biochemistry* 47(44):11481-9
- Barrett, C.B., Reardon, T. & Webb, P. (2001). "Nonfarm income diversification and household livelihood strategies in rural Africa: concepts, dynamics and policy implications", *Food Policy*, Vol. 26, pp. 315-331.
- Batool, S., Babar, A., Nasir, F., & Iqbal, Z, S. (2017). Income Diversification of Rural Households in Pakistan. *International Journal of Economics and Management Sciences* 6 (6), 466.

- Bhattacharyya, D., (2015). "The history of eminent domain in colonial thought and legal practice". *Economic and Political Weekly*. 50 (50).
- Benson, B. L. (2008). The Evolution of Eminent Domain - A Remedy for Market Failure or an Effort to limit Government Power and Government Failure? *Independent Review*, 8(3), 423–432.
- Beyir, M. (2013). *Governance: A Very Short Introduction*, Oxford: Oxford University Press.
- Birley, R. (2011). *Qualitative research methodology*. California: University of California.
- Blocher, J. (2006). Building on custom: Land tenure policy and economic development in Ghana. *Yale Human Rights and Development Journal*, 9(1). Retrieved from <http://digitalcommons.law.yale.edu/yhrdlj/vol9/iss1/5>.
- Block, S. & Webb, P. (2001). "The dynamics of livelihood diversification in post-famine Ethiopia", *Food Policy*, Vol. 26, pp. 333-350
- Botchway, N. F. (1998). Land Ownership and Responsibility for the Mining Environment in Ghana. *Natural Resources Journal*, 38: 509-536.
- Bovaird, T. (2007). 'Beyond engagement and participation: User and community coproduction of public services', *Public Administration Review*, 67 (5), 846–860.
- Bradshaw, T. K. (2006). Theories of poverty and anti-poverty programs in community development (RPRC Working Paper No. 06-05). Retrieved from <http://www.rupri.org/Forms/WP06-05.pdf>.

- Brady, D. (2006). Structural theory and relative poverty in rich Western democracies, 1969–2000. *Research in Social Stratification and Mobility*, 24 (2), 153–175.
- Brady, D. (2009). Rich democracies, poor people: How politics explain poverty. New York, United States of America: Oxford University Press.
- Bryceson, D. (2002). “Multiplex livelihoods in rural Africa: recasting the terms and conditions of gainful employment”, *Journal of Modern African Studies*, Vol. 40, pp. 1-28.
- Bryson, J. M., Crosby, B. C., & Bloomberg, L. (2014). ‘Public value governance: Moving beyond traditional public administration and new public management’, *Public Administration Review*, 74 (4), 445–456.
- Bugri, J., T. (2008). The Dynamics of Tenure Security, Agricultural Production and Environmental Degradation in Africa: Evidence from Stakeholders in North-East Ghana.
- Carney, D., Drinkwater, M., Rusinow, T., Neefjes, K., Wanmali, S., & Singh, N. (1999). Livelihoods approaches compared: A brief comparison of the livelihoods approaches of the UK Department for International Development (DfID), CARE, Oxfam and the United Nations Development Programme (UNDP). Retrieved from http://www.start.org/Program/advanced_institute3_web/p3_documents_folder/Carney_et_al.pdf.
- Chambers, R., & Conway, G.R. (1991). Sustainable rural livelihoods: Practical concepts for the 21st century (IDS Discussion Paper No. 296). Brighton, United Kingdom: Institute for Development Studies.

- Chêne, M. (2010). Corruption prevention strategies in cash transfer schemes. Retrieved from <http://www.u4.no/publications/corruption-preventionstrategies-in-cash-transfer-schemes/downloadasset/433>.
- Chiwele, D. K. (2010). Assessing administrative capacity and costs of cash transfer schemes in Zambia implications for rollout. Brazil: International Policy Centre for Inclusive Growth.
- Cotter, D. A. (2002). Poor people in poor places: Local opportunity structures and household poverty. *Rural Sociology*, 67(4), 534-555.
- Creswell, J. W. (2003). Research design: Qualitative, quantitative and mixed methods approaches (2nd ed.). London: SAGE Publications.
- Creswell, J. W. (2006), *Qualitative Inquiry and Research Design*, London: SAGE Publications.
- da Rocha, B. J., & Lodoh, C. H. K. (1999) Land Law and Conveyancing in Ghana, Accra, Ghana.
- Darling, R. (2002). Partnership models in human services: *Sociological foundations and practices*. New York: Kluwer Academic/ Plenum Publisher.
- Devas, N., & Grant, U. (2003). Local Government Decision-making — Citizen Participation and Local Accountability: Some Evidence from Kenya and Uganda. *Public Administration and Development*.
- David, O. A. , Osonubi, O. , Olaiya, C. O. , Agbolade, J. O. , Ajiboye A. A. , Komolafe, R. J., Chukwuma, D.M.,& Akomolafe, G.F, (2017). Anatomical Response of Wheat Cultivars to Drought Stress 1 2 3 4 5 6; *Ife Journal of Science vol. 19*, no. 2

- Davis, J. (2006). Rural non-farm livelihoods in transition economies: Emerging issues and policies. *Electronic Journal of Agricultural and Development Economics*, 3(2), 180–224.
- Davis, J.R. (2003). The Rural Non-Farm Economy, Livelihoods and their Diversification: Issues and Options. Report 1. Catham Maritime, Natural Resource Institute Available at SSRN: <https://ssrn.com/abstract=691821> or <http://dx.doi.org/10.2139/ssrn.691821>
- Davis, B., Di Giuseppe, S., & Zezza, A. (2017). “Are African households (not) leaving agriculture? Patterns of households’ income sources in rural Sub-Saharan Africa”, *Food Policy*, Vol. 67, pp. 153-174.
- Deininger, K. (2003). Land policies for growth and poverty reduction, Washington DC. The World Bank/Oxford University Press.
- De Janvry, A., & Sadoulet, E. (2000). Rural poverty in Latin America determinants and exit paths. *Food Policy*, 25, 389–409.
- Devereux, S. (2000). Social safety nets for poverty alleviation in Southern Africa (ESCOR Report No. R7017). Sussex, UK: Institute of Development Studies.
- Devereux, S. (2001). Sen’s entitlement approach: Critiques and counter critiques. *Oxford Development Studies*, 29(3), 245-263.
- Devereux, S. (2002). Social protection for the poor: Lessons from recent international experience (IDS Working Paper No. 142). London, United Kingdom: Institute of Development Studies.
- Devereux, S. (2006). Cash transfers and social protection. Paper prepared for the regional workshop on “Cash transfer activities in southern Africa”, Johannesburg, South Africa, 9-10 October, 2006.

- Devereuxa, S., & McGregor, J. A. (2014). Transforming social protection: Human wellbeing and social justice. *European Journal of Development Research, 26*(3), 296–310.
- Devereux, S., & Sabates-Wheeler, R. (2004). Transformative social protection (IDS Working Paper No. 232). England, UK: Institute of Development Studies.
- De Vriese, M. (2006). Refugee livelihoods: A review of the evidence. Retrieved from <http://www.unhcr.org/4423fe5d2.pdf>.
- Ding, C. (2007). Policy and praxis of land acquisition in China. *Land Use Policy, 24*, 1–13.
- Donaldson, J. A., Loh, J., Mudaliar, S., Kadir, M. M., Biqi, W., & Keong, Y. L. (2014). Measuring poverty in Singapore frameworks for consideration. *Social Space, 6*, 58-66.
- Doss, C.R. (2002). Men's Crops? Women's Crops? The Gender Patterns of Cropping in Ghana. *World Development, 30*, 1987-2000. [https://doi.org/10.1016/S0305-750X\(02\)00109-2](https://doi.org/10.1016/S0305-750X(02)00109-2)
- Ellis, F. (1998). Household strategies and rural livelihood diversification. *Journal of Development Studies, 35*(1), 1-38.
- Ellis, F. (2000) The determinants of rural livelihood diversification in developing countries, *J. Agric. Econ. 51* (2) 289–302.
- Eriksen, S.H., Brown, K., & Kelly, M.P. (2005). The dynamics of vulnerability: Locating coping strategies in Kenya and Tanzania. *Geographical Journal, 171*, 287–305

Food and Agricultural Organization [FAO] (2008). Compulsory acquisition of land and compensation, Electronic Public Policy and Support Branch.

Rome: Italy. Ghana: *Policy and Praxis, Land Use Policy*, 1(2): 115–127

Food and Agricultural Organization [FAO] (2009). Compulsory Acquisition of Land and Compensation. FAO Land Tenure Studies 10. Rome: Food and Agriculture Organisation.

Food and Agriculture Organization [FAO] (2012). Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security. Rome: FAO.

Fernández, O. A., Gil, M. E., & Distel, R. A. (2009). The challenge of rangeland degradation in a temperate semiarid region of Argentina: The Caldenal. *Land Deg. Dev.*, 20: 431-440.

Fonteneau, B., Vaes, S., & Huyse, H. (2014). Social protection at the top of the international agenda: Issues at stake from a civil society perspective (Discussion Paper). Retrieved from https://lirias.kuleuven.be/bitstream/123456789/449298/3/R1570_Social-Protection-at-the-top-of-the-International-Agenda.pdf.

Fukuda-Parr, S., Lawson-Remer, T., Randolph, S., (2008). Measuring the progressive realization of human rights obligations: an index of economic and social rights fulfillment. Storrs (CT): University of Connecticut, Human Rights Institute.

Ghana Statistical Service (GSS). (2014). 2010 population and housing census: District analytical report- Ellembelle District. Accra, Ghana: Author.

Ghansah, A. W. (2010). Compulsory Acquisition and Issues Arising: A Case Study of University of Cape Coast Acquisition. Core Values Property

Junction. Accessed on 7th February, 2014, [http// properties junction.blogspot.com](http://propertiesjunction.blogspot.com).

Government of Ghana (1992). Constitution of the Republic of Ghana. Republic of Ghana. Accessed on 18th May, 2014, from [http://www.ghana.gov.gh/images/documents/ constitution_ghana.pdf](http://www.ghana.gov.gh/images/documents/constitution_ghana.pdf)

Gilbert, J. (2013). Land rights as human rights: the case for a specific right to land. *Sur International Journal on Human Rights*, 10(18), 115-135.

Grant, C., & Osanloo, A. (n.d.). Understanding, selecting, and integrating a theoretical framework in dissertation research: Creating the blueprint for your “house”. *Administrative Issues Journal: Connecting Education, Practice and Research*, 4 (2), 12-26.

Gray, C., & Malins, J. (2004). Visualizing research: A guide to the research process in art and design. England: Ashgate Publishing Limited.

Griffie, D. T. (2012). An introduction to second language research methods: Design and data (1st ed.). United States of America: TESL-EJ Publications.

Hagblade, S., Hazell, P., & Reardon, T. (2010). “The rural non-farm economy: Prospects for growth and poverty reduction”, *World Development*, Vol. 38 No.10, pp. 1429-1441

Hanrahan, K. (2015). ‘Mɔn’ (to marry/to cook): negotiating becoming a wife and woman in the kitchens of a northern Ghanaian Konkomba community. *Gender, Place & Culture*. 22. 1-17. 10.1080/0966369 X.2014.993360.

Harvey, P. (2005). Cash and vouchers in emergencies. United Kingdom: Overseas Development Institute (ODI).

- Hickey, S., & Bracking, S. (2005). Exploring the politics of chronic poverty: From representation to a politics of justice? *Journal of World Development*, 33 (6), 851–865.
- Hilson, G.M. (2002). “An overview of land use conflicts in mining communities”, *Land Use Policy*, 19, (1), 65-73.
- Hilson, G.M. (2004). “Structural Adjustment in Ghana: Assessing the Impacts of Mining-Sector Reform”, *Africa Today*, Vol. 51, No. 2, Indiana University Press, pp. 53-77.
- Holden, S., Shiferaw, B. & Pender, J. (2004). “Non-farm income, household welfare and sustainable land management in a less-favoured area in the Ethiopian highlands”, *Food Policy*, Vol. 29 No.4, pp. 369-392.
- Holmes, R., & Bhuvanendra, D. (2013). Social protection and resilient food systems: The role of cash transfers. London, United Kingdom: Overseas Development Institute (ODI).
- Holmes, R., & Jones, N. (2009). Putting the social back into social protection (Background Note). London: Overseas Development Institute.
- Hussein, K., & Nelson, J. (1998). Sustainable livelihoods and livelihood diversification (IDS Working Paper No. 69). Retrieved from <https://www.ids.ac.uk/ids/bookshop/wp/wp69.pdf>.
- Ibekwe, U.C. (2010). “Determinants of Income Among Farm Households in Orlu Agricultural Zone of Imo State, Nigeria”, *Report and Opinion*, Vol. 2 No. 8, pp. 32-35.
- Ikejiaku, B. V. (2009). The concept ‘poverty’ towards understanding in the context of developing countries ‘poverty qua poverty’: With some

comparative evidence on Britain. *Journal of Sustainable Development*, 2 (2), 3-13.

Innes, R. (2000). "The Economics of Takings and Compensation When Land and its Public Use Value are in Private Hands", *Land Economics*, 76(2): 195-212.

International Association for Public Participation [IAPP] (2014), *Spectrum of Public Participation*, Thornton, CO: International Association for Public Participation.

International Fund for Agricultural Development [IFAD] (2011). *Facts and figures-Rural poverty report 2011*. Retrieved from www.ifad.org/rpr2011/media/kit/factsheet_e.pdf. Islam, A. S. (2005). *Sociology of poverty: Quest for a new horizon*. *Bangladesh e-Journal of Sociology*, 2 (1), 1-8.

Jaspars, S., Harvey, P., Hudspeth, C., Rumble, L., & Christensen, D. (2007). *A review of UNICEF's role in cash transfers to emergency affected populations (EMOPS Working Paper)*. New York: United Nations Children's Fund (UNICEF).

Johnson, R. B., & Onwuegbuzie, A. J. (2004). *Mixed methods research: A research paradigm whose time has come*. *Educational Researcher*, 33 (7), 14-26.

Jonathan, M. L. (2012), *Compulsory Acquisition of Land and Compensation in Infrastructure Projects*. *PPP Insights*, 1(3):1-10

Jordan, G. (2004). *The causes of poverty cultural vs. structural: Can there be a synthesis?* *Perspectives in Public Affairs*, 18-34.

- Kasanga, R. K., & Kotey, N. A. (2001). Land management in Ghana: *Building on tradition and modernity*: International Institute for Environment and Development London.
- Khatun, D., & Roy, B.C. (2012). Rural livelihood diversification in West Bengal: Determinants and constraints. *Agricultural Economics Research Review*, 25(1), 115-124.
- King, R., & Sumbo D.K. (2015). Implications of Compulsory Land Acquisition and Compensation in Ghana: A Case Study of Land Acquisition for The Suame-Buoho Road Reconstruction in Kumasi; *Journal of Science and Technology*, Vol. 35, pp100-113.
- Kothari, C. R. (2004). *Research methodology: Methods and techniques* (2nd ed.). New Delhi, India: New Age International Publishers.
- Krantz, L. (2001). The sustainable livelihood approach to poverty reduction: An introduction. Retrieved from http://www.sida.se/contentassets/bd474c210163447c9a7963d77c64148a/the-sustainable-livelihood-approach-to-poverty-reduction_2656.pdf.
- Krejcie, R. V., & Morgan, D. W., (1970). "Determining Sample Size for Research Activities", *Educational and Psychological Measurement*, 30, 607-610
- Kumar, R. (1999). *Research methodology: A step-by-step guide for beginners*. New Delhi, India: SAGE Publications.
- Kumar, R. (2011). *Research methodology: A step-by-step guide for beginners* (3rd ed.). New Delhi, India: SAGE Publications.
- Laderchi, C. R., Saith, R., & Stewart, F. (2003). Does it matter that we don't agree on the definition of poverty? A comparison of four approaches

(Working Paper No. 107). Retrieved from <http://www3.qeh.ox.ac.uk/pdf/qehwp/qehwps107.pdf>.

Lands Commission (2010). Western Corridor Gas Infrastructure Project; Data on Affected Communities, and Persons.

Larbi, W.O. (2008). Compulsory Land Acquisition and Compensation in Ghana: Searching for Alternative Policies and Strategies FIG/FAO/CNG International Seminar on State and Public Sector Land Management Verona, Italy, September 9-10, 2008.

Larbi, W.O., Antwi, A. & Olomolaiye, P. (2004). Compulsory Land Acquisition in Ghana: Policy and Praxis, *Land Use Policy*, 1(2), 115 – 127

Lawson, T., Moores, R., & Jones, M. (2000). Advanced sociology through diagrams. Oxford: Oxford University Press.

Lindert, K., Linder, A., Hobbs, J., & De la Brière, B. (2007). The nuts and bolts of Brazil's Bolsa Família Program: Implementing conditional cash transfers in a decentralized context (SP Discussion Paper No.0709). Retrieved from <http://siteresources.worldbank.org/SOCIALPROTECTION/Resources/SP-Discussion-papers/Safety-Nets-DP/0709.pdf>.

Luse, A., Mennecke, B., & Townsend, A. (2012). Selecting a research topic: A framework for doctoral students. *International Journal of Doctoral Studies*, 7, 143-152.

Lysaght, Z. (2011). Epistemological and paradigmatic ecumenism in "Pasteur's Quadrant:" Tales from doctoral research. Official Conference Proceedings of the Third Asian Conference on Education in Osaka, Japan.

- Machethe, C. L., (2004). Agriculture and poverty in South Africa: Can agriculture reduce poverty? *Paper presented at the conference, Overcoming Underdevelopment, 28– 29, 2004, Pretoria, South Africa.*
- Matshe, I. & Young, T. (2004). “Off-farm labour allocation decisions in small-scale rural households in Zimbabwe”, *Agricultural Economics, Vol. 30* No.3, pp. 175-186.
- Matsumoto, T., Kijima, Y. & Yamano, T. (2006). “The role of local non-farm activities and migration in reducing poverty: evidence from Ethiopia, Kenya and Uganda”, *Agricultural Economics, Vol. 35*, pp 449-458.
- Mogaka, M. M. (2013). The effects of cash transfer programmes on orphans and vulnerable children’s (OVCS) wellbeing and social relations: A case study of Nyamira Division, Nyamira County (Master’s thesis, University of Nairobi, Kenya). Retrieved from <http://erepository.uonbi.ac.ke/xmlui/handle/11295/60641>.
- Nabatchi, T. (2012). ‘Putting the “public” back in public values research: Designing participation to identify and respond to values’, *Public Administration Review, 72* (5), 699–708.
- Neuman, W. L. (2011). *Basics of social research methods: Qualitative and quantitative approaches* (3rd ed.). Boston: Pearson Education, Inc.
- Neudert, R., Goetter, J.F., Andriamparany, J.N. & Rakotoarisoa, M. (2015). “Income diversification, wealth, education and well-being in rural south-western Madagascar: Results from the Mahafaly Region”, *Development Southern Africa, Vol. 32* No.6, pp. 758-784.

Nguyen, P., van Westen, A., & Zoomers, A. (2017). Compulsory land acquisition for urban expansion: livelihood reconstruction after land loss in Hue's peri-urban areas, Central Vietnam: Research Gate, *International Development Planning Review* 39(2):99-121.

Nickel, J., (2007). *Making Sense of Human Rights*, 2nd ed. Malden: Blackwell.

Ogujiuba, K., Obi, K., & Dike, E. (2011). Poverty, social structure, wealth distribution and markets: Understanding the nexus. *Economics and Finance Review*, 1(6), 01 – 11.

Ollenu, N. A. (1962). Principles of Customary Land Law in Ghana. London: Staples Printers Limited of London and Rochester. *The International and Comparative Law Quarterly*, 14 (2): 713-715

Omilola, B., & Kaniki, S. (2014). Social protection in Africa: A review of potential contribution and impact on poverty reduction. Retrieved from http://www.za.undp.org/content/dam/south_africa/docs/mdgs/Social%20Protection%20in%20Africa-A%20Review%20of%20Potential%20Contribution%20and%20Impact%20on%20Poverty%20Reduction1.pdf.

Osei-Hwedie, K. (2004). Poverty eradication in Botswana: Towards the realisation of vision 2016. Pula: *Botswana Journal of African Studies*, 18(1), 7-18.

Osmani, S. R. (1993). Entitlement approach to famine: An assessment (Working Paper No. 107). Helsinki, Finland: UNU World Institute for Development Economics Research (UNU/WIDER).

Parkin, M. (2008). Economics, Addison-Wesley, London, UK

Peppiatt, D., Mitchell, J., & Holzmann, P. (2001). Cash transfers in emergencies: Evaluating benefits and assessing risks (Humanitarian Practice Network Paper No. 35). United Kingdom: Overseas Development Institute (ODI).

Pham, H. T., Westen, M. V. & Annelies Z. (2013). Compensation and Resettlement Policies after Compulsory Land Acquisition for Hydropower Development in Vietnam: Policy and Practice. *Land*, 2:678-704. Accessed on: 18th May 2014, from www.mdpi.com/journal/land/

Perret, S., Anseeuw, W., & Mathebula, F. (2005), Poverty and livelihoods in rural South Africa: Investing diversity and dynamics of livelihoods. Case studies in Limpopo, Unpublished project report num.05/01, Kellogg's Foundation, University of Pretoria, South Africa.

Public Interest and Accountability Committee [PIAC] (2014). Semi-Annual Report on Management of Petroleum Revenues for the Period January to June, 2016.

Quick, K. S., & Feldman, S. M. (2011). 'Distinguishing participation and inclusion', *Journal of Planning Education and Research*, 31 (3), 272–290. Quick & Bryson 2016, p. 12

Rank, M. (2005). *One nation, underprivileged*. New York: Oxford University Press.

Raz, J., (2010). Human Rights without Foundations. In *The Philosophy of International Law*. Edited by Samantha Besson and John Tasioulas. Oxford: Oxford University Press, pp. 321–38.

- Reale, A., (2009). "Assisted Theft: Compulsory land acquisition for private benefit in Australia and the US". *Alternative Law Journal*. Melbourne: *Legal Service Bulletin Co-operative Ltd.* 34 (3): 147-51.
- Reardon, T., Berdegue, J., & Escobar, G. (2001). "Rural nonfarm employment and incomes in Latin America: Overview and policy implications", *World Development*, Vol. 29 No.3, pp. 395-409.
- Richardson, J. A. J., & London, J. K. (2007). Strategies and lessons for reducing persistent rural poverty: A social justice approach to funding rural community transformation. *Journal of the Community Development Society*, 38 (1), 92–107.
- Roberts, N., (2004). 'Public deliberation in an age of direct citizen participation', *American Review of Public Administration*, 34 (4), 315–353.
- Romeshun, K., & Mayadunne, G. (2011). Appropriateness of the Sri Lanka poverty line for measuring urban poverty: The case of Colombo (Human Settlements Working Paper Series Poverty Reduction in Urban Areas No. 35). London, United Kingdom: International Institute for Environment and Development (IIED).
- Royce, E. (2009). *Poverty and power: A structural perspective on American inequality*. Lanham, Maryland: Rowman & Littlefield Publishers, Inc.
- Rünger, M. (2008). *Governance, Land Rights and Access to Land in Ghana. A Development Perspective on Gender Equity*. GTZ, Ghana. http://www.fig.net/pub/accra/papers/ts01/ts01_02_ruenger.pdf

- Sanchez, V. (2005), The determinants of rural non-farm employment and incomes in Bolivia, Unpublished MSc Agricultural Economics Thesis, Michigan State University.
- Sarantakos, S. (2005). Social research (3rd ed.). New York: Palgrave Macmillan.
- Sarpong, A., G. (2006). Improving Tenure Security for the Rural Poor- Ghana Country Case Study- Towards the Improvement of Tenure Security for the Poor in Ghana: Some Thoughts and Observations. FAO, Rome.
- Saxer, S. R., (2005). "Government Power Unleashed: Using Eminent Domain to Acquire a Public Utility or Other Ongoing Enterprise". *Indiana Law Review*. 38 (55): 55.
- Schiller, B. R. (1998). *The economics of poverty and discrimination*. Upper Saddle River: Prentice Hall.
- Schultz, D. (2009). Evicted! Property Rights and Eminent Domain in America: Property Rights and Eminent Domain in America. ABC-CLIO. ISBN 9780313353451.
- Schwarze, N. (2004). Metacognitive Experiences in Consumer Judgment and Decision Making. *Journal of Consumer Psychology*, 14(4), 332-348.
- Scotland, J. (2012). Exploring the philosophical underpinnings of research: Relating ontology and epistemology to the methodology and methods of the scientific, interpretive, and critical research paradigms. *English Language Teaching*, 5(9), 9-16.
- Sekaran, U. (2003). Research methods for business: A skill-building approach (4th ed.). United States of America: Hermitage Publishing Services.

Sen, A. (1981). *Poverty and famines: An essay on entitlement and deprivation*.
Oxford: Clarendon.

Sen, A. (1986). *Food, economics and entitlements* (WILDER Working Paper
No. 1). World Institute for Development Economics Research
(WILDER), United Nations University. Retrieved from <https://www.wider.unu.edu/sites/default/files/WP1.pdf>.

Sen, A. (1990). *Food, economics, and entitlements*. In J. Dreze, & A. Sen (Eds.),
The political economy of hunger, entitlement and well-being, Volume 1
(pp. 34-52). New York, United States: Oxford University Press.

Sen, A. (2009). *The idea of justice*. Cambridge, Mass.: Belknap Press of
Harvard University Press.

Senadza, B. (2012). "Non-farm income diversification in rural Ghana: Patterns
and determinants", *African Development Review*, Vol. 24 No.3, pp. 233-
244.

Smith, B. (2003). *Public policy and public participation engaging citizens and
community in the development of public policy*.

Spicker, P., Leguizamón, S.A., & Gordon, D. (Eds.). (2006). *Poverty: An
international glossary* (2nd ed.). London, United Kingdom: Zed Books
Ltd.

State Lands Act, 1962 (Act 125) Act 125

Sultana, N. (2002). *Conceptualising livelihoods of the extreme poor* (Working
Paper No. 1). Retrieved from <http://www.microfinancegateway.org/sites/default/files/mfg-en-paper-conceptualising-livelihoods-of-theextreme-poor-2002.pdf>.

- Syagga, P.M.; Olima, W.H.A, (1996). The impact of compulsory land acquisition on displaced households: *The case of the third Nairobi water supply project, Kenya. Habitat Int.*, 20, 61–75.
- Taruvinga, A., Gumpo, N., Mudemba, R., & Ngarava, S. (2018). Rural income portfolios, compositions, diversity and determinants: Evidence from Nyandeni local municipality, South Africa: *International Journal of Development and Sustainability ISSN: 2186-8662 – www.isdsnet.com/ijds* Volume 7 Number 2 (2018): Pages 792-807.
- Tayal, B.B. & Jacob, A., (2005), Indian History, World Developments and Civics, p. A-33
- Thao, N. (2016). Impact of Land Acquisition on the Sustainable Livelihoods in Ninh Thuan Province, Vietnam; *Sociology Study*, 6(11), 737-743
- Thomas, D. R. (2006). A General Inductive Approach for Analyzing Qualitative Evaluation Data. *American Journal of Evaluation*, 27, 237-246.<http://dx.doi.org/10.1177/1098214005283748>
- Tiwari, M. (2007). Chronic poverty and entitlement. *Third World Quarterly*, 28(1), 171-191.
- Ty, P., Van Westen, A. C. M., & Zoomers, A. (2013). Compensation and Resettlement Policies after Compulsory Land Acquisition for Hydropower Development in Vietnam: *Policy and Practice. Land*, 2(4), 678–704.
- Uddin, M. N., & Hamiduzzaman, M. (2009). The philosophy of science in social research. *The Journal of International Social Research*, 2/6, 654-664.
- Udry, C. (2011). Land Tenure. In *The Oxford Companion to the Economics of Africa*.

United Nations (UN). (2006). *Social justice in an open world the role of the United Nations*. New York: United Nations publication.

United Nations Development Programme [UNDP] (2005). *International Land Coalition Workshop: Land Rights for African Development: From Knowledge to Action*, October 31-November 3, 2005, Nairobi, Kenya

United States Agency for International Development [USAID] (2015). *Assessment of Land-Tenure Related Constraints to Cocoa Productivity in Ghana*. Washington, DC.

van Gyampo, R. E (2011). Saving Ghana from its oil: a critical assessment of preparations so far made, *Africa Today* 57 (4) 48–69.

Verstegen, S. (2001). *Poverty and conflict: An entitlement perspective* (CPN Briefing Paper). Retrieved from http://www.clingendael.nl/sites/default/files/20010900_cru_other_verstegen.pdf.

Viitanen, K., Falkenbach, H., & Nuuja, K. (2010). *Compulsory Purchase and Compensation: Recommendations for Good Practice*. Copenhagen: International Federation of Surveyors, FIG.

Viitanen, K., & Kakulu, I., (2008). *Global Concerns in Compulsory Purchase and Compensation Process*. In *Proceedings of the Meeting of FIG Working Week: Integrating Generations and FIG/ UN-HABITAT Seminar: Improving Slum Conditions through Innovative Financing*, Stockholm, Sweden, 14–19 June.

Vizard, P. (2001). *Economic theory, freedom and human rights: The work of Amartya Sen* (ODI Briefing Paper). London: Overseas Development Institute.

Vizard, P., (2006). *Poverty and Human Rights: Sen's Capability Perspective Explored*. Oxford: Oxford University Press.

Walliman, N. (2011). *Research methods the basics*. New York: Routledge.

Wilbard, K. (2010). *Land Conflicts in Dar Es Salaam: Who Gains? Who Loses?* Crisis States Working Papers Series No.2 ARDHI University. ISSN 1749-1797 (print) ISSN1749-1800 (online)

World Bank, (2004). *Involuntary Resettlement Sources Book: Planning and Implementation in Development Projects*; The International Bank for Reconstruction and Development, Washington, DC, USA. Accessed on: 10th April 2014, from <http://dx.doi.org/10.1596/0-8213-5576-7>

World Bank, (2011). *Recognizing and reducing corruption risks in land management in Vietnam, Hanoi*, the National Political Publishing House – Su That.

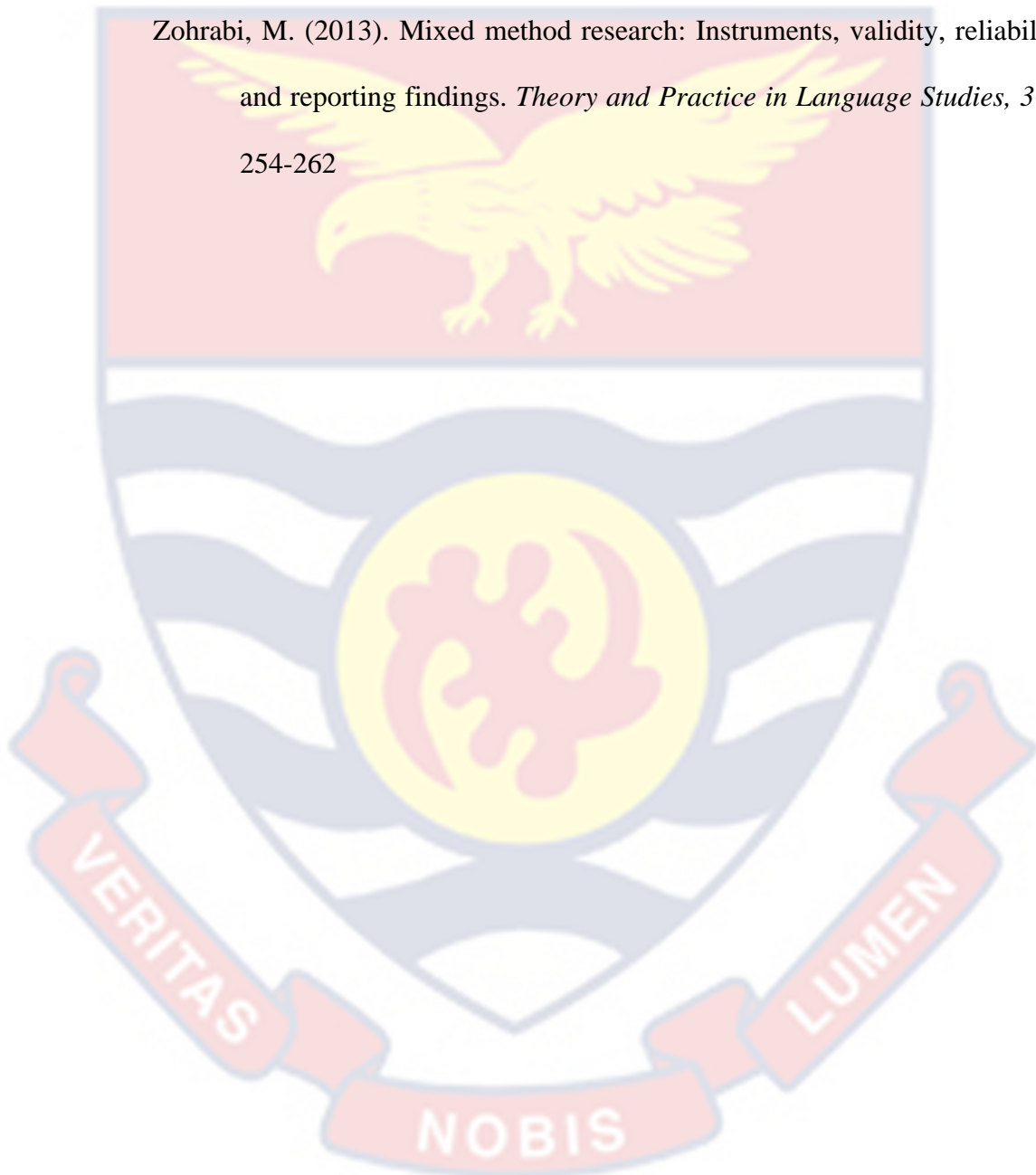
Yukhymenko, M.A., Brown, S.W., Lawless, K.A., Brodowinska, K., & Mullin, G. (2014). Thematic analysis of teacher instructional practices and student responses in middle school classrooms with problem-based learning environment. *Thematic Analysis of Teacher Instructional Objectives, 1* (3), 93-109.

Zhang, X. and Lu, H. (2011). 'Compensation for compulsory land acquisition in China: to rebuild expropriated farmers' long-term livelihoods' (Working Paper), Institute for Research on Labor and Employment (UCLA).

Zhou, M. (2012). *Has farmers' livelihood improved? Case studies about the impacts of compulsory land acquisition on farmers' livelihood in China*, MA thesis, Uppsala University.

Zimmermann, W. (2008). Effective and Transparent Management of Public Land - Experiences, Guiding Principles, and Tools for Implementation. In FIG/FAO/CNG International Seminar on State and Public Land Management. Verona, Italy: FIG.

Zohrabi, M. (2013). Mixed method research: Instruments, validity, reliability and reporting findings. *Theory and Practice in Language Studies*, 3(2) 254-262



APPENDICES**APPENDIX A****INTERVIEW SCHEDULE FOR EXPROPRIATED HOUSEHOLD****HEADS****Dear Valued Participant,**

I, the Principal Investigator, Wisdom Quaiku, from the University of Cape Coast, humbly request you to participate in this research project on the topic: “Compulsory Land Acquisition for the Western Corridor Gas Infrastructure Development Project and Livelihood Adaptation within Nzema East Municipality and Ellembelle District in Ghana.” As head of expropriated household, I deem it necessary to contact you for your views and opinions about the livelihood adaptation measures you have adopted to deal with the resultant effects of expropriation. The research project is an academic exercise in partial fulfilment of the requirements for the award of a doctoral degree. Your participation entails you being interviewed by the principal investigator or a research assistant, and whatever information you provide will be considered as confidential and will be treated as such. Please note that your name or identity will not be mentioned in any part of the report. In addition, the information obtained from you will be used for only its proposed purpose. The principal investigator does not anticipate any risks or harm to you with respect to your involvement in this research project. Your voluntary participation is priceless and as such, you may decline to answer any question that you do not wish to respond to, and you can also withdraw from the interview any time that you feel uncomfortable. The interaction is expected to last for about 60 minutes. Before we start the conversation, do you have any questions? Please feel free to ask any question(s) during the course of the interaction and I or the research assistant will be glad to respond to them. Thank you.

Administrative Part

Code:

Name of the Interviewer:

Name of District:

Name of Community:

Date:

Start Time:

End Time:

Instruction

Please, for each question in the various sections indicate the chosen option by ticking the most appropriate answer(s) and fill in (where applicable)

Section 1: Household's Socio-Economic Characteristics of Respondents

Sex: [1] Male [2] Female

1. Age.....
2. Indicate your marital status: [1] Married [2] Single [3] Divorced
3. What is your highest level of educational attainment? [1] Primary [2] Middle [3] JHS [4] SHS [5] Tertiary [6] Non-formal [7] Nil
4. What is the highest level of educational attainment of your spouse (if applicable)? [1] Primary [2] Middle [3] JHS [4] SHS [5] Tertiary [6] Non formal [7] Nil
5. What is the highest level of education attained by working members of your household? [1] Primary [2] Middle [3] JHS [4] SHS [5] Tertiary [6] Non-formal [7] Nil
6. What is the lowest level of education attained by working members of your household? [1] Primary [2] Middle [3] JHS [4] SHS [5] Tertiary [6] Non-formal [7] Nil
7. What is your major occupation? [1] Farming [2] Fishing [3] Trading [4] Teaching [5] Health worker [6] Other (specify).....
8. What is the major occupation of your spouse (if applicable)? [1] Farming [2] Fishing [3] Trading [4] Teaching [5] Health worker [6] Other (specify).....
9. Indicate your household size?.....
10. How many of the household members are male?
.....
11. How many of the household members are female?
.....
12. How many of the household members are schooling?.....
13. How many members of the household are not working?.....

14. How many members of the household are working?

15. How many working members of the household are male?

16. How many working members of the household are female?

17. Which of the following assets did you acquire before expropriation?

Asset	Tick	Asset	Tick
1. Cooking utensils		9. Motorbike	
2. Television set		10. Coconut farm	
3. Cocoa farm		11. Clothing	
4. Refrigerator		12. Car	
5. Furniture		13. House	
6. Tricycle		14. Land	
7. Tools		15. Bicycle	
8. Mobile phone		16. Others (specify):	

Section 2: Extent of Participation in the Acquisition Processes by Displaced persons

18. Were you seized with the information of the publication of the Executive Instrument on the Western Corridor Gas Infrastructure Development Project acquisitions before the acquiring agencies occupied your land? [1] Yes [2] No

19 b) If yes, which of the following medium did you first hear the information from?

- [1] Newspapers [2] Electronic media [3] Acquiring Agencies [4] Chief and elders [5] District Assembly [6] Assembly member [7] NGOs [8] Others (specify)

.....

19. Which of the following people, institutions, companies or acquiring agencies engaged you on the compulsory land acquisition processes? Tick as many as are applicable?

No	People, Institutions, companies,	Tick
1	Ghana Gas Company	
2	Lands Commission	
3	Environmental Protection Authority	
4	Municipal /District Assembly	
5	Chief and elders	
6	Others (specify)	

20. Which of the following compulsory land acquisition activities did you participate in? Tick as many as are applicable?

No	Acquisition Activities	Tick
1	Boundary demarcation	
2	Submission of claims	
3	Valuation of properties	
4	Determination of property (crop) compensation	
5	Determination of land compensation	
6	Determination of compensation payment schedules	
7	Documentation of affected properties	

21. How was the main mode of engagement [1] Information sharing [2] Consultation [3] Decision-making [4] initiation of action [5] others (specify).....

22. What was the mode of communication between displaced persons and acquiring agencies? [1] Telephone [2] Community public address system [3] WhatsApp platform [4] Others (specify).....

23. Did the Lands Commission undertake the valuation of your
 i) crops? [1] Yes [2] No
 ii) parcel(s) of land? [1] Yes [2] No
 24 a) If yes, were you satisfied with the valuation report? [1] Yes [2] No
 Explain your answer.....

24 b) If no, which private company undertook the valuation of your property?

Section 3: Utilisation of Compulsory Land Acquisition Cash Compensation Claims

24. Were you able to put in your compensation claim for:
 25 a) Properties (crops) on the compulsorily acquired land? [1] Yes [2] No
 No
 If no, why not?.....

25 b) The compulsorily acquired land? [1] Yes [2] No
 If no, why not?.....

***Skip to question 38 if you responded no to both questions 25a and 25b.**

25. Have you received your compensation payment for the:
 26 a) Properties (crops) on the compulsorily acquired land? [1] Yes [2] No
 If no, why not?.....

.....
 26 b) The compulsorily acquired land? [1] Yes [2] No
 If no, why not?

.....
***Skip to question 38 if you responded no to both questions 26 a and 26 b above**

26. How much cash compensation did you receive for the:
 a) Properties (crops) on the compulsorily acquired land?
 GH¢.....
 b) Compulsorily acquired land?
 GH¢.....

27. Were you satisfied with the compensation amount? [1] Yes [2] No
 Explain your answer.....

.....
 28. Was the cash compensation received on the scheduled date? [1] Yes [2] No
 If no, why not?.....

.....
 29. Who decided how the cash compensation should be used in your household?
 [1] Husband [2] wife [3] Both husband and wife [4] Acquiring Agencies
 30. What did you use the cash compensation for?
 [1] Consumption [2] Asset acquisition [3] Income generating activities
 [4] Both Consumption and Asset acquisition [5] Both consumption and Income generating activities [6] Consumption, Asset acquisition and Income generating.

***Skip to question 35 if your response to question 31 is income generating activities only**

31. Which of these consumables did you spend the cash compensation on? Tick as many as are applicable

No.	Item Consumed	Tick	No.	Item	Tick
1	Foodstuff		7	Marriage	
2	Water		8	Alcohol	
3	Travel to search for jobs		9	Cigarette	
4	Healthcare		10	Lotto	
6	School supplies		12	Others (specify):	

32. Which of these assets and chattels did you acquire with the cash compensation? Tick as many as are applicable

Asset	Tick	Asset	Tick
1. Cooking utensils		9. Motorbike	
2. Television set		10. Bicycle	
3. Coconut farm		11. Clothing	
4. Refrigerator		12. Car	
5. Furniture		13. House	
6. Bed		14. Land	
7. Tools		15. Cocoa farm	
8. Mobile phone		16. Others (specify):	

33. Do you attribute your ability to acquire these assets in question 33 entirely to the receipt of the compensation amount? [1] Yes [2] No
 Explain you answer.....

34. Which of these income generating activities did you invest your cash compensation in? [1] Farm enterprises [2] non-farm enterprises [3] Both farm and non-farm enterprises
 Kindly, list the specific income generating activities you are engaged in

35. Were these investments in income generating activities in question 35 started with the receipt of the cash compensation amount? [1] Yes [2] No
 If no, where did you get the start-up capital from?.....

How much did you receive from the other source(s) of income to start the business? GH¢.....

Section 4: Displaced persons' Household Income Portfolios before and after Expropriation

36. What were the household sources of income before expropriation? Tick as many as are applicable

Farm income	Tick	Off-farm income	Tick	Non-farm income	Tick
Crop production:		Retirement benefit (Pension)		Transportation: (Taxi,	

				Commercial, Cargo etc)	
Food crops (Cassava, Plantain, Yam, etc)		Hiring out of farm labour		Handicraft: (weaving, bead making, etc.)	
Tree crops (Cocoa, Coconut, Oil Palm etc.)		Renting: (house, machine, etc)		Trading: (Clothing, cosmetic, electrical appliances, etc.)	
Vegetables (Pepper, Tomatoes, Okro, etc)		Investment (Treasury Bills, Bonds, savings etc)		Hospitality: (Guest house, restaurant, Bar tendering, etc)	
Livestock rearing:		Welfare services (LEAP)		Beautician industry (Hair dressing, dressmaking, barbering)	
Poultry (Fouls, Duck, etc)		Others (Specify):		Repair (Electrical appliances, footwear, etc)	
Animal (Goat, sheep, cattle, etc)				Brewing of local liquor: (Akpeteshie, Palm wine)	
Fish farming: (Tilapia, mud fish)				Pastries: (Bread, pie, egg dough, etc)	
Others (Specify):				Public/Civil Service: (Teaching, Nursing, etc)	
				Construction: (masonry, carpentry, plumbing, wielding etc.)	
				Mining: (Gold, Sand, etc.)	
				Private business (Ghana Gas Co. Ltd, Bank, etc)	
				Small scale manufacturing	
				Selling of food: (Cooked rice,	

				Gari & Beans, Akyeke etc)	
				Others(specify):	

37. What are the current sources of income of your household? Tick as many as are applicable

Farm income	Tick	Off-farm income	Tick	Non-farm income	Tick
Crop production:		Retirement benefit (Pension)		Transportation: (Taxi, Commercial, Cargo etc)	
Food crops (Cassava, Plantain, Yam, etc)		Hiring out of farm labour		Handicraft: (weaving, bead making, etc.)	
Tree crops (Cocoa, Coconut, Oil Palm etc.)		Renting: (house, machine, etc)		Trading: (Clothing, cosmetic, electrical appliances, etc.)	
Vegetables (Pepper, Tomatoes, Okro, etc)		Investment (Treasury Bills, Bonds, Savings etc)		Hospitality: (Guest house, restaurant, Bar tendering, etc)	
Livestock rearing:		Welfare services (LEAP)		Beautician industry (Hair dressing, dressmaking, barbering)	
Poultry (Fouls, Duck, etc)		Others (Specify):		Repair (Electrical appliances, footwear, etc)	
Animal (Goat, sheep, cattle, etc)				Brewing of local liquor: (Akpateshie, Palm wine)	
Fish farming: (Tilapia, mud fish)				Pastries: (Bread, pie, egg dough, etc)	
Others (Specify):				Public/Civil Service: (Teaching, Nursing, etc)	
				Construction: (masonry,	

				carpentry, plumbing, welding etc.)	
				Mining: (Gold, Sand, etc.)	
				Private business (Bank, Water companies, etc)	
				Small scale manufacturing	
				Selling of food: (Cooked rice, Gari & Beans, Akyeke etc)	
				Others(specify):	

38. How much was the household’s annual income before expropriation?

GH¢.....
.....

39. How much do your household earn annually from the current sources of income? GH¢.....

40. Do you obtain income from any other sources apart from those already indicated in question 39? [1] yes [2] no

43 b) If yes, indicate the other sources of income [1] Gift [2] remittance [3] Others (specify).....

41. How much do you earn from these other sources (s)? GH¢

42. Indicate how often you receive income from these other sources. [1] Not at all [2] once a year [3] twice in a year [4] thrice in a year [4] four times in a year [5] every month

43. Have you observed any change in your annual income? [1] Yes [2] No
43 b) If yes, what might have accounted for the change?.....
.....
.....

Section 5: Livelihood strategies adopted by expropriated households

44. Who owns the land? [1] Stool [2] Family [3] State [4] Others (specify)

45. How did you acquire your parcel(s) of land? [1] Inheritance [2] Head of stool [3] Head of family [4] Gift [5] Abusa [6] Abunu [7] Others (specify).....
.....

46. What processes did you go through to acquire the land?.....

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

47. Did/Have you register(ed) your parcel(s) of land with Lands Commission?

[1] Yes [2] No

If no, why not?

Explain.....

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

48. How many parcels of your land were compulsorily acquired?.....

49. What was the size of the compulsorily acquired land?.....

50. What was/were the land use(s) of the compulsorily acquired land?

[1] Farming [2] Residential [3] Commercial [4] Unused [5] Others (specify).....

51b) If your response to question 51 is farming, list the crop (s) that was/were affected [1] Cassava [2] Plantain [3] Cocoa [4] Oil palm [5] Coconut [6] Vegetables [7] Rubber [8] Others (specify).....

51. Were you able to put the unacquired portion of the expropriated parcel(s) of land to use? [1] Yes [2] No

52b) If your response to question 52 is yes, what was/were the land use(s) to which the unacquired portion was put to?

[1] Farming [2] Residential [3] Commercial [4] Others (specify).....

52c) If your response to question 52b is farming, list the crop (s) that was/were planted [1] Cassava [2] Plantain [3] Cocoa [4] Oil palm [5] Coconut [6] Vegetables [7] Rubber [8] Others (specify).....

52. Did you change the farming arrangement for food crop production after expropriation? [1] Yes [2] No

53 b) If yes, which of the following farming arrangements have you adopted?

[1] Extensive farming [2] Diversification [3] Intensification

53. Indicate your interest in the expropriated parcel(s) of land? Tick as many as are applicable

Interest in the Land	Tick	Interest in the Land	Tick
Leasehold		Abusa	
Customary Freehold		Abunu	
Other (specify):			

54. What were the livelihood activities your household were engaged in before expropriation? (Tick as many as are applicable)

Farm	Tick	Off-farm	Tick	Non-farm	Tick
Crop production:		Hiring out of farm labour		Transportation: (Taxi, Commercial, Cargo etc)	
Food crops (Cassava, Plantain, Yam, etc)		Investment (Treasury Bills, Bonds, savings etc)		Handicraft: (weaving, bead making, etc.)	
Tree crops (Cocoa, Coconut, Oil Palm etc.)		Renting: (house, machine, etc)		Trading: (Clothing, cosmetic, electrical appliances, etc.)	
Vegetables (Pepper, Tomatoes, Okro, etc)		Others (Specify):		Hospitality: (Guest house, restaurant, Bar tending, etc)	
Livestock rearing:				Beautician industry (Hair dressing, dressmaking, barbering)	
Poultry (Fouls, Duck, etc)				Repair (Electrical appliances, footwear, etc)	
Animal (Goat, sheep, cattle, etc)				Brewing of local liquor: (Akpeteshie, Palm wine)	
Fish farming: (Tilapia, mud fish)				Pastries: (Bread, pie, egg dough, etc)	
Others (Specify):				Public/Civil Service: (Teaching, Nursing, etc)	

				Construction: (masonry, carpentry, plumbing, welding etc.)	
				Mining: (Gold, Sand, etc.)	
				Brewing of local liquor: (Akpateshie, Palm wine)	
				Private business (Ghana Gas Co. Ltd, Bank, etc)	
				Small scale manufacturing	
				Selling of food: (Cooked rice, Gari & Beans, Akyeke etc)	
				Others(specify):	

55. What are the current livelihood activities your household is engaged in? (Tick as many as are applicable)

Farm	Tick	Off-farm	Tick	Non-farm	Tick
Crop production:		Investment (Treasury Bills, Bonds, Savings etc)		Transportation: (Taxi, Commercial, Cargo etc)	
Food crops (Cassava, Plantain, Yam, etc)		Hiring out of farm labour		Handicraft: (weaving, bead making, etc.)	
Tree crops (Cocoa, Coconut, Oil Palm etc.)		Renting: (house, machine, etc)		Trading: (Clothing, cosmetic, electrical appliances, etc.)	
Vegetables (Pepper, Tomatoes, Okro, etc)		Others (Specify):		Hospitality: (Guest house, restaurant, Bar tendering, etc)	
Livestock rearing:				Beautician industry (Hair dressing, dressmaking, barbering)	

Poultry (Fouls, Duck, etc)				Repair (Electrical appliances, footwear, etc)	
Animal (Goat, sheep, cattle, etc)				Brewing of local liquor: (Akpeteshie, Palm wine)	
Fish farming: (Tilapia, mud fish)				Pastries: (Bread, pie, egg dough, etc)	
Others (Specify):				Public/Civil Service: (Teaching, Nursing, etc)	
				Construction: (masonry, carpentry, plumbing, welding etc.)	
				Mining: (Gold, Sand, etc.)	
				Brewing of local liquor: (Akpeteshie, Palm wine)	
				Private business (Bank, Water companies, etc)	
				Small scale manufacturing	
				Selling of food: (Cooked rice, Gari & Beans, Akyeke etc)	
				Others(specify):	

56. What informed the choice of the livelihood activities indicated in question (Tick as many as applicable) [1] Education [2] Technical training [3] Ability to raise funds [4] Presence of opportunities [5] Physical ability [6] Ownership of assets [7] Wage [8] Job experience [9] Age [10] Sex [11] Others (specify).....

57. Has any member of your household migrated to another community/city/overseas in search of livelihood activity? [1] Yes [2] No

58 b) If yes, where do they migrate to

58. Are you able to raise credit facility to support your livelihood activities? [1] Yes [2] No

59 b) If yes, where do you source your credit facility from?

.....
 59 c) If no, how do you raise funds to support your livelihood activities?.....

59. Has any member of the household secured job in Ghana Gas Company? [1] Yes [2] No

60b. Explain your answer.....

60. Has Ghana Gas Company designed any alternative livelihood support for your household?
 [1] Yes [2] No

62 b) If yes, explain the nature of the alternative livelihood support

Section 6: Challenges Associated with the Implementation of Compulsory Acquisition Order

61. Did any challenge arise during the compulsory land acquisition processes?

[1] Yes [2] No.

If no, skip to question 66 and respond to it only

62. Indicate the major challenges encountered during the compulsory land acquisition activities (Tick one most challenging)

No.	Nature of challenge	Tick
1	Delay in the publication of the Executive Instrument (EI)	
2	Non-submission of claims within six months after the publication of EI	
3	Inadequate knowledge about the acquisition before work started	
4	Non-Completion of the Legal Process	
5	Delay in the adjudication of dispute	
6	Delay in the payment of compensation	

63. Was/were there any mechanism(s) to address the challenge you encountered

[1] Yes [2] No

64 b) If yes, tick as many as applicable [1] Community relation complaint unit of Lands Commission [2] The High Court [3] Assembly member [4] Chief of the community [5] Non-governmental Organisations

64 c) If yes, did you make use of the mechanism(s) for reporting challenges you met as an expropriator [1] Yes [2] No

If no, why

not?.....

.....
.....

64 d) If yes, what was the outcome of the issue(s) that was/were reported?(Tick) [1] Completely resolved [2] Partially resolved [3] Not resolved

64. Any other comments

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

Thank you for your participation



APPENDIX B

DISCUSSION GUIDE FOR EXPROPRIATED COMMUNITY MEMBERS (WOMEN, MEN, TRADITIONAL AUTHORITIES)

I, the Principal Investigator, Wisdom Quaku, from the University of Cape Coast, humbly request you to participate in this research project on the topic: Compulsory Land Acquisition for the Western Corridor Gas Infrastructure

Development Project and Livelihood Adaptation within Nzema East Municipality and Ellembelle District in Ghana. As members of expropriated communities, I deem it necessary to contact you for your views and opinions about the livelihood adaptation measures you have adopted to deal with the resultant effect of expropriation. The research project is an academic exercise in partial fulfilment of the requirements for the award of a doctoral degree. Your participation entails you being interviewed by the principal investigator or moderator, and whatever information you provide will be considered as confidential and will be treated as such. Please note that your names or identities will not be mentioned in any part of the report. In addition, the information obtained from you will be used for only its proposed purpose. The principal investigator does not anticipate any risks or harm to you with respect to your involvement in this research project. Your voluntary participation is priceless and as such, you may decline to answer any question that you do not wish to respond to, and you can also withdraw from the discussion any time that you feel uncomfortable. The interaction is expected to last for about 90 minutes. Before we start the discussion, do you have any question(s)? Please feel free to ask any question(s) during the course of the interaction and I or the research assistant will be glad to respond to them. Thank you.

A. Administrative Part

Name of Interviewer:

Name of District/Municipality:

Name of Community:

Date:

Start Time:

End Time:

Section 2: Extent of Participation in the Acquisition Processes by Displaced persons

1. Did the publication of the Executive Instrument on the Western Corridor Gas Infrastructure Development Project acquisitions happen before the acquiring agencies occupied your land? Probe- newspapers, electronic media, acquiring agencies, chief and elders, district assembly, assembly members, non-governmental organisations, etc.

2. Which people, institutions, or companies engaged you on the compulsory land acquisition processes? Probe- Ghana Gas Company, Lands Commission, Municipal/District Assembly, Environmental Protection Authority, chief and elders etc.
3. Which compulsory land acquisition activities did you participate in? Probe- boundary demarcation, submission of claims, valuation of properties, determination compensation, documentation etc.
4. What was/were the mode of engagement? Probe-information sharing, consultation, decision-making, initiation of action etc.
5. What was the mode of communication between displaced persons and acquiring agencies? Probe-telephone, community public address system, whatsapp platform etc.
6. Which company did the valuation? Probe-Lands Commission, private companies, satisfaction with the processes etc.

Section 3: Utilisation of Compulsory Land Acquisition Cash Compensation Claims

7. Were you able to put in your compensation claim? Probe-compensation for crops and land, adequacy of compensation, payment on time, fully paid etc
8. Who took the decision regarding the use of the compensation? Probe-husband, wife, both wife and husband etc.
9. What was the cash compensation used for? Probe-consumption, asset acquisition, income generating activities, consumables, all etc.
10. Which income generating activities did you invest your cash compensation in? Probe-farm enterprises, non-farm enterprises, both farm and non-farm enterprises

Section 4: Displaced persons' Household Income Portfolios before and after Expropriation

11. What have been the sources of income (previous and current) for your households? Probe- crop production, livestock, aquaculture, fishing in the seas, retirement benefit, leap, investment, renting of houses, hiring of farm labour, transport business, handicraft, trading, hospitality, hairdressing, brewing of local liquor, pastries, public/civil service etc.

Section 5: Livelihood strategies adopted by expropriated households

12. Who owns the land in your community? Probe- stool, family, state etc.
13. How do you acquire land for various uses? Probe- various processes involved, inheritance, stool head, gift, abusa, abunu etc.
14. Do you register your parcel(s) of land with Lands Commission?
15. What was/were the land use(s) of the compulsorily acquired land? Probe-farming, residential, commercial, unused etc
16. Which crops were affected by the acquisition? Probe- cassava, plantain, cocoa, oil palm coconut, vegetables, rubber etc
17. What use did you put the unacquired proportion of the land to? Probe- Farming, Residential, Commercial etc.
18. Have you experienced any change in the farming arrangement for food crop production? Probe-extensive farming, diversification, intensification etc
19. What have been the predominant livelihood activities (previous and current) in the community? Probe-farm, off-farm and non-farm etc.
20. What usually informs the choice of livelihood activities in your community? Probe- education, technical training, ability to raise funds, presence of opportunities, physical ability, ownership of assets, wage, job experience, age, sex, etc.
21. Have members of the community migrated? Probe-is it because of expropriation, or its normal practice, where they migrate to etc
22. Are you able to raise credit facility to support your livelihood activities? Probe-institutions, terms, availability etc.
23. Have members of the community secured jobs from Ghana Gas Company? Probe- how many, type of job etc.
24. Has Ghana Gas Company designed any alternative livelihood support for the community members? Probe-type of support, number of beneficiaries

Section 6: Challenges Associated with the Implementation of Compulsory Acquisition Order

25. What challenges occurred during the compulsory land acquisition processes? Probe- effective communication, effective involvement, delay is Executive Instrument publication, wrong demarcation of

boundaries, litigation over land ownership, delay in compensation payment, inadequate compensation, poor compensation, poor documentation, non-submission of claims, lack of knowledge on acquisition process etc.

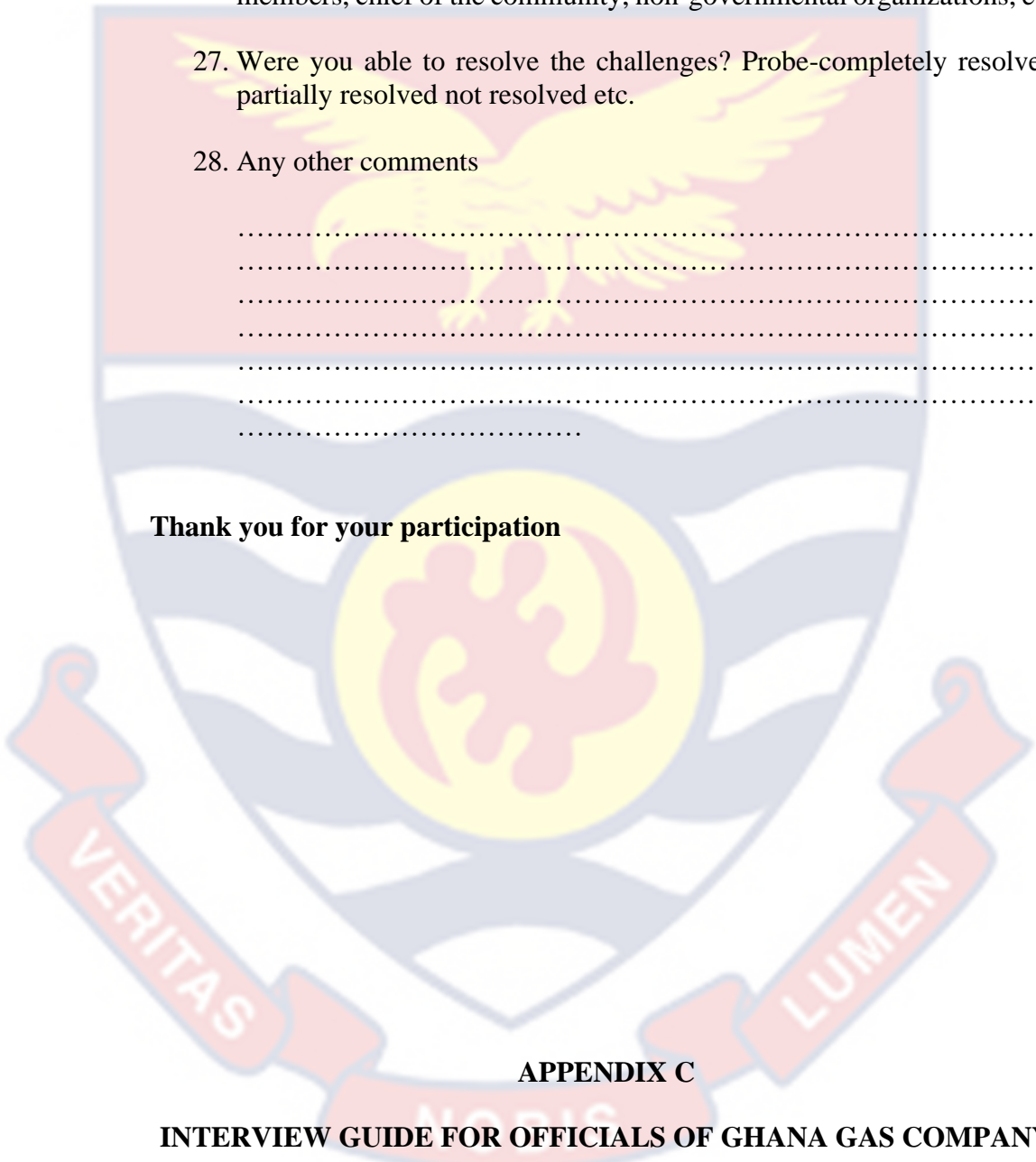
26. How did you address the challenges that occurred? Probe-community relation complaint unit of Lands Commission, the High Court, assembly members, chief of the community, non-governmental organizations, etc.

27. Were you able to resolve the challenges? Probe-completely resolved, partially resolved not resolved etc.

28. Any other comments

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

Thank you for your participation



APPENDIX C

INTERVIEW GUIDE FOR OFFICIALS OF GHANA GAS COMPANY

My name is Wisdom Quaiku and a Ph.D. student at the University of Cape Coast. I am undertaking my research project on the topic: *Compulsory Land Acquisition for the Western Corridor Gas Infrastructure Development Project and Livelihood Adaptation within Nzema East Municipality and Ellembelle District in Ghana*. As an agency of government which is involved in the compulsory acquisition

processes, I thought it would be a good idea to seek your views about the subject matter of the research. I would like to ask you some questions about your outfit's experiences in relation to the Western Corridor Gas Infrastructure Development Project expropriation as well as matters of compensation and livelihood strategies. The research is an academic exercise in partial fulfilment of the requirements for the award of a doctoral degree.

Let me assure you that your name will not be disclosed in any part of the report and the information obtained from you will be used for only its proposed purpose. Your voluntary participation is priceless and as such, you may decline to answer any question that you do not wish to respond, and you can withdraw from the interview at any time that you feel uncomfortable. The interview should take about 60 minutes. I will take notes of our conversation and record at the same time and if at any point during the conversation you want me to turn off the recorder or take off something you said, please let me know. Before we begin the interview, do you have any questions? If any questions arise at any point during the conversation, you can feel free to ask them. I will be more than willing to answer your questions. Let me begin by asking you some questions about the Western Corridor Gas Infrastructure Development Project acquisition.

A. Administrative Part

Name of Interviewer:

Date:

Start Time:

End Time:

Section 2: Extent of Participation in the Acquisition Processes by Displaced persons

1. Did the publication of the Executive Instrument on the Western Corridor Gas Infrastructure Development Project acquisitions happen before the acquiring agencies occupied your land? Probe- newspapers, electronic media, acquiring agencies, chief and elders, district assembly, assembly members, non-governmental organisations, etc.
2. What was/were the mode of engagement? Probe-information sharing, consultation, decision-making, initiation of action etc.
3. What was the mode of communication between displaced persons and acquiring agencies? Probe-telephone, community public address system, whatsapp platform etc.

4. Which company did the valuation? Probe-Lands Commission, private companies, satisfaction with the processes etc.

Section 3: Utilisation of Compulsory Land Acquisition Cash Compensation Claims

5. Were the displaced persons able to put in their compensation claim? Probe- compensation for crops and land, adequacy of compensation, payment on time, fully paid etc
6. Which income generating activities did the displaced persons invest their cash compensation in? Probe-farm enterprises, non-farm enterprises, both farm and non-farm enterprises

Section 4: Displaced persons' Household Income Portfolios before and after Expropriation

7. What have been the sources of income (previous and current) for the displaced persons? Probe- crop production, livestock, aquaculture, fishing in the seas, retirement benefit, leap, investment, renting of houses, hiring of farm labour, transport business, handicraft, trading, hospitality, hairdressing, brewing of local liquor, pastries, public/civil service etc.

Section 5: Livelihood strategies adopted by expropriated households

8. Who owns the land in the study area? Probe- stool, family, state etc.
9. Do people register their parcel(s) of land with Lands Commission?
10. What was/were the land use(s) of the compulsorily acquired land? Probe-farming, residential, commercial, unused etc
11. Which crops were affected by the acquisition? Probe- cassava, plantain, cocoa, oil palm coconut, vegetables, rubber etc
12. What use did displaced persons put the unacquired proportion of the land to? Probe- Farming, Residential, Commercial etc.
13. What have been the predominant livelihood activities (previous and current) in the community? Probe-farm, off-farm and non-farm etc.
14. What usually informs the choice of livelihood activities in the study area? Probe- education, technical training, ability to raise funds, presence of opportunities, physical ability, ownership of assets, wage, job experience, age, sex, etc.

- 15. Have members of the community secured jobs from Ghana Gas Company? Probe- how many, type of job etc.
- 16. Has Ghana Gas Company designed any alternative livelihood support for the community members? Probe-type of support, number of beneficiaries

Section 6: Challenges Associated with the Implementation of Compulsory Acquisition Order

- 17. What challenges occurred during the compulsory land acquisition processes? Probe- effective communication, effective involvement, delay in Executive Instrument publication, wrong demarcation of boundaries, litigation over land ownership, delay in compensation payment, inadequate compensation, poor compensation, poor documentation, non-submission of claims, lack of knowledge on acquisition process etc.
- 18. How were the challenges addressed? Probe-community relation complaint unit of Lands Commission, the High Court, assembly members, chief of the community, non-governmental organizations, etc.
- 19. Were the challenges resolved? Probe-completely resolved, partially resolved, not resolved etc.
- 20. Any other comments

.....

.....

.....

.....

.....

.....

.....

Thank you for your participation

APPENDIX D

INTERVIEW GUIDE FOR OFFICIAL(S) OF LAND COMMISSION

My name is Wisdom Quaiku and a Ph.D. student at the University of Cape Coast. I am undertaking my research project on the topic: *Compulsory Land Acquisition for the Western Corridor Gas Infrastructure Development Project and Livelihood Adaptation within Nzema East Municipality and Ellembelle District in Ghana*. As staff of an agency of government which is involved in the

implementation of compulsory land acquisition order, I thought it would be a good idea to interview you so that you can share with me your experiences and opinions about the subject matter of the research. I would like to ask you some questions about your outfit's experiences in relation to the Western Corridor Gas Infrastructure Development Project acquisition. The research is an academic exercise in partial fulfilment of the requirements for the award of a doctoral degree and whatever information you provide will be considered as confidential and treated as such.

Let me assure you that your identity will not be disclosed in any part of the report and the information obtained from you will be used for only its proposed purpose. Your voluntary participation is priceless and as such, you may decline to answer any question that you do not wish to respond, and you can withdraw from the interview at any time that you feel uncomfortable. The interview should take about 60 minutes. Are you available to respond to the questions now? I will only take down notes of our conversation and please let me know if at any point you want me to turn off the recorder or keep something off the record. Do you have any questions before we start? If any questions arise at any point in the course of the conversation, feel free to ask them. I would be glad to answer your questions. Let me begin by asking you some questions about expropriation, valuation of properties and compensation determination.

A. Administrative Part

Name of Interviewer:

Date:

Start Time:

End Time:

Section 2: Extent of Participation in the Acquisition Processes by Displaced persons

1. Did the publication of the Executive Instrument on the Western Corridor Gas Infrastructure Development Project acquisitions happen before the acquiring agencies occupied your land? Probe- newspapers, electronic media, acquiring agencies, chief and elders, district assembly, assembly members, non-governmental organisations, etc.
2. What was/were the mode of engagement? Probe-information sharing, consultation, decision-making, initiation of action etc.

3. What was the mode of communication between displaced persons and acquiring agencies? Probe-telephone, community public address system, whatsApp platform etc.
4. Which company did the valuation? Probe-Lands Commission, private companies, satisfaction with the processes etc.

Section 3: Utilisation of Compulsory Land Acquisition Cash Compensation Claims

5. Were the displaced persons able to put in their compensation claim? Probe- compensation for crops and land, adequacy of compensation, payment on time, fully paid etc
6. Which income generating activities did the displaced persons invest their cash compensation in? Probe-farm enterprises, non-farm enterprises, both farm and non-farm enterprises

Section 5: Livelihood strategies adopted by expropriated households

7. Who owns the land in the study area? Probe- stool, family, state etc.
8. Do people register their parcel(s) of land with Lands Commission?
9. What was/were the land use(s) of the compulsorily acquired land? Probe-farming, residential, commercial, unused etc
10. Which crops were affected by the acquisition? Probe- cassava, plantain, cocoa, oil palm coconut, vegetables, rubber etc
11. What have been the predominant livelihood activities (previous and current) in the community? Probe-farm, off-farm and non-farm etc.

Section 6: Challenges Associated with the Implementation of Compulsory Acquisition Order

12. What challenges occurred during the compulsory land acquisition processes? Probe- effective communication, effective involvement, delay in Executive Instrument publication, wrong demarcation of boundaries, litigation over land ownership, delay in compensation payment, inadequate compensation, poor compensation, poor documentation, non-submission of claims, lack of knowledge on acquisition process etc.

13. How were the challenges addressed? Probe-community relation complaint unit of Lands Commission, the High Court, assembly members, chief of the community, non-governmental organizations, etc.

14. Were the challenges resolved? Probe-completely resolved, partially resolved, not resolved etc.

15. Any other comments

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



APPENDIX E

INTERVIEW GUIDE FOR TRADITIONAL AUTHORITIES

I am Wisdom Quaiku and a Ph.D. student at the University of Cape Coast. I am undertaking my research project on the topic: *Compulsory Land Acquisition for the Western Corridor Gas Infrastructure Development Project and Livelihood Adaptation within Nzema East Municipality and Ellembelle District in Ghana*. As a traditional ruler and the custodian of the land, I thought it would be appropriate to interview you so that you can share with me your experiences and opinions about

the subject matter of the research. I would like to ask you some questions about your views on the Western Corridor Gas Infrastructure Development project acquisition, the land tenure system, and livelihood strategies within your area of jurisdiction. The research project is an academic exercise in partial fulfilment of the requirements for the award of a doctoral degree.

Let me pledge that your name or identity will not be mentioned in any part of the report and the information that will be obtained from you will be used for only its proposed purpose. Your voluntary participation is priceless and as such, you may decline to answer any question that you do not wish to respond, and you can withdraw from the interview at any time that you feel uncomfortable. Our interview today will last approximately 60 minutes during which I will be asking you about the land tenure system, livelihoods of the people, the effects of the acquisition order on the people. Are you willing you to answer the questions now? I will only take notes of our conversation and if at any point you want me to turn off the recorder or keep something you said off the record you can draw my attention to it. Do you have any questions before we start the conversation? If any questions arise at any point, feel free to ask, I would be happy to answer your questions. Let me start by asking you some questions about your views on the Western Corridor Gas Infrastructure acquisition, and how that has affected your total land area and the livelihoods of the people.

A. Administrative Part

Name of Interviewer:

Name of District/Municipality:

Name of Community:

Date:

Start Time:

End Time:

Section 2: Extent of Participation in the Acquisition Processes by Displaced persons

1. Did the publication of the Executive Instrument on the Western Corridor Gas Infrastructure Development Project acquisitions happen before the acquiring agencies occupied your land? Probe- newspapers, electronic media, acquiring agencies, chief and elders, district assembly, assembly members, non-governmental organisations, etc.
2. Which people, institutions, or companies engaged you on the compulsory land acquisition processes? Probe- Ghana Gas Company,

Lands Commission, Municipal/District Assembly, Environmental Protection Authority, chief and elders etc.

3. Which compulsory land acquisition activities did you participate in? Probe- boundary demarcation, submission of claims, valuation of properties, determination compensation, documentation etc.
4. What was/were the mode of engagement? Probe-information sharing, consultation, decision-making, initiation of action etc.
5. What was the mode of communication between displaced persons and acquiring agencies? Probe-telephone, community public address system, whatsApp platform etc.
6. Which company did the valuation? Probe-Lands Commission, private companies, satisfaction with the processes etc.

Section 3: Utilisation of Compulsory Land Acquisition Cash Compensation Claims

7. Were your community members able to put in their compensation claim? Probe- compensation for crops and land, adequacy of compensation, payment on time, fully paid etc
8. What use did the community members put the cash compensation to? Probe-consumption, asset acquisition, income generating activities, consumables, all etc.
9. Which income generating activities did your community members invest their cash compensation in? Probe-farm enterprises, non-farm enterprises, both farm and non-farm enterprises

Section 4: Displaced persons' Household Income Portfolios before and after Expropriation

10. What have been the sources of income (previous and current) for the community members? Probe- crop production, livestock, aquaculture, fishing in the seas, retirement benefit, leap, investment, renting of houses, hiring of farm labour, transport business, handicraft, trading, hospitality, hairdressing, brewing of local liquor, pastries, public/civil service etc.

Section 5: Livelihood strategies adopted by expropriated households

11. Who owns the land in your community? Probe- stool, family, state etc.
12. How do people acquire land for various uses? Probe- various processes involved, inheritance, stool head, gift, abusa, abunu etc.
13. Do your people register their parcel(s) of land with Lands Commission?
14. What was/were the land use(s) of the compulsorily acquired land? Probe-farming, residential, commercial, unused etc
15. Which crops were affected by the acquisition? Probe- cassava, plantain, cocoa, oil palm coconut, vegetables, rubber etc
16. What use did the community members put the unacquired proportion of the land to? Probe- Farming, Residential, Commercial etc.
17. Have the community member changed the farming arrangement for food crop production? Probe-extensive farming, diversification, intensification etc
18. What have been the predominant livelihood activities (previous and current) in the community? Probe-farm, off-farm and non-farm etc.
19. What usually informs the choice of livelihood activities in your community? Probe- education, technical training, ability to raise funds, presence of opportunities, physical ability, ownership of assets, wage, job experience, age, sex, etc.
20. Have some members of the community migrated? Probe-is it because of expropriation, or its normal practice, where they migrate to etc
21. Are community members able to raise credit facility to support your livelihood activities? Probe-institutions, terms, availability etc.
22. Have some members of the community secured jobs from Ghana Gas Company? Probe- how many, type of job etc.
23. Has Ghana Gas Company designed any alternative livelihood support for the community members? Probe-type of support, number of beneficiaries

Section 6: Challenges Associated with the Implementation of Compulsory Acquisition Order

24. What challenges occurred during the compulsory land acquisition processes? Probe- effective communication, effective involvement, delay in Executive Instrument publication, wrong demarcation of boundaries, litigation over land ownership, delay in compensation payment, inadequate compensation, poor compensation, poor

documentation, non-submission of claims, lack of knowledge on acquisition process etc.

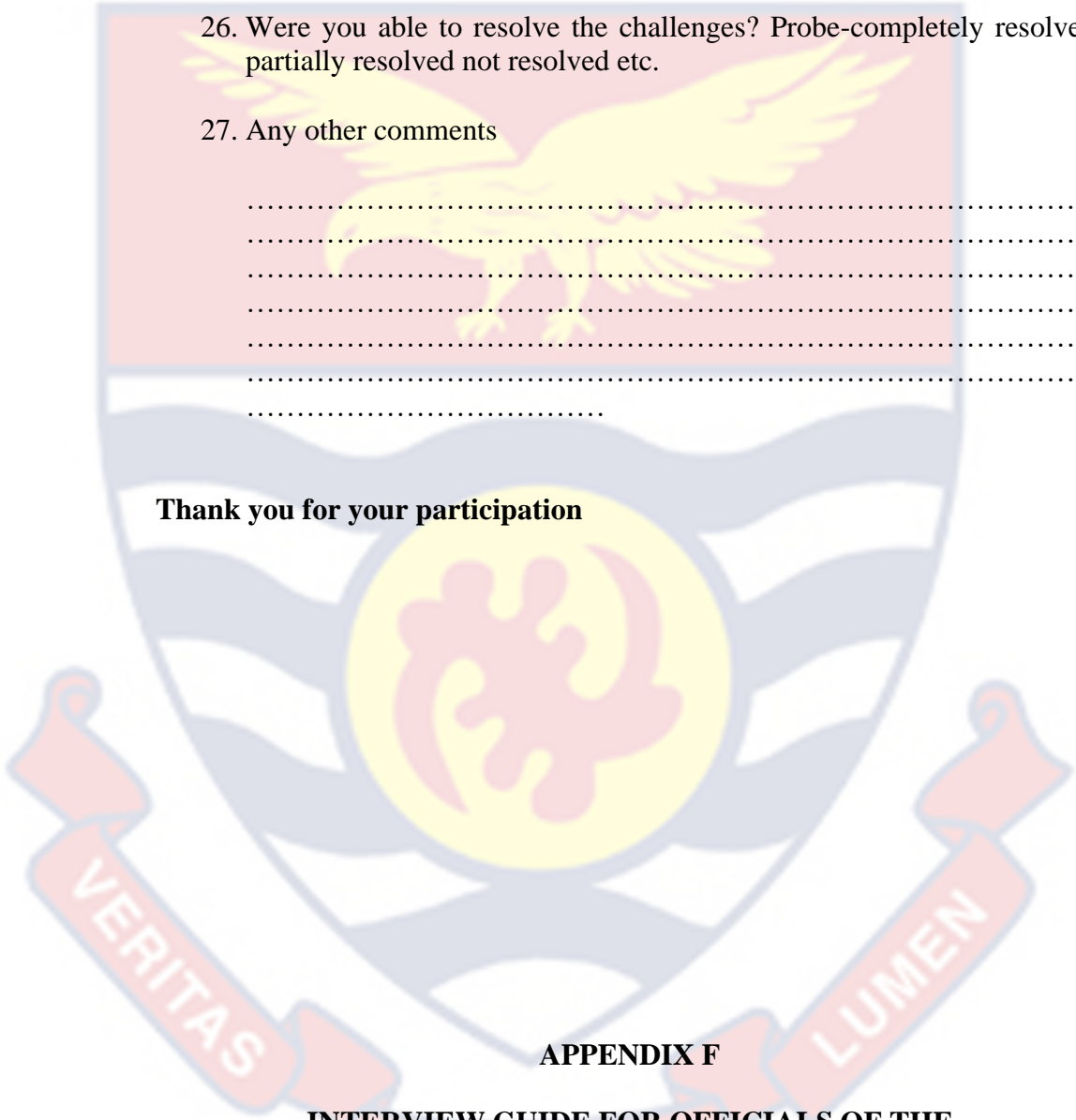
25. How were you able to address the challenges that occurred? Probe-community relation complaint unit of Lands Commission, the High Court, assembly members, chief of the community, non-governmental organizations, etc.

26. Were you able to resolve the challenges? Probe-completely resolved, partially resolved not resolved etc.

27. Any other comments

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

Thank you for your participation



APPENDIX F

INTERVIEW GUIDE FOR OFFICIALS OF THE DISTRICT/MUNICIPAL ASSEMBLY

My name is Wisdom Quaiku and a Ph.D. student at the University of Cape Coast. My research project focuses on the topic: *Compulsory Land Acquisition for the Western Corridor Gas Infrastructure Development Project and Livelihood Adaptation within Nzema East Municipality and Ellembelle District in Ghana*. As a resident of the study area, I will like to have a conversation with you so that you

can share with me your experiences and opinions about the subject matter of the research. Your answering of this will presuppose that you have given your consent to participate in this research. Our conversation today will last about 60 minutes during which I will be asking you questions about the compulsory land acquisition order of the Western Corridor Gas Infrastructure Development acquisitions, and livelihood strategies that have been adopted by expropriated parties. The research project is an academic exercise in partial fulfilment of the requirements for the award of a doctoral degree.

I guarantee that your name or identity will not be mentioned in any part of the report, and the information obtained from you will be used for only the proposed purpose. Your voluntary participation is priceless and as such, you may decline to answer any question that you do not wish to respond, and you can withdraw from the interview at any time that you feel uncomfortable. Are you available to respond to some questions at this time? I will not only take notes of our conversation but will also record the conversation. If at any point you want me to turn off the recorder or keep something you said off the record, kindly let me know. Before we begin the interview, do you have any questions? If any questions arise at any point in the course of the interview feel free to ask them. I would be ready to answer your questions. Let me begin by asking you some questions about your views on the Western Corridor Gas Infrastructure Development acquisition.

A. Administrative Part

Name of Interviewer:

District/Municipality:

Date:

Start Time:

End Time:

Section 2: Extent of Participation in the Acquisition Processes by Displaced persons

1. Did the publication of the Executive Instrument on the Western Corridor Gas Infrastructure Development Project acquisitions happen before the acquiring agencies occupied your land? Probe- newspapers, electronic media, acquiring agencies, chief and elders, district assembly, assembly members, non-governmental organisations, etc.
2. What was/were the mode of engagement? Probe-information sharing, consultation, decision-making, initiation of action etc.

3. What was the mode of communication between displaced persons and acquiring agencies? Probe-telephone, community public address system, whatsApp platform etc.
4. Which company did the valuation? Probe-Lands Commission, private companies, satisfaction with the processes etc.

Section 3: Utilisation of Compulsory Land Acquisition Cash Compensation Claims

5. Were the displaced persons able to put in their compensation claim? Probe- compensation for crops and land, adequacy of compensation, payment on time, fully paid etc
6. Which income generating activities did the displaced persons invest their cash compensation in? Probe-farm enterprises, non-farm enterprises, both farm and non-farm enterprises

Section 4: Displaced persons' Household Income Portfolios before and after Expropriation

7. What have been the sources of income (previous and current) for the displaced persons? Probe- crop production, livestock, aquaculture, fishing in the seas, retirement benefit, leap, investment, renting of houses, hiring of farm labour, transport business, handicraft, trading, hospitality, hairdressing, brewing of local liquor, pastries, public/civil service etc.

Section 5: Livelihood strategies adopted by expropriated households

8. Who owns the land in the study area? Probe- stool, family, state etc.
9. How do people acquire land for various uses? Probe- various processes involved, inheritance, stool head, gift, abusa, abunu etc.
10. Do people register their parcel(s) of land with Lands Commission?
11. What was/were the land use(s) of the compulsorily acquired land? Probe-farming, residential, commercial, unused etc
12. Which crops were affected by the acquisition? Probe- cassava, plantain, cocoa, oil palm coconut, vegetables, rubber etc
13. What have been the predominant livelihood activities (previous and current) in the community? Probe-farm, off-farm and non-farm etc.

- 14. What usually informs the choice of livelihood activities in the study area? Probe- education, technical training, ability to raise funds, presence of opportunities, physical ability, ownership of assets, wage, job experience, age, sex, etc.
- 15. How are displaced persons able to raise credit facilities to support their livelihood activities? Probe-institutions, terms, availability etc.
- 16. Have members of the community secured jobs from Ghana Gas Company? Probe- how many, type of job etc.
- 17. Has Ghana Gas Company designed any alternative livelihood support for the community members? Probe-type of support, number of beneficiaries

Section 6: Challenges Associated with the Implementation of Compulsory Acquisition Order

- 18. What challenges occurred during the compulsory land acquisition processes? Probe- effective communication, effective involvement, delay in Executive Instrument publication, wrong demarcation of boundaries, litigation over land ownership, delay in compensation payment, inadequate compensation, poor compensation, poor documentation, non-submission of claims, lack of knowledge on acquisition process etc.
- 19. How were the challenges addressed? Probe-community relation complaint unit of Lands Commission, the High Court, assembly members, chief of the community, non-governmental organizations, etc.
- 20. Were the challenges resolved? Probe-completely resolved, partially resolved, not resolved etc.
- 21. Any other comments

.....

APPENDIX G

INTERVIEW GUIDE FOR OFFICIAL (S) OF NON-GOVERNMENTAL ORGANISATIONS

I am Wisdom Quaiku and a Ph.D. student at the University of Cape Coast. My research project focuses on the topic: *Compulsory Land Acquisition for the Western Corridor Gas Infrastructure Development Project and Livelihood Adaptation within Nzema East Municipality and Ellembelle District in Ghana*. As a

development worker, I will like you to share your views and experiences about the Western Corridor Gas Infrastructure Development Project. Your participation in the conversation will presuppose that you have given your consent to participate in this research. Our conversation today will last for about 60 minutes during which I will be asking you questions concerning the livelihood strategies of displaced persons, and challenges associated with expropriation. The research project is an academic exercise in partial fulfilment of the requirements for the award of a doctoral degree.

Be assured that your name or identity will not be mentioned in any part of the report, and the information obtained from you will be used for only the proposed purpose. Your voluntary participation is priceless and as such, you may decline to answer any question that you do not wish to respond, and you can withdraw from the interview at any time that you feel uncomfortable. Are you available to respond to some questions at this time? I will not only take notes of our conversation but will also record the conversation. If at any point you want me to turn off the recorder or keep something you said off the record, kindly let me know. Before we begin the interview, do you have any questions? If any questions arise at any point in the course of the interview feel free to ask them. I would be ready to answer your questions. Let me start by asking you some questions about your views on the livelihood strategies in the study area.

A. Administrative Part

Name of Interviewer:

Date:

Start Time:

End Time:

Section 2: Extent of Participation in the Acquisition Processes by Displaced persons

1. Did the publication of the Executive Instrument on the Western Corridor Gas Infrastructure Development Project acquisitions happen before the acquiring agencies occupied your land? Probe- newspapers, electronic media, acquiring agencies, chief and elders, district assembly, assembly members, non-governmental organisations, etc.
2. What was/were the mode of engagement? Probe-information sharing, consultation, decision-making, initiation of action etc.

3. What was the mode of communication between displaced persons and acquiring agencies? Probe-telephone, community public address system, whatsApp platform etc.
4. Which company did the valuation? Probe-Lands Commission, private companies, satisfaction with the processes etc.

Section 3: Utilisation of Compulsory Land Acquisition Cash Compensation Claims

5. Were the displaced persons able to put in their compensation claim? Probe- compensation for crops and land, adequacy of compensation, payment on time, fully paid etc
6. Which income generating activities did the displaced persons invest their cash compensation in? Probe-farm enterprises, non-farm enterprises, both farm and non-farm enterprises

Section 4: Displaced persons' Household Income Portfolios before and after Expropriation

7. What have been the sources of income (previous and current) for the displaced persons? Probe- crop production, livestock, aquaculture, fishing in the seas, retirement benefit, leap, investment, renting of houses, hiring of farm labour, transport business, handicraft, trading, hospitality, hairdressing, brewing of local liquor, pastries, public/civil service etc.

Section 5: Livelihood strategies adopted by expropriated households

8. Who owns the land in the study area? Probe- stool, family, state etc.
9. How do people acquire land for various uses? Probe- various processes involved, inheritance, stool head, gift, abusa, abunu etc.
10. Do people register their parcel(s) of land with Lands Commission?
11. What was/were the land use(s) of the compulsorily acquired land? Probe-farming, residential, commercial, unused etc
12. Which crops were affected by the acquisition? Probe- cassava, plantain, cocoa, oil palm coconut, vegetables, rubber etc
13. What use did displaced persons put the unacquired proportion of the land to? Probe- Farming, Residential, Commercial etc.
14. What have been the predominant livelihood activities (previous and current) in the community? Probe-farm, off-farm and non-farm etc.

- 15. What usually informs the choice of livelihood activities in the study area? Probe- education, technical training, ability to raise funds, presence of opportunities, physical ability, ownership of assets, wage, job experience, age, sex, etc.
- 16. How are displaced persons able to raise credit facilities to support their livelihood activities? Probe-institutions, terms, availability etc.
- 17. Have members of the community secured jobs from Ghana Gas Company? Probe- how many, type of job etc.
- 18. Has Ghana Gas Company designed any alternative livelihood support for the community members? Probe-type of support, number of beneficiaries

Section 6: Challenges Associated with the Implementation of Compulsory Acquisition Order

- 19. What challenges occurred during the compulsory land acquisition processes? Probe- effective communication, effective involvement, delay in Executive Instrument publication, wrong demarcation of boundaries, litigation over land ownership, delay in compensation payment, inadequate compensation, poor compensation, poor documentation, non-submission of claims, lack of knowledge on acquisition process etc.
- 20. How were the challenges addressed? Probe-community relation complaint unit of Lands Commission, the High Court, assembly members, chief of the community, non-governmental organizations, etc.
- 21. Were the challenges resolved? Probe-completely resolved, partially resolved, not resolved etc.
- 22. Any other comments

.....

.....

.....

.....

.....

.....

.....

Thank you for your participation



APPENDIX H

APPLICATION FOR ETHICAL CLEARANCE

Department of Integrated Development Studies
School for Development Studies
University of Cape Coast
PMB
15th January, 2020.

The Chairman
Institutional Review Board
University of Cape Coast



Dear Sir or Madam,

APPLICATION FOR ETHICAL CLEARANCE

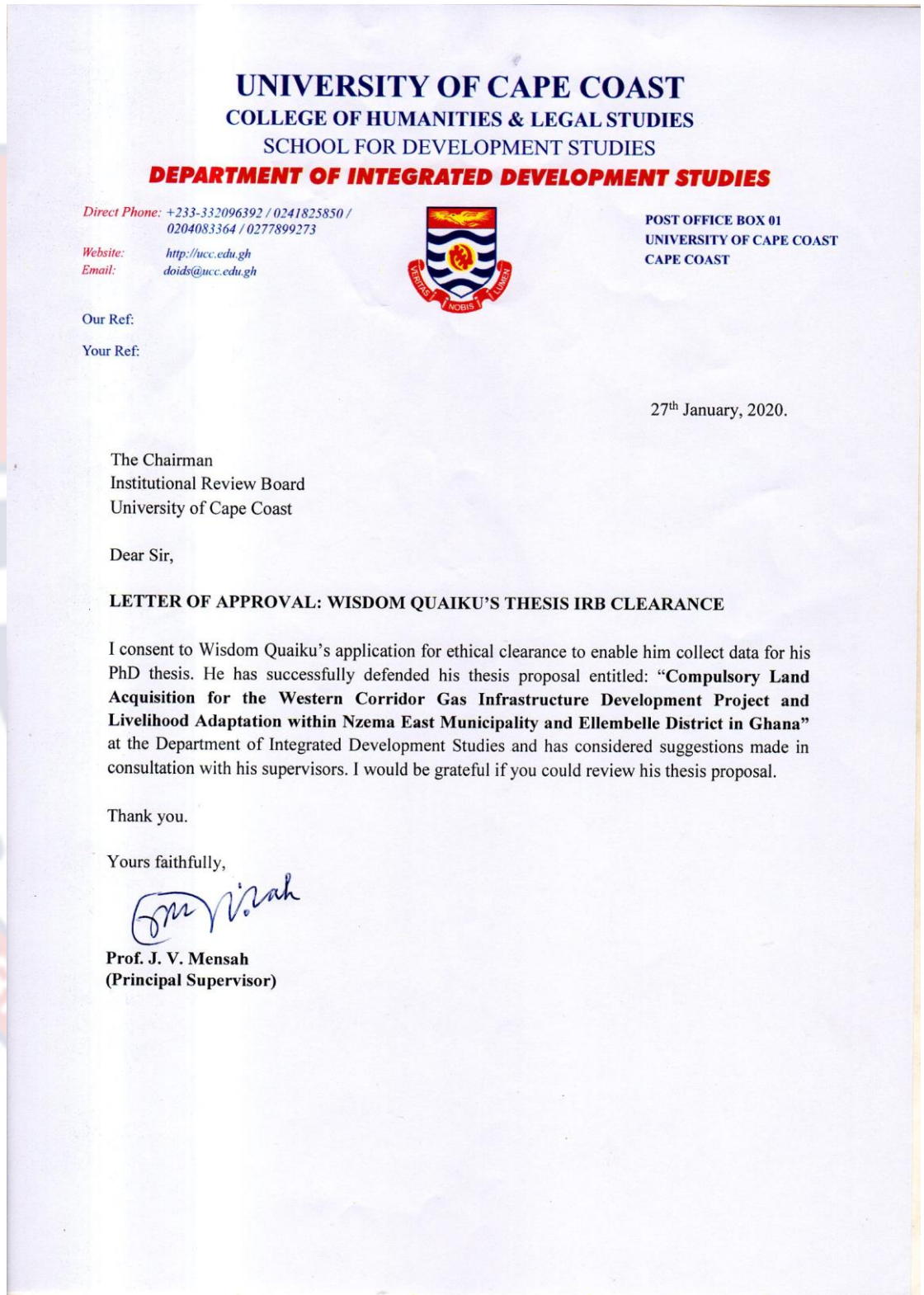
I write to apply for ethical clearance to conduct a research entitled: **"Compulsory Land Acquisition for the Western Corridor Gas Infrastructure Development Project and Livelihood Adaptation within Nzema East Municipality and Ellembelle District in Ghana"**
I wish to confirm that the information provided and the supporting documents reflect what I want to do as part of my PhD studies in the Department of Integrated Development, University of Cape Coast. I hope my research proposal meets the ethical clearance standards and that it would be approved.

Sincerely,

Wisdom Quaiku
(Principal Investigator)
Department of Integrated Development Studies
School for Development Studies
University of Cape Coast, Ghana
wisdomquaiku@yahoo.com
0242128672
SS/DSB/17/0001

APPENDIX I

LETTER OF APPROVAL



APPENDIX J


ETHICAL CLEARANCE

UNIVERSITY OF CAPE COAST
COLLEGE OF HUMANITIES & LEGAL STUDIES
SCHOOL FOR DEVELOPMENT STUDIES
DEPARTMENT OF INTEGRATED DEVELOPMENT STUDIES

Direct Phone: +233-332096392 / 0241825850 /
0204083364 / 0277899273

Website: <http://ucc.edu.gh>
Email: doids@ucc.edu.gh

Our Ref: DIDS/PHD/ Vol.1/058
Your Ref:



POST OFFICE BOX 01
UNIVERSITY OF CAPE COAST
CAPE COAST

17th January, 2020.

The Chairman
Institutional Review Board
University of Cape Coast

Dear Sir,

**ETHICAL CLEARANCE FOR CONDUCT OF RESEARCH: WISDOM QUAIKU
SS/DSD/17/0001**


We write to introduce Mr. Wisdom Quaku, a Doctor of Philosophy student at the Department of Integrated Development Studies, School for Development Studies. Mr. Quaku requires ethical clearance to proceed with his data collection for the thesis titled, "**Compulsory Land Acquisition for the Western Corridor Gas Infrastructure Development Project and Livelihood Adaptation within Nzema East Municipality and Ellembelle District in Ghana**".

We confirm that the Department has approved Mr. Quaku's proposal and has granted him permission to conduct and complete his thesis as part of the requirements to obtain his PhD degree.

We would therefore be grateful if his thesis proposal could be reviewed to enable him carry out the research.

Thank you.

Yours faithfully,


Frederick Koomson (PhD)
HEAD