

SALIFU ISSIFU

## URBAN SPRAWL UNDERMINING URBAN PLANNING AND MANAGEMENT IN GHANA

A case of Walewale Township in the Northern  
Region of Ghana

Master's thesis in Development Studies, Specializing in  
Geography

Supervisor: Stig Jørgensen

Trondheim, May 2017



A sprawl area in Fongni, Walewale

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Norwegian University of Science and Technology  
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 **NTNU**  
Norwegian University of  
Science and Technology

## **ABSTRACT**

Globally, urban growth and development has been unprecedented in the early 21<sup>st</sup> century in both the developed and the developing world. Ghana, experienced rapid urban growth without urban planning after colonialism creating a messy urban sprawl in many cities. This study sought to assess land use regulations for achieving a sustainable urban development and the role of city managers in managing urban sprawl in Walewale.

The general assumptions were that, lapses in traditional and central governance system were responsible for urban sprawl occurrence and the phenomenon could be remedy, when corrective measures are employ. The study employed theories of urban sprawl theory, sustainable urban development theory and sustainable urban planning theory, to explain conceptual framework and issues raised. The study is purely qualitative research, where both primary and scanty official available secondary data were gathered. I interviewed 16 primary household heads and nine key informants made of seven chiefs and two-male planning officers through semi-structured interviews. Twelve male-participants and eight female-participants focus group discussions were also conducted as well as personal observation on the field.

Additionally, the study area concentrate on the political, physical and socio-demographic characters of the Walewale. Walewale urban population growth from 2000 to 2010 accounting for 39 percent of the urbanizing district because of its administrative functions in employment generation due to educational and healthcare facilities demand for labour force and other urban service delivery.

The analysis of the study, concentrate on, urban land institutions and their functions, the dynamics of land tenure system, where history played a major part in urban sprawl phenomenon and growth. Again, the spatial distribution of social infrastructure like water, electricity, waste management and many more became necessary because those critical services enhance the livelihoods of the people and how to improve them. The general trend observed was planned areas have improved services and unplanned areas were deteriorating in service delivering.

Finally, conclusions and recommendations dwelt in strengthening the structure of both local and central government systems through urban regulations such as tax policy, urban ordinances, urban zoning, GIS Maps, and public land acquisition and management were recommended as control mechanisms.

Key words: Ghana, urban sprawl, sustainable, land use, land tenure, zoning

## ACKNOWLEDGEMENT

I wish first to express my profound and sincere gratitude to the Almighty God for his guidance and protection for me towards the completion of this programme successful. I am highly indebted to my supervisor, Associate Prof. Stig Jørgensen, Department of Geography, NTNU, who insightfully supervised my Thesis work. Prof. your guidance, suggestion and friendliness have been most highly invaluable.

I am mostly grateful to all the lecturers of the Department of Geography, NTNU, Dragvoll Campus for their mentorship roles to my education. It is my pleasure to acknowledge the invaluable contributions for me by the Town and Country Planning Officer, Ali Anafo and the Deputy Development Officer, Mr. Iddrisu Adam of the Walewale District Assembly.

I cannot have finished thanking all without mentioning of my Nephew, Issifu Sadique Muniru, undergraduate student of the University for Development Studies, my good friends Mr. Adam Abdulai and Mr. Jefferson Abdulai for their tiresome data-gathering period in the scorching sun.

I am also grateful to my Mum, Issifu Fatimata and my wife, Rachia Samson for their supportive roles in my education. May God richly bless you all.

Issifu Salifu.

Trondheim, Norway.

## DECLARATION

I hereby declare that, this thesis is the product of my own research work carried out for the fulfilment of the requirement for the award of the Master`s of Philosophy in Development Studies- Specializing in Geography under the supervising of Associate Professor, Stig Jørgensen.

All works have been duly acknowledged and any unacknowledged works, errors and weaknesses are entirely welcome.

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Issifu Salifu  
(Student)

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Associate. Prof. Stig Jørgensen  
(Supervisor)

## **DEDICATION**

I dedicate this work to my wife, Madam Rachia Samson, and my twin-girls, Sahira Suhuyini and Suhaira Wunpini for their unflagging love, dedication, care and support during my studies.

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## **ABBREVIATIONS, ACRONYMS AND SPECIFIC WORDS**

Biafra War	A 1973 Nigerian secessionist civil war
Bouga	Literally refers to someone who has travel to overseas
CWSA	Community Water and Sanitation Agency
Doo	Mamprusi word which connotes a room
ECG	Electricity Company of Ghana
EMS	Short Messaging System
GIS	Geographic Information System
GOG	Government of Ghana
GPRTU	Ghana Private Road Transport Union
GSS	Ghana Statistical Service
IRS	Internal Revenue Service
LAP	Land Administration Project
LUMP	Land Use Planning and Management Project
Mamprugu	The four geopolitical area occupied by the Mamprusi and other minor tribal groups
Mampruli	The local dialect of the Mamprusi people

Naa Jeriga Wall	A Defensive wall built by Naa Jeringa, an Overlord of Mamprugu Kingdom
Nayiri	Overlord of the Mamprugu Kingdom
Nayoku DAM	A Local Dam Suppling Treated Water for People of Walewale and its Environs
NDPC	National Development Planning Commission
NGO	Non-Governmental Organization
NORST	Northern Region Small Towns
NSD	National Sanitation Day
NTNU	Norwegian University of Science and Technology
PHC	Population and Housing Census
PNDC	Provisional National Defence Council
PPAG	Planned Parenthood Association of Ghana
RWSP	Rural Water Supply Programme
Sabon Zongo	A section of a town inhabited by mainly Muslim strangers
TCPD	Town and Country Planning Department
Tendamba	An Earth Priests
Tindana	An Earth Priest
Tro-tro	Public Transport Service in Ghana
UGB	Urban Growth Boundary
VAT	Value Added Tax
WCED	World Commission on Environment and Development
WMD	West Mamprusi District
WMDA	West Mamprusi District Assembly

## CHAPTER ONE

### THE RESEARCH PROBLEM

#### 1.1. Introduction

Urban development and urban planning regulations are a regulatory procedures used to control urban land development in accordance with a master plan or a blue-print (Arimah & Adeagbo, 2000). However, an urban management scholar, (Agbola, 1987) sees urban planning and management as a collection of interrelated statutory and administrative instruments and techniques designed to safeguard ,regulates, conserve and disburse land in the interest of the overall community, as well as control the character, appearance and management of buildings and facilities to ensure economy, convenience and aesthetics . (Habitat, 2009), argued that, since 2008, more than 50% of the World population lives in urban areas and these figures were likely to increase to over 70% by the year 2010. However, this phenomenal increase is merely concentrated in developing countries in Asia and Africa .This increasing urbanization globally is engulfed with urban problems such as incompatible land use, environmental degradation, and non-provisions of public goods like roads and public parks according to Harrison (1977). With regards to situations of urban sprawl, Land regulations is often seen as government intervention to solve its consequences (Adams, 2008). According to Mabogunje, Hardoy, Misra, and Jackson (1978) they argued that global urban planning have four distinct characteristics including; the normative, which means they do not describe what is it but, what is desirable, that contain the promise and prediction of sanction-penalty for noncompliance and rewards for compliance, feasibility and finally defined relationship between an identifiable sender and an equally obvious receiver.

In Ghana, urbanization has overgrown urban planning, reducing planning to reactive activity and urban planners resort to short-term measures addressing challenges associated with demographic and spatial change affecting the population and physical development of towns (Ubink & Quan, 2008). During Ghana`s independence on 6<sup>th</sup> March, 1957, the population was 6 million and increased threefold rapidly to 18 million by the year 1996 within a period of 39 years (Service, 2005) . The 2010 Population and Housing Census conducted by the Ghana Statistical Service, the population grew a little above 24 million and the number of people living in urban areas double (Agyei-Mensah & Owusu, 2010). Planning in Ghana has since not change in theory and practice and still follow the British planning system handed over after colonial



rule since most of the planning officials still trained in the British curriculum (Yeboah & Obeng-Odoom, 2010). The Town and Country Planning Department (TCPD) was established in 1945 and charged with the responsibility of planning and management of the growth of cities, towns and villages in the country (ibid). Some scholars like (Boamah, Nelson, & Gyimah, 2012), argued that, prior to 1993, the brain-child for planning was the legal provision of the Town and Country Planning (Gold Coast), CAP 84 which established a Town and Country Planning Board, tasked with the responsibility of orderly, progressive planning and development of land, towns and other areas whether rural or urban. However, the public institutional capacity to guide and support land use regulations has decreased and houses are primarily constructed through illegal land acquisition or subdivision of land in conflict with planning procedures, building of houses without authorization and in total violation of building codes. Those who violate this are not only limited to the poor members of society but, in recent years, middle and upper class high income groups follow suit and standard of housing regions have also been managed informally, with regards to subdivision of land having no official permission, both public and private with poor infrastructure provisions (Stow, Lopez, Lippitt, Hinton, & Weeks, 2007).

## **1:2. Choice of study area**

Why I choice to do my research in Walewale and no other areas in Ghana?

I hailed from Kukua Village 2, which is 2 km south of Walewale, the West Mamprusi District capital located in Northern region of Ghana. Initially, I had first-hand experience and seen the recent chaotic urban sprawl growth of the town, Walewale, having lived there myself. Before undertaking my study, I often felt academic works in Northern Ghana is backward and during my data-gathering period this perception was confirmed when the district library virtually had no thesis or written works in their archives. Much of the work on urban planning in Ghana were done on southern Ghanaian big towns and cities like Accra and Kumasi and less work is done on medium size and small towns like Walewale. Seeing urban sprawl phenomenon in Accra and Kumasi and recently engulfing Walewale calls for research to curb it in the bud. Walewale can best be describe as a nodal town that attract all kinds of economic activities from all walks of life and grows faster in its spatial structure. More conscious efforts should be made towards achieving eco-city through providing most efficient housing to accommodate it`s growing population.

Again, my carrier goals towards becoming an urban planner to deal specifically with social housing and urban environment in general motivated me to solve my backyard problems first

before looking nationally and globally. Having grown with Islamic values and seeing Zongos with their chaotic poor urban housing, insanitary environment and many others, a holistic approached, is needed to solve these problems.

My study area is Walewale, the West Mamprusi District capital created in 1988 under the government of Ghana Decentralization and Local Government Reform Policy and located in the Northern Region of Ghana ([www.ghanadistricts.com](http://www.ghanadistricts.com)). The West Mamprusi District population grew within a decade from 115,025 in 2000 to 121,117 in 2010 and 131,650 in 2005 (Makain, 2007). Walewale Township alone in 2000 was 13,558 (Bambangi & Abubakari, 2013) and 2010 Population and Housing Census put the figure to 39% (approximately 18,880) of the district population (Ampofo, Soyelle, & Abanyie, 2016). The district annual population percentage growth is estimated to be 2.4%, and urban population of 18% have far-reaching consequences with regards to access to land and its use. Land is mainly own and control by the traditional authorities leading to indiscriminate land sales, high rate of urbanization, less regard to land use regulations and its impacts on sustainable development (Bambangi & Abubakari, 2013). These problems among others have further worsened the social and economic plight of the people as well as development in the district. The Town and Country Planning Law, Cap 84 among other legislations spelt out the regulations for undertaking any form of physical development in the community. However, effectiveness of these legislations with regards to land use and physical development has been a major problem to the success of land use regulation on planning which is often violated with impunity. The problems of improper land use planning and uncontrolled development are evident due to inflexible land ownership system and political interference (Yeboah & Obeng-Odoom, 2010). It is on this note that this study seeks to assess the dynamics of land use regulations on planning and its effects on sustainable development in Walewale.

### **1:3. Problem statement**

Walewale, became the district Capital in 1988, under the Government of Ghana Decentralization and Local Government Reform Policy, and, geographically located at the centre of the district in the Northern Region of Ghana. It shared borders with the Upper West region to the North-western Conner and Upper East to the North. However, upon assuming the district capital status, its population grew astronomically with people migrating from the hinterlands (villages), other nearby towns and cross-border migration from Mali, Niger and Burkina Faso into the district capital to assumed leadership roles, search for jobs, education or seek modern healthcare delivery system. This phenomenon exacted much pressure on housing

for accommodation and social services because the rapid population growth within the shortest possible time brought housing deficiencies. However, insufficient administrative capacity to control housing constructions for occupancy occurred far beyond its historically beautiful urban design boundaries especially in the unplanned areas posing serious challenges to urban management. This is a common phenomenon occurring in all medium-sized towns in Ghana and Walewale does not stand in an exception.

#### **1.4. Research goal**

The overall goal of my research is to alert urban institutional managers in Walewale about a looming urban sprawl occurrence and other small and medium-size towns in Ghana, having similar fate.

#### **1.5. Objectives of the study**

The main objective of the study is to assess land use regulations and its implications on sustainable development in zoning residential areas in Walewale.

#### **1.6. Specific research questions**

The research seeks to answer the following questions

1. Which Ghanaian legislations control land use regulations on zoning residential areas in Walewale Township?
2. How does land tenure system affects land use planning on zoning in Walewale?
3. What are the benefits and implications of land use regulations on planning or zoning in Walewale?

#### **1.7. Specific research assumptions**

The following assumptions were made before I carried out my research into urban sprawl phenomenon in Walewale.

1. Urban growth in Walewale is uncontrolled.
2. Traditional governance and land tenure system are responsible for urban sprawl growth and development.
3. Inefficient urban land administration regulating planning and zoning shared the responsibility for the messy urban sprawl in Walewale.
4. Urban sprawl poses negative consequences for residents.

5. Urban sprawl could be managed with adherence to planning regulations.

### **1.8. Rationale and scope of the study**

My study final analysis traced the historical roots of urban sprawl in Walewale. It is cost effective to adhere to effective land use planning and regulations than to live with its untold consequences or to repair its irreparable damage, just like preventing urban poverty is far cheaper than alleviating it once it occurs (Srivastava & Fatima, 2012). Recently, much of the environmental unsustainable peri-urban sprawl that has occurred and the negative implications it has generated need to be resolved and the cost to find a lasting solution to it will be substantial. It is wise for city planners to formulate sustainable cities development models in using participatory approach of land use planning that would curtail the negative land use consequences and transform the liveability of those cities. The West Mamprusi District has become a victim of non- strict adherence to effective land use planning models, if even they exist at all thereby depriving the district of socio-economic benefits that would aid development. Therefore, this research would focus on the issues hampering dynamic and effective land use planning models and to make recommendations through model formulation for the district.

### **1.9. Structure of the thesis**

The thesis is organised in eight chapters. Chapter one deals with, introduction, the problem statement, research questions, objectives, assumptions, brief introduction to the study area and rationale and scope of the study. Chapter two focus on theory and literature, where historical and global origin of towns and cities, global trend of urbanization, urbanization in Ghana, the theories on urban sprawl, sustainable urban development and urban planning are discussed. Chapter three discusses the methodologies on type of data, sources of data, methods of data collection, methodological problems, shortcomings and qualitative data analysis. Chapter four described the background information on physical, socioeconomic and cultural practices of the study area. five to seven deals with the scientific and empirical data analysis base on the consecutive research questions outlined. Chapter five presents land administration and land tenure system in Ghana and Walewale in particular, and how they influence urban sprawl development. Chapter six discusses the main causes of urban sprawl in Walewale, focussing on land tenure and land use planning, while chapter seven discusses the possible benefits and

implications of adhering to or ignoring land use regulations on zoning in the study area. Chapter eight summarizes and recommend policy considerations.

## CHAPTER TWO

### THEORY AND LITERATURE REVIEW

#### 2.1. World historical origin of towns and cities

Pre-historic man and human societies went through several transformations. Man first lived in small and mobile communities, depending on wild animal and plant species for food and shelter, over several millennia (Rayfield, 1974). Historically, Man adopted hunting, gathering and later domestication of plant and animal species. Settled agriculture, as a way of life happened later, and led to population growth, and distance territories were incorporated through man`s quest for migration and battered trade (Smith, 2009). However, these dynamic farming societies became larger as a result of achieving political stability, division of labour, specialization, and complex social systems, where class inequalities became evident, especially among Egyptians (Pacione, 2009). Again, social and institutional transformation emerged like kingship system, political and religious powers, urban heterogeneity through migration and trade, forms of government as well as social stratification. Varieties of economic activities followed and first ever cities were built without initial influence from any existing larger states known primary (Spencer & Redmond, 2004).

Smith (2009), quoting Childe, argued that, ten reasons accounted for the emergence of cities and towns such as, complex composition and varied functions, full-time specialists like transport workers, merchants, officials and priests, monumental public buildings, symbolizing the concentration of social structures. The ruling class made up of priests, civil servants, and the militia and finally, depended on predictive and sophisticated scientific revolution and engaged in long and foreign distance trade. Childe was criticized by disregarding to co-ordinate different processes and institutions together because state organization should be on residence not kingship system (Osborne, 2005).

In sub- Saharan Africa, (Mabogunje, 1969), attributed, three limiting conditions necessary, for the rise of urban centres. He said they must be (a) there must be surplus of food production for functional specialization in order, to feed the class of specialists whose activities are now withdrawn from agriculture; (b) in order for this food surpluses to be made available to the group of specialists, there must be a small group of people (the ruling class) who are able to exercise some power over the group of food producers in terms of allocation. The ruling class must ensure stable and peaceful conditions for both the food producers and the specialists, so

they can produce of their best; and (c) and finally, a class of traders to trade, exchange the surplus food and their needs for raw materials satisfied.

World ethnography disputes these facts because achieving food surpluses is not necessarily developing into cities, because, North America, food surpluses and energy was rather used for practicing warfare.

Historically, urbanization in Africa passed through three phases, the first 9<sup>th</sup> century phase, where the trans- Saharan trade promoted Western Sudanese cities growth, the second phase, was the activities of trans- Atlantic slave trade (the Guinea Coast cities); and finally, the 19<sup>th</sup>-20<sup>th</sup> centuries colonial cities, founded during and after the 2nd World War by the colonialists. Towns in Western Sudan began as Arab trading post along trade routes. Trading in goods like gold, ivory, and slaves demanded by the Arabs, and salt, cloth, and Mediterranean foodstuffs needed by Africans (Hallett, 1970). The medieval period, began around A.D. 800 in Western Sudan, several kingdoms engaged in warfare of conquest, risen and later conquered by other revival political states. These cities composed of the ruling class, Arabs traders and the artisans, small traders, and slaves. According to Rayfield (1974) the ancient cities had some similar structural comparability to colonial cities of West Africa, but with slightly difference in scale of urban development. There was a conflicting outside influence based on political ideology around 800 between the Arabian world and the Christians world through trade and evangelism. Initially, the Arabs controlled the trans-Saharan trade routes, preventing and paving ways for Christian nations to explore the Guinea Coast by sea. The European exploration and discovery of the New World, opened trade in American gold fields, circumventing the Muslim sphere of influence, accessing slave trade and finally, the declined in African medieval civilizations (ibid).

The 1800 Trans-Atlantic Slave trade, and the favourable geographical conditions stimulated development of cities along the Guinea coast with few European settlements (Rayfield, 1974). However, with the introduction of orthodox medicine and healthcare system, tropical diseases became preventable and curable leading to population explosion in Africa. Cities developed as centres of commerce and political administration. Rural-urban migration into colonial towns and cities in search of job opportunities fueled the urbanization process in Africa.

After colonialism, African leaders took over governance, however, artificial national boundaries created by colonial masters remained unchanged regardless of ethnic diversity and national capitals in West African still depict colonial mentality (Ibid).

## 2.2. Trend of global urbanization

Urbanization refers to an increase in proportion of the total number of people that lives in urban area (Pacione, 2009). Comparatively, urban growth is an increase in the population of towns and cities. Urbanism incorporate inclusively the social, and behavioral characteristics of urban living across societies (ibid). The world has experienced rapid urban growth with estimates projecting to the year 2025 that, at least 8 out of every ten people in the most developed regions will live in urban centres (ibid). In Europe, Northern America, Japan, Australia and Zealand, projections hovered around 75% of the population were urban dwellers in 1994 (ibid).

However, developed countries pace of urbanization has declined and witnessed a demographic transition model (with more ageing population than youthful population). However, the trend in the less developed regions (mostly in Asia and Africa) are characterized by rapid urbanization since 1970, where about 25% of the people lived in urban areas and in 1994 almost 40% were urban dwellers. The rate of annual growth was around 3.5% per annum and less than 1% in the rural areas, and estimates are that almost 60% will live in cities by the year 2025, amounting to about 4 billion population of the least developed regions of the world (Pacione, 2009). According to Pacione (2009) who quoted 1950 population figures of 738 million will increase seven-fold, to 5.1 billion inhabitants by the year 2015, however, world population was and still is unfairly unevenly distributed. In 1970 (677-67.5%), 1994 (868-74.7%) and 2025 will account for (1,040-84.0%) respectively. While the less developed regions accounted for 1970 (676-25.1%), 1994 (1,653-37%) and 2025 will account for (4,025-57%). In analyzing this urbanization trend, the developing region, from 1970 to 1994, the annual rate of urbanization was around 11.9%. Between 1994 towards 2025 ,the projections is almost 20% rate while the developed region is growing at a rate of 7.2% between 1970 to 1994 and increase marginally at a rate of 9.3% from 1994 to 2025 projections (Pacione, 2009).

However, in contrast to Pacione`s projections, (Un-Habitat, 2008) also argue that, since 2008, more than 50% of the World population were found living in urban areas and the world`s urban dwellers were projected, to increase by 70% by 2050 (Brown, 2012) . However, this phenomenal increase is mostly felt in developing world especially in Asia and Africa as they also argued. Urbanization globally, is not problem free but engulfed with urban problems like incompatible land use and environmental degradation, (Harrison, 1977) . Situations of urban sprawl emerged as a challenge for urban planners but land regulations are government intervention policies to deal with urban problems (Adams, 2008).



*Table 2.1. Global percentage trend of urbanization and projections for 2025.*

Region	1970	1994	2000	2025
Developed Regions	67.5	74.7	73.9	84
Developing Regions	25.1	37	40.5	57

(Source: Summary of Pacione`s work 2009 and Cohen, 2006)

### **2.3. Historical process of urbanization in Ghana.**

in a four-tier system. Hierarchically, the large towns/cities of Accra, Kumasi, Tema and Sekondi-Takoradi having populations about 250,000 or more. The next on the hierarchy are the intermediate (medium-sized) towns with populations of 50,000 to 250,000, and typically, the regional capitals. At the bottom of the classification where Walewale is found are small towns, exemplified by district capitals/administrative centers with populations between 5000 and 50,000 (Owusu, 2005).

Since 1921 when the first formal census was conducted in Ghana, the population of Ghana has grown several folds. The growth of the population has gone *in tandem*(Naab, Dinye, & Kasanga, 2013) with increase in the proportion of the total population living in urban areas measured in settlements with a population of 5000 or more to qualified as an urban centre per Ghana administrative definition of a town (Ghana Statistical Service,2012). Starting from humble beginning of 9% in 1921, the proportion of the total population urbanized almost tripled to a little above 23% in 1960, and more than doubled to reach 49% in 2007. There has been a persistent percentage upward movement of the number of people living in urban areas from 1948 to date. Whereas only 9.4% of the total population lived in urban areas in 1931, this population shifted slightly to 13.9% in 1948, 23% in 1960, 28.9% in 1970, 31.3% in 1984 and 43.9% in 2000. However, by the year 2000, the number of urban settlements had increased about nine folds from 41 in 1948 to 364 in 2000 while the corresponding population increased almost fifteen times from 570,597 persons in 1948 to 8,278,636 in 2000 (Naab et al., 2013). According to Songsore (2003) the higher percentage of rural-urban migration was not surprising because it coincided with the post-war economic boom and post-independent African nations efforts towards industrializations. Again, provision of social infrastructure using urban place as growth poles and Ghana after 1957 independence was no exception. Several factors are at play leading to this rising trend in urbanization in Ghana and the main factors are demographic in nature: Rural- urban migration accounting for 98% urban growth between the

periods of 1948 to 1960 (Naab et al., 2013; Songsore, 2003), natural increases in towns and cities, and re-classification of urban areas using census data conducted. Camps and villages grow into towns once they have attained the threshold population of 5000 or more persons. The most significant issue to consider is that with the increase in urban populations concomitantly does not cause reduction of rural areas population. Rural population defied the norm and increased from 5 million in 1960 to 10.5 million in 2000 (Songsore, 2003) and 6 million in 1970 , 8.4 million in 1984 (Naab et al., 2013). However, the rate of increase in the urban population was faster than that of the rural population growth rates (Naab et al., 2013). Ghana`s inter-censal population growth rate of 2.7% per annum is lower than the growth rate of West Africa (2.9%), but demonstrable higher than the global rate of (1.5%) with a national population density of 79.3 person/km<sup>2</sup>.

*Table 2.2. Population growth in Ghana by urban proportions from 1921-2015*

Year	Tot. Population	% urbanized	Urban Population	No. of Urban Settlement
1921	2,298,000	7.8	179,244	n. a
1931	3,163,000	9.4	297,322	n. a
1948	4,118,000	12.9	570,597	41
1960	6,727,000	23.1	1,551,174	98
1970	8,559,000	28.9	2,472,456	135
1984	12,296,000	32.0	3,938,614	203
2000	18,912,000	43.8	8,278,636	364
2007	23,000,000	49.0	11,270,000	492
2010	24,658,823	51.0	12,545,229	636
-2015	27,409,893	47.8	14,247,000	Above 636

Source: Ghana Statistical Service (2005a, 2005b and 2010 estimate) and (Otiso & Owusu, 2008)

The Northern region of Ghana has a total population of 2,479,461 in 2010 with more females (1,249,574) than males (1,229,887). Between 2000- 2010, the population of the region increased by 36.2 percent making it the fastest growing region in the country after the Central (38.1 %) and Greater Accra (38.0 %) regions. Historically, in 1960, the population of Northern region was 531,573, increased to 727,618 in 1970 and to 1,164,583 in 1984 representing over 50 percent increase in 24 years. The region recorded an inter-censal growth rate of 2.9 percent between 2000 and 2010. This is a slight increase over the 2.8 percent of the period 1984 to 2000. Prior to 2000, the annual inter-censal growth rate of the region was a little above 3 percent (3.2 percent between 1960 and 1970 and 3.4 percent between 1970 and 1984). The al population is 10.1 percent, making it the fourth largest in terms

of population after the Ashanti (19.4%), Greater Accra (16.3%) and Eastern (10.7%) regions (Ghana Statistical Service, 2010 Population and Housing Census Data Report).

## **2.4. The Criteria for defining an urban area**

In analyzing the criteria for defining an urban area, the researcher used three parameters such as ecological, economic and social character of the area (Paddison, 2000). The meaning of urban area remains fleeting and dynamic and often change from time to time, and differing across sovereign political boundaries, and been modified depending upon the purpose that the definition of urban would serve. Normally, the term urban defined in terms of administrative boundaries, functional boundaries, and at times defined in terms of ecological factors such as ve living in very large urban agglomerations, these divergences in defining the notion of urban has made it difficult to conduct comparative studies on urban populations across time and across borders. The difficulty emanates from the fact that the concept of urban, from which city boundaries are demarcated, is considered abstract involving a several inter-dependent factors, such as: population size criteria; population density within a given area; space; economic and social organization and hierarchy; economic function; labor supply and demand as well as administrative functions (Alexander, 1954).

### **2.4.1. Population size criteria**

The concept of an urban varied over time and space and administratively defined differently across the globe. The Population Division of the United Nations (UN) uses the population of people resident in a settlement to define an urban area (Ofem, 2012). Per the Division criteria, any settlement with 2,000 residents and above is an urban centre. This UN population threshold is used by several countries worldwide. However, the Nordic countries, Sweden and Norway any settlement with a population of 200 inhabitants is classified as an urban area. An 'urban settlement' (Norwegian 'tettsted') is defined as a place with a minimum population of 200 and where houses are normally not more than 50 m apart and with not more than 25 per cent of the economically active population in that area engaged in agriculture and forestry production (Myklebost, 1968). The number of inhabitants in certain countries that determine whether a place is qualified as an urban area is markedly differently in some countries such as the USA which is about 2,500, the Switzerland 10,000 and Japan is about 30,000 (Pacione, 2009) and in

New Zealand, 10,000 people or more is adopted while in India (5,000) and Nigeria, 20,000 residents (Ofem, 2012).

The rising trend in urbanization in Ghana has been driven by demographic factors, rural urban migration (Between the periods of 1948 to 1960, about 98% of the urban growth was caused by migration from rural areas), natural increases in towns and cities, and re-classification of towns. Villages grow and attained the status of towns once they have attained the threshold population of 5000 or more persons as an official census definition of an urban centre in Ghana (Naab et al., 2013).

#### **2.4.2. Population density and contiguity criterion**

Population density refers to the average number of people in any geographical area. The minimum density requirement is generally 400 persons per square kilometer (Ofem, 2012). However, developing countries does not necessarily consider with this criterion especially Ghana. Australia fo

on population clusters of 1,000 or more people with a minimum density of 200 people per square kilometer (Ibid). In Japan, also, urbanized areas are classified as contiguous areas of Densely Inhabited Districts (DIDs) using census figures and seeing districts as units with a population density of 4,000 people per square kilometer (Ibid). whist the US Census Bureau

ve a population density of

(Ofem, 2012). The

predominantly scattered pattern of settlements in the vast landmass of Northern Ghana would pose difficulties in applying the population density and contiguity criterion as illustrated by population density of West Mamprusi District is 46.4 per sq. km which is far lesser using the global average (Coulombe, 2005).

#### **2.4.3. Administrative and functional criteria**

Countries defined according to legal or administrative criteria, even though some problems may arise such as defining urban places by national government leads to a great diversity (Ofem, 2012) . This is often creating problems for comparative research and can only be overcome by urban analysts constructing their own definitions and applying them uniformly across the globe and sometimes little correspondence with the actual physical extent of the urban area where built-up areas extent beyond the administrative boundaries previously planned by authorities.

the legal boundaries of the city.

#### **2.4.4. Economic criteria**

In comparison with rural areas, mostly economic activities in an urban center are organized around non-agricultural productivities. A definition of urban based on non-agricultural functioning captures a different dimension than those based on density and population size (Paddison, 2000). The variety of economic functions that take place in an urban centre includes various types of production, but also educational, political, administrative and socially related economic activities which tend to employ a diversely orientated labor force. The function performed by each settlement is very important in classifying settlements (Ofem, 2012). Mostly perform administrative and religious functions, which are noncommercial functions ought to be incorporated in ranking settlements. A city has two basic economic activities (Basic and non-basic): The multiplicity production maybe marine shipping business of the port and manufacturing goods for general use ,and ancillary services which are either directly or indirectly to the service and convenience of the people engaged in the primary occupation (Alexander, 1954). The West Mamprusi District Assembly has jurisdiction over legislative, executive and deliberative powers hence solely responsible for the planning and development of the district. Since the district exhibit, the above functions qualified it as an urban area. In India, a settlement must have more than 75 percent of the adult male population engage in non-agricultural work to be considered as an urban area.

#### **2.4.5. Social character of the area**

There exists a dichotomy of lifestyles between urban dwellers and rural folks in real life situations. Their behavioural characteristics and patterns, their values and belief systems, their world views, and their social interaction in general (Paddison, 2000). The social element is the

elements that shape the social sphere of the urban area, such as piped water, lighting system, entertainment facilities, ring roam system that abound in urban areas described as positive sense as well as negative characteristics, such as crime, congestion and pollution (Ibid).

There are two basic problems identified by some researchers in differentiating urban centers from rural ones using the basis of social character. First, when dealing with less developed countries, there is a strong rural tradition among rural migrants in urban areas, making such

distinction very difficult to establish. Secondly, in more advanced countries, many rural areas assumed similar characteristics of an urban core, despite a less population densities in those areas. For instance, entertainment facilities, services and even patronage, styles of speech and values and belief systems. With this it becomes more difficult in differentiating urban centre from rural vicinity, when the two co-exist on a continuum basis (Paddison, 2000).

#### **2.4.6. Mental map or urbanism as a way of life criteria**

This involve subjective approach of world urban places to understand human behavior in the urban environment and improving the quality of urban life. Urbanism as a way of life (Urban lifestyles). According to Wirth (1938) the proposed urban-rural continuum and argued that as the size, density and heterogeneity of places increases called for economic and social disorganization. Urbanism as a way of life and a process leading to the erosion of the moral order of society due to the concomitant decline of community. Urban having its own influences over individuals and the social disorganization of urban life in which much social interaction is of transitory and superficial nature with unknown others with a strong extended family links and communities, small settlements and rural areas. However recently, scholars have rejected the notion of crude dualism of bipolar concepts such as urban-rural or public-private. Because it is too Western ethnocentrism seeing universal application of rural change processes, there are presents of village communities in cities and the failure to locate the process of urbanization within the political economy of capitalism. There is a new dimension of urban habitat (urban field) which denote relatively low density but having a good transportation system with a broad array of economic, social and recreational opportunities. This is exemplified by a metropolitan area having at least 200,000 to 300,000 people. This criterion looks at two factors such as maximum time or distance that most people are prepared to commute and the time or distance that most people are willing to move.

#### **2.4.7. Segregation and congregation criteria**

Segregation of settlements in an urban society refers to a situation where individuals of a minority groups are unevenly distributed across urban space in relation to the rest of the population. This social and spatial segregation and congregation in urban societies arise due to several underlying factors such as spatial segregation helps to minimize conflict among social groups while enhancing social control as well as endowing specific social groups with tool of exerting positive cohesive political voice (Knox & Pinch, 2014). Clustering of social groups

can also be a desire of members to preserve their own identity, lifestyles, common norms that favoured their socio-cultural practices such as marrying among group members and counter inter-group marriages base on social, religious, ethnic or racial orientation (Ibid). Fears of exposure to others influences on their lifestyles in order to curb personal and institutionalized discrimination based on class, culture, gender, sexual orientation, ethnicity and race (Knox & Pinch, 2014).

Minority group refer to any group characterized by unique features such as race, religion, nationality or culture, congregated in cities because of in-migration sometimes called chain-migration (Awumbila & Ardayfio-Schandorf, 2008) for instance African-Americans, Italians in American cities (Knox & Pinch, 2014) . After successful settling and integration with the charted urban society,

minority group with a common cultural life is being absorbed into the host community sociocultural practices. However, sometimes, both external and internal forces creating urban sprawl and ghettos block successful immigrant integration. When the charter or host group exhibit discriminately attitudes and institutional discrimination, separatism weakens internal cohesiveness (Ibid). When the host society perceived minority group to be socially undesirable, they would try to make them spatially isolated using various mechanisms such as blocking strategy by inciting occupants of the city neighborhood to resist the invasion of minority group. They do this through social hostility, and refusal to sell or rent homes and deliberately

(Knox & Pinch, 2014). To

illustrate the dilemma of minority groups in Great Britain, (Phillips & Karn, 1991) argue that, their initial situation begins with ubiquities of gaining access to public housing because of their limited residency periods, and they often being allocated to poor-quality housing- old flats, and finally given an unpopular inner-city housing estates where mostly those houses are occupied by non-whites population. Some in order to ameliorate the situation they encountered, they often choose private accommodation where landlords ripe from their disadvantage situations and charge inflated rents with uncertain security of tenure and pushing them segregate into small niche communities within the urban centres (Phillips & Karn, 1991).

The main reasons were defense and mutual support in times of need, cultural preservation and facilitate attack or retaliation. To paraphrase (Boal, 1976), congregation is about the minority groups in society who felt threatened, due to differences in cultural and racial makeup, they perceived the threat may materialized in a form of physical violence or remain psychological threat so, to foster internal harmony and cohesion, they congregate at one place (Knox & Pinch, 2014). Sometimes minority group cluster for defensive purpose when the realized an intense

discrimination from the charter group. For instance ghetto was first used in Vernice during the Renaissance era where Jewish people were forced to reside in a particular purpose (Knox & Pinch, 2014). According to Anderson (1988)

Vancouver in British Columbia -Canada during the 19<sup>th</sup> Century to counter mod rule and violence acts against the Chinese population from the predominant whites population. Minority

neighbours, such as formal minority-oriented institutions, businesses start-ups capital, to nurture friendship and kinship ties and waged away social hostility and other discriminations from the host community. Minority groups sometimes formed informal self-help networks and welfare systems such as Sikh temples and Muslims mosques in British cities became Pakistani local welfare systems, which were offering food,shelter,recreation as well as education became the cultural and religious focus (Hiro, 1973). For preservation of a distinctive cultural heritage to prevent absorption by chartered group culture for instance, the preserving of common religious belief systems, food music and others (Knox & Pinch, 2014). Some researchers argue that people congregate to facilitate attacks either for peaceful and legitimate reasons. For instance, the black power movement in America where the blacks use the ghettos to achieved electoral representation in urban politics in America (Ibid).

In Ghana, during the mid-1980s implementation of the Structural Adjustment Programme by the PNDC Government fueled rural-urban migration from the northern region of Ghana and other economically marginalized regions, mostly of the Dagomba, Mamprusi, Ewes, Kotokoli, Dargati, Frafra and some tribes from the sub-region such as Nigerians, Malians,Togolese etc. Who segregated and clustered into various ethnic clustered groups in Nima. Nima was a peri-

1910 by Mallam Bako ,a local Hausa Islamic leader from northern Nigeria Accra (Owusu, 2010). The African Zongo having a strong affinity to Islamic religious preferences in terms of its enthusiasm for Arabic education and non-western cultural heritage. The Zongo unique culture is often spatial reinforced with their architectural building forms and public structures like the mosques and Arabic and Hausa spoken vernacular languages daily (Agyei-Mensah & Owusu, 2012). These dilemmas often called upon minority groups to congregate against some social injustices they are encountering. For instance, such societies lack proper sanitation, reliable electricity supply, urban paved roads, good schools and deplorable open gutters serving as breeding grounds for mosquitoes (Owusu, 2010).



## 2.5. Urban sprawl theory

In consonance with the definition of the term urban sprawl as an excessive spatial growth of cities (Brueckner, 2000). From the definition of urban sprawl, urban spatial expansion and growth originate from three main forces, which are growing population, rising incomes of make people pay fully for new urban infrastructure development, and finally, the falling price of commuting costs due to improved transportation facilities (ibid). This phenomenon leading to excessive commuting of individuals because of the failure to account for the social costs of congestion in towns. So, urban spatial growth that occurred purely in response to these fundamental forces should not be considered socially desirable. However, economists advance three fundamental market failures accounting for this urban sprawl and upsetting the allocation of land between agricultural productivity and urban spatial land uses and hence there is a reason justifying criticisms of urban sprawl occurrence (ibid).

According to some scholars, when there is a stiffer competition for land between real estate developers and non-urban users mainly farmers for agricultural purposes (Brueckner & Fansler, 1983; Naab et al., 2013) helps to determine the spatial growth of cities, developers often and favorable bid away additional land from agricultural users. In regions where agricultural lands productivity value is high, cities turn to developed into compact cities than regions with cheap and unproductive agricultural lands (Brueckner & Fansler, 1983; Naab et al., 2013) . Urban Sprawl as a spatial urban expansion have been criticized based on the following grounds. Cities taking up an open space encroaching excessively on agricultural land use, the aesthetic benefits from the presence of open space are lost leading to scarce farmland, long commutes generate traffic congestion and air pollution, reduce the incentive for redevelopment inner-city decay, reduce social interaction by spreading people out (low density suburban), weakening the bounds that unite a health society. Whiles other argued positively for urban growth because; people lifestyle of consuming large amounts of living space at affordable prices will limits the supply of land for residential development, limiting the supply of land for development, urban land prices, and housing prices will have skyrocketed. However, to solve price escalation, consumers would have to reduce their consumption of housing space and making new dwelling places smaller and this would promote denser cities containing smaller houses.

The welfare economics theory could be relevant to explain the urban sprawl theory (Pigou, 2013). This market failure orthodoxy, suggests that, real world markets forces driven by demand and supply often at times failed to allocate resources efficiently. This inefficiency

called for the need of government to intervene through economic policy regulations such as tax redistribution to address those market failure (Adams, Watkins, & White, 2005). According to these researchers, urban property market failure is often associated with negative externalities like incompatible land use, environmental degradation and the non-provision of public goods such as community parks ,schools and roads (Hughes, 2003) . According to Brueckner and Fansler (1983) there are three fundamental market failure led forces leading to urban sprawl occurrences.

Firstly, when the national population grows, cities response accordingly and grow spatially to accommodate more people demanding for housing. Since this called for stiffer competition always bidding for land between real estate developers and non-urban users-mainly farmers for agricultural purposes determine where and how the spatial growth of cities occurs. Developers often and favorable bid successful away additional land from agricultural users. The above analogy happened because of government`s failure to account for the social value of open space used for urban development. Open space provides city dwellers with an easy escape from the frenetic urban scene and a chance to enjoy nature in its purity (Brueckner & Fansler, 1983; Correll, Lillydahl, & Singell, 1978). Such benefits are not considered when land is converted into urban use. Since intangible open space, benefits do not constitute part of income earned by the land when it used for agricultural purpose. Government must charge development tax on each acre of land converted from agricultural land use to urban use added to any fees already levied on estate developers. The magnitude of the tax should be set equal to the parity of the value of the open space lost, when government raise the cost of conversion tax and this will retard the development process and slows the rate of urban expansion. Economists find it difficult to assign a dollar value to an open space creditable for taxation purpose. The tax policy would restrict city expansion but may raise land and housing prices and shrinking housing consumption. A failure to consider the social value of open space when land is converted to urban use (Brueckner & Fansler, 1983).

This second phenomenon occurs when there is rising income among people and goes along to affect urban spatial growth because residents of such cities demand more living space as they become richer with increased aspirations. Some residents do desire to carry out their greater housing consumption in a location where housing is cheap (suburbs) and serene due to rising price incentive favoring suburbanization. This often is boosted by government desires to invest in building freeways and other transportation infrastructure government investment making travel faster and more convenient reducing and reducing cost of commuting to those areas. Consumers enjoy cheap housing in the suburbs and pay relatively cheaper commuting cost

penalties (Brueckner, 2000). This led to relocation of jobs in the suburban areas called job suburbanization. Instead of relying on shipping output through centrally located rail depots and port facilities, firms relied on truck transport called job urbanization. The big problem arises from the failure of real estate developers to consider the entire public infrastructure costs generated by their projects; thus, development appears artificially cheaper from the developers' point of view, encouraging excessive urban growth. When a new housing project is built, government must extend roads and sewers, schools, parks and recreation to the area. Homeowners pay property tax system for this new infrastructure; the market failure is that, under the current financial arrangement, infrastructure-related tax burden on new homeowners is less than the actual cost of they generate. The cost is often shared among all the city residents rather than charged directly to those who require the new infrastructure. Change the infrastructure financing system so that the new development pays for its actual costs. The new impact fees infrastructure costs are paid up front in a lump sum fashion rather than being spread over many years of property tax payments. Calculate to offset the exact fees of new development and pay by housing developers instead of by homeowners (Altshuler & Gomez-Ibanez, 1993).

The third phenomenon arises on the part of individual commuters to recognize the social costs of congestion on themselves and society at large created by their use of the road network causing excessive commuting and large cities. When a commuter drives on a highway, he incurs extra cost for other commuters beyond his private cost. This cost is the extra congestion caused by the commuter's delay in traffic flow easily because a rising time cost for the traveler as well as imposed on other commuters. Government must come out with good policies by diverting some traffic to off-peak hours, when roads are less busy, some car commuters should switch to public transit. The average cost distance should be shortened. Government must impose a congestion toll on individual commuters as a levy. The incurred cost by the individual called out-pocket-cost of rush-hour commuting when rises, and commuters being rational would have the incentive to shorten their commutes by living closer to their jobs location shrinking the city. When people drives shorter distances to work, total traffic volume (as measured by vehicle miles) falls, the amount of auto-related air pollution minimized. With modern technology, total congestion tolls can be computed reliably. However, government policies on these views on congestion tolls as net tax increase may create problems for the ruling government. Another obstacle may arise when daunting or faulty logistics technology is used for collecting toll in a manner that does impede traffic flow or uncounted revenue. Technology can remove this obstacle by allowing toll charges to be tallied by electronic meters installed in the automobiles being practiced by

Norway. Low technology solutions such as downtown parking taxes and costly bumper stickers discourage the use of private cars. Some commuters who may give out their cars and switch to the use of public transport and businesses may also comply to re-schedules their working hours to allows employers to commute at off-peak hours when no tolls are charge or moderate tolls are charged.

However, other solutions to urban sprawl, like urban growth boundary, a zoning tool, that slows urban growth by outlawing or banning spatial urban development in designated areas spatially on the urban fringe. This measure is by drawing a polygon around the city and prohibiting development outside that boundary (Ding, Knaap, & Hopkins, 1999) . However, the main problems with this hypothetical tool is the need for stringent and needless guesswork by urban planners. This tool often lead to the development of compact cities and causing in appropriate escalating costs in relation to land, rent and urban services as well as unwanted increases in urban density. The Urban Growth Boundary zoning tool would confront a challenge of the desire of high-income people who want to form separate jurisdictions enjoying the provision of public goods by the government has often been the issue in developed countries such as education, public safety, and parks. It is often argued that when households of different incomes are inter-mixed by living in the same geographical area, high-income households pay more than an equal share of the cost of public goods provided. Because of their larger property tax bills, and ending up with lower public spending on public goods which they may prefer, because low-income households often find it difficult to pay their share of property taxes. High income earners forming separate jurisdictions is a means to avoid the necessity of subsidizing low-income households on public goods in their locality and the location of such jurisdictions is often located in the suburban areas (Tiebout, 1956) .The remedy may lie with effective legislative powers giving to the metropolitan area governments to passed on, re-distributive taxation policy that would benefit the low-income consumers to weaken the incentives drive of separate suburbanization and curb spatial urban sprawl. The major problems with this re-distributive tax policy sometimes, there may be a fierce political opposition from well-off households (Orfield, 1998) on the bases of human rights of interfering with freedom of choice in the public sector. The household should have the right to select their own place of residence from among different autonomous jurisdictions offering different amount of public spending on public goods and how much to spend traveling on a regular basis for recreation (Ofem, 2012).

The urban sprawl in developing countries like Ghana also exhibit similar characteristics as their developed regions of the world (Olujimi, 2009).

These suburban isolated parcels of land acquired are not subjected to conventional design (Olujimi, 2009) . The inability of governments to effectively and efficiently develop their compulsorily and constitutionally acquired parcels of land in some cities. These African governments sometimes are reluctant to pay compensations to the landowner and thus, the unwillingness of the owners to release fully the allocated acquired land to government and prefer selling the lands to individuals who develop without recourse to planning regulations. Even where government is willing to pay compensations, but they often encountered lack of political will to implement development control measures, insufficient and untrained planning officers to carryout effective monitoring, evaluation and supervision (Olujimi, 2009).

This theory is fraught with serious lapses and may not be applicable in Ghana especially Walewale. The town is a predominantly inhabited by Muslims who are inclined to polygamy, high fertility birth rates, and low infant mortality. The idea of open space is westernized in the context and does not occupy any central point and to be uncollected. The recent emergence of sectoral development reserved for rich in society especially, behind the district administration called Kukuazugu, government in the future would force to build infrastructure like schools and hospitals but cannot forced inhabitant to pay the total cost of putting up those services. The people often use bicycles, motorcycles and ordinary taxi cabs (Riverson & Carapetis, 1991) which are not properly registered with the Driver and Vehicular License Authority (DVLA). Therefore, the idea of imposing congestion toll during pick hours to reduce traffic control and eliminate social cost of congestion would be problematic properly monitor and taxes collected.

## **2.6. Sustainable urban development theory**

Development in the early sixties was measured only with growth of the gross national product without recourse to the detriment on the environment as a result of over exploitation of natural resources to meet man`s basic needs (WCED, 1987). However, environmental economists raised the alarm about necessity of preserving the stock of the natural resources from total depend upon it instead of over exploitation (Pearce, 2013). The concept of sustainable development emerged in 1980 during the World Conservation Strategy conversion as a result

of the looming awareness of the global environmental challenges. The global warming and environmental degradation couple with socio-economic deprivation affecting humanity in the 21<sup>st</sup> century within and across nations as well as a concerns about our healthy future (Nature, Resources, & Fund, 1980). However, there was an ideological shift that enlarge this concept by bringing together environmental and socio-economic issues famously expressed in the Brundtland Report -Our common future definition of

(WCED, 1987) in their report, recognize the unique nature of man dependence on the pure natural environment to meet his basic human needs and well-being in a wider sense and not merely exploiting the raw natural resources. This ideas broadened the scope of sustainable development to encompassed the ecology and economy on all scale either locally, regionally, nationally and globally (Hopwood, Mellor, & O'Brien, 2005). The term sustainable development has different aspects such as social sustainability, environmental or ecological sustainability and economic sustainability (Dempsey, Bramley, Power, & Brown, 2011) . Sustainable development concept was developed in respond to the escalating ecological destruction during 1980s retreat from social concerns of poverty ,deprivation and urban dereliction that were causing destructive havoc in many parts of the world on humanity (Carley & Kirk, 1998; Dempsey et al., 2011; WCED, 1987).

According to Dempsey et al. (2011) argued that ,a Sustainable city should be compact, high density, mixed land use ,an environmentally sound, efficient transport, socially and economic beneficial and viable. A sustainability community is about the ability of society itself, or when the community can sustain and reproduce itself to an acceptable level of functioning in relation to service delivery. Sustainable community aims to achieve social interaction between community members or as places where people want to live and work, now and in the future. Those cities meet their diverse needs of existing and future residents because there are safe, inclusive, well planned and built, offer equality of opportunity and good service for all people. Classical sustainable example of world cities are Barcelona, Amsterdam and Malmo (Dempsey, 2005). Social interaction is a basic process in human nature that nurtured social order to ensure a cohesive society. Without social interaction in society, people living in each area can only be described as individuals living separate lives in a purported society and would have little sense of community sense of pride as well as a place of attachment (Ibid).

This objective can be achieved through physical structural designs and social construction of residents of cities. Physical planning of cities such as, architecture and site design. Designing

residences, through shrinking private spaces in a way to promote social interaction in our public space. This could be done by positioning houses closer to the street, their porches facing the street and shrinking lots space. Another method is on the density and scale where urban centres are structured based on neighbourhood scale, having small-scale, clear boundaries and public centres. Smaller scales increased residential density and face-to-face interaction and a relatively higher density centres promote commercial viability. Streets are design as public space and not as voids between buildings and must accommodate pedestrians that strengthen community bonds, and sense of place. These Streets are public spaces and should be safe to use their sidewalks. Public spaces provide venues that counter community`s privatized communication. Public spaces like parks and civic centres are symbols of civic pride. Finally, Mixed land uses, where residence, place of work recreational centres and shopping centres are inter-mixed and aimed at enhancing social interaction. People of different life stages in terms of races, ages, and income lived together, which can encourage them to drive less and walk. Mixture of housing randomly encourage personal contact of different social classes making the community more integrated (Talen, 1999).

The first social sustainability factor is citizen participation as one`s sense of belonging to a community and willing to accept civic duties. Civic participation and localized empowerment through social interaction among all members or residents like voting in an election. The existence of, and people active participation in local institutions, either formal or informal depend on the levels of trust across the community which excludes threats, and a positive sense of identification and pride in (Dempsey et al., 2011).

The second is community stability, a concept of inter-generational equity with the lens of supporting social capital such as good education, community facilities to minimize crime and anti-social behavior among people living a specific geographical area. The main requirement of achieving community stability is through long-term residents who are familiar with their members living in an area (DeFilippis, 2001) .

The third concept is the pride or sense of belonging to a place, which often defined your identity. To be inside a place is to belong to it and identify with it. This also includes the values and norms that make a community unique among the comity of nations (Adler & Kwon, 2002) . Safety and security is another fundamental part of social sustainability. This is in consonance with Abraham Maslow`s hierarchy of human needs which security is paramount requirement to ensure social cohesion (Huitt, 2004). When security is ensured and citizens are safe in their neighborhood from crime, and disorder, residents can feel secure in their social interactions with other people and in community activities (Dempsey et al., 2011).

## **2.7. Sustainable urban planning theory.**

The new urbanism is the widely known existing neo-traditional model in urban planning. New urbanism urged design-based strategies on traditional urban designs to assist curbed suburban sprawl and inner-city decline and to build and rebuild neighborhoods and cities. Inner city density is the ratio of people or dwelling units to land area at a time (Jabareen, 2006) . Certain population densities, makes it sufficient to generate social interactions possible for urban functions or activities viability. (Newman & Kenworthy, 1989) argued that good urban policies do save significant amounts of energy utilization, for instance increasing the urban density, compacting the city center; availability of transit options and by restraining the provision of automobile infrastructure. The form of our cities designs, due reflect, which kind of transport technology that was dominant at different stages of our societal development (Jabareen, 2006).

environmental costs of their provisions, the carrying capacity and try to balance the needs of

s and waste

sources, recycling its components, and economized the use of land. Compactness refers to urban contiguity or connectivity paving way for future urban development taking place adjacent to existing urban structures (Wheeler, 2002). When compactness applied to already existing urban structures rather than new urban fabric, it normally about containment of further sprawl, rather than preventing the spread of present urban sprawl (Hagan, 2000). Compacting urban space goes a long way to minimize transport of energy, water, materials, products, and people (Elkin, McLaren, & Hillman, 1991). One a major strategy of achieving compactness is through intensification, where urban land is efficiently utilized by increasing the density of development activities. This is through development of previously undeveloped urban land, redevelopment of existing buildings or previously developed sites, subdivisions and conversions (Jenks, Williams, Burton, & Jenks, 2000).

In developed countries, (Bohl, 2000) new urbanism is a planning and design tool that takes on historical precedents to combined different housing types in the form of neighborhoods, devoid of modern superblocks and suburbs developments. New urbanists argued that, this historical residential design features would be able to satisfy residents, encourage walking, support social neighborhood contacts, and ensure strong emotional sense of community. Diversified urban areas, people walk, an activity impractical in the suburbs and grey areas. Even, diverse people



from outside, come to the area either by car or by public transportation, resort to walking in densely cities. Less dense cities sometimes are unattractive, monotonous urban landscapes, insufficient housing to accommodate all income groups creating class and racial segregation and this phenomenon produce job-housing imbalances hence increased driving, congestion, and air pollution in urban vicinities while increasing residential densities beyond the suburban norm. When households of different incomes groups and household structures are mixed, there is a corresponding greater density. The ideology was developed in the United States and United Kingdom during the 1970s and 1980s. In the U.S., more than 95 percent of the population growth happened in suburban areas outside cities where more people live and work. This phenomenon created urban sprawl, described as a chaotic mess of low-density housing and commercial strip development. Urban containment curbed the outward expansion of the urban field and forcing urban market forces to work inward. Where there are public policy tools to desirable geographical form (Pendall, Martin, & Fulton, 2002).

## CHAPTER THREE

### METHODS OF RESEARCH

#### 3.1. Introduction to qualitative methods

Methodology entails scientific approaches and methods used by the researcher (s) to carry out a scientific enquiry. These include research design, sampling techniques, sample distribution and size, instruments for data collecting, methods of data collection and data analysis either using qualitative or quantitative research techniques. Data collection is that stage of a research where the subjects are approached and the information required for the study is gathered. My data was mainly qualitative. The primary data was the fieldwork component, I carried out such as the focused group discussions, personal observation, and open-ended semi-structured interview-guide. I used to interview both primary informants as well as took photography, and in addition to this data, the secondary based on existing literature was incorporated in the analysis.

I chose qualitative methodology as against quantitative approach in this research because looking at the specific and contextual attitudes and behavioural patterns, which may be more difficult for quantitative data analyses of human behaviour. My study focuses on land use regulations and its impacts on sustainable development in residential communities in Ghana, using Walewale as a case study. This is mainly based on human experiences, attitudes and behavioural changes. Based on this, I wanted to know, understand and evaluate, how Walewale community people themselves feel, think with regards to future sustainable urban planning process and the uncertainties regarding uncontrolled urban sprawl. I consulted traditional rulers, Town and Country Planning Department, and property owners who are the stakeholders and I acquired insightful knowledge from them. According to Kitchin and Tate (2000), informants need to freely express their views, feelings and share their experiences as some of the aspirations and goals qualitative methodology strive to achieve. They identified three strategies in undertaking qualitative research namely, language oriented approaches, descriptive and theory-building approaches but sometimes they may overlap and be nearly synonymous with similar attributes as I experienced during my data gathering process (Ibid). Based on these arguments, my research focused on descriptive/interpretative approach to identify the main causes and consequences of urban sprawl in Walewale.

### 3.2. Initial selection procedures

As a native of the district, and now a master's student researcher from the Norwegian University of Science and Technology (NTNU). I followed the traditional customs strictly to obtain their permission and approval in order to explain my research mission to my research subjects before proceeding with my interviews. To ensure that I went through all the necessary customary practices and procedures in accessing information, I offered cola nuts in a form of money, especially to the traditional rulers as customs demanded.

Firstly, I selected my two *research assistants*

holder from London School of Economics and Political Science and my nephew, a level 300 student of the University for Development Studies in Tamale, Northern Ghana. To make our work easier and representative, we hypothetically divided Walewale into four sections based on four-nodal urban roads crisscrossing each other in the town, (North-east-

North-west - n outh-east- Moshefong and South-west-Nayiri

Appendix 5). We used *purposive sampling* techniques for the 7 traditional rulers and the two-male district planning officials who were my key base on them being land title holders and expertise in my study area respectively. We also used *stratified purposive sampling* method by neighbourhood and since Walewale is a large area by gender for my primary informants because, it was a farming season and people were busy with their farming activities and businesses and this means, whomsoever we met and he/she was ready for interview was interviewed.

I tried to build and sustain a friendly collaborative atmosphere with both my research assistants and informants during the interviews period in order to integrate very well with them. I followed some ground rules such as dressing decently to command self-respect and treated my research subjects with due respect, dignity and humility. I made conscious efforts to listen with rap attention in order to enjoy the interpersonal conversation during the interview sessions. According to Crang and Cook (2007) not only do researchers have to worry about the goals and ethics of their academic work, but also about how to get on with the people they are working with in a personal, everyday sense. Additionally, I made my informants comfortable and assure them of their confidentiality and anonymity because the interviews were for academic purpose only. I gave my informants the chance to express their views on the land use regulations and its impacts on the sub-themes of the study on sustainable development of Walewale with the lens of the current fast population explosion and rapid urbanization and suburbanization. These approaches made my informants believe that, I was just a student and studying and would not

use their responses for any selfish agenda. All my informants were satisfied with me and treated me with the due respect also because I was a Ghanaian and studying in Norway. In the field, my high level of knowledge and proficiency in the local language (Mamprulli,) as a native speaker, helped me communicate easily with the local people as it gave them also the chance to express themselves well too. However, I took an extra care because according to Crang and Cook (2007), even the most well verse proficient speaker will not necessarily be identified as or creolised version, even though linguistic abilities could influence the planning of research in its earlier stages. I had the opportunity of catching a niche with the landholders even though the data production time was short but as a native of the district with prior knowledge of the problem at hand, it was enough. This section I gave an overall overviewed of the conditions under which the interviews and observations was scheduled and conducted.

### **3.3.1. Interviews, focus group discussions and observations**

Interview is about a scientific observer wanting to extract relatively unbiased information from his/her interviewees. This enabled the researcher and the researched to participate on an equal footing in a relatively frank discussion to develop intersubjective. However, one major challenge for some researchers is how to arrange and meet total strangers maybe socio-culturally different background from the researcher and get them to talk to him/her about their thoughts, feelings and actions.

According to Crang and Cook (2007) as a means of gleaning information from conversations from a research communities, they differentiated different types of interviews ranging from the highly structured (which the researcher asks pre-determined questions in a specific order). The semi-structured (where the researcher and the participant(s) set some broad parameters to the discussions) and the relatively unstructured (which is a friendly conversation with no pre-determined focus) and in-depth interview. I choose the semi-structure interview option because I wanted to broadly discuss in an open and relax manner with the research participants to get much information.

The interviews were directed towards both *primary informants* and *key informants*. My *key informants* were the two district planning officials, the seven traditional chiefs and the primary informants comprises of the 16 household heads (see table 3.1), which I deemed proper sampling size to ensure fairness for the study. I interviewed both the key and primary informants who gave information and had considerable knowledge in rules governing land use

regulations, notable the seven traditional chiefs and the two-male planning officers in the West Mamprusi district, Walewale.

The next was *participant observation* and (Kitchin & Tate, 2013) argued, the researcher watch events as they unfold, sometimes a researcher may also take part in events while observing the behaviour of those being studied. On the part of *focus groups* discussions, I split the groups by gender with 12 male participants and eight female participants. P

views in relation to land use regulations was obtained. In all these methods, I was an active participant as either a moderator or an interviewer

To conduct a successful research, I used participant observation by being present, taking part and building trust through revealing my intentions to the researched being observed, to prevent the project, suffer greatly if relationships trust is not developed. The participant observation allowed me more insights into the intricacies of land tenure systems in the district.

### **3.3.2. Interview and sampling of traditional rulers**

With the aid of an Interview guide and using *purposive sampling* technique, I approached the seven traditional chiefs selected from the division (Wungu tradition area). I choose all, based on the fact that, they were and having stakes in the Walewale Township lands as a result of traditional land tenure system. They also have a well verse knowledge of the situation in the area as well as their roles as traditional custodians of the land.

I first booked appointments through my *research assistants* with an envelope containing my

Science and Technology (NTNU) and a short biography of myself and the reason for the interview. Our first honoured interview invitation was by Sangdanfong Chief, a distance of six kilometres from Kukua No.2, where I stayed. I visited all the seven chiefs in the company of my research assistants. Normally, upon arrival and ushering into the chief courtyard by his linguist, exchange of greetings, then formal introductions made and we offered cola nuts in a form of money as traditional formality through the chief linguists.

The chiefs welcome me as their illustrious son from oversea university and were so happy to receive us. Prior to the starting of the interview secessions, I always sought for their consent to audio-visually records their responses. The six sub chiefs accepted my request with the exception of the divisional chief (Wungnaa) who declined the request on personal reasons which he offered no explanation. According to the chiefs, there were several problems with regards to their birth right inherited lands and mentioned them as follows. Either one of them was their agents selling of one plot of land to different people at the same time or different

times or developing such a land always brings problems. Another, was land disputes arises over boundaries between the sub-chiefs which they normally referred to their father (Wungnaa) for amicable solution and sometimes when their father could not solve those problems, he usually referred them to the overload of the Mamprugu king and some end up in law courts.

The Wungnaa (the divisional chief) to make this point clear to us, he referred to the aged-long land disputes between the chief of Kukua No.2 and Loagri No.2 over who owned the right to release the land in Kukua No.2 for development. Gumrana (Loagri Chief) claimed ownership and selling lands within Kukua No.2 and its surrounding environs but the Zongnaa (chief of Kukua No.2) made a case against the Gumranaa to his palace in 2014 and he passed judgement in favoured of the Loagri No.2 chief to the dissatisfaction of the Kukua No.2 chief who referred

However, he was cautious and did not disclosed the final judgement from the King, even upon I made the request. However, the king of Mamprugu was not interviewed, because the king`s realm was not congruent with the study area. He attributed the recent uncontrolled housing development to the land disputes since legitimate ownership is been disputed and this was relevant for my study. The chiefs also said some farmers who cultivate a virgin forest for centuries and passed on the land to their descendants. Who claimed ownership of those lands and normally had hectic times with the chiefs, when the chiefs release those lands for development, which they claimed contravened the system of allodial customary land ownership practice.

I used this approach in gathering vital information from the traditional rulers. My research questions centred on: how do they see the future outlook (urban design) of the Walewale Township (see interview guide in Appendix No.1), how would the sanitation problem be tackled, what criteria is used in allocation of land for developing social amenities like schools, hospitals, playing grounds, how sustainable will the city be in the current unplanned and uncontrolled manner. The open nature of the interview guide helped them expressed freely their own ideas and views about the possible future needs of the town.

All the six chiefs were males and spoke in the local dialect of which I transcribed into English with the exception of the Kperiga Regent who spoke partly in English. In the field in some cases, the necessary procedure which involved accessing and achieving specific targets whether population or goals with considerable knowledge by using local dialect cannot be downplayed (Kitchin & Tate, 2000). During my interviews, they highlighted several issues, which enriched my research because the traditional rulers brought out what I did not know which inevitable contributing to the growth of urban sprawl. However, some questions that seems sensitive with

regards to documentation of disputed lands and boundaries of which direct answers from the chiefs seems difficult, probable for their personal affairs. During the interview sessions, I realised the chiefs had an extensive knowledge in the land use regulations in their areas, even beyond the scope of my study.

The interview for each chief lasted about 45-60 minutes around 12 well-structured questions because they were often having tight scheduled with other assigned duties to perform and I could not have engaged them for long. Before going to the actual field, I planned to interview eight chiefs, but when I commenced my fieldwork, one chief, Moזורana (Chief of Nasia) was excluded leaving seven chiefs because he holds no land title within Walewale Township. I used *purposive sampling* method to interview all the remaining seven chiefs, since they all possessed land in the area. This complete selection was important because leaving any one chief meaning vital information could have been lost. Actually, this is not a sampling, but a total representative of all relevant informants.

### **3.3.3. Interview and sampling of the district planning officials**

I sent my introductory letter from the Department of Geography (NTNU), to the planning unit of the District Assembly to seek for appointment and possible schedule an interview with the planning officers, but the Development Planning Officer was absent. However, the Town and Country Planning Officer responded that, he was busy with administrative work and had no deputy. However, he made a request for my interview guide to fill for me, which I gave him one copy (see interview guide in Appendix 2). Therefore, he gave me two weeks to come for it. The Development planning officer, who happened to travel but has a deputy and who accepted and granted me the interview.

With an interview guide, my concerns covered the district bye-laws regarding land transactions, building codes, compliance to district bye-laws by developers as well as the district capacity in dealing with administrative and planning non-compliance with regards to the growth of urban sprawl in the town.

According to the planning officers, the attitudes of the chiefs, household heads and land title holders were making proper planning difficult for them as authorities in the district, because administratively, bye-laws regulating land use were being disregarded with impunity. The interview lasted about 3 hours because he was so emotional about the attitudes of the people and gave me much information on land use regulations beyond the scope of my study.

Even though, I had no idea of the division of the planning departments into two units in the district. The District Assembly happened to have two units, one was the Development planning

unit in-charge of social issues and other was the Town and Country Planning in- charge of physical planning. I planned a semi-structured interview with the planning officers using a *purposive sampling* method with the aid of an interview-guide. I was told the substantive district planning officer in-charge of the development-planning unit was absent and the Town and Country Planning Officer told me he was busy with administrative work but ready to fill the interview guide for me at his leisure time, which I obliged. Therefore, in order to get first-hand information, I scheduled an interview with the Deputy Planning Officer in-charge of Development Planning Officer, since Town and Country Planning Department had no deputy to get official face-to-face interview about his views on urban sprawl issues in the district.

informants in the study.

### **3.3.4. Semi-Structured interviews and sampling of household heads**

Apart from the seven chiefs and the two-male planning officers, 11 house hold heads were interviewed through face-to-face interaction and five administered interview guide making up of the sixteen informants. The distribution was as follows, six by my field Assistants, and 10 by myself. When my field assistants were in the field, I made them record the interviews they conducted in order to avoid themselves filling in the notes in the interview guide that is the administered interview (see table 3.1). Often, after delivering them to me, I do replay the recorded version submitted to me by my research assistants for my own assessment. The individual household heads interview normally lasted for two to three hours, which my research subjects complained bitterly of tiredness, but they accepted this long interview.

I used *purposive quota sampling* method by the four suburban areas (see 3.2) by neighbours to select sixteen household heads. Out of the sixteen household heads, I randomly select informants from these four areas who, I directly interviewed, five were selected for semi-structured interview administration (see table 3.1). The rest of the 11 were face-to-face interview. My selection was based on three or above years of residency in an area, which may give the person the necessary information about the place. However, there was no age limit of whom should be selected based on the sixteen household heads were interviewed making up six informants based on who had the time and willing to be interviewed.

As mentioned earlier, I divided Walewale Township into four main areas to ensure fair sample size representation even though just four household heads per an area was a very small sample was based on the four urban roads that run through the town. The West African highway from Tamale (Northern regional capital) to Bolgatanga (Upper East regional capital) and the



Nalerigu-Wungu road, Nalerigu (seat of the king of Mamprugu) to Wungu (seat of Wungu Traditional area) roads in order to administered four interview guides (see interview guide in Appendix 3) in each section making up of sixteen. The suburban areas were given names such as Kukuazugu, Moshefong, Nayirifong and Fongni for easy identification and assisted me during the analyses (see map in Appendix 5).

I administered five semi-structured interview guides for then to fill in answers and notes based on the disseminated interview guide given to household heads and who seems to be busy with their businesses and farming activities. Again, these people were educated household heads and could not have time to sit with me through face-to-face interview. Normally, these categories of people could read and write, so I often given three-to - e for them.

In the interview guide administration, I randomly selected the following, one female house household head from Kukuazugu, one male from Moshefong, one male from Nayirifong and finally, from Fongni, one male and one female. The final random selection was two females and three males making up of the five whom we administered the interview guide. Four out of the five semi-structured interview issued were accordingly returned.

However, the face-to-face interaction, which involved eleven household heads, the selection was as follows, three household heads from Kukuazugu, making up of one male and two female household heads. From Moshefong, three household heads who happened to be all males. Again, three household heads from Nayirifong making up of two males and one female, and finally, from Fongni, two household heads, consisting of one female and one male. Seven male household heads and four female household heads were interviewed (see the table 3.1). Collectively, six females and 10 males making up the 16 household heads.

**Table 3.1. Characteristics of household heads selected for the interview and administered questionnaires.**

Neighbourhood	Administered Semi-Structured Interview		Face-to-face Interview		Row Total
	Male	Female	MALE	Female	
Kukuazugu	0	1	1	2	4
Moshefong	1	0	3	0	4
Nayirifong	1	0	2	1	4
Fongni	1	1	1	1	4
Column Total	3	2	7	4	16

### 3.4. Focus group discussion and sampling procedure.

In addition to the interviews with the primary and key informants, I conducted two gendered focus group discussions in the study area. One informant from the previous interviews was recruited for the male group as mentioned above. In my efforts of conducting my focus group discussions, I encountered real practical effects of power relations, especially the male group where some saw themselves as the main source of knowledge and does not like that their ideas could be challenged by any group member. This phenomenon was in tandem with what (Crang & Cook, 2007) postulated, that certain members in the group may try to dominate, particularly if they feel they are experts on the topic and can rapidly become the fount of wisdom and no one else will risk appearing foolish by arguing with them. However, as a mediator, I co-operated and made assurance to every member in the group that all answers were recorded and will be analyse and this courage their participation level. I also, allocated five minutes to every member in the group to voice out their opinions. I chose focus group discussions because I had very limited time to stay on site because of multi-sited nature of my research and the large community, Walewale town, is which made it virtually impossible to interview every household.

Besides, June-September is the peak farming season in the savannah zone, where my research subjects are predominately farmers and has no much time for me. Accommodation was not a major problem since my hometown is just three kilometres to the district capital, Walewale, so every day I walked back and forth for my data gathering. Language was not also a problem since I am a native speaker of the dominate language (Mamprulli) of the area.

I successfully conducted two focus group discussions, using the same semi-structured open-ended interview guides for the two suburban areas that they happened to be two sections of urban sprawl pronged areas. I was assisted by two research assistants, who assisted me in writing, monitoring and taking of audio-visual recordings of the interviews (see interview guide Appendix 4). The first focus group, I planned to select eight male household heads to obtain a minimum of six to eight participants, and to ensure these number attended, I over sampled and got all the 12 invitees in attendance. However, finally I had 12 household heads because I believe the topic was lively, addressing their main concerns about land regulations with regards to building permits in Walewale. The discussions normally lasted over two to three hours each, I had quite well argumentative discussions, and counter arguments and their colleagues corrected some who gave wrong answers. However, two out of the 12 attendees in the male group were senior-most family members, however, I did not experience it among the female group which made up of eight members. Since my policy was, in the absence of the household head due to farming or petty trading activities going on during my fieldwork data gathering time, I rely on the most senior family member of each household. I organised the two focused discussions with each group consisting of only males or females per group. The male focus group was carried on at Nayirifong (chief palace section). The selection of the male group was a *purposive sampling* technique and I included only one male informant from the household heads whom I interviewed earlier during the individual household head interviews because, he was considered knowledgeable in land customs and traditions of the area. However, I selected different people altogether, because I, did not want people who might have had fore-knowledge of my research questions and will give me the same answers and dominate the discussions. The selection was based on the prior knowledge of the people through my research assistants who themselves knew the people with pre-requisite knowledge of the area concerning my study.

On the female side, which I chose Fongni (where Walewale originates), looking at the phenomenon of male-dominated Muslim community of Walewale, getting the eight female-household heads were not easy. Therefore, I used *snowball-sampling* method since few of them were ready to own up as household heads and willing to participate because they claimed they were often seen as witches or unlucky women being a household head without a husband. Some of the female household heads normally points at a male or their sons in the house as the household heads. Therefore, getting female household head was not easy. However, getting one female household head enabled me got in touch with the rest, since the previous one normally show me where to get the other in that order. During the focus group discussions, I got in-depth

knowledge of the people`s views on land use regulations, the District Assembly bye-laws and what was their expectations, fears, experiences and possible impacts on sustainable development in the future. Both group discussions lasted for two and a half hours each.

### **3.5. Participant Observation**

I was passionate to observe physical infrastructure such as houses, lorry parks and public gardens. I observed building structures on-sites at the suburban areas such as social amenities and residential areas and their impacts on the sustainability of the city with regards to how unplanned manner they were. I went on to an on-going construction sites to observe for myself, engage with the people to know more about the situation at hand, and took pictures for reference. I was also directed to a site reserved by the District Assembly for construction of parking space for long trucks, but people built without adhering to warning by the authorities, prior to the beginning of the project, many homes were demolished. As (Silverman, 2013) posited that, conducting qualitative research, using this data gathering technique, will help you produce your own data and critically analyse and interpret your data before drawing concluding remarks.

However, I was privileged enough to attend and participate in a 2-hour scheduled meeting organised by the Town and Country Planning division of the district with regards to home owners building without authorization by public officer (s). Where a situational land litigation occurred in my presence, one woman bought a land in 2010 and the same land was sold to another man in 2012. So, the man started developing the land and fighting ensued so the planning department intervened by cross-checking the documents regarding who bought the said land first and the land title was giving to the 2010 owner. This provoked the man and he started throwing stones indiscriminately and this event pushed the meeting to 3 hours and 35 minutes. The planning officers enumerated several incidences of such occurrences in the district due to ignorance and illiteracy on the part of buyers and land sellers.

### **3.6. Photography**

An illustrative photos are assumed to be a factual record of the field (Banks, 2008). I took pictures of building structures I observed from the site and the settings I deemed necessary for my research study upon prior consent of my interviewees. I also took pictures of important documents I was not able to make copies in the field especially from the District Planning Office, which I have used as an illustrative picture. The photographs show a proof for me being

in the field by including them at relevant places in my analysis and as argued by (Ibid) photography serve as a credible, realistic form of evidence. This will help me produce my own data to supplement some information given during my interviews. Finally, during analysis, these photographs will remind me of relevant information, which might have gone out of memory in the field but only to find them relevant later during the data interpretation and analysis through careful observation and assessment of the photographs obtained.

### **3.7. Secondary Data**

Scarcity of public written documents such as town planning models, zoning regulations and maps as embedded in a poor tradition of the district in storing vital archives. I had no relevant secondary data from the District Planning Unit. Even planning documents concerning property rights were seen to be sensitive and not available to me because they claimed those documents should not be release into the public domain. The District Library Complex had outdated books. However, I was told they prepared a planning model for the town but could not find it for me, with the exceptions of the District Assembly profile document, which contained little information about my study focus. Virtually, no thesis or academic work was done on this study area in the district concerning my study focus. However, I only rely on materials from other studies in Ghana and the Nordiska Afrikainstitutete (NAI) library, Norwegian University of Science and Technology (NTNU), Dragvoll library, other theses and Google to able me come out with good academic work.

### **3.8. Limitation of the study.**

The study faced several challenges including documentation, time, material, methodology and analysis in nature.

#### **3.8.1. Time limitation.**

The data-gathering period was between June-September 2016, preceding a busy spring 2015 semester prior to our departure for the fieldwork in Ghana. Firstly, in every successful data gathering, pre-testing of interview guide is important which was not properly done. Even though there was no pilot study, but as an insider with prior knowledge about the cultural context, practices, attitudes and behavioural patterns complemented as a pilot study, however, scientifically, it invariable could had impacted on the reliability and validity of the information I obtained and should not be down-played. Secondly, due to time factor, short notices for

appointments were made and sometimes prompt preparing by my informants can go a long way to compromise the authenticity of information I received and sometimes appointments not honoured. For instance, the Town and Country Planning Officer who told me he was busy with administrative work. I knew meeting him; on-one-on-one could have yielded more vital information to enrich my data. Since time too was a scarce resource, it made me unable to collect all my interview guide answers from my informants especially those who filled in my interview guide, since one could not finish I had no time to wait and collect it

### **3.8.2. Financial Constraints**

literally connotes rise in social status in terms of financial resource, as if you are from a gold mine. Even disregarding my studentship status and not as a worker in overseas, my research subjects even chiefs, demanded huge sums of money before accepting to grant me audience. Sometimes I have to explain to them that I am just a student and before they could accept my little gift cola nuts. I faced financial challenges in accessing information from my informants and this could have negative impacts on the validity and reliability of the information I obtained, because one man told me directly that government has given us money to give to them before interviewing them and we kept the money while soliciting for their knowledge. Such thinking can lead to the researched saying the opposite even though I understood the language he spoke.

### **3.8.3. The rigor of the qualitative research data**

The quality of my research data obtained in the field was crosschecked on the field by comparing the answers given verbally and the written answers on my interview guide by my interviewees. However, without hesitation, my final analyses will determine whether *transferability* of my studies to similar studies done elsewhere can allow for generalization purposes (Lincoln & Guba, 1985).

According to Lincoln and Guba (1985) I absolutely cannot do away with *confirmability* where as an independent inquirer, my personal biases, motivations and interests could potentially influence my data interpretation. For instance, the bias criteria of only selecting educated household heads to administer my interview guide, which some of them did not answer sensitive questions. I did not, instead of including \_\_\_\_\_ to increase the number of informants, considering the small sample size of my data. However, (Lincoln & Guba, 1985) argued that, informants in their own wisdom in minimizing any idiosyncrasies in

giving out sensitive information to researchers, they often declined. I encountered similar problems in accessing documents because of trustworthiness, which some people claimed they were not having the required information I was demanding. Again, whether I would present credible (Ibid) final analysis in an authentic way, as one man said, he does not trust government workers and will never show me his house building permit. Even, the Physical Works department at the district declined given me documents with the pretence that, those documents were sensitive and should not be in the public domain even upon going through my Introductive Letter from NTNU. Again, taking photos and audio recordings were declined by a traditional

some household heads because of a rumour of victimization later. Mostly farmers and business people were excluded because they were busy with their economic activities and vital information from them could not be obtained.

However, physical accessibility was not a major problem because, Kukua No.2, where I stayed and Walewale is three kilometres apart and linked by the Trans-West African Highway and I could get a bus, a motorbike or bicycle daily, and sometimes I walked even though tiresome.

## CHAPER FOUR

### BACKGROUND INFORMATION ON THE STUDY AREA

#### 4.1. Introduction and location

The West Mamprusi District was created in 1988 under (Legislative Instrument-LI 1448) which was later in 2012 replaced with LI 2061 following the creation of the Moagduri District under

The district has a total landmass area of 2610.44 sq. Km and shares boundaries with East Mamprusi and Gushiegu districts to the East, North Gonja, Savelugu and Kumbungu districts to the South, Builsa, Kassena-Nankana East districts and Bolgatanga municipal (Upper East Region of Ghana) to the north.

The District Assembly has 41 Assembly members made up of 31 and 10 elected and government appointees respectively. The District Assembly has jurisdiction over legislative, executive and deliberative powers hence solely responsible for the planning and development of the district. The District Chief Executive (DCE) is appointed by the president as the political and administrative head and assisted by the District Coordinating Director. The District Coordinating Director who has an oversight responsibility over all decentralised Departments and Agencies in the District heads the administrative wing of the assembly.

The district is one of the twenty-six (26) administrative assemblies in the Northern Region of Ghana and Walewale as its capital.

Walewale is located on the West African Trunk Highway linking, Accra, the capital of Ghana to Burkina Faso. This road is tarred and passengers feel comfortable travelling on it. The District is approximately 68 miles (109 kilometres) away from Tamale and predominantly rural of about 75% of the population living in rural settlements having population less than 2000 (Doris, 2014). An untarred, deplorable, dusty and full of potholes road to the east is the Gambaga-Nalerigu road, and travelling on it is very uncomfortable especially in the raining season from April-August. To the West is a feeder road traversing to Yama via Wungu.



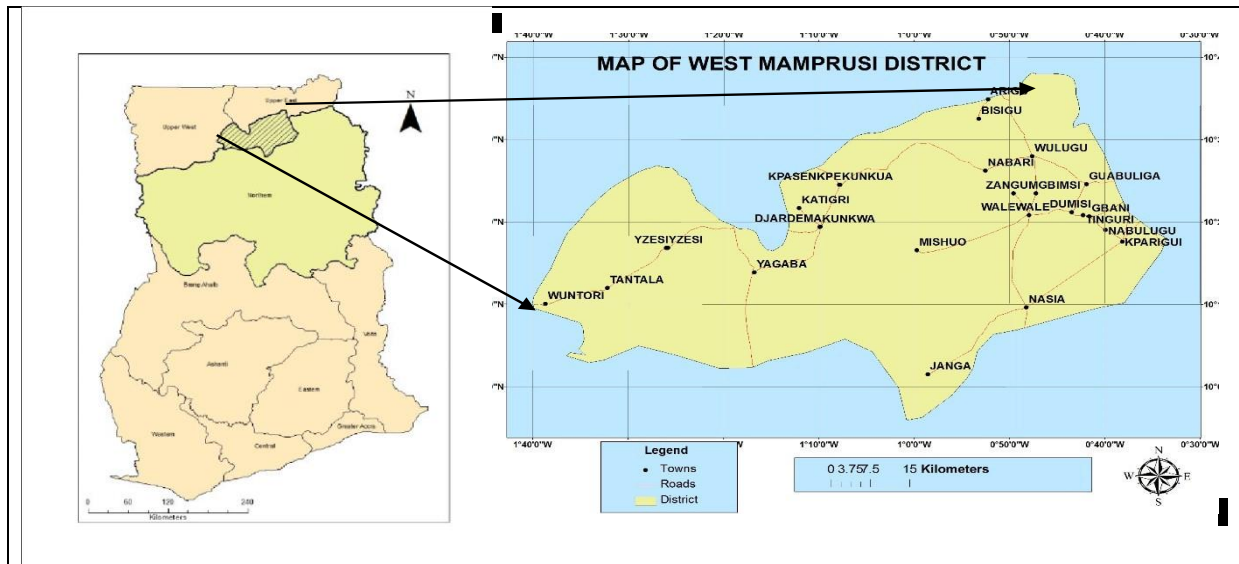


Figure 4.1. Map of Ghana showing the West Mamprusi District.

(Source: Ampofo et al. 2016)

#### 4.2. Relief, soil and drainage

The district has an undulating terrain characterized by gentle slopes from northeast and southwest. However, a few isolated visible outcrops and uplands of not more than 10% slope exist. Isolated hills, which break the monotony of the landscape, can be found around Karimenga and the outskirts of Wulugu. These rock formations have promising effects for the district's development because some of the stones are rich in potassium, useful for manufacturing fertilizer for agriculture purposes. The high outcrops also help in trapping of moisture-laden winds necessary for the formation of rain clouds, and hence rainfall for crop cultivation. Again, the bases of these hills and mountains are fertile lands suitable to produce food and cash crops and serve as tourist attractions as well as for hotel development.

The principal sources of water supply in the district are small town water supply systems in Walewale, Wulugu and Guabuliga. There are point sources fitted with hand pumps and hand-dug wells. The main agencies facilitating water and sanitation are the Community Water and Sanitation Agency (CWSA), NGOs including World Vision Ghana, Northern Region Small Towns (NORST), New Energy, the European Union, and the Rural Water Supply Programme (RWSP).

### **4.3. Climate and Vegetation**

The district is characterized by a single rainy season, a common feature of the Northern belt of Ghana. A long dry and short wet season coexist inter-changeable. The two seasons are influenced by two oscillating air masses, the harmattan wind, which blows in a North-eastern direction across the whole area. Between, late November to early March rainfall is virtually absent. Wet season set in around May to October with annual rainfall ranges between 950mm-1200mm. Temperatures generally records between 12-45 degree Celsius (Walker, 1957). The Humidity levels is generally high with low water vapour in the night and falls low during the daytime (Ampofo et al., 2016).

The natural vegetation is the Guinea Savannah Woodland, composed of short trees of different sizes and density, growing over a dispersed cover of perennial grasses and shrubs.

### **4.4. Economic activities**

The District is predominantly farmers, who engaged in crops production on a subsistence basis for family consumption. The major crops grown includes; maize, millet, rice, groundnuts, beans, sorghum, Bambara beans and yam, and some cash crops like cotton. Few farmers engage in irrigation farming along the banks of the White Volta normally growing vegetables crops such as tomatoes, onions, soya beans, pepper and tobacco are cultivation. The also real animals like cattle, goats, sheep, and fowls.

In tourism, the district abounds with unique tourist sites especially the locally architectural traditional mosque at Wulugu, the mysterious light on Wungu road and the Kpabgu cave, believed to be housing a lion and python. A renowned Islamic Scholar in Wulugu built the traditional mosque during the 1980s. This mosque was built with mud, gravel and stone without cement, but being able to withstand perennial natural disasters such as floods and storms and remains very strong as if it was built with modern materials such as concrete. The historic mysterious light on the Wungu road also dates to human memory. Approaching the light from distance, the light appears bright and broad but gets narrow and narrow as you move near it. Although, Inhabitants speculate how the light came to be, no one seems to know in fact when and how the light came there. All these are potential tourist sites, when explored and developed could bring economic development to the District.

#### **4.5. Demographic characteristics**

The West Mamprusi District comprised of 86 communities including some fishing and farm camps with a population of 121,117 (Ghana Statistical Service, 2014). The District, is largely inhabited by the Mamprusi people (75%) who coexist peacefully with other minor ethnic groups, such as the Builsa (4.7%), Frafra (2.7%), Kasena (2.2%), the Dagomba (1.8%), and some other ethnic groups in Ghana, (2010 PHC, GSS). In effect, 50.8 percent of the population are females while 49.2 percent are males. The District is predominantly rural, with a population of 76,503 people living in rural settlements. Urbanized Walewale Township with population of 18,880 representing 39% of the district population (Ampofo et al., 2016). The population density of the District is 46.4 per sq. km. The dominant religion is Islam comprising about (79.4%), Christianity (15.6%) and the African traditional religion pegged at (3.7%) and their main traditional festivals are Bugum (fire festival) and Damba festival. (GSS, 2010 PHC). Sex ratio in the district comprises of 96.8 and very youthful population mirroring developing societies. The age dependency ratio in the West Mamprusi District during the 2010 PHC is about 103%, meaning that, every 100 persons in the productive force has 103 dependents to cater for.

#### **4.6. Socioeconomic infrastructure**

Health facilities in the district are few and obviously woefully inadequate in terms of qualified medical staff and equipment since the whole district normally has only Medical Doctor. The highest level of health delivery systems in the district is the Walewale District Hospital, which serves as a referral centre. There are 4 other health facilities both private and public. These are the Janga Polyclinic, Kpesengke Health Centre, Kparigu PPAG Clinic, Mandela & Our Lady of Roccio private clinics in Walewale. Others are CHPS compounds at Gbeo, Nasia, and Guabuliga. The District also has a local Radio station called Eagle FM (est.2011), the Ghana Commercial Bank, and the Agriculture Development Bank branches in all stationed in Walewale, the district capital.

#### **4.7. The Mamprugu traditional area**

The Mamprugu Traditional Area is a centralised political structure made up of five divisional chiefdoms or paramountcies under the Overlord (Davis, 1987). According to Mole-Dagbani oral tradition, preserved by state drummers and recited annually during Damba festival, they believed to have originated from east of Lake Chad in Central Africa. They settled

in the Savannah Zones of the present-day northern Ghana around the 15<sup>th</sup> and 16<sup>th</sup> centuries. This brave band of invaders waged wars of conquest and defeated the indigenous autochthonous population of the area and established their authority over a large area under the abled leadership of Naa Gbewaa (Brukum, 2005).

The traditional state of Mamprugu consisting of the central province of Nalerigu and the five divisions, which are: Kpasenkpe, Janga, Wungu, Yunyoo, and Kurugu, presently covering four administrative districts in northern Ghana (Tonah, 2006). The Nayiri (overlord of the Mamprugu kingdom) based on their unwritten constitution, customs and tradition wielded much power, in most cases having the last say concerning judicial, political, military and administrative matters of the kingdom. Even though, these powers have been taken away from him in modern nation-state structure. However, to ensure certain elements of democracy, pertaining to adjudication of cases and making crucial pronouncements, he is assisted by his council of elders and the five divisional chiefs to prevent him from being an autocrat. The Overlord honoured this obligation out of, a fear of any civil war outbreak (each divisional chief will command his own army) and because there is the urgent need for internal unity to maintain the survival of the kingdom (Bukari, 2016).

The five divisional chiefs conformed to the patrilineal inheritance system of the Mamprusi, and enskinment entirely based on traditional laid down customs, upon the death of the previous chief with no customary provision for des-enskinment (Davis, 1987). This traditional chieftaincy system predates colonialism and is still practiced by the people.

#### **4.8. Wungu divisional area**

The Wungu Traditional Area covered two administrative districts, the West Mamprusi District (Walewale as capital) and the Moagduri District (Yagaba as capital). The Wungu province is considered the largest in terms of geographical area and wealthiest in terms of natural resources of the Mamprugu kingdom. The traditional titled of the divisional is *nna* -line hereditary kingship system. He discharges his duties with the assistance of his council of chiefs and the various village chiefs enskinned by him. The area consists of Wungu (the traditional seat of government), the largest and commercial town Walewale (the administrative centre) and Moagduri district). The Wungu Traditional Area is divided and supervised by the village chiefs who administered them in the name of the skin of Wungu and registered at the Department of Stool Lands of the district, since chieftaincy is not the preserved of personal property and often exchange families (Tonah, 2006).

The Wunnaa, is the kingmaker for the Wungu Traditional Area, enskinning the chiefs to assist him in his administration with the assistance of his council of elders in Wungu. They are, Duranna (Chief of Walewale), Gumdanaa (chief of Loagri No.2), and the following chiefs enskinned by the Nayiri even though under the jurisdiction of the Wungu Traditional Area, Sayoonaa (Chief of Sayoo), Jarigbandana (Chief of Sangdandfong), Kpeinaa (chief of Kperiga) and Zongnaa (chief of Kukua NO.2). The Wungu Traditional Area covered a vast geographical area and could measure as three times bigger than the neighbouring paramountcies of Janga and Kpasenkpa. Having a population of 100,000 inhabitants and a population density of 24 persons per square kilometre, and considered as one of the densely-populated area in northern Ghana (Assembly 2000 cited in, Tonah 2006).

#### **4.9. Walewale Town**

Even though, less scholarly work is done on the historical origin of Walewale. However, the chief of Walewale (Duurana) attributed the growth of Walewale to three factors. The first was the significant role played by trans- Saharan trade and Trans-Atlantic Slave trades. According to him, who quoted oral tradition, which is being confirmed by (Insoll, Kankpeyeng, & MacLean, 2009) they had it that, a northern trade-route passed through the town from Salaga in the south to Paga in the north-east, where slaves were transported to Elmina and Cape Coast for onward shipment to the Atlantic world. The trading benefits facilitated the development of the town (See map in Appendix 5).

The second was the strategy location of the town offering military defense to the Mamprugu kingdom where the kingdom traditional stockpile of weapons were kept, and today serves as a shrine. The name of his kingship title is named after the shri (meaning room). Today, the growth of the town is attributed to its role as a centre of political administration.

## CHAPTER FIVE

### URBAN LAND PLANNING, POLICY, MANAGEMENT AND TENURIAL SYSTEM AND THEIR IMPACTS ON URBAN SPRAWL IN WALEWALE

#### 5.1. Urban Planning System and policy in Ghana.

Urban land use planning was introduced by the colonial powers, the British in the Gold Coast now called present day Ghana in 1945. The British established the Town and Country Planning

land use planning based on master plans, land use segregation, discrete zoning). Cap 84- this legislative instrument (LI 1630 OF 1996) was assisted by the National Building Regulations. Cap 84 was an administrative and supervisory Board, tasked with a responsibility of orderly and progressive planning the development of land, towns and other areas whether urban or rural in the Gold Coast. However, after independence in 1957, to decentralize planning, the Ministry of Local Government and Rural Development (the highest state institution with an oversight role over planning in Ghana) backed by Local Government Act (1993) (Act 462) was passed. The outlined planning responsibilities were envisioned: a process of preparing and implementing a set of decisions and actions at local, district, regional, and national levels, effecting a transformation in the living conditions of the people of an area and their environment in ways that improve their existing socio-economic livelihood in accordance with article 295 of the 1992 Constitution of Ghana.

Ghana administratively is sub-divided into 216 district, municipal and metropolitan assemblies. The district assemblies are supposed to plan cities and towns with the assistance of decentralized institutions like the Survey Department and the National Development Planning Commission. They carryout supervision and granting building documentations, ensuing engineering standards for estate developers, ensuing license to mining companies, waste disposal and the erection of advertisement (Section 162, Local Government Act).

The District Assemblies carry out the control mechanism in two ways either by declaration an  
a planning committee who carry out feasibility studies and determine the present and future needs of the area. Following the declaration of a statutory planning area, the area would be immediately zoned in consonance with an approved sub-division plan before any development commences. Prospective estate developers are also mandated under the law to obtain prior building permits from the Town and Country Planning Department before commencing any development with regards to pre-permit items such as architectural designs and formalized titles (Awuah, Hammond, Lamond, & Booth,

2014). The next step requires the district assembly to publish the planning scheme, and inviting the public concerning permit applications and their subsequent assessment or evaluation. The district assemblies follow strictly the planning regulations prescribed to them from the national level such that every stage of construction must be inspected and certified by planning authorities before the next stage commences and finally, a certificate of occupancy is required for habitation upon the completion of development (Awuah et al., 2014).

However, Ghana urban planning system remain unchanged even after Ghana`s independence in both theory and practice and still based on the relics of British planning system because most planning officials were and still trained in the British planning curriculum. Again, the public institutional capacity to guide and support land use regulations has decreased and houses are primarily constructed through illegal land acquisition or subdivision of land in conflict with planning procedures, building of houses without authorization and in total violation of building codes. Those who violate this are not only limited to the poor in society but, middle and upper class follow suit. The standard of housing regions has also been managed informally, with regards to subdivision of land having no official permission, both public and private (Stow et al., 2007).

Some researchers alluded to some reasons that accounted for weak planning policies in Ghana, like: lack of awareness of planning regulations by citizens; restrictive regulations; high cost of compliance with planning regulations; administrative bureaucracies; weak and under-resourced planning institutions; and political interference in the execution of planning functions (Awuah et al., 2014; Larbi, 1996).

According to Awuah et al. (2014) government of Ghana with the zeal to address these problems, in 2007, an urban planning reform was initiated under the auspices of the Land Use Planning and Management Project (LUMP). This was a land tenure reform initiated in 2003, under the supervision of the Land Administration Project (LAP). The ultimate objective of the reform planning project was to develop a decentralized coherent, streamlined and sustainable land use planning and management system which adhere to community-based consultation and participation in managing infrastructure development (Awuah et al., 2014).

## **5.2. Introduction to urban management**

Ghana, as a developing country, urban management is often not problem free because of the prevailing high rate of urbanization mostly occurring in unplanned areas of cities. The unpleasant menace that follow is the result of administrative deficiency where there is outgrowing capacity of local municipalities to plan and control urban growth with adequate

housing, land provision and services to meet the needs of urban population of the 21<sup>st</sup> century Africa (Stren, 1993).

Urban management is about how to integrate urban social and economic infrastructure in a holistic way such as housing, educational facilities, environmental factors (urban waste management), and transportation in a sustainable way. Some researchers argued that central government with efficient administrative structures can effectively manage urban system while other argued for combining the untapped local community knowledge in urban management (ibid).

In Africa, especially Ghana, there is still a persistence growing gap between local urban governance capacities and the provision of available administrative services to meet basic needs of people. This issue should not be downplayed because the foreseeable future of African countries is uncertain ,since, it still follow the normal conventional practice of top-down urban management ideology (McGill, 1998).

Urban management, is institutional or government machinery which dispenses resources through the manipulative power of the government. This institutional capacity idea regard urban management as an interface between government operative bureaucracy at the central level which has the ultimate power and vested interest to dispense and control viable economic resources to the community who are in dire need of those resources to survive (McGill, 1998). The institutional dimension is also about the sense of organizational or managerial ability of central government machinery to defined their own understanding of urban management with the lens of power relations, the nature of cities and the socioeconomic urban structures at their disposal (Leonard, 1982). However, in order to achieve the target goals ,the distributive institutions and officials in charged are often empowered with the requisite skills and competencies through capacity building in order to allocate those resources and facilities to maximize benefits and minimized urban wastage (McGill, 1998).

Some researchers argue that urban management are also a set of activities put together intentionally to shape and guide the social, physical and economic development direction in an urban area with the aim of promoting economic and social wellbeing of the people at that geographical area through the provision of essential or basic social services for the people (McGill, 1998).

Urban management can also be the ability of metropolitan managers being able to implement and declared spatial strategy, which goes on to be regarded as reasonable and efficient, or the ability of the city to deliver basic urban essentials goods and trunk infrastructure to a rapidly urbanizing population. Urban management must be viewed in a holistic manner, which embrace



the entire actor in city development and not just dispensing resources, harnessing all delivering force of urban development and not just relying on master plan concepts.

However, it must also focus on horizontal integration to overcome sub-sectoral development and vertically integrated to overcome deficit in town planning, devoid of budgetary implementation and be capable of responding to prevailing opportunities through community or informal sector or NGO participation as well as traditional leaders (McGill, 1998). In order to solve the prevailing problem, the only way out of this structural dilemma in African urban management is to take cognizance of the potentially and socially regularized land management at the grass-roots level (bottom-up approach) which has built up as a reaction to the unreliable and nascent public sector interventions in many of the so-called informal settlements (Kombe & Kreibich, 2000).

During the 1980s, the major agenda globally towards the developing countries from the developed world was aid towards developing the infrastructure base of the Third World countries. But as the decade progressed, there were policy shift from donor countries towards providing engineering and building institutional capacity of developing countries to build and maintained their own infrastructure. Seeing urban area as ethnically, socially and economically diverse ,urban development must recognized the same and cooperation between local untapped knowledge and expert knowledge from the centre, in order to manage urban waste economy (McGill, 1998).

However, effective urban land control and management especially, rapid urban sprawl areas currently experiencing in Ghana. This crucial phenomenon in tackling the growing land use problems such as slum development, rising costs of land price and rent, inaccessibility of land for providing housing, incompatible urban use, perennial flooding, overcrowding in cities and congestion among others for the purpose of achieving sustainable urban development with the ultimate aim of achieving safety and health of the urban dwellers (Aribigbola, 2008b).

Urban management in Africa confronts with the following problems such as non -adoption and Utilization of Modern Planning Approaches. There worldwide embraced urban management concepts worldwide, which are seen as panacea for combating inefficient urban management, which the international community currently emphasized on citizen participation in decision-making. However ,due to Africa exceptionality, many urban or city managers ignored these new approaches and methodologies and does not incorporated alongside into land use planning and management but rather relied on the traditional master plan approach handed down to us after colonization (Aribigbola, 2008b). Therefore, non-adoption and incorporation of the new

approaches are a major constraint that needs to be surmounted to ensure better management of land in the city.

For instance, planning officials in Nigeria used outdated and outmoded land use Planning Act 1978 Policies. This law spilt out only on allocation of land in the country. However, the Nigeria urban and regional planning Act of 1992, which came to improve planning activity in Nigeria, was total deficit because it lacks the element of public participation in planning decision-making and this peculiar problem also manifest in Ghana.

### **5.3. Urban land Management Institutions in Ghana**

Ghana has a decentralized s hree-tier-Planning System. It is hierarchically structured from top to bottom and run uniformly through the ten (10) administrative regions of Ghana and northern region is not exceptional. At the national level, state institutions are mandated to carry out mainly supervisory roles and comprise several of ministries, specialized agencies and departments such as the Ministry of Lands and Forestry, the Ministry of Works and Housing, the Ministry of Roads and Highways and the Ministry of Local Government and Rural Development and the National Development Planning Commission. Below the national level, follow the (regional level), where decentralized and specialized state agencies and departments performs both coordination and implementation roles. These institutions are the Town and Country Planning Department, The Lands Commission, the Land Valuation Board, the Survey Department and the Regional Coordination Council. Finally, at the bottom of the hierarchy is the district Assemblies, where their sole responsibilities lie with the District Assemblies, which perform mainly implementation roles.

Scholars such as (Kasim Kasanga, 1995) justified the dualistic (with elements of customary land tenure system and state controlled lands) and decentralized system of state management of lands. The division is based on the following grounds: terests,

establishment, the correction of anomalies and problems in the customary system concerning litigation, land disputes and unfavourable agricultural tenancies. It also includes, the introduction of written and storing records concerning deeds and land title registration in order to confer security of tenure and promote investment in landed property, and the use of registered documents for collateral purposes for obtaining loans from financial institutions, which most farmers lacked. The Northern Ghana, where Walewale is located, also follow the dualistic landownership and

management regime, but the traditional chiefs have much stake in land allocation and appropriation than government.

Analysing the hierarchy, these state institutions has specialized functions and some assumed supervisory, coordination and implementation functions and the bottom District Assemblies only carry out an implementation role.

At the national level, the various ministries under the aegis of the sector minister who is politically appointed carry out precisely supervisory work. The ministries approve intended land development submitted to them, which is in tandem with national development planning scheme.

The National Development Planning Commission (NDPC) was established in 1989 to take charge of the overall planning of both spatial and the economy of the entire country.

The Commission, which is directly under the President is a participatory planning institution and give citizens the right of the public hearing opportunity. People who are directly or indirectly affected by large-scale and other nuisance development have the right to object if they desire or wished. For instance, before unauthorized structures earmarked for demolishing takes place, owners of such buildings are pre-informed of the planned demolishing and their inputs are taken before the demolishing is carried on. The prior knowledge information those who are ready to comply with the directive are often either compensated appropriately in kind or cash by the respective district.

The commission has a clear mandate to initiate and prepare settlement development plans with local community participation. The commission, has trained staff, who carry out studies on the national economy, socio-spatial, environmental and human settlement issues and policies, and mobilize human and physical resources for Ghana`s development agenda. The Commission, annually present budgetary formulae and implementation strategies in consonance with district and national development plans, and finally monitor and evaluate the development policies and projects in each district in Ghana.

The 1992 Constitution of the Republic of Ghana also created the lands Commission under Article 258 (1) and split-out its functions. The Commission is sub-divided into 10 Regional Lands Commissions in each region of Ghana to manage public lands and any lands vested in the president (Kasim Kasanga, 1995). The Lands Commission, through coordination also offer advice to the government, local or traditional authorities on land policy framework to ensure that individual, family or traditional authorities planned their development in conformity with the based maps of the areas concerned. Finally, the Commission formulate a comprehensive programme for the registration of land titles throughout Ghana. The Commission, was again

empowered under Article 267 (3)

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no development of any stool land unless the Regional Lands Commission of the Region in which the land is situated has certified that the disposition. Development is consistent with the developo

(Kasim Kasanga, 1995).

The Survey Department was established in 1901 under the Mines Department to prepare based maps as part of colonial civil service and now decentralized to both regional and district levels to carry out its core functions. It was to carry out surveying prior to the granting of mining concessions. The department became an autonomous department in 1907 and concentrated in surveying for mining concessions, forest reserves, railways and roads.

In urban land management, the department produces sectional maps, cadastral maps and site plans on which title registration is based and licensed surveyors prepare these. However, some of the site plans maps produced appeared to be inaccurate and unreliable causing land disputes. This resulted into slow preparation of base maps, land sales and development in areas where base maps have not yet been prepared causing multiple sales, haphazard development and land disputes (Kasim Kasanga, 1995).

The courts or legal system also plays significant roles in land management and development in Ghana. Their crucial role is to ensure certainty on land transactions and titles or deed registration. However, and regrettably, it has not been easy, the court system in Ghana suffers from several problems making them impossible or delay in land adjudication cases. Daily encountering problems are cases being congested in courts resulting in corruption in case management, partly due to shortage of judges and lawyers. There are a long backlog of land cases waiting to be heard, causing anxiety, uncertainty, insecurity countrywide (Kasim Kasanga, 1995).

The Town and Country Planning Department carried out urban Planning activities at the regional level and passed on to the district assemblies for implementation. They prepared documentations on public lands like leasehold title, freehold and development of government lands whether rural or urban communities in Ghana. For instance, in Walewale, the Town and Country Planning Director, told me because of the complex nature of the traditional land tenure system, he voluntarily coordinates with the chiefs who are the custodians of the land to draw out the urban plan model for the town, to avoid controversy and promote compliance concerning documents acquisition. The leasehold title is a duration granted to a person by a proprietor who acquired the necessarily permit to use and develop a land over a period often span between 40 years to 999 years. However, freehold is a perpetual and forever holding of a

land by a person and often passed on to his next of kin upon his/her death. In Walewale, land bought for housing becomes freehold and land acquired for agricultural purpose is a leasehold. The Land Valuation Board is mandated to perform the functions of valuing all public lands or government acquired lands for proper compensation package to be paid to landowners. All matters of compensation for land acquired by the government, and prepare valuation lists for property rating purposes for government or public corporation concerning land administration in Ghana. The Land Valuation Board also determine the value of government rented premises and advise the Lands Commission and the Forestry Commission on royalty payments on forestry holdings on products (Kasim Kasanga, 1995).

At the lower lever of the system is the District and Metropolitan Assemblies introduced since 1986 by the Local Government Act 1993 (Act 462) to provides the institutional and legal framework for District and Metropolitan Assemblies, with vested executive and deliberative powers, to plan for the overall development of districts in Ghana (ibid).

#### **5.4. Institutional bottlenecks of land administration in Ghana**

The work of these urban planning and management is often not problem free. They face several challenges. When I interviewed the Deputy Development Planning Officer, he told me, the major problem in the district, was high rate of illiteracy. He first spoke of the trained work force available in the West Mamprusi District. According to him, only two trained planning officers are available and have the mandate to planned for the district with a total landmass area of 2610.44 sq. Km which comprised of 86 communities including some fishing and farm camps with a total population of 121,117 (Ghana Statistical Service-GSS,2010, Population and Housing Census- PHC).

The officials are not native speakers of the local dialect, Mampruli. The town is a predominantly Muslim community, one expect higher rate of illiteracy, poverty and high birth rates because of polygamous marriage system. Many people cannot read, write nor communicate in English, the official language of administration in Ghana.

The land documents are often written in English, which make it difficult for the landowners, estate developers and homeowners to understand the content about coding system, address system, building technicalities like permits, site-specific architectural designs and officials goes through lengthy ways of explaining to clients, which involves cost and time. The bureaucratic procedures in the District Assembly concerning documents acquisition where several hands are involved land permits must pass through several offices before final approval is given. The documentation given by officials especially those serving the traditional chiefs at the Stool

Lands Office are semi- illiterates with some of them, their highest level of education is Junior High School and others with no formal education. This often, cause improper handling of documents and some files are often missing and could not be trace whiles some documents stored in their computers if only they exist cannot be retrieved leaving clients to go through many frustrations. Another major constraint is poor and inadequate funding to effectively monitored and control land development.

The planning department gets their annual budgetary allocation from the District Assembly Common Fund, which is paid annually and on quarterly basis to every district to propel its development. However, the constitutional requirement for quarterly release of these monies is always in arrears and sometimes little or virtually no allocation for the planning department in the districts. This activity did not feature at all directly in the budget proposals for the periods and the only allocation indirectly to land use management covers staff salaries and other emoluments (Aribigbola, 2008b). In such a situation, initiating urban development planning and schemes using master plans during the 1980s-failed miserable to materialized in Africa.

Thus, planning in Ghana and its decentralized apparatus at the district levels has no option than to follow and approve layouts and building plans prepared by families, traditional authorities, communities and individuals as well as granting statutory rights of occupancy to owners of lands (Aribigbola, 2008b). Some official relied on this factor and often demand bribes from prospective clients to render speedy service(s) for them and other officials often failed to cooperate with clients when bribes are not given. This institutional corruption is a major issue in Ghana, and explain the high number of land litigations dotted around in our courts. In Walewale the number of housing units built annually sometimes far exceeds the number of registered land titles with the District Assembly. The, model below was taken from (Baabeeyir, A. 2000 of Ghana.

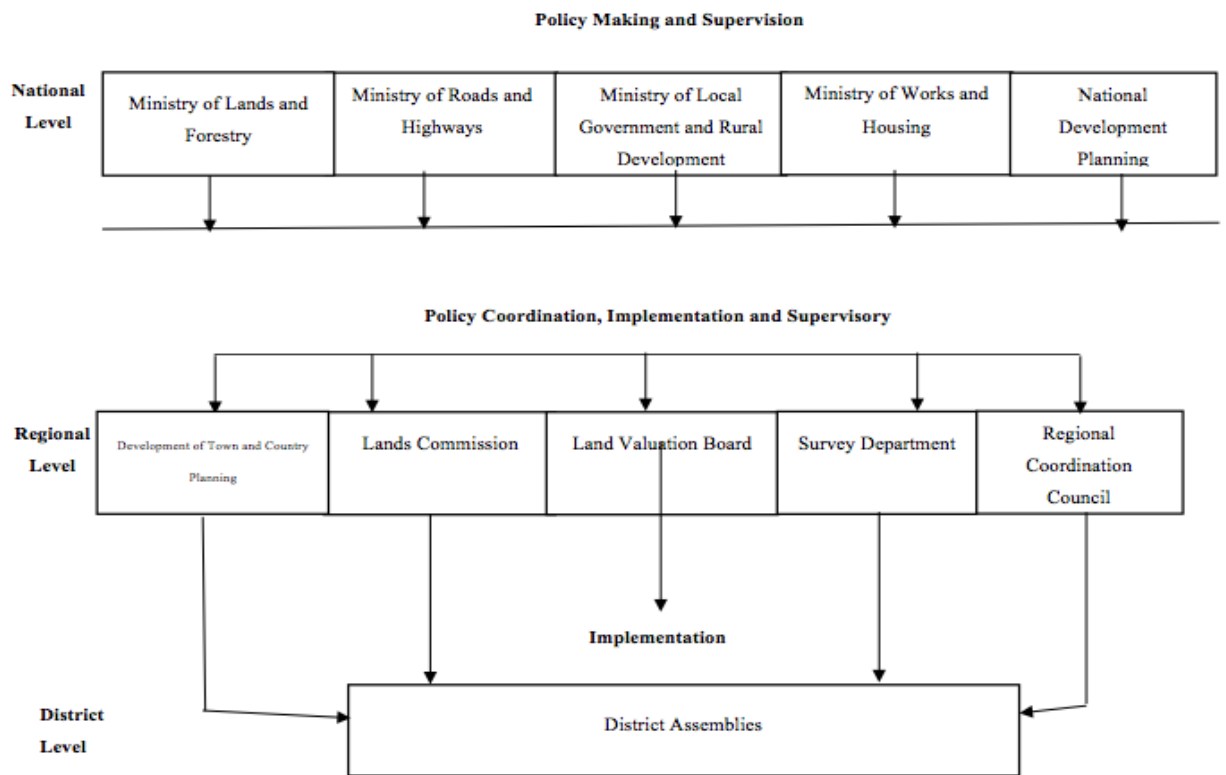


Figure 5:1 Three-tier structure of urban management in Ghana

## **5.5. Land Tenure system in Ghana**

Land tenure system in Africa according to Yaro (2010) is a well-managed socio-cultural laws which try to grant equal access to all family members who have interest in the land for either transactional purpose or development.

In Africa, as a whole especially in Ghana, making a meaningful livelihood require someone to have access to a piece of land for either agricultural production or commercial purpose or else survival would be in total jeopardy (Ibid). In rural development perspective, land is a critical commodity because it is highly demanded or require for both agricultural and non-agricultural production. Some scholars argued against recent land tenure modifications as negative phenomenon ,because it would promote landlessness but hailed by progressive Liberals who see it as a positive move because it will increase productivity and promote individual freedom (Atwood, 1990).

Ghana administratively, is divided into Ten (10) regions under the decentralization and local government system for efficient and effective governance. The bi-land tenure administration system which the southern seven regions have similar land tenure system and the three Northern regions of Ghana (Northern, Upper East and Upper West) have their unique resemblance in traditional land administration. The southern regions have sharecropping as the only unique land tenure practice not generally practice by the northern regions.

In analysing land tenure system in Ghana, firstly the concept would need to be explained in order to set the ball rolling, and it refers to a body of laws, rules and obligations handed down to us by our forefathers since time immemorial and used to govern the interest and rights in land holding and/or ownership (Yaro, 2010) . This anachronistic traditional laws provides a social and legal framework for exercising of rights and interests regarding land dormancy, development or transference of land title (s) (Kasim Kasanga, 1995). Land rights and interests may vary across localities in Ghana with regards to whether it is customary/private or public holding, temporary or perpetual (acquisition of land for agricultural purposes often returned to the rightly owner upon cultivation or the death of the clan head who gave out the land. However, land customarily acquired for housing purpose remained legitimately forever upon payment in kind or cash), big or small, secure or insecure (ibid).

According to traditional land tenure system exhibit unique customary and common law such as the allodial interest. This is highest right in customary land without any restrictions on the user rights



of use and these interests may be held by the stool, clan, family or private person, the customary freehold where the rights of subjects or people to have the free right to use land. The allodial title landholder or when a family member takes over the right of ownership from the allodial holder from the skin/stool. The skin is the traditional symbol of chieftaincy authority among the three northern regions-Northern, Upper East and Upper West and the stool represent the traditional authority of the southern sector of Ghana) upon payment of some amount either in kind or cash payment with money or offer an animal or/and food stuffs for sacrifices to the earth gods.

We also have the sharecropping, which is practice mostly in the southern sector of Ghana where pre-arrangement is made between the landowner and the labourer to shared farm products or proceeds from the land after cultivation based on agreeable percentage.

Ghana is regarded as a rural and agriculturally based economy. Land tenure system as a nucleus for agriculture production. Chronologically, before the advent of colonialism, ownership of land in

who exercise authority over land because he was often accorded with spiritual powers over this people. The acephalous Northern Ghanaian tribes, who had no knowledge of traditional kinship system, mostly exercised this system of land ownership. They had no chiefs but regarded the Tindana as their supreme ruler and refers both civil and criminal matters for his adjudication. The indigenous tribes of the northern Ghana comprised the following, Komkoba, Vagala, Telensi, Kusasi, Frafra among others. The Tendamba were highly respected because they wielded considerable power over land in their jurisdiction.

According to Kasim Kasanga (1995) the Tindana performed the following functions such as allocation of vacant land to strangers (migrants) who often approached him with token of a gift either in kind or cash (cola). The Tindana often refers an immigrant coming to settle in the community to someone who might have land for easy release to him. Other functions include settlement of land disputes in the community; pouring of libation and the pacification of the land when sacrilege such as murder, rape, sexual act in the bush and other crimes has been committed within the community. He also introduces

enskinment (the process of installation of a new chief among the northern tribes of Ghana). He also act as an advisor to chiefs on important state matters of great concern; he also arranged for the annual sacrifices to the earth gods to ensure peace and the prosperity among community members

during festivals and beginning of farming season or harvesting time; and enforcement of covenants for communal lands (Kasim Kasanga, 1995).

The head of each family is the representative in land matters holding their positions by the will of God and not by the will of the family because it is natural law that family heads represent the will of God before the group. These Tindanas are usually the descendants of first sellers in the community or sometimes chosen by soothsayers.

However, when the political and centralized people invaded the indigenous people and the later introduced the chieftaincy system into them, most Tindanas were killed and chiefs took over the roles as custodians of the land. Tindana is not synonymous to fetish priest, but they represent the community and hold the allodial land rights among the people (Atwood, 1990).

This ritualistic system of landownership among the indigenous tribe of northern Ghana and where the Tindana enjoyed the utmost respect and dignity vanished. Those responsibilities transferred to a political landownership upon the advent of a band of invaders and warriors from Northeastern Ghana during the 15<sup>th</sup> and 16<sup>th</sup> centuries comprise of the Mole-Dagbani people and the Gonjas. The Mole-Dagbani people were the Mamprusi, Nanumba, Dagomba and the Mossi people of present day Burkina Faso. Among the Mole-Dagbani people, land is vested in the YA-NA (paramount chief of the Dagomba people), Bimbilla-Na (paramount chief of the Nanumba people) and the Nayiri (Paramount chief of the Mamprusi people). These supreme traditional rulers intend vested the land into their sub-chiefs or divisional chiefs who often do not consult the Tindanas even where they exist in land transactions. The land is always held by the Skin as a symbol of authority among the people and chiefs representing the skin as the soul and embodiment of his people (Kasim Kasanga, 1995).

After the Ghana's independence on 6<sup>th</sup> March, 1957, ushered in dual Land tenure systems in Ghana where land is been administered by both the customary and state institutions as well (Yaro, 2010). Since 1992, traditional authority supervised full control of land ownership while state agencies provide enabling conditions for smooth land transactions for development (ibid).

## **5.6. Land Tenure system in Mamprugu**

Land tenure system in Mamprugu, and Walewale, which is subsumed in the Mamprugu land, my study area, located in the northernmost part of Northern Ghana (see chapter 4.7). Today covered four administrative districts such as the West Mamprusi District, Mankragu/Moagduri District, East

Mamprusi District and the Bunkpurigu-Yunyoo District. Mamprugu is politically and administratively structured into chiefdoms, which is hierarchical and politically organized.

The pa

divisional chiefs. The Mamprugu land is vested in the skin, represented by the overlord (Nayiri) who intern delegate land management roles into the hands of the divisional chiefs.

The Divisional chiefs sub-divide their land among their sub chiefs. Landownership is based on family allodial system (clan lands), individual lands (mostly acquired through purchase, lease, and inheritance among others), community lands, and gift land to strangers. This traditional land tenure system arrangement reduced the priestly role previously performed by the Tindana in the land administration of the Mamprugu.

Any land or mineral found within the Mamprugu Traditional Area is held in the name of the skin in trust for the people who are represented by their chiefs. Walewale town is under the Wungu divisional area where all lands are vested in Wunna Naa (Chief of Wungu). This land tenure system, where traditional authorities exercise enormous powers in land allocation, appropriation have serious consequential impacts on urban planning in Walewale. However, the traditional council work with the District Assembly who issue documentations concerning title registration, land permit, site engineering and building inspection.

### **5.7. State land ownership in Ghana**

Ghana, during colonial period, lands were forcefully acquired and vested in the Governor in trust for the Queen of Brit had the power of allocation or appropriation for Europeans and companies and this phenomenon deprived Africans from their birth right to land on African soil.

However, after independence, and the introduction of modern democratic dispensation, the current 1992 Constitution of Ghana guaranteed state ownership of lands in two ways: the state public lands and state private lands. According to Larbi (2008) the state owned about two percent of all lands in Ghana and still have a split share of two percent between the traditional customary land and whiles traditional land tenure system covered about seventy-eight percent (Larbi, 2008).

In the West African sub-region, some countries such as Mali, Senegal and many others forcefully acquired and nationalized public lands to guaranteed provision of public goods like schools, public parks, and nature or game reserves, building of roads and telecommunication lines, military camps,

seat of government among others. The state acquired lands can also be put into the land market for freehold titles, or lease for private individuals, business entities, corporate bodies as well as protecting landlessness in society.

The 1992 Constitution of the Republic of Ghana, guaranteed the right to private property ownership in association with others

or right over any property shall be compulsorily taken possession of or acquired by the State unless the taking of possession or acquisition is necessary in the interest of defence, public safety, public order, public morality, public health, town and country planning or the development or utilization

This constitutional provision guaranteed individual right to property ownership and no any person whatsoever whether individual or the state have the right to denied anyone to ownership of land. That is why the state or individual pays compensation upon taking over land from its rightful owner for public good, confirming land tenure system is constitutionally guaranteed in Ghana.

#### **5.8. Effects of Land tenure system on planning and land management**

The rapid rate of urbanization in the Walewale Township goes along to affect urban planning and management. The peri-urbanization is taking a big toll based on the arrangement of ownership of the land in question. Walewale Township, lands ownership is mostly individual, family and community, where the majority disregard planning laws.

The chiefs who owned the land in trust for the people are the people who sale the land for development even though they are mandated by the District Assembly bye-laws to consult the Department of Town and Country Planning for proper allocation. This should conform with the town`s master plan but sometimes because of additional costs and bureaucratic nature some chiefs and house owners disobey the formal procedures by leasing and selling lands without necessary documentations. Mostly, the sub-urbanization is greatly felt in the unplanned and semi-planned areas of the town.

The demand for housing to accommodate the increasing population in Walewale leads to the development of quarters, slums or sprawl areas. The land tenure system dictates the allocation of land for residential purpose. After the data collection and analyses, about 70 percent attributed

overcrowding of houses to land tenure system because, people built houses based on their landownership and do not consult the Town and Country Planning Department.

Another effect of land tenure system on planning is poor urban sanitation, poor urban water supply, erratic power, poor solid waste management. Fongni (one of the neighbourhood) is facing serious poor sanitation where open waters from bathrooms and rain water at times because of flooding.

## CHAPTER SIX

### URBAN SPRAWL AND THE ENVIRONMENT

#### 6.1. Introduction to the causes of Urban Sprawl in Walewale

The term urban sprawl, refer to excessive spatial growth of cities (Brueckner, 2000). Urban spatial expansion and growth occur as a result of three main forces; a growing population, rising incomes of urban dwellers and, the falling price of commuting costs due to improved transport facilities (ibid). Today, urban planning and management was a legacy introduced in Ghana by our colonial masters with the main aim of controlling uncontrolled urban development in the then Gold Coast and today modern Ghana. However, Walewale, my informants presented others interesting historical factors causing urban sprawl development.

#### 6.2. Historical, cultural and social factors

According to the traditional rulers (chiefs), who were my key informants and the Male Focus Group discussing, I conducted, they alluded to the fact that, during the pre-colonial period, land tenure -  
land-right- -comers through their earth-

sacrifices to them to ensure plentiful harvest and community well-being or success in violent conflicts or war against them.

The office of the earth-priest which made up of the Chief Priest assisted by elders of the village were regarded as a soul and a spiritual embodiment between the land and the people, and land boundaries were demarcated using both mental maps like hunting and farm boundaries, routes and physical features such as rivers, big tress, and many more.

The chiefs informed me that, historical factors shaped the spatial structure and organization of northern towns, because, it was compulsory to consult the services of the earth-priest to divine and determine the location of a new home to be built after a fowl or goat was sacrificed to the gods. This is to ask for their blessings and protection for the prospective landlord devoid of the concept of modern urban land use planning .It was a cherished norm that, the eldest son cannot built far

away from his father`s house because when the father died, the son is supposed to inherit the family house and must returned home (Lentz, 2010).

Additionally, in the focus *our* ancestors in their efforts to formed defensive-mechanisms against wild animals and domestic slaving built compact housing (building closer) to ensure safety of their neighbours and wade away those wild animals such as lions, hyenas, deer and many others which were engaged in killing human beings for their nutritional needs and for their own self- .

The illustration above shows that, the savannah ecological zone was a dense forest intersperse with grasses and harbouring herbivorous wild animals, which used to prey on man before turning into grassland savannah today. The people were not possessing modern sophisticated and superior weapons to kill these wild animals but rather using inferior weapons like stone tools such as, bow and arrow, and sticks, which sometimes led to casualties on the part of the people.

When a man assumed the status of being able to own a house, his family would demarcate a plot of land within the same compound yard after appropriate divination by the earth-priest, to be built, so, the concept of land use planning was totally lacking among them. The idea of layout streets could have pave the way and enabled these wild animals to easily penetrate their homes to cause more casualties.

During colonialism, the contact with the British imperialists around 1800s, there were attempts to change the land ownership in the then, Gold Coast, now, Ghana and the Northern region`s not an exception. According to the Town and Country Planning Officer, when the colonial officials saw that land was not considered an economic asset and introduced 1896.

Again, hands of the Governor General, threatening land tenure system, the native chiefs and Gold Coast lawyers vehemently opposed the bills through the formation of the Aborigines Rights Protection Society in 1897 which impressed that all lands, whether occupied or unoccupied belong to Africans and their families.

During late 1920s, the British, with their efforts to introduced urban land use policies and regulations, which, were fearfully resisted by the Gold Coasters, because land use planning was alien, and appeared cultural and historically inconsistent with our concept of town structure. This was geared towards maintaining native customary land tenure system but with strict African land

market control culminating into 1927 Land and Native Rights Ordinance which declared Northern lands as public lands (both occupied and unoccupied) to be use for common benefits and vested in the Governor General.

The British Provincial Commissioner, Captain Read, had this to say on land tenure system in northern Ghana (Lentz, 2010) *land tenure does not exist in the form that it is understood in civilized count* *value; it is regarded*

*as part of the universe, just like the sun, moon, and stars are*

information on the land tenure system in Northern Ghana for taxation purpose.

Because selling land was prohibited and a taboo in northern Ghana, and anyone whether chiefs, -gods in

(Lentz, 2010), so commercialization of land was alien to northern cultures which the British wanted to introduced.

The Town and Country Planning Department (TCPD) was established in 1945 and charged with the responsibility of planning and management of the growth of cities, towns and villages in the country, with major structural and implementation defects particularly the land tenure system. These failed urban land management policies were panacea for today`s urban sprawl phenomenon. The institution was seen as perpetuating white supremacy and their concept of urban development being alien to the black man, making chiefs suspicious concerning undermining their aged-long authority as custodian of the land.

Colonialism, according to my key informants (precisely the chiefs) brought modern slavery, however indigenous slavery was being practiced in Ghana since time immemorial and armed tribal conflicts. This is where people been captured and sold into slavery, so people have to continuously have their defensive-mechanism compound or compact building structure without due diligence to urban planning rules which were even alien and unknown, so they can protect themselves in times of attacked by slave raiders and not wield animals again.

This arrangement formed a barricade of self-defensive-walls to wade off any attacks, and in any eventuality men often send signals across and call upon others for defence or reprisal attack.

circular compound housing (round housing) nature of Fongni (a sub section of Walewale) believed to be the original birthplace of the town could best be explained concerning this historical factor. According to the chief of Loagri No. *the self-defensive nature was the single*



*most important factor in pre-colonial period before the advent of colonialism if not I could have*

This phenomenon of walled towns like the Naa Jeringa Wall in Nalerigu in the East Mamprusi District which is similar to many historic towns in Africa mainly built for defensive purpose and Walewale is not an exception and the main purpose was wading away beast of burden and against human raid for slaves.

After colonialism (post-independent Ghana), came the concept of urban planning but could not completely erase the historical experience of the people of Walewale, with regards to traditional building structures promoting urban sprawl. Colonial land administration was seriously resisted and limited and post-independent provided an ample evidence to support land use regulations in Ghana.

The administration of Lands Act (Act,123) having Executive Instruments 87&109 vested Northern lands in the president, which mean in theory, benefits and interests goes to customary landowners but in practice denied them the land rights. However, the 1979 Constitution rectified this anomaly and returned traditional lands to the chiefs and this was reaffirmed by the current 1992 constitution of the Republic of Ghana. However, the urban land use and management still confront the structural problems of urbanization and population growth, hence urban sprawl complexities.

### **6.3. Ineffective local governance**

The Town and Country Planning Department under District Assemblies in Ghana obtain their annual funding from the District Assembly Common Fund paid quarterly to the districts from the central government for their activities, such as undertaking developmental projects (school buildings and rehabilitation, markets etc.), paying staff salaries, sanitation issues, fuelling of their operational vehicles, scholarship awards and many more.

These Monies are used by the planning department for every planning activity such as, physical planning, area survey for land demarcation purposes, staff allowances and salaries, logistic support such as purchasing vehicles for monitoring and supervision, computers for record keeping and data storage as well as some preparing cadastral maps.

However, the most qualified and well trained urban planners are often located at the national level (big cities and towns) where they have access to efficient services and been well paid, depriving the regional and the district levels with the needed and requisite manpower. At both the regional

and district levels, the planning units are often stocked with inexperience or fresh graduates, who are often accused of having links with influential politicians and does not even hailed from those districts with fore-knowledge of the local problems, or with little knowledge or experience to ensure proper urban planning and implementation.

The basic problem faced by these officials is logistics because official cars to control and monitor the activities of landowners and developers are often lacking. However, if only the operational vehicles are there, they often broken down without proper maintenance and this makes their work difficult especially during the raining season or to control plots far afield. Sometimes these officials rely on motorbikes and bicycles, which make it very difficult to carry out adequate supervision.

Some of the highly trained and experienced urban planners and practitioners are often lobbied with the top hierarchy at the national level or through influential politicians to remain in Accra. Where they are closer to better social amenities such as housing, health facilities, schools and better chances of getting promotion at their work places then been far away from the centre of power.

They are allegations of administrative staffs engaging in naked corruption and nepotism because of their meagre or low salaries being unable to satisfy their demands in today high cost of living in Ghana and clients who wants their land documents approved faster often have to pay bribes to them. They are serious allegations of politicians recruiting their party faithfuls, friends, family members and tribesmen through the Local Government and Rural Development as urban planners who lacks the requisite training and qualification in the field as regional and district planners. These recruits found it difficult understanding well thought and designed master plans for the towns and often failed miserable in implantation to neither talk about producing new and innovative plans.

#### **6.4. Population growth in an Islamic community**

In the development world, the phenomenon of urban sprawl, is a big problem as result of rural-urban migration from the hinterlands in search of greener pastures and necessitate the desire for housing to accommodate the populations. This issue of urbanization is developing countries is wide spread as a result of population explosion. Walewale, is predominantly an Islamic community (79.4% of the people) with some few Christians (15.6% of the people) and African Traditional believers (3.7%) and these people, religiously practice polygamous marriage system with its praise for high birth rates.

Even before the introduction of Islam, according to one of my primary informant (one landlord in *a man`s wealth was counted based on the number of wives and children he possessed. So basically, social recognition in society was measured on this factor making large family a resource and force to reckon with because he could get more helping hands in the far* . Even though, Islamically, a man is mandated to married up to four wives, but some, less than 5% of married men in Walewale, violates this rule and married beyond these number.

With the advent of colonialism and its after mouth, the incidence of high birth rate is still the order of the day, because the six-childhood killer disease, which was the major problem of infant mortality, is outdated and child survival rate is very high.

Another reason, according to the Town and Country Planning Officer, who said, ignorance and children such as paying hospital bills, school fees, and many more in a country without social benefit or safety nets for parents.

The average household in Walewale, is about eight inhabitants (from 10 primary informants view point) and some numbering over fifty people. However, with the introduction of modern western ways of life, and a strong philosophy on individualism, which was been front upon is gradually eroding the extended family system in Walewale, so there is a strong demand for land for housing to accommodate the people.

Walewale, upon the assumption of district capital status, more white-collar jobs were created to operate the affairs of its administration. Therefore, a wave of migrants from both far and near (people from nearby communities, immigrants from Upper East and West, and even Burkina Faso, Mali and Niger traders) migrate into the town in search of job opportunities and some of them settled permanently. This process invariable increased land acquisition for housing and business purposes making the town out-grown beyond its master planned areas plunging it into its status of an urban sprawl town.

### **6.5. Land tenure system and stakeholders**

Individual families own the allodial superior land title system in Walewale, whose clan heads control it in the interest of the family. However, these lands belong to the Mamprugu skin (the symbol of authority of the overlord of the Mamprugu Kingdom) and the divisional chief of the

area).

One unique feature of this tenorial arrangement is that, ownership becomes perpetual after acquisition for housing purposes. Even, though still under the legal ownership of the skin, once the proper procedure of land acquisition for housing development is complete, the interest on the land perpetuates, which mean the land will not returned to its original owner, even upon the death of the one who acquired it but rather passed on to his next of kin. This however, does not apply to agricultural lands. Here, no agricultural lands are sold, hired or leased for, at least, peasant farming.

in cash or kind to the landowner before acquisition) and a plot is offered.

This system of ownership of land is flexible to all kinds of land related development purpose or otherwise. Despite the relaxed system of landownership, stranger wishing to acquire land for any purpose in Walewale, should not under-rate the possible dangers such as land litigations and conflicts in courts or summon to the chief palace when you by-passed these flexible procedures to legally acquired the land.

This arrangement makes District Assemblies weak in land allocation and appropriation, hence, chiefs are vested with the ultimate say in land use and they do disregard land use planning regulations promoting unsuitable structures development and increasing urban sprawl.

The Land tenure system is considered as a major factor contributing to urban sprawl in Walewale according to the Town and Country Planner Officer, who lamented when narrating his views on it briefly to me. The custodians of the land who are the various chiefs do sell the land to developers with or without the involvement of the Town and Country Planning, under the District Assembly, because of the perceived corruption by their officials and the fee charged by the district land management institutions for issuing permits and producing maps for them.

The chiefs ideally are supposed to inform the department for necessary documentation to be issued before any development takes place on said lands but due to ignorance or non-cooperative nature of some chiefs sold land to people without the knowledge of the District Assembly. According to the one household head, who was in his late fifties, said the District Assembly area is

*-an Akan phase which means late acquisition of wealth by people (preserved of the rich who can afford the land price and the type of buildings people are building there). When the Town and Country Planning Department have a site specific architectural design for an area, due to the*

*economic situation and the level of poverty in Walewale, most people do not buy lands from those regulated areas because they cannot afford the cost of putting up such buildings their colleagues are building there.*

So, the chiefs who have vast land there evade the services of the planning unit and sell their land to their clients who want to put up their houses there because such chiefs always feel they are being deprived of royalties from the land and this constitute more than sixty percent of their source of revenue for livelihood.

The chiefs sometimes engage in multiple sales of a single piece of land sometimes to two people or several at the same time and when they realized those land ownership is in doubt and developing those lands bring in misunderstanding probably ending up in land litigation in the traditional court (chief palace) or the normal courts. Individual and family ownership of land also promote urban sprawl because, when those people wants to develop such lands maybe due to ignorance they see no reason why they should go for documents or land inspection from the Town and Country Planning before putting up their structures.

These people either for housing or commercial purposes because of the perceived corruption by urban land management officials and some also complained of exorbitant fees charged in documents acquisition. They often start developing until the Planning department realized that some land development is taking place and before they issued authoritative note on the walls of the building asking them to stop work until proper documentations are issue and this is a common phenomenon in Ghana even in the major cities such as Accra and Kumasi.

Some land developers

District Assembly (W.M.D.A) and within a short period re-

by West Mamprusi District Assembly (W.M.D.A). So, officials on inspection duty will think they authorized the development and by-passed those buildings thinking they issued both the authoritative notes already.

This phenomenon, less emphases is paid to residents living in those places having access to urban facilities such housing layout, good sanitation, efficient waste management, non-erratic electricity and water supply and other urban services because they often disregard zoning rules or planning regulations that could have improved accessibility to the place. This chaotic urban phenomenon, with reference to Appendix 5 map of Walewale can be seen in some areas in Walewale such as,

Fongni, Nayirifong, Moshefong and even some sections of Kukuazugu believed to be unplanned areas.

The activities of some private land developers are also promoting the development of urban sprawl because of not been ready to pay a fee to acquire building permit because they often complained of corruption and no legal bidding laws to punish culprits on the part of authorities and bureaucratic nature of documents acquisition and a waste of time. Acquiring building permit could be a very hectic task because the documents needs to pass through several departments before been approved and sometimes monies are illegally paid to some unseen hands if a prospective client wants express service to put up his or her building.

This discourage people especially, the landowners who wants to build his or her own house would not rationally have to spend extra for documents before building and this invariable leads to urban sprawl.

#### **6.6. Inefficient private sector urban management practices**

In developing countries, urban waste management is a big problem and a challenge with the phenomenon of dirty and filthy environments posing dangers to the health and well-being of citizens and a drain on our national budgets, which Ghana is not an exception. To solve this problem, require commitment in both energy and resources by government, civil society organizations, financial institutions, educational campaigns and voluntary regular clean-up exercises.

However, this commitment is often lacking in Ghana, as a result of partisan politics sabotaging government environmental initiatives and financial budgetary constraints.

The West Mamprusi District, Walewale as the capital confronts with the challenges of urban management concerning infrastructure and urban services delivering such as water supply, electricity, road maintenance, pave managing both liquid and solid waste and street cleanliness.

The town only source of waste management is carried out by Zoomlion Ghana Limited formed in 2006, a giant waste, environmental and sanitation management body operating in Ghana and several parts of Africa. This private waste management company in Ghana is under the supervision of District Assemblies at the local government unit. The company workers always complained of meagre salaries and sometimes payments delayed about three or several months in arrears and they

are logistically ill equipped to manage waste in Ghana and Walewale. The staff often lacks operational vehicles but resort to the use of tricycles to convey mostly solid waste.

In developing countries, such as Ghana, private waste management companies are not vibrant especially in remote communities like Walewale. Walewale, is among the dirtiest towns in Ghana, because of the open gutters, unburied and rotten spoiled food, garbage, big refuse dumps and unhygienic public latrines with their disturbing stench affecting nearby residents (Ampofo et al., 2016). The open gutters with bath waters running crisscrossing roads and footpaths at times serves as breeding grounds for mosquitoes and other insects as well as rodents such as rats, mice and houseflies.

The recurrent phenomenon of cholera and dysentery in the town is because of the insanitary nature of the town, where public latrines (toilet facilities) which are open to the public and human excreta improperly managed (lacked underground waste management system) making life unbearable for inhabitants. These areas are often the most likely option for the poor and vulnerable people who live in those places because of cheap rents or low cost of acquiring land and building houses, but the high and middle class people who are gainful employed and earn higher income do not live in those areas.

So, the various District Assemblies, sometimes do downplay the necessity of solving the waste and insanitary conditions enumerated above, and this goes a long way to promote the growth of urban sprawl. Additional, Muslims predominant communities often called Zongos, for instance, Nima (a suburb of Accra) where those areas harboured hardened criminals. These people often engaging in drug trades, illegal water and electricity connectivity and government authorities, security agents and influential politicians use their services for the selfish gains and do often neglect their activities even though their presence posed security and financial threat to the national economy (Appiahene-Gyamfi, 2003).

These areas are associated with filthy surroundings and unhygienic environments because most people living here are low-income salary earners and poorly educated and rents in those areas are relative cheaper, which they can offer, even though Walewale have not gotten there yet but it is a matter of time not a possibility. The insanitary nature of those communities, and lack of urban services such as bitumen paved roads, proper street layouts, non-erratic power supply, treated pipe borne water system running non-stopped and efficient liquid and solid waste management are chaotic. This situation described above can be seen in Fongni and other unplanned areas of

Walewale, where the houses are often built of local materials such as mud and roofed with grasses (thatches) and are so closed, overcrowded and open gutters with running water is a norm and not an exception.

The zeal of an individual house owner and families to cooperate through communal labour engaging in regular clean-up exercise is often lacking especially in high illiteracy areas, but people often claimed if you managed your waste others will still litter the environment syndrome. On 1<sup>st</sup> November 2014, the Government of Ghana declared, First Saturday of every month as National Sanitation Day across Ghana. This was in response to the 2014 cholera outbreak as a voluntary clean-up exercise for all Ghanaian residents to reduce unsanitary conditions that breed diseases and causes injuries.

The National Sanitation Day (NSD) is an initiative by the Ministry of Local Government and Rural Development and a bill was initiated and sent to parliament by the ministry, now pending approval to give legal backing to the NSD programme to prosecute individuals who refuse to take part in the program ([www.gov.gh](http://www.gov.gh)). The clean-up exercise is organized and supervised by various District Assemblies where residents engage in the exercise to deal with open defecation, uncollected big refuse dumps, open gutters with running waters, public latrines not properly maintained and Ghana is described as one of the dirties countries in the world (Appiah-Sekyere, 2016).

According to the Town and Country Planning Officer, who reiterated with frustration and said, *hmmm, in Walewale, this policy received a major blow because of partisan politics. Where the opposition members sabotage the programme and do not regularly participate to make it a failed policy and a campaign tool against the ruling government, even though they wish to live in a clean*

This situation of party politics sabotaging government programmes and policies is one of the defects of democracy and a challenge to African development, and the residents of Walewale, exhibited these non-participatory characteristics.

## **6.7. Economic constraints**

The financial backgrounds of various landowners and homeowners are bedrocks cementing the recurring urban sprawl in Walewale. Most people in Walewale has no formal education and lack the necessarily training and skills required to be employed in either formal sector of government work or private sector.



Mostly, because of high illiteracy rate which is a panacea for high rates of unemployment put them in economically imprudent to afford modern high rise building with their associated cost of putting up such buildings and they often put poor mud buildings roofed with local materials precisely thatch. Even those, who could have afforded aluminium sheets they now appear dusty and rusted into brownish posing dangers of acid rains polluting soils and promoting poorer harvest in Walewale.

Most prospective land developers were of the view that, even though they know some of the rules regarding land documentations and the necessity for acquiring them but lack the needed capital to afford them. During the female focus group discussing, one female member in her early forties

*in a polygamous family, the number of children and wives living together (in the same house), feeding them three square meals a day is not even easy. The landlord (s) also meeting their shelter needs imposed an additional cost to be borne by him, that why I could not even go to school because my father*

This illustrate the severity of poverty among the people and their focus is getting food and not material possession like modern homes. Most prospective land developers find it difficult to pay small fee charge by the Survey Department for surveying their lands, for boundary demarcation, producing cadastral maps, issuance of building permits by the Town and Country Planning Department, paying for site plans and host of others building regularities.

They often rely on private surveyors who carryout faulty surveys, improper boundary demarcation and fake documents and do not also submit their works to the Department of Town and Country Planning for approval. The activities of private surveyors are causing havoc in Walewale, because boundary conflicts are rampant resulting in land litigations ending up either in traditional chief palace or formal district law courts for adjudications.

*the economic situation of residents make them relocate to unplanned and ethnic segregated areas, because of affordability in putting up the desire architectural buildings. These people can confidently build mud houses roofed with thatches but most of them cannot afford modern sand or concrete block houses roofed with corrugated roofing sheets (aluminium sheets) even those who could afford disintegrate themselves and build in better*

. Meaning that, the visible physical segregation of the town into planned and unplanned areas can be attributed to the deep-rooted poverty faced by residents, and the entire Northern regions, which is blamed as a colonial taxation and forced labour legacies.

The planning officer also had this to say,  
*and accusing us of engaging in something they called naked corruption and extortion putting extra cost on clients apart from the official fee we charged before land title registration or building*

Land developers, to avoid vulnerability and over exploitation, they rather disregard land title registration entirely and it goes a long way to promote urban sprawl.

## CHAPTER SEVEN

### BENEFITS AND IMPLICATIONS OF LAND USE REGULATIONS IN WALEWALE

#### 7.1. Introduction to benefits of urban land use regulations

Urbanization in developed countries was a blessing because it has promoted socioeconomic development and this could have been replicated in developing countries if well managed. However, urbanization turned out as a curse to many developing countries especially in Ghana, because infrastructure provision appears messy and dysfunctional. Planned areas in Walewale are: Kukuazugu (District Assembly side). However, Fongni, Kperiga, Tampuligu and suburban areas of Nayirifong and Moshefong are semi/unplanned and Fongni. These spatial amenities provision and performance further segregate the residents into poor and rich quarters. The affluence in society segregate and congregate in well planned areas where social services are functioning well and push the poor into the sprawl areas due to cheap rents and social capital provided by friends and family members. The tables below e views regarding infrastructure provision and performance in both planned and unplanned areas in Walewale. The informants comprise the urban management institutions, the individual landowners and homeowners, the segregated focus group, the seven traditional chiefs and the estate developers who have stake in land administration in Walewale.

#### 7.2. Portable water supply and performance

The provision and the rate of potable water delivering to the residents in Walewale, was looked at based on shareholders shared views during my data-gathering period. The basic source of water supply to the townfolks are from many hand dug wells, mechanized wells, bore holes, and the small Nayoku Dam Water Treatment Plant (a 2-kilometre northeaster village) of Walewale. It is providing more than 80% of treated water for Walewale and its surrounding communities. Rainwater harvesting is limited, however, the intermittent stream crisscrossing the town also supply water especially during the raining season. During the dry season, some used donkey-carts, tricycles, bicycles and head-porterage to carry water and sell to people who can afford. Most of the

people relied on the hand-dug wells which according to them, provides reliable and regular source of water for domestic works (washing, cooking, human consumption), industrial, irrigating small vegetables and livestock rearing activities. Due to prolong drought in the Savannah regions where Walewale is located, the practice of harvesting and storing rain water in big tanks is not common, however, some middle and upper class families patronage this water provision services. The idea

and the indigenes, local government unit (the West Mamprusi District Assembly-W.M.D. A), Non-Governmental Organizations (N.G.O) and the central government all provide water for consumption. The provision and performance of this critical social service to enhance higher standard of living among the residents. I

concerning provision and performance, in a planned and an unplanned/semi-planned area. The views of the informants concerning water provision (supply) and performance (delivery) are in the below table. They were a general descriptive consensus for using words like regular, irregular, variable, standard and sub-standard. That when water supply was running all times without hitches they will say its provision was regular. When otherwise, irregular, even though good for consumption without the risks of contracting water-borne diseases like cholera and dysentery. The table below shows the overall subjective assessments or views by the people involved.

*unplanned areas in Walewale.*

Informants	No	Planned areas		Unplanned Areas	
		Provision	performance	Provision	Performance
Individual Land and House owners	M 10 F 6 Tat.16	Changing, Irregular	Adequate,	Non-existence	Sub-standard
Supporting Chiefs	4	Improving	Adequate	Regular	Good
Other Chiefs	3	No improvement	Inadequate	Reliable	Good
District Planning Officers	2	Improvement	Standard, adequate	Irregular	Sub-standard
Male Focus Group	12	Irregular	Variable	Regular and reliable	Very Good
Female Focus Group	8	Irregular	Sub-Standard	Regular	Standard
Total	45				

In analysing the water provision in both planned and unplanned areas, (the individual land and house owners, other chiefs, both the male and female focus groups and the Estate developers (almost 90% with few representing 10% having dissenting views) argued that, portable water provision was not improving over the years, and put the blame squarely on the authorities. According to them, some politicians during political campaign seasons promise them with water provision, but after elections, they do not fulfil their promises made to them. However, other development partners sometimes are financially incapable to provide them water. An individual cannot also afford the cost of obtaining a mechanized borehole (s). However, contrary to their assessment about water provision in planned areas, the district planning officers and the supporting chiefs argued that provision was reliable/regular because most households were connected to the water pipelines and some having mechanized boreholes at their disposal.

With regards to the performance or water delivery rate in planned areas, the only different was the inclusion of some house and landowners, to the supporting chiefs, and the planning officers who were positive/optimists, that, performance was standard or regular. According to the planning officers, the W.M.D.A has invested substantial amount of resources to provide portable water for the people and the town have witnessed improved water supply in recent years. However, they agreed to the fact that, finance, drought, poverty affecting the people and making bills payment problematic. The sinking water table especially during the dry season was also a big challenge to government and the assembly, because of the drying up of the Nayoku River, which is the main source of water supply for the water treatment plant to ensure regular water supply for the increasing population growth. The dissenting chiefs, both male and female focus group as well as the Estate developers appear pessimists about the performance and said it was irregular. They argued that, the water treatment plant is electricity driven and sometimes, the town experience lights-out or erratic power supply for days making taps closed and the dam almost dry out during the dry season limiting the volume of its water supplying capacity.

Contrary, on the unplanned areas, performance appeared positive (standard) for the seven chiefs, the male and female focus group and Estate developers and sub-standard for the Planning officers and the individual land and homeowners. They argued that, availability and reliability of water is assured in unplanned areas because the people depend on individual hand dug wells for their water supply and since nothing can be used to wash water, they see no problem with the water for human consumption. This is because they lacked the concept of modern water purification method, because they do not boil and cool water for drinking unless for bathing and cooking food. However, both planned and unplanned areas, people patronage water sold in bottles and bags treated in Walewale and some from Bolgatanga -the Upper East regional capital.

Some individual landlords and landladies, maybe with some level of education and the District Planning Officers articulated that unplanned areas, water supply was sub-standard for human consumption. They alluded to the fact that, drinking water from the wells and the stream is unwholesome for human consumption, because of seepage of uncollected liquid and solid waste (garbage) into the ground. However, there is no alternative source of water during the dry season making the people to rely on those sources of water supply. The open defecation in nearby bushes, on huge refuse dumps (with stinky smells and hovering houseflies) and open gutters are common in Walewale. During heavy downpour silted drains into the ground and contaminate water sources,

contributing significantly to the recent high rates of cholera, diarrhoea, dysentery, malaria diseases. Sometimes death especially amount children, women and the elderly.

### 7.3. Logistics and transport services

Walewale Township is among the districts in Northern Ghana with bad, deplorable and dusty urban roads. The sub-urban roads connecting the town are feeder roads, footpaths, with only one kilometre bitumen (asphalt) road linking the Police Station, the Market Square, the District Hospital and ends at Walewale Secondary Technical School. The footpaths serve as urban roads and during the raining season, they often become muddy, unmotorable and dusty during the dry season. The only available transport services are the old taxicabs and mini-buses driven often by unqualified, drunkards and sometimes-unlicensed drivers. According to the District Planning Unit, the Ghana Private Road Transport Union (GPRTU) a decentralized trade union which made up of drivers and vehicle owners, having national and regional executives who determine their welfare. Informants views were based on the specific criteria on the asphalt roads and footpaths conditions and qualitative assessments such as improvement, dusty and muddy were assigned to various roads in the town.

*Table 7.2. Informan assessment of the nature of transport and logistics services in Walewale.*

Informants	No	Walewale Planned Areas (Asphalt Roads)	Walewale Unplanned Areas (Footpaths)
Individual Land and House owners	M 10 F 6 Tot.16	Some are in good shape (Motorable)	Muddy during raining seasons and dusty during dry seasons
Chiefs	7	Some improvement	Muddy, dusty, inaccessible
District Planning Officers	2	great improvement	Dusty and muddy
Male Focus Group	12	Some are motorable	Dusty and muddy
Female Focus Group	8	Some are in good shape	Dusty, muddy, inaccessible
Total	45		

From the table, all the 45 informants (100%) accepted the fact that, asphalt urban roads were in great improvement and little improvement in road network in the unplanned areas. However, there is no dual carriage road in the town. At the time of the research, there was no single tarred road in the unplanned areas of Walewale and virtually exhibiting 100% characteristics of been deplorable, dusty and muddy. The urban footpaths such as the Bugya Road, Kperiga-Old Court Road, and Junction-to Mandela Clinic-Nayoku road, Market Square-Tampulingu (under construction) and Tuugbinni -Moshefong were all footpaths and no visible sign of constructional work was going on (see Appendix 5 for the map of road network). The only means of transport services for commercial and non-commercial purposes within the town is by motorbikes, tricycles, bicycles and walking. There is no buses and taxi cabs services within the town, but only to nearby communities such as Tinguri-Gbani- Kparigu, Kukua-Loagri-Nasia, Wungu, Gbimsi-Wulugu, Bugiya and this explained the small nature of the town. Neoplan and other buses, some from Bolgatanga, transport passengers, mostly kayaye (female head potters from the north to south in search of jobs) over long distances to Accra, Kumasi and other places.

The government of Ghana introduced a nationwide, Metro Mass Transport Services in 2003 (public bus system) in its drive to solve the problem of urban transport deficient. It was a pro-poor transport service providing reliable and affordable services. However, this laudable idea was kicked against in Walewale town, due to selfishness of transport owners because they argued that their transport businesses were in jeopardy and they could lose their jobs. Therefore, Walewale was denied those bus services castigated by the local tro-tro owners because they feared they could be kicked out of business and rendered joblessness. One could have conclude that, Walewale is environmental friendly without toxic urban atmosphere because of little vehicular movement. However, the phenomenon of big refuse dumps and solid waste burning contribute to atmospheric gases often producing acid rains and diseases such as bronchitis, tuberculosis and others. Below pictures, show the two contrasting roads in Walewale Township, where the planned areas have asphalted roads and the unplanned areas are crisscross by footpaths discouraging interaction.





*Figure 7.1. An asphalt road linking the Walewale Police Station to the Market Square.*  
(Source: Author work during the fieldwork).



*Figure 7.2. A gravel road linking a sprawl area in Fongni, Walewale.*  
(Source: Author work during the fieldwork).

#### 7.4. Electricity connectivity

Electricity connectivity in Walewale, according to the District Planning Unit is improving recently, with several sub-sections now connected to the national electricity grid. However, unplanned areas like Tampulingu, Moshefong are still not fully connected to electricity. Even, places that are connected experience erratic power supply too often.

**Table 7.3. assessment of electricity connectivity in both planned and unplanned areas in Walewale.**

Informants	No	Planned areas		Unplanned Areas	
		Provision	Performance	Provision	Performance
Individual Land and House owners	M 10 F 6 Tot.16	Unsatisfactorily	Erratic	unsatisfactorily	Erratic
Chiefs	7	Unsatisfactorily	Erratic	unsatisfactorily	Erratic
District Planning Officers	2	Improvement	Regular	unsatisfactorily	Erratic
Both Focus Groups	20	improvement	Erratic	unsatisfactorily	Erratic
Total	45				

From the table above, the 16-individual land and house owners and the seven chiefs argued that, there was no improvement in electricity provision to the planned areas whereas the two-male Planning Officers and the 20 Focus Groups collectively saw little improvement in provision recently.

Power performance was considered erratic in even planned areas by all informants except for the two planning officials, who held a contrary view and saw some level of improvement to electricity provision in all the planned areas. With regards to performance, 43 individual informants said it was erratic except the two-male planning officers who claimed performance was regular.

All the 45 informants unanimously said electricity provision and performance were unsatisfactorily and erratic unplanned areas respectively.

The major reason was the cost involve of supplying electricity by the Volta River Authority, the national electricity distributor and sometimes deliberately cut power supply due to non-payment of

electricity bills to some houses. However, some of the house owners blamed authority for sabotage or punishment for non-possession of building permits.

### **7.5. Educational and Health Facilities**

Walewale have three main health facilities, which are all located in the planned areas of the town. The health facilities are the District Hospital as the only public funded health facility in the town, and two other private clinics (The Mandela Healthcare Centre and the Our Lady of Rocio Health Centre). Walewale have two public funded Secondary schools, the Walewale Secondary Technical School and the Walewale Vocational and Technical School and two other private senior secondary schools (the Walewale Islamic secondary schools and the Excellent College) all located in planned areas. However, there are several Junior high schools, primary and Islamic Madrasa schools located in both planned and unplanned areas and mostly public funded with few private funded ones. The District Library is the only public non-functioning library in the town. These schools are not spatially distributed based on planned or unplanned areas.

### **7.6. Urban waste, public latrine and pollution generation and management**

The issue of pollution, public latrines and urban waste management in Walewale is serious looking at the myriad of waste generation sources. They commonly emanate from activities of residential/domestic, industrial, commercial and agricultural wastes shrouding the town. The basic sources of wastes generation in Walewale are from food leftovers, rubbish (paper, plastic and empty containers), compost/organic waste, scrubs or metals (e-waste). Poor waste management do endanger the quality of the environment, severe health risks, and generally put socio-economic cost on people`s wellbeing.



***Figure 7.3. A photo of uncollected refuse dump in Fongni, Walewale.***

(Source: Author. A picture taken during the fieldwork).

According to the District Planning Officers, the West Mamprusi District Assembly (W.M.D.A) and the Zoomlion Ghana Limited (a private waste management company) are the only waste management bodies in Walewale. However, the District Assembly is faced with several like insufficient dustbins for collecting waste, poor attitude towards waste management, logistic problems (equipment and tools), limited and untrained waste management personnel and lack of contemporary waste management and collection equipment. But, they alluded to the fact clean-up exercise, attitudinal change, and obeying basic urban building policies could have increase the awareness levels about the consequences of unhygienic conditions. The Planning Officers also emphases that, Zoomlion Company should be efficiently resourced to meet its financial obligations such as regular payment of their employees, procuring equipment, rebuilding landfill sites. The issues of open gutters serving as breeding grounds for mosquitoes and houseflies causes malaria and cholera respectively. The phenomenon of unhygienic public latrines, uncollected garbage, huge refuse dumps, open

defecation and filthy butcher shops poses health risks to residents as a result of their stinky smells air pollutants and acid rains. Walewale, as said by my individual household heads during the data gathering, is a filthy town, to them, both solid and liquid wastes spread the shanty areas of the town indiscriminately. The main butcher shop at the market square and even private butcher shops lacks basic sanitary practice, with animals being slaughter in the open and leftover to the mercy of houseflies that carry cholera parasites. However, proper urban planning, more secured and hygienic slaughterhouses and shops could have been designated by the (W.M.D.A) for this economic activity and could have generated more revenue for the district.

The household heads, told me that they often make strong efforts in managing wastes they generated by separating paper/cardboard/boxes for making fire for cooking. Others such as plastics, cans, empty bottles, plastic containers are often put into reuse in the household or sold to informal waste collectors who retail them for traders to package foodstuffs like shea-butter, groundnut paste and oil, and vegetables in the market.

#### **7.7. Public addressing system to boast local revenue mobilization**

The district planning unit told me the Government of Ghana policy efforts to address revenue mobilization leakages into the pockets of individual revenue collectors. However, the officers, acknowledged the fact that, the policies were feasible in the planned areas such as Kukuazugu and Nayirifong. Where proper property addressing system prior existed before, but the problem is in the sprawling areas, the policies appear as a less successful because of location of business owners. With proper property addressing system, revenue collection will have been easy and increase the financial capacity of the District Assemblies. A Street addressing system is about naming streets and numbering properties along to identify their location, ownership in order to prepare cadastral maps with Geographical Information System (GIS). Easy identification would have enhanced tax/revenue collection by decentralized agencies in the district such as E.C.G (Electricity Company of Ghana), Ghana Water Company, Internal Revenue Service (IRS), Value Added Tax (VAT) and to promote business growth. Businesses operations and quicker response during emergencies like domestic fire outbreaks by the Fire Service and Police Emergency Teams. This system would also promote efficient District Courier Organizations like EMS and Postal Services, and aid government drive for implementing National Identification and Population and Housing Census and minimized the phenomenon of revenue leakages by dubious officials. All these can be achieved by efficient

and effective urban land use policies aiming at controlling the prevailing chaotic urban sprawl phenomenon in Walewale. The issues of micro-business owners evading tax and exploiting their workers with meagre and sometimes unpaid salaries would be mitigated with better urban planning policies.

#### **7.8.1. Land documentations possession in some planned areas in Walewale**

either acquired or do not acquired land documents before putting up their structures. It was observed that acquisition of documents was strictly followed in planned zoned areas because all the lands were properly surveyed, demarcated and serviced for housing. Kukuazugu, a well-planned suburban area, prospective land developers cannot put up any structure without acquiring documents from authorities. Informants were asked whether they registered their lands, houses or both and from whom they obtained their deed registration. Some said from the Town and Country Planning Officers, while others claimed from the local chiefs. Those who claimed they registered with their chiefs might had done so through their friends, family members, or simply lacks knowledge about who is supposed to register their lands for them.

**Table 7.4A: Informants assessment of the compliance level to land/house title/deed registration in planned areas of Walewale.**

Informants	No		Land title/Deed registration			
	Yes	No	Issuing Authority	Reasons for acquisition		
Individual Land and Household Heads	M 10 F 6 Tot. 16	10 6 16	0 0 16	Town and Country Planning, the chiefs	To avoid litigation/land Tenue conflicts/perpetual peace, building in unauthorized places, guaranteed your property, demolition	
Chiefs	7	7	0	Town and Country Planning	For demarcation, litigation	
Planning Officers	2	2	0	Town and Country Planning	To avoid litigation, intimidation,	
Male Focus Group	12	12	0	Town and Country Planning	To avoid litigation, intimidation structures demolition	
Female Focus Group	8	8	0	Town and Country Planning	To avoid litigation, intimidation structures demolition	
Total	45	45	0			

From the table 7.4 A above, all the 45 informants said it was mandatory to have land title/deed registration in planned zoned areas making compliance level of 100 percent. However, with respect to issuing authority, all, except some land/house owners claimed their chiefs issued land titles, maybe due to ignorance (*laissez faire*) or total lacking knowledge about how the land administration works. Few of those land/house owners without formal education said, they had theirs issued by the Town and Country Planning Officers. Some of the reasons why they

registered their land/houses are to avoid future demolition, land litigation, conflicts and threat to their lives and others.

*in planned areas of Walewale.*

Informants	No	Site/Building Design possessions			
		Yes	No	Issuing Authority	Reasons for acquisition
Individual Land and Household Heads	M 10 F 6 Tot.16	6 4 10	4 2 6	Town and Country Planning, house owner, Private estate developers	To have a good layout, not necessary, achieved durable structure, minimized costs of building
Chiefs	7	6	1	Town and Country Planning, Chiefs	To have a good street layout
Planning Officers	2	1	1	Town and Country Planning Department, Some contract private architects	They think add additional cost, ignorance or lack of education, they think they can provide for themselves
Male Focus Group	12	8	4	Town and Country Planning, from private people	For site, specific design.
Female Focus Group	8	5	3	Town and Country Planning, from private people	For site, specific design, to economic your building costs,
Total	45	30	15		



From the Table 7.4B, with regards to building design, ten out of 16 household heads (six males and four females) alluded to the fact that, some do contract the Town and Country Planning Officers for designing their building design for them, while six out of 16 (four males and two females household heads) said, they do have one.

Six out of seven chiefs said land developers normally acquired building designs while one chief disagreed. On the side of the two-male Planning Officers, the Town and Country Planning Officer said developers do contact him for designs while the Deputy Development Officer said no by claiming that less than 60% land developers do acquire building design.

Again, eight out of 12 Male Focus Group were in consensus that, builders do have building design while four out of the 12 said otherwise and five out of eight Female Focus Group said they had building design before they built while three said they never had. Nine Out of the 14 female household heads, acquired building design, while 21 out of 31 male household heads also acquired building design. Collectively, 30 out of 45 informants do acquire building designs and 15 out of 45 build without building designs. Compliance to building design rules happened to be over 60 percent in planned areas.

However, most prospective land developers claimed officers charge unnecessary fees before issuing their building designs, and since they can build on their family lands without building designs, it was not necessary obtaining one.

**Table 7.4C. assessment of the compliance level to building permit acquisition in planned areas of Walewale**

Informants	No	Building Permit possession			
		Yes	No	Issuing Authority	Reasons for acquisition
Individual Land and Household Heads	M 10 F 6 Tot. 16	7 5 12	3 1 4	Town and Country Planning, house owner, Private estate developers	To have a good layout, not necessary, achieved durable structure, minimized costs of building, achieve site specific architectural design, avoid scattered building
Chiefs	7	6	1	Town and Country Planning Officer	For demarcation, avoid litigation
Planning Officers	2	2	0	Town and Country Planning	They see it not necessary, Ignorance, high permit fees, acquired their lands from chiefs, no need for permit
Male Focus Group	12	7	5	Town and Country Planning	avoid land litigation and demolition
Female Focus Group	8	6	2	Town and Country Planning	avoid land litigation and demolition
Total	45	33	12		

From the Table 7.4C above, with regards to building permit acquisition, 12 out of 16 (seven males and five females household heads) do acquired building permits, whiles, four of 16 (three males and one female household heads) do not acquired building permits before building.

Six out of seven chiefs said land developers normally acquired building permits while one chief disagreed. On the side of the two-male Planning Officers, said developers do acquire building permits before building in planned areas, with the exception of few cases of non-compliance.

Seven out of 12 Male Focus Group said, land developers do acquire building permits, while five out of the 12 said otherwise and six out of eight Female Focus Group said they acquired building permits before they built while two said they do not. 11 Out of the 14 female household heads, acquired building permits, while 22 out of 31 male household heads also acquired building design. In Totality, 33 out of 45 informants do acquire building permits and 12 out of 45 build without building permit for the stated reasons in the table above. However, compliance level with regards to building permit acquisition in planned areas was more than 70 percent in planned areas.

### **7.8.2. Land documentation possession in some semi-unplanned/unplanned areas in Walewale**

Acquisition of land documents appeared different in the following sprawl areas such as, Fongni, Kperiga, Tampuligu and the inner circles of Nayirifong and Moshefong are semi/unplanned. The tables in the Appendices assessed views with regards to district bye-laws on land documentations.

From the table 7.5A, (See Appendix 6 refer to) with regards to land/house title/deed registration, five out of 16 household heads (three males and two females) registered their lands and/or houses, while 11 out of 16 (seven males and four household heads) did not register and have no title/deed to the houses and lands.

Five out of seven chiefs said land developers do registered their houses and lands while two chiefs disagreed. The Town and Country Planning Officer said developers, at times, they do contact him for registration while the Deputy Development Officer was not really sure.

Again, five out of 12 Male Focus Group said they have deed/title to their lands and/or houses, while seven out of the 12 said otherwise, and on the Female Focus Group, seven said they have registered their lands and/or houses before they built while one said she did not.

Nine Out of the 14 female household heads, have registered, while 14 out of 31 male household also registered. Collectively, 23 out of 45 informants do registered their lands and/or houses and 22 out of 45 build did not register making compliance level of title/deed registration a little above 50 percent in the unplanned areas with the in-table stated reasons.

Analysing table 7.5B, (See Appendix 7 refer to) three out of 16 household heads (one male and claimed to have contacted the Town and Country Planning Department to acquire a building design, while 13 out of 16 (nine household heads) did not even know and use building design.

Two out of seven chiefs said they know some land developers do acquire building design before building, while five chiefs disagreed. The Town and Country Planning Officer said developers, at times contact him for designing building design for them while the Deputy Development Officer disagreed.

Again, two out of 12 Male Focus Group said they had building design before building their houses, while 10 out of the 12 said otherwise, and on the Female Focus Group, two said they had building design before they built while six said they never had one.

Four Out of the 14 female household heads, had building design and 10 did not have, while 6 out of 31 male household also had building design and 25 did not have. Collectively, only 10 out of 45 informants used building design and 35 out of 45 did not use building design with the in-table stated reasons and compliance level was less than 23 percent.

Analysing table 7.5C (See Appendix 8 refer to), with regards to building permit acquisition, nine out of 16 (six males and three females household heads) do acquired building permits, while, seven of 16 (four males and three female household heads) do not acquired building permits before building.

Six out of seven chiefs said, land developers normally acquired building permits while one chief disagreed. Chiefs misunderstood the official building permit to oral giving out of land to people to develop. On the side of the two-male Planning Officers, the Deputy Development Planning Officer said developers do acquire building permits before building in the unplanned areas, while the Town and Country Planning Officer disagree.

Seven out of 12 Male Focus Group said, land developers do acquire building permits, while five out of the 12 said otherwise and three out of eight Female Focus Group said they acquired building permits before they built while five said they do not. Six Out of the 14 female household heads, acquired building permits, while 20 out of 31 male household heads also acquired building permits. In Totality, 26 out of 45 informants do acquire building permits and 19 out of 45 build without building permit for the stated reasons in the table in Appendix 8 making compliance level with regards to building permit acquisition in the unplanned areas more than 56 percent.

Maybe those landlords who acquired permits were the educated ones and could differentiate between obtaining oral permission to build by the chiefs and obtaining authoritative documents from the District Assembly. The planning officers were of the view that, chiefs discourage building permits acquisition by developers because when they gave the land out, the people thought they have finished with the land issues. The planning authorities often have to issue an authoritative note on the walls of the building normally reads, Stop produce permit . After all documents obtained then, they would issue another .



**Figure 7.4. A photo showing non-building permit by a developer in Nayirifong, Walewale.**  
(Source: Author. A picture taken during the fieldwork).

Corruption could be the driving factor discouraging land developers from acquiring documents. Effective urban land use policies could solve this problem if proper mechanisms are put in place. The public must be properly educated on the need for land documentation that will compel them to always acquire legal documents before putting up structures. According to my informants, the Town and Country planning office should be equipped with computers and log books to register all lands and regular in-service training for their staff. They should be public education through the local radio station in the local dialect to educate prospective land developers about the necessity of obtaining documents before erecting their structures.

The traditional rulers should also obey land use regulations and properly register their lands and desist from selling one plot of land to several people at the same time to avoid land litigations.

## 7.9. Landscape beautification (eco-city)

The district planning officers were interested in urban beauty. They described urban beauty in Walewale with regards to street layouts, open areas, public gardens, well layout streetlights, site-specific architectural design. Adherence to building codes in straight lines leaving gaps between houses to serve as pavements and accessibility to houses. In order to avert domestic disasters like floods, fires and other life threatening issues is been violated in the town because people often erect unauthorized structures like kiosks for micro-businesses such as provisional stores, saloons,

*The foot paths which served as linking sub-sections of the town as urban roads is unfortunate in modern parlance, because urban beautification should have asphalt paved roads which are disabled friendly, street signs, Regular Street lighting systems. High rise buildings with some serving us offices and apartments, foot bridges over minor marshy areas and well developed playgrounds*

Country Planning Officer. This district planning officer was of the view that, the people does not understand the benefits of open spaces and often used the ten-metre yard between houses for petty trading activities. Below is a picture showing a modern house being put up behind the District Assembly (Kukuazugu-a planned area) and the planning unit vision for the entire town.



**Figure 7.5. A well-planned area housing structure -Kukuazugu, Walewale.**

*(Source: Author. A picture taken during the fieldwork).*

However, some people in both the male and female focus groups had different views on the beauty of Walewale. For instance, those who were exposed to other big cities in Ghana through travelled, said Walewale could not be compared to other cities like, Bolgatanga (Upper East Regional capital), Accra (National capital), Kumasi (Asante Regional capital), Tamale (Northern Regional

capital) and others. Their less exposed counterparts held a contrary view and claimed, Walewale was more beautiful as compare to the surrounding villages, because *it is first among equals in the district* female participant. The chiefs and some homeowners argued that the style of local architectural and roofing design was in line with the Mamprugu customs and tradition and appeared beautiful and building codes, per the regulations were irrelevant. However, comparing Walewale to other district, regional and the national capital, one could realize that, the town is not neat and clean as claimed by some of the informants, maybe because of their non-travelled experienced.

#### **7.10. Controlling natural and man-made disasters**

Mostly the nature and types of houses put up through self-help housing structures without modern architectural designs built by architects. These buildings are prone to both natural and human-induced disasters such as flooding during heavy rains, landslide, mudflow, strong winds (harmattan winds causing felling trees, domestic fires), and drought. The buildings are constructed with earth (sand, mud, mixed with water), roofed with thatch, and plaster with cow dump, sand mixed with bitumen with few plaster with cement which made them non- durable especially in an adverse weather conditions or use for a long period and sometimes these houses do collapse either on occupants or destroyed completely deepening the poverty situation in the town.

Walewale experience, a perennial flooding caused by choked gutters that do not allow free flow of running water during heavy downpour, is a worrisome phenomenon causing annual loss of lives and properties running into millions of Ghana cedi. For instance, one chief told me how on the 19<sup>th</sup> May 2013, some trees felled at the main Market Square in the town, killing four and over 30 traders were severely injured caused by strong winds. The unplanned nature of the town shared greater responsibility on these frequent disasters occurrence. Another problem is domestic and commercial fires, normally caused by open oven for cooking in traditional homes using fire woods, cooking at market places (causing an ending market fires in Ghana). Some of these fires are caused by methane-gas-filled-cylinders leakages and negligence of safety routines.

The Ghana Fire Service, sometimes find it difficult, to put out those fires due to lack of water in their fire tenders, unprofessional fire service personal and lack of maintenance culture of their vehicles. Launching a proper implemented urban regulatory policy in Walewale, can help to avert these situations because, they would be street layout, accessible and motorable roads to every house

or to the market square to allow swift response during a disaster or fire outbreak, however, these laudable ideas are lacking for now. Sometimes storms uproot electricity poles and trees, ripped off roof of houses and public buildings like schools, latrines and many more, where, public funded disaster management body called the National Disaster Management Organization (NADMO) often aggravate residents plight by given them foodstuffs, mattresses and mats who loss several millions of Ghana cedi worth of properties.

### **7.11. Introduction to implications of urban sprawl in Walewale**

The challenges of urban sprawl are numerous and result from failed urban policies by both the central and local government. Walewale is not an exception and bears similar microcosm of failed policies. Traditional governance system and land tenurial practices stand as the duo-hindrance to urban planning in Walewale, because, land as traditional authorities hold a commodity who normally disregards urban planning policies and urban land management practices. The sub-sequential problems due engulf the whole society and residents who live in Walewale to deal with the pains of untold and preventable occurrences.

### **7.12. High rate of criminal activities**

According to Knox and Pinch (2014) deviant subgroup is a group within a society that has behavioural patterns and norms substantially different from the majority of the people in that society. Urban sprawl areas in general may harboured hard time criminals and Walewale may not

sometimes-free accommodation provided by friends, family members or consensual contracts for their cohorts. Normally, these areas are occupied by people with little or without formal education and mostly engaging in both legitimate petty trading activities or sometimes in illegitimate/underground economy in the informal sector. They constitute societal misfits who normally live in these places such as drug peddlers, armed robbers, prostitutes, economic thieves (pickpockets-larceny), confident tricksters, local dubious herbalists, questionable Imans and Pastors, burglary, arsonists and others engage in embezzlement, forgery, false pretences, and in receipt of stolen goods (Appiahene-Gyamfi, 2003). According to one household head, in his late fifties, who said, *the police arrested three thieves recently who were engaging in slaughtering of donkeys for sale and he believed they lived in those crowded areas. Hmmm, these people terrorize*



*their unsuspecting and helpless victims causing all kinds of psych problems for them such as,*

. To buttress this point, for instance, I have also heard that, Naanziabong-a sub-section of Moshefong, in Walewale, unconfirmed reports in the public domain that, the place is noted for people who engage and trade in Indian Hemps (Wee). According to the said reports, security personnel are aware of their illegal activities but often look helpless because, those people are seen as dangerous and possess security threats. These criminals are believed to be connected to influential people in society who protect their interests by patronizing their services for their selfish gains, hence, making them untouchables.

### **7.13. Poor quality housing**

Another appalling phenomenon in urban sprawl areas is the poor state of the housing structures. According to Potter and Lloyd-Evans (2014) they argued that 20% of the world population lacks decent accommodation and about one-fifth or over half in the Third world people lived in substandard housing. They also alluded to the fact that, over one million people live in illegal or informal settlements in developing countries of which Ghana is not an exception. In Walewale, -built/auto constructed/Self-designed and family labour, friends, and communal initiatives (Ibid). The basic building materials are earth/sand or mud mixed with water. They use cow dump and clay mixtures for plastering and roof with thatch/grasses. Only few who are financially sound, that is, the middle and upper class mould sand and concrete blocks comprising of sea sand, cement, stone and water. These people engage the services of architects and engineers for building. Below photos was taken at Fongni, showing self-help built houses roofed with aluminium sheets one of the sprawl and unplanned area.



*Figure 7.6. Photos illustrating poor housing structures in Fongni, unplanned area.*  
 (Source: Author work during the fieldwork).

Traditionally, the basic shaped and structures of the houses are circular in nature. The rooms built for the women are often circular or round and some lack windows for ventilation. While, the male rooms assumed rectangular/square form and normally fixed with small-sized doors and windows for ventilation purposes. These poor rooms and housing structures poses several health risks for occupants. In an environment with excessive hot weather, where temperatures can be as 40 degree Celsius around January-May, living in a room without window due account for high rates of heat - related sicknesses such as Cerebrospinal Meningitis, skin burn and very dark-skinned colours of residents.

#### **7.14. High rate of land litigations**

The seven chiefs interviewed, six admitted of encountering land litigations and only one chief said he never encountered any land litigation issues. The 16 land and house owners, 14 said they either encountered land litigation and two said otherwise. On the part of the male focus group discussion made up of 12 members, nine alluded to the fact that, they have ever encountered land litigation by themselves or their close associates whiles three said they had not directly involved, even though they know and see people suffering from it. On the part of the female focus group discussion made up of eight members, five have been involved either directly or indirectly in land litigation and the remaining three have not been affected. Both the Town and Country Planning Officer and the

Deputy Development Planning Officer were of the view that, several court cases of land litigations were pending in the chief palaces and the Walewale District Magistrate Court for several years. However, they said the main causes of land litigations in the town were as follows; selling of land without approval from district planning department, farming on a piece of land without approval from the land owners. Again, forceful acquisition of land by some residents, land owners not consulting chiefs and opinion leaders before releasing land to people, lack of negotiation, money making ventures, multiple selling of land to many people, wrong documentation, traditional land tenure system, chiefs and their sons selling the same piece of land to different people.

The chiefs outlined procedures involved in solving land litigation issues. According to them, whenever, conflict or disagreement over the right to ownership of land occurred, most of them go to the chief palace for arbitration or for amicable settlement. Those who are not satisfied with the ruling or pronouncement by the chief can either go to a chief whose authority is higher than the first chief or seek court redress. However, when chiefs lock horns over a parcel of land or boundary disputes they often go to the next chief in higher authority or go to court. For instance, sub-chiefs go to a divisional chief whom they are under his jurisdiction or may be drag to another divisional chief whom they are not under his jurisdiction but have well verse knowledge on that geographical area, but some end up at the overlord of Mamprugu for arbitration. Several people complained of losing their investment on purchased land (s) because of multiple sales, while others lost their lives due to cutlass and gun battles as a result of land conflicts. Some communities and houses had ever been set ablaze by arsonists and raise down by inferno over disputed parcel of land. Chiefs do take advantage and forcefully confiscate and evict rightfully acquired landowners to the vagaries of the weather and disillusion. Some claimed they have been spiritually or physically threaten and attacked leading them into psychological trauma and anxiety after losing or regaining their properties invested in acquiring land. However, these issues are not necessarily limited to urban sprawl areas alone in Walewale.

### **7.15. Home of poverty**

Urban sprawl areas are places where the reality of poverty is been felt, seen and display .These areas according to Potter and Lloyd-Evans (2014)

There is a wide range of social safety nets in these segregated areas, like cheap rent or free accommodation often provided by, family members and friends for the destitute in these areas,

making them slums of hope. However, some of the social services like water, electricity, and well-managed public latrines and tarred roads, which makes life worth living are often not adequately provided in slum areas, making them slums of despairs. The main reasons accounting for the severe poverty is both environmental and man-made factors. According to one landlady in her sixties lamented about the causes of poverty especially among women as follows *son, you see, when I was young, my father sent me to school, but I dropout to marry early because my peers were marrying. So, lack of education, early marriage, and high birth rates due to Islamic value for children, polygamy and lack of vocational and technical skills contributes greatly to the prevalent rate of poverty among us* . From these statements, lack of education and ignorance is the bedrock of poverty among the people. However, environmental incidences such as unreliable rainfall pattern, bushfires during the dry season leading to post-harvest losses, infertile lands and flooding whenever a particular year, has adequate rainfall contribute to the severe poverty of the people.

## CHAPTER EIGHT

### SUMMARY AND CONCLUSION

#### 8.1. Introduction

This chapter summarized and concludes the thesis based on the empirical research findings, and make recommendations for policy makers. The findings will be presented according to the ordered of the research questions presented in chapter 1.

#### 8.2. Findings of the study

The primary aim of the study is to investigate the phenomenon of urban sprawl development in Walewale. The main objective is to investigate urban sprawl implications on zoning residential areas in Walewale. Three specific research questions were stated.

Regarding the first research question, the empirical findings and conclusions asserted that, *several Ghanaian legislations are used to control land use regulations on zoning residential areas in Ghana and Walewale in particular*. These legislative provisions appeared in two-fold, that is the traditional unwritten legislations, primarily based on customs and usages of the people as well as the various colonial and post-colonial Ghanaian constitutional provisions, which specified urban land use regulations for developing any residential area.

According to the second research question, *land tenure system affects land use planning on zoning residential areas in Walewale* appeared vividly as urban sprawl defied these legislative provisions and their occurrence in Walewale, especially on privately unregulated lands for constructional purposes. Since, the majority of the chiefs are uneducated and being custodian of the lands, and they defied urban land use regulations and often release land for development without regards to due process of law. Analysing responses from the interviews I conducted, land management institutions and individual house/land owners, alluded to the fact that, urban sprawl development is rooted in history and failed contemporary state policies. The researcher firm observations from the fieldwork, showed that, urban sprawl was evident in private and encroached government lands even if it was a zoned planned area, confirming a strong relationship existing between urban sprawl and landownership.

The third research question centred on *the benefits and implications of land use regulations on planning or zoning in Walewale*. The various interview guide I administered, embraced critical urban service provisions, their performance and maintenance. The noticeable phenomenon was a little improvement in provisions and maintenance of urban services were observed in planned areas than the unplanned areas. For instance, good asphalted urban roads, modern housing structures, efficient waste management, electricity connectivity, portable water, educational and health facilities and efficient revenue mobilization were found satisfactorily at the planned areas and poor housing structures, high crime rates, land litigation, both natural and man-made disasters and unhygienic environmental conditions pre-dominate the unplanned areas. Urban sprawl could be regulated by strengthening both central and local governance in Walewale and land tenure system modified to conformed to land use laws, since it is purely controlled and managed by traditional rulers. There should be public education about the importance of adhering to land use regulations by the West Mamprusi District Assembly. However, it should be done cautiously, in order not to undermine the authority of the traditional rulers, since the chiefs are seen as final authority with regards to land transactions and whatever the chief says becomes final.

Urban sprawl, when well-managed, its external effects to residents with regard to non-provision of critical social services and could be curtail by adhering to land use regulations.

### **8.3. Summary**

The physical urban environment in unplanned Walewale is haphazard and chaotic scenery as a result of uncontrolled housing development to accommodate the growing population. This urban growth is not without external urban problems especially to urban destitute.

In Walewale, the planning department often lack the needed capacity and competence workforce to regulate the development of housing in private hands. Many planning officials are alleged to engage in corruption and bribe to complement their low salaries taking from their clients before processing their land documents, even though some officials are honest. As a result of the alleged wrongdoing by planning officers, developers, chiefs and homeowners resort to the use of private land surveyors to demarcate their lands. The local radio station is also inadequately resourced, so, its educative programmes in the local dialects excludes land documentation issues, worsening the unaware or ill- informed cohorts of people. Some landowners were said to be dishonest and engaging in multiple sales of their plot(s) of land to many people at the same time. Develo

often encountered litigation when they start development. Where several people, claiming ownership to the same piece of land with its consequences of conflicts and sometimes violent attacks. This phenomenon sometimes lead to, violent clashes, loss of lives and properties, notably observed in Accra and Kumasi, where abled -

to protect and guide lands to prevent encroachment. Walewale have not experience the brutal are is not taken, the same fate could befall the town within the shortest possible time.

#### **8.4. Critical issues and the study limitations.**

The process of the study embraced challenges, restrictions and various lapses. Some were methodological, access to information, practical and analytical limitations.

Accessing data from the Town and Country Planning department of the West Mamprusi District was not only tiresome but they even lacked basic documents that would make their own work more easy, accurate and faster. I requested for integrated development planning model of Walewale Township, which the Development Planning Officer told me they prepared for the Township. However, I was told directly that, they could not trace its whereabouts. I was dumbfounded when the District Planning Officer, also told me he never saw a digital map of Walewale Township. Therefore, I could not even get a proper GIS map of Walewale. Again, the Physical Works Department, which is in charge of demolition of unauthorized structures, did not have official statistics of the number of structures demolished, but only knew locations where they ever carried demolition. The district only Library had no scientific academic work on the town concerning land use regulations or town planning and even lacks basic maps, and books about the town. This shows educational poverty and remoteness of the district.

Methodologically, my study employed qualitative methods, creating a room for a bias presentation of facts about the critical social services provisions in the town, since responses were not tallied and based purely on individual subjective views and no scientific work done about my study to enable me to do comparative analysis to observe historical change in Walewale urban form on quantitative way. On the issue of official corruption and bribe taking allegations made, even though the planning officials denied those allegations, but they could say something, but actually mean and exeat differently. This bias view point of the informants also posed a challenge to the researcher. The research lacks previous academic work as reference material done on the same or related topic to crosscheck his findings to ensure trustworthiness of the study.

Time and finances also posed a challenge for a cross-sectional study. Time limitation could not allow me to observe how education throughout a period could have influenced or changed the behaviour of prospective land developers, chiefs and estate developers with regards to acquisition of land documentations in Walewale. Illiteracy was considered a

major factor in non-compliance and hence, the researcher was financially incapable to undertake such a task as well.

However, looking at the small sample size used for the analysis and generalizations could be problematic, but the interviews were based on careful random or purposive selection depending on the groups. This selection of urban land management institutions, individual household heads, chiefs, planning officials and the Focus Groups could adequately represent the views of the entire people

## **8.5. Policy Considerations**

Government public policy is a  where resources and personnel are committed to achieve a target and prevent social change (Bengston, Fletcher, & Nelson, 2004). First International concern was drawn to the deteriorating housing conditions in urban areas of developing countries during the United Nations Habitat 1 conference held in Vancouver in 1976. In housing provision, emphases lay on three factors: affordability, housing quality, and social equity and justice (accessibility) and every nation thrive to meet these fundamental requirements for its citizens. Affordable housing where the cost is not more 30 percent of the household income per month. Housing quality is about structural adequacy, neighbourhood quality, safety, adequate public services, access to work, room density and affordability. Social equity is the social perception of housing where citizens have access to housing needs without limitations based on  in society (Aribigbola, 2008a).

Ghana government efforts in meeting these targets, where separate splendour houses were built to accommodate British Civil Servants to prevent the spread tropical alien diseases like malaria, yellow fever, and other diseases and the Tema New Town through the Tema Development Corporation (TDC) and the State Housing Corporation (SHC) involved in building affordable housing between 1957 and 1990 (Tipple & Korboe, 1998). Walewale, had no government housing policy or strategies to develop land use and zoning. Some relevant policy considerations are outlined below.

### **8.5.1. Public land acquisition and management**

Government can naturalize lands for public parks, recreational areas, forests, wildlife refuges, wilderness, and greenways, should be preserve for local, regional, national interests.



### **8.5.2. Urban ordinances**

Development moratoria. This is a drastic growth prohibition management policy on issuance of building permits in rapidly growing areas for some time until sustainable achievable solution (s) is/are obtained.

Interim development regulations. This is a top-gap temporary measure to stop problem development but allowing problem-free developments until solutions are invented.

Rate of growth control. It is a mandatory putting an upper limit on the number of building permits to be issued yearly.

Adequate public facility. This require initial mandatory provision of urban services like water, electricity, sewage and waste management system and a host of others before allowing a proposed development to take place.

### **8.5.3. Urban zoning regulations**

Up zoning or small-lot zoning. This a development control mechanism, which allows the demarcation of small lots/plots in urbanizing areas to continue development to encourage more intense development along aside.

Greenbelt. It is a physical area of open space or farmland, which surrounds a city, or metropolitan area with the main aim as a permanent barrier to urban development and expansion.

Urban growth boundary. A development control which uses a dividing line drawn around an urban area to separate it from surrounding rural areas where areas outside the boundary are zoned for rural uses, and inside for urban use.

### **8.5.4. Tax policies**

Development tax on each acre of land converted from agricultural land use to urban use and magnitude of the tax should be set equal to the value of the open space. The colonial legacy of poll -tax (Allott, 1957) deprived the Northern regions of their labour force and lands designated as Crown lands kept them in abject poverty. This is where abled-body men were forced to migrate to the southern sector to work on the cocoa farms and the mines to pay their tax. Post-independence governments revisit the power of land control to traditional rulers to economically empower them, since the north is resource poor region and the only economic resource is the land, so, keeping to this constitutional arrangement maybe in the right direction.

### **8.5.5. GIS Maps**

The District Assemblies should be resourced, regularly trained their staff to digitize their land cadastre maps and frequently updates them to avoid issues of multiple sales, tax evasion, and land conflicts.

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## APPENDICES



## Appendix 1

Key Informants interview guide: Seven traditional chiefs

To assess land use regulations and its implications on sustainable development in zoning residential areas in Walewale.

Preamble: I would like to ask you some questions on Land Use Regulations (L.U.R) and its impacts on sustainable development in Walewale, the things I will be looking at include: District bye-laws regulating land acquisition, land usage, the structure of the traditional land tenure system, some of the benefits associated with compliance to land use regulations, the possible implications of non-compliance and what could be done to achieve sustainable development in Walewale and its suburban areas. This will be discussed in accordance with the subtopics below. Your answers given will be treated with the utmost confidentiality it deserves and be use strictly for academic purpose (s) only.

1. What is your total land area measured in hectares in Walewale?
2. Which particular residential areas in Walewale do you own land?
3. Do you normally acquire land title (s) for your land?
4. Why did you acquire the land title (s)?
5. Which officials issued your documentations, site planning, building permits and land title (s) for you?
6. Do you consider it difficult to acquire necessary documentations and approval to build a house or register your lands?
7. Why is land documentation (s) and official approvals for land is difficult in Walewale?
8. Do you think the problems you encounter can cause unapproved structures development?
9. Which type of society members do you give your land to for development?
10. Do you normally encounter land litigations issues?
11. What are some of the possible causes of land litigations in Walewale?
12. What are the possible ways of tackling land litigation (s) phenomenon in Walewale?

Name and Title of responding Chief

Thank you for participating!

## Appendix 2

Key Informants interview guide: The two-male planning officers

To assess land use regulations and its implications on sustainable development in zoning residential areas in Walewale.

Preamble: I would like to ask you some questions on Land Use Regulations (L.U.R) and its impacts on sustainable development in Walewale, the things I will be looking at include: District bye-laws regulating land acquisition, land usage, the structure of the traditional land tenure system, some of the benefits associated with compliance to land use regulations, the possible implications of non-compliance and what could be done to achieve sustainable development in Walewale and its suburban areas. This will be discussed in accordance with the subtopics below. Your answers given will be treated with the utmost confidentiality it deserves and be use strictly for academic purpose (s) only.

1. When was the district planning unit established?
2. How will you define urban sprawl phenomenon in Walewale?
3. What proportion of Walewale Township is planned, semi-planned and unplanned?
4. Which sections of Walewale Township is planned, semi-planned and unplanned?
5. It is common phenomenon that estate developers build without building permit as a common phenomenon in Ghana, do you think Walewale have similar problems and why?

necessary permit or approval from authority before putting up structures?

7. Which of the areas do you encounter the greatest urban sprawl phenomenon in Walewale and why?

- a. Government acquired land in the district
- b. privately owned land

8. Does the district have sustainable urban planning model to guide its growth and development?

9. Are there bye- laws to control urban sprawl developers in the district?

-laws in the district?

11. Do you think developers comply with the bye-laws and why or why not?
12. What is the direction of the expansion of Walewale into its fringes?
13. What kind of buildings or structures are being constructed and which ones develops faster?
14. Do you think traditional governance system play a major role in urban sprawl and why?
15. Which environmental problems associated with urban sprawl development in Walewale?
16. As a district planning unit what do you think could be done to ensure sustainability in the town`s development with regards to the following.
  - a. Land allocation for building construction
  - b. Siting and location of building
  - c. Design and construction of buildings
  - d. Quality of materials for buildings

Name and position of responding officer

Thank you for participating!

### Appendix 3

Primary Informants interview guide: 16 Household heads

To assess land use regulations and its implications on sustainable development in zoning residential areas in Walewale.

Preamble: I would like to ask you some questions on Land Use Regulations (L.U.R) and its impacts on sustainable development in Walewale, the things I will be looking at include: District bye-laws regulating land acquisition, land usage, the structure of the traditional land tenure system, some of the benefits associated with compliance to land use regulations, the possible implications of non-compliance and what could be done to achieve sustainable development in Walewale and its suburban areas. This will be discussed in accordance with the subtopics below. Your answers given will be treated with the utmost confidentiality it deserves and be use strictly for academic purpose (s) only.

#### Section A: Questions on District bye-laws, land tenure system, L.U.R benefits and implications

1. Which section (s) of Walewale do you own a land/house (s) or both? Do you normally have to acquire legal document (s) for your land or house?
2. Did you acquire a building permit before building your house (s)?
3. Why do you think acquiring building permit is important?
4. Who provides your site /building plan for you?
- 5.
6. Department or Authorities is/or are in charge of issuing documentation (s) for siting social amenities in Walewale
7. What specific function (s) does the authority mention in question 7 perform?
8. To what extent do you think Walewale Township have a district planning model
9. To what extent does the district planning authorities enforce developers to follow the district planning model?
10. Explain why some geographical area (s) are planned, semi-planned or unplanned in Walewale Township?

11. What are the district bye-laws say with regards to the following land transaction issues?

- a. Land acquisition
- b. Land title/deed registration
- c. Site plan drawing and building design certification
- d. Building codes and addressing system
- e. Layout of street structure and building density

12. Do you think compliance with District Assembly bye-laws on zoning have positive benefits with regards to sitting the following infrastructure?

- a. building of residential facilities
- b. allocation of schools
- c. allocation of health facilities
- d. allocation of commercial centres
- e. road and communication networks
- f. others specify

13. Why do you think estate developers or home builders comply with the District Assembly bye-laws on land use regulations on planning or zoning in Walewale?

14. What factors could have account for non-compliance with regards to the District Assembly bye-laws on land use regulations or zoning in Walewale

15. Do you think non-compliance with the District bye-laws on land use regulations on planning residential areas or zoning have negative implications in Walewale town?

16. What are some of the possible causes of land litigations in Walewale?

17. What are the possible ways of tackling land litigation (s) phenomenon in Walewale?

18. To what extent traditional land tenure system contribute to land litigation (s) in Walewale?-

19. How effective is land use regulations on planning or zoning residential areas in Walewale

20. How would you describe the following infrastructure performance and delivery in Walewale?

- a. Water supply
- b. Electricity supply
- c. Waste and sewage management and disposal system
- d. Road network
- e. Drainage system, Fire safety regulations and fighting
- f. Other specify

21. How can land use regulations on planning residential areas be improved to promote socio-economic development?

22. What do you think should be done to make land use regulation on planning or zoning effective in the following areas?

- a. city centre
- b. residential areas
- c. urban sprawl areas

SECTION B: Questions on environment, sanitation and waste management

1. What are the most important environmental problems do you think face residents in Walewale

2. Do you think the sanitation problems have dire consequences on residents?

3.

life in Walewale with regards to the following?

- a. Compound farming or backyard gardening
- b. Retail trade or micro-business (Kiosk Business)
- c. Others specify

4. What measures are in place to manage waste and sewage disposal in Walewale?

5. To what extent do you think fires outbreaks have links or would have links with regard to the unplanned nature of some parts in Walewale Township?

6. What do you think could be done to prevent or control domestic fire outbreaks in Walewale Township?

Thank you for participating!

## Appendix 4

Focus Group Discussions guide: 12-Male and Eight-Female Group

To assess land use regulations and its implications on sustainable development in zoning residential areas in Walewale.

Preamble: I am interested in knowing how non-compliance with regards to land use regulations have an impacts on sustainable development in residential communities in Ghana and I am using Walewale as my case study area. The unplanned and uncontrolled development of Walewale Township have might have led to the phenomenon of urban sprawl development at its fringes and this will have socio-economic and environmental implications on the lives of the people. I will ask you a couple of questions and your responses will be treated confidential and only for academic purposes.

1. What in your opinion account for the development of urban sprawl in Walewale?
2. What are the necessary legal processes and procedures involving in land documentation and why people comply with the procedures?
3. Which reasons might cause people disobeying zoning regulations in Walewale?
4. Why do you think there is a growing phenomenon of urban sprawl in some areas?
5. Do you think city authorities should be blame for this urban sprawl development?
6. Do you think traditional rulers play significant roles to the growth and development of urban sprawl in Walewale?
7. To what extent does traditional land tenure system affects Town planning in Walewale
8. Do you think individual landowners and homeowners should be blame for the sprawl development?
9. Do you know some bye-laws guiding Town planning in Walewale with regards to e.g. building permits, site plan, building codes, layout, and disaster safety measures etc.?
10. Do you think if people were obeying the land use planning and regulations it could have benefit the district?



11. What have you seen could be a future consequence with regards to non-compliance with land use planning in the district?

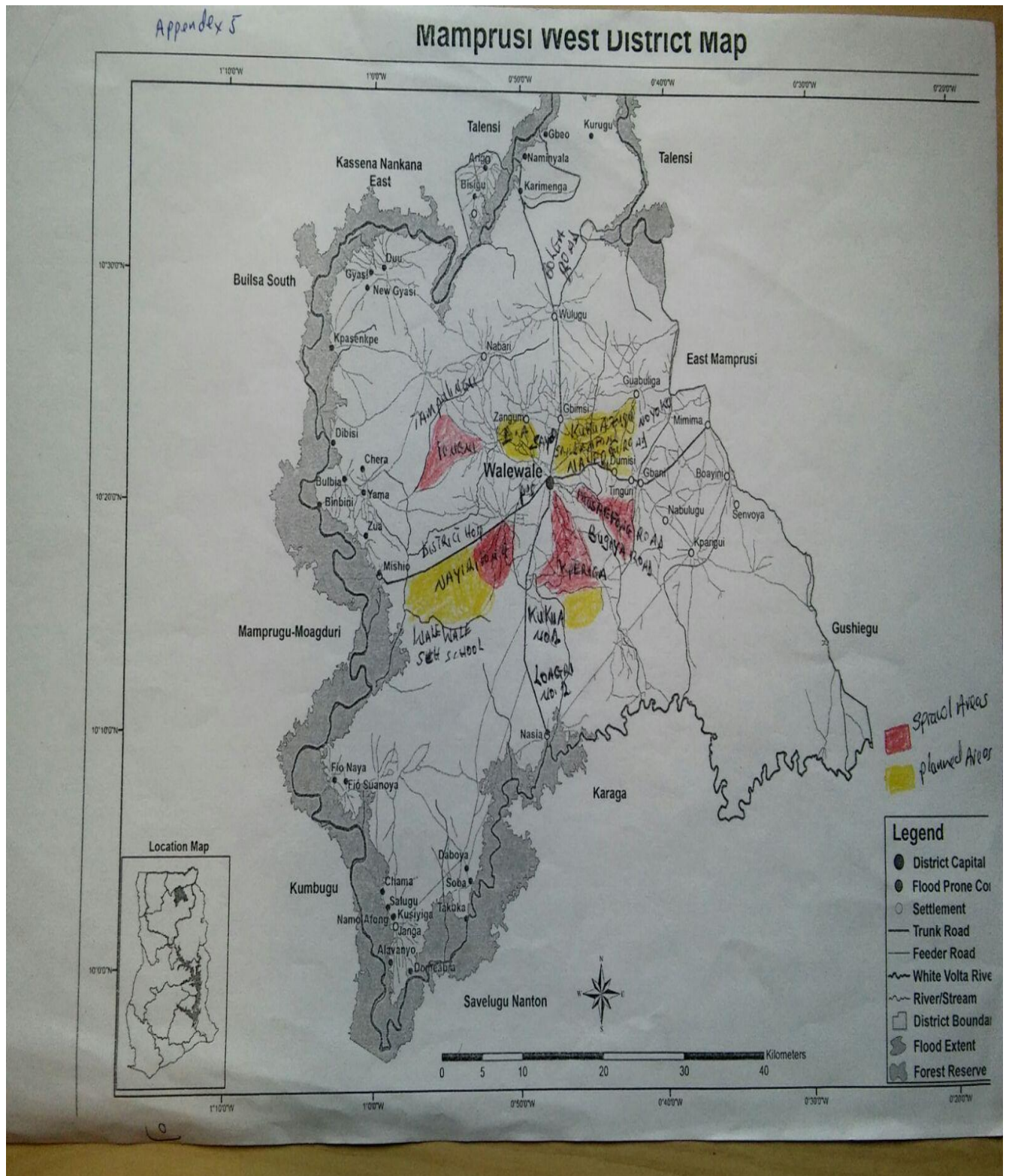
12. What do you suggest to solve this problem of urban sprawl in Walewale?

Name of Group

Thank you for participating!

## Appendix 5

Figure 4.2: Map of Walewale Township



## Appendix 6

*n unplanned areas in*

*Walewale.*

Informants	No	Land title/Deed registration			
		Yes	No	Issuing Authority	Reasons for acquisition
Individual Land and Household Heads	M 10 F 6 Tot. 16	3 2 5	7 4 11	Town and Country Planning, chiefs, Family Heads	To avoid litigation/land Tenue conflicts/perpetual peace, guaranteed your property, avoid demolition, expensive, corruption
Chiefs	7	5	2	Town and Country Planning, Chiefs	For demarcation, avoid litigation
Planning Officers	2	1	1	They do not know	Ignorance, unnecessary, discourage by chiefs, no bidding laws
Male Focus Group	12	5	7	Town and Country Planning, Chiefs, Private people	To avoid litigation, intimidation, land litigation, high cost, Unnecessary
Female Focus Group	8	7	1	Town and Country Planning, Chief, Private people	To avoid litigation, intimidation, land litigation, high cost, Unnecessary
Total	45	23	22		

## Appendix 7

*Table 7.5B. Informants assessment of compliance level to building/site design possession in unplanned areas in Walewale*

Informants	No	Site/Building Design possessions			
		Yes	No	Issuing Authority	Reasons for acquisition
Individual Land and Household Heads	M 10 F 6 Tot.16	1 2 3	9 4 13	Town and Country Planning, provided by house owner, private estate developers	To have a good layout, not necessary, achieved durable structure, minimized costs of building, achieve site specific architectural design, avoid scattered building, achieve your desire building
Chiefs	7	2	5	Themselves	To have good homes
Planning Officers	2	1	1	They do not know	additional cost, ignorance, self-provision
Male Focus Group	12	2	10	Town and Country Planning, private people	For site, specific design, economic your building costs, not necessary, increase your cost
Female Focus Group	8	2	6	They do not know	They think its add additional cost, ignorance or lack of education, they think they can provide for themselves
Total	45	10	35		

## Appendix 8

### unplanned areas of Walewale.

Informants	No	Building Permit possession			
		Yes	No	Issuing Authority	Reasons for acquisition
Individual Land and Household Heads	M 10 F 6 Tot.16	6 3 9	4 3 7	Chiefs, Town and Country Planning Officers	To have a good layout, not necessary, achieved durable structure, minimized costs of building, achieve site specific architectural design, avoid scattered building
Chiefs	7	6	1	Chiefs	For demarcation, avoid litigation
Planning Officers	2	1	1	They do not know	about future consequences
Male Focus Group	12	7	5	Town and Country Planning Officers, chiefs	To avoid Land litigation, demolition
Female Focus Group	8	3	5	Chiefs	They see it not necessary, ignorance, high permit fees, they acquired their lands from chiefs, so no need for permit
Total	45	26	19		

