THE EMERGENCE OF GATED COMMUNITIES IN GHANA AND THEIR IMPLICATION FOR URBAN PLANNING AND MANAGEMENT

By

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DECLARATION

I hereby declare that this thesis is my work towards the MSc. Development Planning and Management Programme and that to the best of my knowledge, it contains no material previously published by another author nor material which has been submitted for the award of any degree by this University or any other university except where due acknowledgement has been given in the text.

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ABSTRACT

In the last two decades, Ghana has become more urbanized and currently the rate of urbanization is estimated to be 53%. Accra, the capital city is experiencing an urban housing form known as gated communities. The emergence of gated communities in Ghana has contributed greatly to the housing supply of Ghana. It has also led to the construction of quality housing estates for people living in Ghana. The concept of gated communities is a multi facetted one where households indirectly pay for certain services and infrastructure to be provided to them when it is the duty of central government to provide those services. Gated communities are getting more common in Ghana that, they may soon pose a challenge to Ghana's planning and urban strategies which aims at making Ghana's cities sustainable and socially diverse. However, with gated communities, there is privatization of spaces which were otherwise considered public. The various planning institutions are faced with certain challenges in the planning and management of these urban forms as real estate developers provide the needed services and facilities in lieu of the state.

The study used purposive sampling to select the relevant institutions for the study. The real estate developers and gated communities were sampled using the snowball method and respondents were selected using accidental sampling. Data was collected from respondents using a well structured questionnaire and observations. The study revealed that GREDA and the various planning institutions do not have appropriate data on the gated communities in Ghana. The planning institutions were not actively monitoring the activities of real estate developers and sometimes planners were even prevented from entering gated communities to monitor their activities. It was realized from the study that there is the need for a legal, regulatory, environmental and urban housing policy in Ghana.

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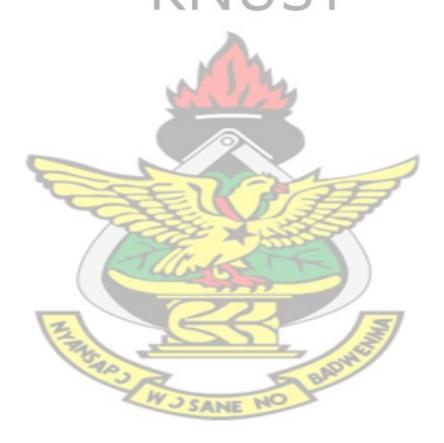
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LIST OF ABBREVIATIONS

| AMA – Accra Metropolitan Assembly |
|---|
| BHC – Bank for Housing and Construction |
| BoG – Bank of Ghana |
| DUR – Department of Urban Roads |
| ECG – Electricity Company of Ghana |
| FGBS – First Ghana Building Society |
| GLSS – Ghana Living Standards Survey |
| GREDA – Ghana Real Estate Developers Association |
| GSS – Ghana Statistical Service |
| GWCL – Ghana Water Company Limited |
| HFC – Home Finance Company |
| LAP – Land Administration Project |
| MLNR – Ministry of Lands and Natural Resources |
| MMDAs – Metropolitan, Municipal and District Assemblies |
| MWRWH – Ministry of Water Resources Works and Housing |
| NDPC – National Development Planning Commission |
| PHC – Population and Housing Census |

POP – Plaster of Paris

SG-SSB – Societe Generale Social Security Bank

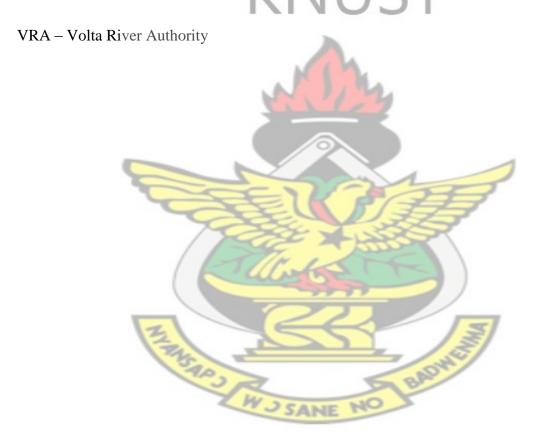
SHC – States Housing Corporation

SIC – State Insurance Company

SSNIT – Social Security and National Insurance Trust

TCPD – Town and Country Planning Department

TDC – Tema Development Corporation



CHAPTER ONE

BACKGROUND TO THE STUDY

1.1 Introduction

Housing is a basic need of man and according to the constitution of Ghana (1992); all men have the right to own property either alone or in association with others. Housing has a direct relation with the population of an area and the households in that particular area. Over the years, population has changed and demand for housing has also changed. As population grows, more and more people begin to live in cities. This trend where an increasing proportion of the population lives in and around a city and its suburbs is usually referred to as urbanization. According to the UN-HABITAT (2009), there are two (2) billion new urban residents. There is also an annual urban population increase of 70 million people worldwide, constituting 877.4 million new households. It is therefore estimated that there will be an annual increment of 35.1 million households by 2030, which implies the current rate of urbanization might continue up to 2030.

The relationship between population and housing is seen as a positive one. The size of a population, and particularly the number of households, determines the demand for housing. The larger the population, the higher the demand for housing and the smaller the population, the lesser the housing they demand. Also, the availability of suitable and affordable housing may attract certain categories of people to a particular location. Housing normally influences young people's decisions to leave their parental home, marry or cohabit, and have children. Population change can lead to a change in demand for housing. Population growth will lead to a growth in the number of households and hence increase in housing demand. Population decline on the other hand may lead to a decrease in housing demand (UNECE, 2009).

Adequate housing supply might attract immigrants or influence their choice of residential location. Housing usually has a lifespan, where producers, consumers, landlords, planners, developers and financiers all play a role during the period. It is also believed that people move to regions where houses are built, though houses are not necessarily built in regions where people would want to live.

Urban growth is a phenomenon that is occurring worldwide due mainly to the rapid population growth that the world is currently experiencing. Over 3.3 billion people reside in urban areas and this is expected to reach 5 billion by 2030 (UN-HABITAT, 2008). High urban population growth rates have created pressures which local (metropolitan, municipal, districts, city, town and area) management and administrative structures are ill-prepared to handle. In the wake of the urbanization that the world is now experiencing, one of the basic challenges that people in urban centers are facing is that of housing, because the demand for housing exceeds supply. Most urban areas are increasingly unable to provide adequate housing to the inhabitants. However, adequate housing is a fundamental human right and can be interpreted as the right to live somewhere in security, peace and dignity.

At around the year 2030, Africa is expected to enter its urban age with 759.4 million people, estimated to be half of its total population, living in cities (UN-HABITAT, 2008). It means there would be more households which will demand housing and it can be envisaged that most African governments will not be able to provide adequate housing for their citizens. The role of private real estate developers is therefore seen as very vital if this housing gap is to be filled. These private real estate developers are expected to become the major players with regards to the provision of housing and housing infrastructure. In most African countries, the private real estate sector has emerged to help cater for the housing needs that their governments are not able to provide.

Urban planning in Ghana like any other African country has undergone some changes since independence. The changes have been in response to limitations of Ghana's urban planning concepts, models and policy on housing, where government was considered as the key player in the provision and management of housing. Immediately after independence, there was not a privately established real estate market, and most individuals constructed their own houses incrementally, using their personal savings. After independence, government policy on housing was centralized with subsidy packages made available to increase ownership of houses in the country in the form of roof loans scheme, self help housing scheme, public housing, and the provision of serviced sites to developers for housing construction (COHRE, 2008).

During the period preceding independence, government's housing policies were geared toward the reduction of overcrowded housing conditions by building houses for government workers. However, recent government efforts have been aimed towards the provision of an enabling environment to increase the supply of quality housing via private sector initiatives. This uses the laissez faire system where the market forces of demand and supply are allowed to operate freely (Fiadzo, 2004). Therefore in 1994, the government of Ghana adopted a housing strategy similar to the one used by the government of the second republic (that is between 1969 and 1972) in which government acted as a facilitator instead of being the major provider of housing and housing needs (Kofi, 2004). It liberalized the housing sector and this gradually led to private real estate developers under the umbrella organization known as the Ghana Real Estate Developers Association (GREDA) taking over the provision of housing in Ghana. Mahama and Antwi cited by Afrane and Asamoah in Adarkwa (ed) (2011), further said empirical evidence shows that governments that create an enabling environment for the housing sector are usually more successful than those that directly supply and finance social housing.

The Ghana real estate developers association (GREDA) is performing a major role to minimize Ghana's huge housing deficit by constructing over 10,954 new homes since the formation of the association in 1988, though a majority of ordinary workers cannot afford the houses they build due to low-levels of income. Thus, remittances are seen to be playing a significant role in the growth of the housing sector (Bank of Ghana, 2007).

Accra, the capital city of Ghana, has a total land area of 201sq km. With a population of 3.9 million people in 2010 (Ghana Statistical Service, 2011) Accra is today, one of the most populated and fast growing Metropolis in Africa with an annual growth rate of 4.3% (UN-HABITAT, 2004). Accra township is experiencing a shift from a compact city that has a high density, mixed land use, concentration of settlements for example within indigenous Ga communities such as Jamestown and Chorkor with a density of about 1,000 persons/ha to one where there is less density in planned residential areas mostly at the outskirt of the city such as Adenta, Pokuase and Kwabenya. Although the low density houses may be aimed at decongesting the city centre, the one storey self contained houses that spread over the city create a lateral expansion of the city with residential houses and few shops (Kofi, 2004). Currently, Ghana is facing an acute housing problem with housing deficit being in excess of 400,000 units (UN HABITAT, 2010).

Real estate developers also buy very large parcels of land usually located at the outskirts of town, which they fence sometimes to prevent encroachment and later they build housing units in these fenced areas. These houses end up having a common entrance because of the wall around the houses and the entrance is usually gated to prevent entry by non residents. Such housing developments by their nature can be referred to as gated communities. In Ghana and the Greater Accra Region in particular, as more people try to avoid the stress involved in personally acquiring and building on a piece of un-serviced plot, they engage the services of

these private real estate developers who end up providing them homes in their gated communities (Kofi, 2004).

The concept of gated Communities is often seen as a paradoxical one where the word "gated" is usually used to refer to steps taken to keep the unwanted outside an area therefore encouraging marginalization and segregation. The term "community" on the other hand, generally implies a common way of life and beliefs which are supposed to enhance social interaction (Atkinson et al, 2005).

Gated communities generally have to do with privatization of spaces that were earlier on considered to be public spaces. It employs various security measures aimed at excluding non-residents, traffic flows, unwanted commercial activities and limiting the usage of other facilities within the community's premises. A gated community is not just a single apartment or building that has a wall and or gate but rather a collection of dwelling units. Also, a gated community does not need a gate in practice for it to be called a gated community but it must however use some defensive means, either of an architectural or of a landscaping nature.

1.2 Problem Statement

The Population and Housing Census (2000) of the Ghana Statistical Service, has it that there were 2,181,975 houses countrywide even though a total of 3,877,418 dwelling units or places of abode were also recorded. This implies about 1,695,443 'houses' or places of abode inhabited by a number of households are not conventional houses. Also, if every household of 5.1 persons were to have a separate unit of housing then ceteris paribus, with a population of about 20 million, Ghana will need a total of 3,708,250 housing units (Bank of Ghana, 2007). Also, according to the National Development Planning Commission (NDPC, 2010), the rapid increase in population has resulted in a large housing deficit, especially in urban areas. The

housing need of Ghana is about 100,000 units per annum while supply is estimated at 35% of the total need.

Ghana has crossed the 50% mark of urbanization and Accra the capital city has grown quite rapidly in the past decade, leading to the growth of slums and gated communities (UNECA, 2009). According to the Ghana Living Standards Survey of the Ghana Statistical Service (GLSS 5) there is insufficient housing stock to meet the demand in urban areas. There is also a shortage of houses for about 20% of households and Accra has the highest proportion of households living in improvised homes than other towns in Ghana. To meet this gap, real estate developers build gated communities for those who can afford and as the gated communities emerge, there is also usually an associated growth of slums and unplanned structures just outside the gated communities.

Gated communities mostly take the semblance of island communities since they are walled in from the outside world. However, they have to depend on surrounding communities to provide them with some services such as hair dressing, gardening, cleaning and laundry. Those who provide these services have to live close by in order to get such jobs and they end up creating slums in the nearby communities. Hence as more gated communities emerge, it would also mean that more slums will be created close by, leading to a large number of slums even in the future.

The other issue with such gated developments is that zoning is conventionally done in such a way that those in the middle income brackets live near those in the high income brackets so that they could see their lifestyles and be encouraged to improve and better their own lives and those of the lower income brackets also live near the middle income group so as to also try to develop that status of the middle income group. But with gated communities, it looks as if it is the low income earners who usually live next door to the high income group, making it

difficult for the various income groups to develop. The gap that exists between the high income group and the low income groups could widen even as the years go by. It will also continue to accelerate the sprawl of the city of Accra hindering the provision of such services like water, solid waste disposal, refuse collection, good drainage, and electricity. The existing facilities are deteriorating as inadequate investment is put into their maintenance. Furthermore, capacities of these facilities are out stretched (UN-HABITAT, 2009) and the lower income group will continue to lack such facilities and services.

This phenomenon of gated communities which started in Accra after the liberalization of the housing sector in 1992 is rapidly spreading to Kumasi and the twin cities of Sekondi and Takoradi with real estate agencies acquiring large parcels of land in these towns and developing them so as to eventually sell or rent them out to individuals and organizations. As these real estate developers build gated communities, they provide them with the needed services and infrastructure in a bid to satisfy their clientele base and attract more clients. Some of these include roads and streets in such communities, the source of energy (electricity) supplied and the sources of water provided. There is also the issue with the provision of social services such as schools, clinics, play grounds, shopping malls, and security among others. However, non residents are excluded from using the facilities and services within these gated communities. Hence as more gated communities emerge, the more segregation we would have in the Ghanaian society. It could therefore mean that in the near future, though people could be living close by a gated community, yet they would be prevented from benefiting from services such as medical services that are located in the gated communities which could lead to conflicts between residents and non residents.

Also, as the real estate developers take over the provision of such facilities and services, the question then is whether they follow laid down procedures and standards. Even when they follow the standards it is still possible they do not cater for future demands for such goods

and services and the maintenance culture may also be poor. Their focus might just be to satisfy the current need so as to be able to attract prospective buyers and renters to their property. The capacities of transformers for electricity for example may not be sufficient for the expansions that may occur in the area in the future, the sizes of the roads and drains may also not be up to the standards the state would have used if they were to provide for them. Also, with gating, traffic patterns are altered as non residents are not allowed to go through the roads that pass through such communities. Even emergency vehicles are often delayed because of such gated developments and travelling times become increased resulting in less effective urban functioning, especially in areas of planning and management. Also, if in the future some form of expansion of infrastructure has to take place and such gated developments get affected, resettlement and compensation for such residents might be very expensive for the state.

1.2.1 Research Question

The research questions which serve as a guide to this work include the following;

- 1. How accessible are social facilities and social services to gated communities?
- 2. What motivates people to opt for gated communities?
- 3. How do gated communities affect urban planning and management in Ghana?
- 4. What urban planning and management policies and interventions can be developed with regards to gated communities?

1.3 The Main Goal of the Study

The goal of the study is to examine the existing and potential effects the emergence of gated communities have on urban planning and management in Ghana.

1.4 Objectives of the Study

- 1. To identify the reasons why people choose gated communities
- 2. To identify how accessible social facilities and services are to gated communities
- 3. To find out how gated communities affect urban planning and management in Ghana and
- 4. To make some policy recommendations for urban planning and management.

1.5 Justification

The study intends to come out with ways by which infrastructure provision to gated communities can be improved as development and urbanization continues to take place. Most communities depend on the government for the provision of certain infrastructure such as schools, health facilities, roads, electricity and potable water. However, real estate developers who build gated communities end up providing these services and facilities because their customers demand them.

It is generally accepted that in Ghana, physical development runs faster than planning hence most of these gated communities develop before they are planned for by the state. So planning for them after they have been developed brings about certain challenges that need to be addressed. This study will therefore help in suggesting policies that can be formulated for such large urban housing forms.

The concept of gated communities in other countries has been deeply researched. However, in Ghana, much has been written about housing but very little has been written about gated communities. This study intends to be among the pioneering works that studies their emergence and how it affects urban planning and management in Ghana. It is therefore envisaged that, the research findings would add to the body of knowledge which can serve as basis for reference and for further research.

1.6 Scope of the Study

The focus of this research geographically is to study the emergence of gated communities in Ghana with reference to the Greater Accra region. This study focused on three of such gated communities in Accra; Trassaco Valley, Redrow estates and J. Kwate estates. Contextually, it also looked at the extent to which gated communities are contributing to urban development in Ghana and how it affects urban planning and management.

The study also examined some of the institutions involved in the housing and infrastructure sub-sectors; the various planning institutions, the Accra Metropolitan Assembly (AMA), real estate developers and the legal and regulatory system for the provision of gated communities in Ghana. In addition, the study also looked at the financing of gated communities and home financing in Ghana.

1.7 Limitations of the Study

Limitations of the study include unavailability of data on all gated communities in Ghana. It is difficult to establish the exact number of houses provided by real estate developers who build gated communities. GREDA, the umbrella organisation for real estate developers in Ghana does not have information on their members who build gated communities.

The second concern is that most real estate developers seemed to have been fatigued from answering questionnaire from researchers and most of them try to give excuses as to why they cannot immediately respond to this survey. In some of the cases where the real estate developers responded to the questionnaire, the community management board refused to respond and even denied the researcher access into their community.

Also one of the reasons why people choose to live in gated communities is that they do not want solicitors (including researchers) of any kind coming to disturb them. So the researcher

had to go through the leaders of the community management boards and the security at the gates to get households to respond to the survey.

1.8 Organisation of Study

The study has been organized into five chapters. Chapter one comprises the problem statement, research questions and objectives, scope, justification, limitations of the study and organization of the study.

Chapter Two delves into issues which have been discussed by different authors relating to gated communities and urban planning and management. It specifically tries to understand why gated communities emerged, how they are financed in Ghana and the factors which influence their development. It also looks at the relationship which exists between urban planning and management and gated communities. This chapter also has the conceptual framework of the study.

The Third chapter outlines a brief profile of housing of the study area and the methodology used. It described how the research was carried out, how and why the research sites and samples were selected, what problems arose during that process, and explain the analysis and presentation of the data. Chapter four contains the presentation, analysis and discussion of data collected. In line with the research objectives, the findings are presented in three main sections: how the emergence of gated communities affects urban planning and management; how accessible social services are to them and; what motivates people to opt for them. Chapter Five gives a summary of the whole study, recommendations in line with the research problem and objectives and finally, concludes.

CHAPTER TWO

EMERGENCE OF GATED COMMUNITIES, HOUSING SUPPLY AND URBAN PLANNING AND MANAGEMENT

2.1 What are Gated Communities

A Gated Community according to Abdelhamid (2005) is an urban settlement surrounded by walls with several entrances which are controlled by gates and security guards. Sometimes the gates are under video surveillance and access to these settlements is strictly reserved, basically to the residents and their visitors. These settlements are usually equipped by big shopping centers and malls, cinemas, recreational facilities, parks, swimming pools, beaches and artificial lakes. Grant & Mittelsteadt (2004) sees a gated community as a housing development on private roads closed to general traffic by a gate across the primary access. The developments may be surrounded by fences, walls, or other natural barriers that further limit public access.

Barnes (n.d) says gated communities are a radical urban form where housing developments restrict public access, usually through the use of gates, walls and fences. In addition, closed circuit television systems and other security devices are often integral features of the 'community'. Landman & Schönteich (2002) asserts that Gated communities are a generic term that includes enclosed neighbourhoods that have controlled access through gates or booms across existing roads, and security villages and complexes, including lifestyle communities which provide their enclosed residents with a range of non-residential amenities such as schools, offices, shops and golf courses.

Gruszczak (2010) also says a Gated community in its original, spatial-residential meaning, is a residential development established on a dense territorial area surrounded by walls, fences or natural barriers, with restricted access through a secured entrance, guarded by professional

private security personnel taking advantage of sophisticated technologies and devices of surveillance and control. Hence the reasons why real estate developers gate their communities are diverse such as for security reasons and prestige.

2.1.1 Types of Gated Communities

Based on the reasons for gating, Blakely and Snyder (1997) identified three types of gated communities: lifestyle, prestige, and security zone communities. In theory, the categories represent ideal types that serve particular markets. In practice, they say, communities may show a combination of features from these types. Grant & Mittelsteadt (2004) also identifies a type of gated community they call Lifestyle communities. They are seen to focus on leisure activities and have recreational facilities, common amenities, and shared services at their core. Examples of such communities are identified as retirement villages, golf communities, or suburban new towns. They assert that their developers attract residents searching for identity, security, and a shared lifestyle by creating a sense of community through common interests and activities.

Another type of gated community identified by Grant & Mittelsteadt is the prestige communities which serve as an emblem of wealth and status for people concerned about their aura. To Grant & Mittelsteadt many North American cities saw the emergence of prestige developments at the close of the 19th century as homes for industrial magnates and celebrities where the gates prevented the general populace from knowing and seeing how the wealthy lived.

A third type of gated community identified is the security zone community which closes off public streets to nonresidents. These kinds of gated communities they say reflect a fear of outsiders. Most real estate developers usually put security in place in the other types of gated communities, the residents in such security zone communities may lobby for and participate

in erecting the barriers. Walls and gates are mostly erected to deter crime, limit traffic, or maintain property values (Grant & Mittelsteadt, 2004). However, with urbanization and in Ghana, it could also be said that some walls are erected by developers of gated communities to prevent encroachment by others since they are usually located at the peripheries of towns.

2.1.2 Location of gated communities

Some gated communities which are located outside the city are considered to be a form of refuge from the polluted environment in such crowded cities, hence people who are in search of fresh air go for these gated communities. Yet these same people participate in the pollution and in the destruction of that natural reserve of pure air, through the exhaust fumes from their cars and other installations of their luxury life. Such gated communities can be seen as being a major blockage to sustainable development since they somehow lead to pollution taking place (Abdelhamid, 2005).

Blakely and Snyder (1997) says gated communities are both new suburban developments and older inner city areas retrofitted to provide security. This is because the old central cities are no more the preferred places in the metropolitan hierarchy for residency, industry, commerce, and retail but the suburbs. Gated communities are a geographic and a metropolitan phenomenon as they are largely found in urban areas and rarely in rural areas.

In some other places however, gated enclaves may also appear in rural regions. This is because the location of gated communities is directly related to other variables that drive gating. For instance, the rates and fear of crime and poverty vary from place to place, thus encouraging those with means to look for residential solutions to the threats they may be facing. However, gated communities are appearing in both rich and poor countries. The pattern of gating within countries depends on the factors within that country (Grant and Mittelsteadt, 2004).

2.1.3 The demand for Gated Communities

The issue of safety and security is often quoted as the most convincing reason for opting to live behind the gates. However, there are various opinions on whether or not gated communities do actually reduce crime. Also, some researchers have indicated that gated communities can either enhance or reduce a sense of community (Moobela, 2003). There is little doubt that urban problems are the stimuli for this wave of gating. The drive for separation, distinction, exclusion, and protection is fueled in part by the dramatic demographic change in many of the metropolitan areas with large numbers of gated communities. High levels of foreign immigration, a growing underclass, and a restricted economy are changing the face of metropolitan areas (Blakely and Snyder, 1997).

Blakely and Snyder (1997) asserts that the need for gates and walls is also given rise to and encouraged by changes in the social and physical structure of the surrounding communities. The surrounding communities are becoming urbanized, such that they face many of the problems and pathologies formerly thought to be restricted to big cities as income, race, and economic opportunity increasingly separate America.

Though resident Ghanaians are seen as the main target of the real estate developers, it is the rising middle income class of Ghanaians who opt for gated communities and not just Ghanaians in general as the poor cannot afford a home in a gated community. The clientele base of the real estate industry in Ghana is rather broad based and also includes resident non-Ghanaians, non-resident Ghanaians and non-resident non Ghanaians (Bank of Ghana, 2007).

Blakely and Snyder (1997) says the developers of gated communities see themselves as providing security. The elderly have been targeted for gated communities since the 1970s, and gated second home complexes are also well established. Those seen in need of walls now also include those who are likely to be away on long vacations frequently and families with

double-income and which no one is home during the day. Security is viewed as freedom not just from crime, but also from such annoyances as solicitors and canvassers, mischievous teenagers, and strangers of any kind, malicious or not.

The housing market therefore appears tilted in favour of non-resident Ghanaians and foreigners whose incomes are denominated or indexed in foreign currencies. As a result, a large segment of the population is effectively excluded from access to housing properties built by real estate developers (Bank of Ghana, 2007).

2.2 The historical development of gated communities

The concept of gated communities dates back as old as the time when nation states started to exist. In historical times, most cities had walls surrounding them to act as a measure to prevent their enemy armies and strangers from entering easily into the city. There usually was a gate to go through that was guarded by soldiers. There were smaller gates in some cities in addition to the main gates when you had to enter the main parts of the city. Such cities were called Walled Cities (Abdelhamid, 2005).

Getting to the later part of the 20th century, this kind of ancient urban form began to reappear in modern settlements. Gated, secured and enclave developments have increasingly become a common feature of current suburban building patterns. Also, some older neighbourhoods in some cities are closing off streets to enhance local security and reduce traffic (Grant and Mittelsteadt, 2004).

Landman & Schönteich (2002) also saw gated and walled cities to be almost as old as human urban settlement. They believe that it was with the development of nation states, public police forces and air power that walled cities ceased to function as fortresses to keep foreign invaders and marauding criminal gangs out. Today they see such walled cities emerging in an architectural concept known as the gated community.

These gated communities serve and act as a buffer for the urban dweller who mainly feels afraid, anxious and unsecured. The causes of such insecurity and fear are several fold and could be as a result of current world economic order, global terrorism, increasing crime, migration, the privatisation of public services and the global political instability. For them, gated communities provide them with a safe and defensible environment though it is contentious whether gated communities are actually safer than the open neighbourhoods (Quintal and Thompson, 2007).

In many cities, because of poor planning and high in-migration, physical development becomes haphazard and unplanned leading to a growth in the number and sizes of slums. Gated communities are therefore emerging to cater for the security needs of the affluent residents. In times of disasters, reconstruction should adopt innovative planning tools that reinforce community recovery and achieves a more sustainable urban land form (UN HABITAT, 2010).

In Ghana, ownership of houses is a very important part of the culture and traditions. Houses provide shelter and also serve as a way of evaluating the status and prestige that is ascribed to people. However, according to the Ghana Real Estate Developers Association (GREDA, 1998 cited in Moss) only 5% of those who want to own a house can do so without any external support. It also said that 60% of Ghanaians cannot build a house without some form of financial assistance and the remaining 35% cannot own or build a house in their lifetime.

2.3 Factors that influence the development of Gated Communities

The growth of gated communities can be seen as a response to the privatization and withdrawal of the state in the provision of housing all over the world. Most public services such as collection of waste and security are now provided by private agencies instead of the local governments. According to the UN HABITAT (2010), the ever-widening gap between

rich and poor is symbolised by the stark disparity in the quality of the living environment. This is reflected in the contrasting urban forms where you find exclusive gated communities developing beside rundown neighbourhoods and slums.

Abdelhamid (2005) believes that the main reason for the emergence of gated communities is the increasing crime rate in its surrounding. Some residents decide to run away from this "risky" environment and live in a closed safely gated community, for example in South Africa and in other countries. Atkinson et al (2005) also thinks that the motivating force behind the development of gated communities has been a fear of crime and a desire for development that is secure.

In Saudi Arabia for instance where certain practices are publicly prohibited, gated communities provide their inhabitants with the same life style of their homelands so that they can freely practice their daily activities. The Kingdom Compound, a gated community outside of the capital Riyadh, reserved to expatriates is an example of this type of lifestyle community. Whilst it is customary for women to wear veils in Saudi Arabia, women are not obliged to put on veils as long as they are within the confines of these Gated Communities. So they are allowed to lead a life style similar to their home of origin as long as they are in the community but beyond the gates they have to respect the laws, traditions and culture of the State of Saudi Arabia, which in most instances is very difficult for most expatriate women (Abdelhamid, 2005).

However, some gated communities are also seen to reflect the growing range of choices available to consumers in the postmodern city. The affluent can move to gated enclaves in search of privacy and exclusivity, and in flight from fear as Grant (2004) cited Dillon, 1994; Hubert and Delsohn, 1996; Low, 2001; Marcuse, 1997; Wilson-Doenges, 2000.

Gruszczak (2010) explains that the emergence of gated communities is originally related to developments in urban planification, housing policies as well as socio-psychological determinants of living and social perception of personal safety and public security. Gruszczak also feels that patterns of social stratification, material diversification and human mobility have also contributed to the growing demand for gated communities.

2.4 Planning and Management

According to Levent and Nijkamp, urban planning is seen as a combination of science and art. It encompasses many different disciplines and brings them all under a single umbrella. It is the organization of all elements of a town, city or other urban environment. It includes plans for safety, aesthetics and common sense placement of everything from houses to factories. Goals for attractive architecture for city buildings are put into place and beautiful green spaces are planned with schools rightly provided to the neighborhoods where they are needed most and hospitals in centralized locations which allows for growth and plans highways accordingly. Urban planning also considers how future growth will affect traffic flow and try to eliminate trouble spots before they become a problem.

Whilst the University of Kansas says urban planning is a professional field which deals with addressing the health and welfare of urban areas. The potentials and problems of urban areas relate to the built environment and its underlying social, economic, political, and legal structure and related public policies. Chakrabarty (2001) says management is the process of designing and maintaining an environment in which individuals work together in groups, efficiently so as to achieve some specific objectives. Management just as in urban management is normally carried out through five essential functions; planning, organizing, staffing, leading and controlling. Urban management on the other hand involves coordinating and integrating public and private activities to tackle major problems the residents of a region

face - with the aim of building a more competitive, equitable and sustainable city. (Jusoh, et al. 2009)

2.5 The relationship between Urban Planning and Management and Gated

Communities

In management, planning involves having aims and taking actions to achieve them in a rational manner. Cities are seen as engines for economic growth in most economies since they are places where people live and work. Urban planners and managers prepare plans with the aim of making cities viable and desirable for people to live and work in an equitable and sustainable manner. Urban planning and management which includes land-use planning therefore concerns itself with gated communities, all types of housing, sanitation, transportation, commerce and the urban environment in general. Urban planning should accomplish a physical planning structure matching the economic base structure and the resulting demographic structure. However, the dynamics, uncertainties and conflicting interests make it difficult to easily achieve such. This is one of the causes of urban problems such as the emergence of slums and land-use changes, mostly by real estate developers who build their structures sometimes in violation of statutory city master plans and planning regulations (Chakrabarty 2001).

Urban planning and management should be continuous and flexible so as to be able to cope with the size and complexity of growth of cities. The city of Accra for instance has different elements, which include buildings and open spaces in various mixes. It is a manifestation of the underlying economic, socio-cultural, and environmental needs of the city. Inadequate infrastructure, resource constraints and the dynamics of land prices make it imperative to apply flexible principles in regulating housing and gated communities particularly in most cities (Chakrabarty 2001).

Today's world is rapidly urbanising, with particularly radical urban expansion predicted in developing countries such as Ghana and Nigeria. Increasing urbanisation impacts on the periurban in terms of changes in land use, new forms of household composition, differential access to urban benefits (such as health infrastructure and employment) and increased pressure on common natural resources (STEPS, 2009).

While early gated communities were restricted to retirement villages and the compounds of the super rich, the majority found today are for those in the middle to upper-middle class. Higher end tracts within planned communities are now commonly gated. They seem to be more common in larger tracts, as there are more units over which to spread the cost of walling, gating, and constructing and staffing guardhouses (Blakely and Snyder, 1997).

Planning approaches are switching from the command and control model and becoming more strategic, selective and oriented to guide rational investment planning, which is environmentally conscious and accrues benefits for the whole community. The legislative and policy frameworks that establish legitimate institutional processes and procedures for spatial planning are being revised in many countries. Legal and institutional reforms to facilitate inter-sectoral coordination and position urban planning at the intersection of public sectors policies and resource allocation are being discussed and implemented.

Also, participatory processes are becoming more and more embedded into planning processes in order to provide for meaningful engagement and involvement of the public in all phases of decision making, implementation and monitoring. This way, urban planning becomes a tool for local democracy and inclusive governance and is enabled to respond creatively to the expressed needs of a city's inhabitants rather than regulating them.

For these changes to take root and expand, the role of governments, both central and local, needs to be reassessed and reaffirmed as guarantor of the public interest and to ensure basic

needs, as well as for the development of clear policy direction on the role of urban areas in each national context. This should include effective yet realistic capacity of enforcing planning decisions (UN HABITAT 2010). The design aspects of many gated communities emerged as a major issue for planners, who must consider a proposed development's compatibility with its existing surroundings (Atkinson et al, 2005). In order to support this reform agenda, planners need to change their role, adopt new skills and revisit their ethical commitment. The education of planners needs to incorporate these new demands and approaches (UN HABITAT 2010).

2.6 Conditions for maximizing the benefits from the rise of gated communities and mitigating the negative effects

2.6.1 Urbanisation in Ghana

Several urban development strategies can be found in various Government publications. The fundamental concern in these documents is optimizing sustainable economic growth. They also draw upon and develop the capabilities and initiatives of people to the benefit of Ghana as a whole. The scale and complexity of urban problems is intensifying and rapid urbanisation and population growth is creating a major challenge to the country's development (UN HABITAT, 2008).

UN HABITAT (2008) has it that there is high population growth in Ghana which has led to an increase in informal urban settlements. According to the UN HABITAT, in 1921, about 7.8 percent of the Ghanaian population lived in urban centers. By 1960, the figure had risen to 23.1 percent and 32 percent in 1984. In 2000, the percentage of people living in areas classified as urban rose to 43.8 percent. Ghana's current level of urbanisation is said to be more than 50 percent.

Urbanisation is accompanied by globalisation, which comes along with the creation of new urban economic cores, increased demand for services and new criteria for selecting and evaluating economic activities. This has advantages for some, but is frequently accompanied by the downgrading of public services such as water provision and waste removal (STEPS, 2009).

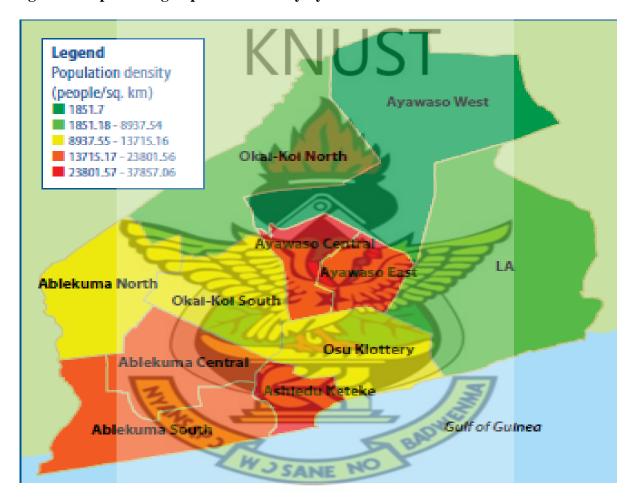


Figure 1: Map showing Population Density by Sub-metro

Source: World Bank, 2010

The gross population density for Accra Metropolitan Area is 10.03 persons per hectare compared to 6.23 per hectare in 1970. Accra has a very youthful population with 56% of the population under the age of 24 years (UN HABITAT, 2009). The table below shows how population is affecting urbanization in Ghana.

Accra is a major centre for manufacturing, marketing, finance, insurance, transportation and tourism. It is an urban economy where the service sector is the largest, employing about 531,670 people with the informal service sub-sector taking the largest number of labour force in the sector (UN HABITAT, 2009).

Table 1: Population Trends in Ghana, 1950-2030 (thousands of inhabitants)

| Year | 1950 | 1960 | 1970 | 1980 | 1990 | 2000 | 2005 | 2010 | 2015 | 2020 | 2025 | 2030 |
|-------|------|------|------|-------|------|------|------|------|-------|-------|--------|--------|
| Total | 5,24 | 7,13 | 8,98 | 11,30 | 15,4 | 19,8 | 22,1 | 24,3 | 26,56 | 28,79 | 30,964 | 33,075 |
| | 3 | 1 | 2 | 3 | 80 | 67 | 13 | 12 | 2 | 0 | | |
| Rural | 4,43 | 5,47 | 6,38 | 7,780 | 9,83 | 11,1 | 11,5 | 11,7 | 11,92 | 11,94 | 11,860 | 11,655 |
| | 3 | 3 | 0 | | 6 | 24 | 37 | 80 | 2 | 6 | | |
| Urban | 810 | 1,65 | 2,60 | 3,523 | 5,64 | 8,74 | 10,5 | 12,5 | 14,64 | 16,84 | 19,104 | 21,420 |
| | | 8 | 2 | | 4 | 3 | 76 | 32 | 0 | 4 | | |
| % | 15.4 | 23.3 | 29 | 31.2 | 36.5 | 44 | 47.8 | 51.5 | 55.1 | 58.5 | 61.7 | 64.8 |
| urban | | | | | . 6 | | Ma. | | | | | |
| Accra | 177 | 393 | 631 | 863 | 1,19 | 1,67 | 1,98 | 2,32 | 2,666 | | | |
| | | | | | 7 | 4 | 1 | 1 | | | | |
| Kumas | 99 | 221 | 349 | 452 | 696 | 1,18 | 1,51 | 1,81 | 2,095 | | | |
| i | | - | | | | 7 | 7 | 8 | | 1 | | |

Source: World Urbanization Prospects, 2005.

Traffic and transportation situation in Accra is sometimes seen to be disorderly with a lot of missing links and un-engineered roads (300 – 400kms), unpaved roads and potholes. A total of 65 percent of vehicular movement has the Central Business District as their final destination. A large number of low capacity vehicles result in congestion on the roads and the high travel time creates aggressive situations on the road (UN HABITAT, 2009). In terms of urban development, governance and institutions, land and housing, shelter and basic services, the environment, vulnerability reduction and capacity development are seen as the main challenges and priorities facing Ghana (UN HABITAT 2008).

2.6.2 Land and Housing Development Policy in Ghana

In many developing countries including Ghana, planning systems and processes are still largely based on colonial laws which were designed to support spatial segregation and

population control. They do not reflect the needs and priorities of urban residents. The urban model they promote is not able to adequately cater for the diversity of ways of life and needs of developing world cities of today (UN HABITAT, 2010).

In Ghana, most houses are provided by people for themselves through local contractors on land allocated to them by local land-holding chiefs under customary ownership. Official housing policy and implementation are centralised functions of the state which does not take care of local needs. Before the 2000 Housing and Population Census, housing policy formulation depended on estimates based on households and houses which aimed at reducing crowding. It did not also look at effective demand for housing which takes into account the capacity of the potential housing policy beneficiaries to afford housing. There have been three National Housing Policies since independence; The 1986 National Housing Policy and Action Plan (1987 – 1990), The 1992 National Shelter Strategy and its review in 1999 (UN-HABITAT, 2011)

According to the UN HABITAT (2010) the ultimate goal of the Ghana's shelter policy is to provide adequate, decent and affordable housing that is accessible and sustainable with infrastructural facilities to satisfy the needs of the people. It is expected that this will be complemented by the following policies;

- Improve the supply of serviced land available for housing, particularly for the target groups;
- To expand infrastructure development to all areas of the country and ensure its access by all citizens through a clear infrastructure policy and development programmes;
- To develop, produce and promote the increased use of local alternate building materials of acceptable quality to respond effectively to the shelter construction needs of the majority of the country's population; and

• Provide greater access to credit particularly for the target groups.

Anim-Odame, Key and Stevenson (2006) in citing the World Bank (2003) says that currently, the Ministry of Lands, Forestry and Mines is embarking on a Land Administration Project (LAP) as the main tool for implementing the National Land Policy. The project's goals are "to reduce poverty and enhance social growth through improving security of tenure, accelerating access to land by the populace and fostering efficient land management by developing efficient systems of land titling and administration based on clear coherent and consistent policies and laws supported by appropriate institutional structures"

Government is seeking to ensure that by the year 2015, at least 60 per cent of materials used in the building and construction industry will be indigenous raw materials. A housing policy program on the utilization of local building materials such as clay brick and tiles, pozzolana cement, bamboo etc in the construction industry has already been prepared on the initiative of government (NDPC, 2011).

Of importance to policy is the pricing and sources of funding required to meet the huge demand for housing in Ghana by households, which is estimated at about one million units over the next ten years (Bank of Ghana, 2007). Also, Blandey et al cited in Moobela (2003) suggest that the planning system in Ghana is ill-equipped to handle the emerging phenomenon; and gated communities can produce a range of unforeseen problems such as the possibility of community groups withdrawing from local services and opting out of local taxation.

Table 2: Share and Rate of Increase of Households by Region

| Region | Share of I | Households | | Rate of increase | | | |
|-------------------|------------|------------|----------|------------------|-----------|-----------|-------|
| | 1960 | 1970 | 1984 | 2000 | 1960-1970 | 1970-1984 | 1984- |
| | | | | | | | 2000 |
| Western | 23.3 | 10.5 | 10.6 | 11.1 | 10.5 | 39.6 | 56.2 |
| Central | - | 11.4 | 12.0 | 9.9 | - | 45.6 | 23.1 |
| Greater | 9.0 | 12.0 | 14.5 | 16.9 | 56.8 | 67.1 | 73.3 |
| Accra | | | | | | | |
| Volta | 11.1 | 10.5 | 10.1 | 9.3 | 11,2 | 33.0 | 37.4 |
| Eastern | 15.5 | 14.5 | 13.8 | 12.3 | 10.0 | 31.6 | 33.0 |
| Ashanti | 18.4 | 18.5 | 17.7 | 18.5 | 18.2 | 32.3 | 55.9 |
| Brong | 10.1 | 9.5 | 9.5 | 9.3 | 10.6 | 38.3 | 46.1 |
| Ahafo | | | | | | | |
| Northern | 12.6 | 5.7 | 5.4 | 6.6 | 22.3 | 31.0 | 82.4 |
| Upper East | | 7.4 | 6.4 | 3.9 | | | 42.2 |
| Upper West | | |) | 2.2 | | | |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 17.6 | 38.3 | 49.2 |
| Number | 1,525,24 | 1,793,58 | 2,480,36 | 3,701,24 | | | |
| | 0 | 0 | 8 | 1 | | | |

Source: Population and Housing Census, 2000

Statutory land use planning is weak and land owners have created alternative land use planning processes thereby opening up avenues for the poor to cash in for their housing needs (UN-HABITAT, 2009). The Rent Act 1963, (Act 220), which regulates the affairs between landlords and tenants, is currently ineffective. Much as it was promulgated to protect tenants, it does not afford any protection to Ghanaians in practice, and has rather led to tenants being exploited by landlords (COHRE, 2008).

According to the NDPC (2011), there are cumbersome land acquisition procedures with a weak enforcement of the standards and codes necessary in the design and construction of houses. There is also an ineffective rural housing policy and land developments are unorganised. The NDPC also see housing finance as one of the main challenges facing the sector and is reflected in the inadequate finance of the construction industry in Ghana, the high mortgage cost and low production and patronage of local building materials.

To address these challenges, government intends to increase access to safe, adequate and affordable shelter and also provide relevant opportunities that will enhance the participation of the private sector. They also intend to improve the existing institutional and legal frameworks and create an accessible housing finance system so that the real estate industry can provide homes that are affordable to the ordinary Ghanaian (NDPC, 2011).

2.6.3 Legal and Regulatory Framework related to Housing and Land in Ghana

According to the UN-HABITAT (2011), the Constitution of Ghana Chapter 20 Clause 257 (1 -5) has vested all public lands in the President. Clause 266 (1-5) also excludes foreigners from freehold leases. Hence, Non-Ghanaians are excluded from freehold interest in land in Ghana and any existing freehold held by non-Ghanaians is deemed to be a leasehold for fifty years from 1969 which reverts to the state upon the expiry of the lease. Clause 267 (1-9) has it that all land belongs to the indigenous settlers and is vested in the appropriate stool or skin on behalf of, and in trust for the subjects of the stool in accordance with customary law and usage. Under the State Lands Act, 1962 (Act 125), the President (acting on behalf of the state) has the power to compulsorily acquire the absolute interest in any land for use in the "public interest". The Lands Registry Act, 1962 (Act 122) was also introduced to repeal earlier colonial registration and also provided for the registration of all instruments affecting land, together with a plan or map with the description of the land. The Conveyance Decree of 1973 (NRCD 175) allows all conveyances to be in writing though oral grants under customary law are exempted but must be recorded by the court registrar. Others are the Land Title Registration Act, 1986 (PNDCL 152), Land Title Regulation, 1986 L.I. 1241 and Stamp Duty Act, 2005 (Act 689)

The CAP 84 Town and Country Planning Ordinance was set up as a framework for spatial planning that originated from the colonial era and emphasised master planning. It regulates Land use planning and also provides for the orderly and progressive development of land,

towns and cities, in a manner that preserves and improves amenities. It gives authority to the Town and Country Planning Department, as the government's statutory agency in the declaration of planning areas in any part of the country. It was however distorted by the passage of the Local Government Law (1993, Act 462) which over-emphasises development planning. The Local Government Law 1993 - Act 462 Sections 49 to 57 controlled development

Housing finance, foreclosure and mortgage is governed by the Building Society Ordinance 1955 (No.30) which regulates the establishment of building societies to assist members to acquire housing by savings and loans. The Co-operative Societies Act, 1968 (NLCD252), the PNDCL 329 Home Mortgage Finance Law 1993, the Home Mortgage Finance Act, 2008, Act 770, the Credit Reporting Act, 2007, Act 726, the Long-Term Savings Scheme Act 2004 (Act 679) and the Borrower and Lenders Act 2008, Act 773 all regulate home financing in Ghana.

The Legislative instrument for Capital Gains is Chapter 2 of the Internal Revenue Act, 2000 (Act 592) which imposes a 10 per cent tax on the realised capital gain from the sale of (residential) property. PNDCL 111 Intestate Succession Act, 1985 / Intestate Succession Amendment law, 1991 (PNDC Law 264) also regulates property rights and inheritance. All gifts, including building materials, are subject to tax through the Gift Tax, VAT Act 546, 1998 Section 13. The Ghana Investment Promotion Centre Act 1994 (Act 478) also provides for incentives and benefits for the real property sector through exemption from customs duties; depreciation of plant and machinery; tax exemptions on buildings; investment allowances; repatriation of any earnings in the currency of the investment; and a five-year tax holiday on income from sale or letting. The Ministry of Water Resources, Works and Housing provides the conditions and terms for funds that the state may be willing to borrow for housing investment. (UN-HABITAT, 2011)

The Rent Act, 1963, Act 220 ensures landlords can charge rent in advance of not more than 6 months and succeeding rents are due every six months. Rent Tax – Act 592 Internal Revenue Act, 2000 also empowers the Internal Revenue Service to impose tax on income derived from rent revenue accruing from properties let for the purpose of renting or leasing. The withholding tax on rent income is 8 per cent. LI 1630 National Building Regulations 1996 apply to the erection, alteration or extension of buildings in the country and grant the right of approval over all construction activities to local authorities and impose compliance requirements on all prospective developers. Building materials standards were developed by the Ghana Standards Board in 1988 and feature in the Ghana Building Code. (UN-HABITAT, 2011)

2.6.4 Housing Financing and Delivery in Ghana

According to the Bank of Ghana (2007), government supported the development of the Ghana Real Estate Developers Association in its early days and this according to their promotional material has resulted in the construction of over 10,954 new homes since its formation in 1988. In the study by the Bank of Ghana, it is suggested that external monetary conditions impact directly on the housing market in Ghana through the movements in the foreign exchange rate. Most housing projects embarked by real estate developers in Ghana were self-financed and a good number of real estate developers rely on loans from domestic banks to partially finance some of their housing projects and a few get loans from foreign sources. It is also intimated that some real estate agencies also use mortgage financing arrangement.

A few banks in Ghana offer mortgages to High Net Worth customers. The First Ghana Building Society (FGBS) has failed in the provision of mortgage financing on a sustainable and consistent manner. Home Finance Company Limited (HFC) which turned out to be the

leading housing finance institution in Ghana provides a wide range of mortgage financing to a broad continuum of customers (Moss, n.d).

The typical Ghanaian household is often faced with three choices in the acquisition of shelter. These are to rent, build or mortgage a home. In the developed countries, the mortgage industry has proved to be the most capable and superior financier of the housing needs of the population but in countries such as Ghana, such a choice is bound to fail because of the sociocultural dynamics of the people (Bank of Ghana, 2007). Citing The Guardian (March 15, 2003), Moobela (2003) said property consultants and developers say that homes in gated communities are 10% more expensive than comparable properties in open access areas and most people would want to save on that ten percent.

It is argued that the boom in the housing sector of Ghana is largely motivated by the flow in remittances from abroad. Others are of the opinion that these are basically determined by improved access to global financial markets due to the stability of the Ghanaian economy. That is to say non-resident Ghanaians with access to low interest global funds are progressively investing in the housing sector. The bank also said the macroeconomic stability of the domestic economy at the time which was depicted by low inflation and declining interest rates also encouraged investments in the housing sector by resident Ghanaians with access to lower cost of funds from domestic sources (Bank of Ghana, 2007).

The status of HFC has since changed to a universal bank – HFC Bank – offering commercial banking, investment banking and mortgage banking services. Thus, mortgage banking has become a segment of the banks' activities. The Bank currently operates mortgage schemes for home purchasing, uncompleted housing, home improvement, residential property finance and the nonresident Ghanaians scheme. Although these houses are provided on a mortgage basis to households and individuals, patronage is often skewed in favour of high-income

earners due to the high cost of buying or mortgaging. Clearly, the high cost of housing is caused by price of land, cost of access to utilities such as roads, water and electricity on such lands, building costs etc (Bank of Ghana, 2007).

Generally, activities in the housing industry may affect the well being of a people in terms of size and composition of household wealth, accessibility to credit, labour productivity, employment and other macroeconomic variables (Bank of Ghana, 2007). This is in spite of the fact that they would not invest their own funds and bear only 10% default risk. Most households in Ghana use their own savings, sweat equity, barter arrangements and remittances to build their houses. The commercial financial institutions provide very little support to low and moderate-income households in the form of mortgages. Where it has done so, it favored the owner occupied and new dwellings and offers very limited support to the rental and incremental housing development (Moss, p.d).

Ghana therefore has an inconsistent history of mortgage financing with several but unsustained methods of housing finance. Financial institutions which include the Social Security and National Insurance Trust (SSNIT), State Insurance Corporation (SIC), the defunct Bank for Housing and Construction (BHC), Social Security Bank (now SGSSB Bank), Home Finance Company and First Ghana Building Society (FGBS) have at various times offered mortgage facilities to the working class of the population. Their mortgage activities were hampered by relatively high borrowing cost and hence, their overall effect on the housing industry was limited, benefiting only middle and higher income groups. Apart from the Home Finance Company (currently HFC Bank) and the FGBS, the other institutions are no more participants in the mortgage financing industry (Bank of Ghana, 2007).

The key factors militating against effective housing delivery in Ghana according to the UN-HABITAT (2010) include the following:

- Land Cost and its accessibility;
- Finance;
- High cost of Mortgage;
- Infrastructure Development;
- Development Approval Procedures;
- Availability and Cost of Building Materials;
- Institutional Co-ordination; and
- Governance for Shelter Provision.

2.7 Accessibility to Social Infrastructure and Services

2.7.1 Sanitation and water

The state of sanitation in Accra is poor. The city is characterised by choked drains, indiscriminate waste disposal and uncollected refuse in central waste containers. Some of the factors responsible for the poor sanitation include, poor conceptualization of sanitation, lack of adequate sanitary facilities, ignorance and irresponsibility of individuals, households and community members, lack of community action, springing up of unauthorized temporary structures, continuous increasing number of squatters, indiscriminate hawking, and lack of regular budgetary allocation for sanitation (UN HABITAT, 2009).

A lot of progress has been made over the years in an effort to improve the sanitation situation in Ghana. The Waste Management Departments (WMD) of all the MMDAs have been empowered with logistics to carry out their duties and also the private sector has also been involved in waste management. Currently the lead public private partnership in waste management is through the activities of Zoomlion in refuse collection. People also seem to be willing to pay for both their solid and liquid waste to be collected and most refuse dumps have been replaced with landfill sites.

Accra is supplied by pipe-borne water from 2 operational sources - The Weija and Kpone Water Works. Access to water by the classes of people in Accra varies according to the three categories of urban dwellers in Accra. First, there are those who live in first class residential areas such as gated communities and are connected to the water supply network. This group of people mostly has their water flowing 24 hours a day, and pay for water at the official rates. Secondly, there are those Accra residents (a large proportion) who live in areas which are connected to the network but do not get water through their taps on a regular basis. These people have to supplement their water supplies by buying water from vendors. Finally there are the majority of residents, mostly the poor and vulnerable groups living in slums and poor neighbourhood, which are not connected to the network, and have to buy their water from the vendors (UN HABITAT, 2009). This has therefore led to illegal connections being done in most poor suburbs. Others also break the pipelines so as to be able to tap water from these pipe lines.

2.7.2 Roads and Transport

The transport sector plays a very important role in the Ghanaian economy. It accounts for approximately 9 percent of GDP and generates a significant share of the budgetary revenues of the Government. The country has a well developed transportation system consisting of two deep-water ports that yearly handle about 7 million tons of import and export traffic; 944 kilometers of railway system serving the southern part of the country; 60,000 kilometers road network system consisting of 20,500 kilometers of trunk roads, 34,000 kilometers of feeder roads and over 5,500 kilometers of urban roads; and one internal airport and 8 regional airports and airstrips throughout the country (NDPC, 2010).

Most parts of the city of Accra are not adequately served by good access roads. The urban transport environment in Accra is characterized by heavy congestion particularly during the peak periods due mostly to low vehicle utilization rates, poor implementation of traffic

management measures, and inadequate facilities for pedestrians and cyclists and weak road safety arrangements. The transport sector is a dominant source of local air pollutants that are responsible for poor health and other negative impacts (UN-HABITAT, 2009).

Despite these challenges, the urban transport sector under the Department of Urban Roads is better resourced than the other service delivery sectors. The department is adequately staffed and receives substantial investment from donor partners and the road fund (NDPC, 2010).

Road transport is the predominant mode of transportation, and accounts for 94 percent of freight and 97 percent of all traffic movements in the country. Currently, 41% of the road network is in good condition, 27% is in fair condition and 32% is in poor condition (NDPC, 2010).

2.7.3 Health

There are policy-related issues that need to be addressed in the health sector of Ghana. These include: large access to health care between urban and rural; gender gaps in access to health care due to poverty, deprivation and ignorance and an absence of an appropriate legal framework for the health sector. There is also an inadequate and unequal distribution of health infrastructure throughout the country, leading to limited access to health facilities especially by deprived communities (NDPC, 2010).

Although health facilities are sometimes within physical accessibility of the poor, the cost is beyond their scope. Most of them rely on traditional medication and self medication for their health needs. The high-income groups rely on both public and private health facilities. There is high level private and non-governmental institutions participation in health delivery (UN HABITAT, 2009).

2.7.4 Education

The education sector of Ghana, comprising Pre-school Education, Primary and Junior High School, Second Cycle Education including Technical and Vocational Education and Training (TVET), Tertiary Education and Non-Formal Education faces problems of access, quality and management. There is also low motivation and poor conditions of service for workers in the education sector which can sometimes lead to low quality of teaching and learning. There is also the issue with inadequate educational infrastructure nationwide (NDPC, 2010).

At the primary level, about 36.38 % of eligible children are enrolled. The enrolment of girls is higher than boys. The ratio of girls is also higher at this level. The higher enrolment of girls and the favourable examination result has been attributed to implementation of Send-your-Girl-Child-to school policy, which was implemented about a decade ago (UN HABITA 2009).

2.8 Overview of Gated Communities in Ghana

Compared with other advanced countries, Ghana's housing industry is at a rudimentary stage. High property prices particularly in the urban centers such as Accra, Tema, Kumasi and Takoradi fueled by a rapidly growing middle-class, as well as rapid and uncontrollable urbanization have turned the housing industry into one of the critical developmental issues facing policymakers (Bank of Ghana, 2007).

The implications of the growth of this phenomenon of gated communities are however, deeply troubling. Gated communities are said to increase housing costs by about 10%; they enhance social class and ethnic segregation; they privatize goods that are consumed by the public (like streets, parks, and even schools); they may promote rather than reduce the fear of crime (Grant, 2003). Also, very little emphasis is placed on the physical security features (such as walls, gates and guards). Rather, inhabitants seem to choose them primarily for

prestige- and privacy reasons (Grant, 2005). Usually because of the extended family system practiced in Ghana, relatives visit without even informing you and to run from these sometimes unwelcomed visitors and relations, people choose to live in gated communities so that friends and relatives cannot just come to them anytime they want but rather with their consent.

Gated communities can therefore address the fears and anxieties of individuals by enhancing personal safety, the security of material goods, as well as protecting the home from unwanted intrusions. Further, there is evidence that the physical design and management structures of these accommodation forms assist in fostering a sense of community and common purpose among residents. Themes usually found in the marketing of gated communities in Ghana are prestige, community and privacy, but very seldom security (although walls and gates can be seen). This could be explained by the comparatively very low crime rates in Ghana (Grant, 2005).

Researchers and scholars have held that gated enclaves represent the hope of security; they appeal to consumers who need a sense of community and identity; they offer an important niche marketing strategy for developers in a competitive environment; they keep out the unwelcome and unfamiliar; they often come associated with attractive amenities; they increase property values. However, the security does not come cheap. It comes with a premium (Xavier, 2008).

If real estate developers are allowed to continue to develop gated communities, it may result in a marked spatial segregation and social exclusion amongst the communities. In Malaysia, gated and guarded precincts are increasingly causing anger and scorn among the public as housing the affluent and "snobbish" sectors of the population (Xavier, 2008).

Most potential buyers of gated communities are to be found abroad. A combination of targeted marketing techniques focused on international media, and the existence of a large Ghanaian Diaspora, created the market for gated communities (Grant, 2005).

2.9 Effects of Gated Communities

Having a barrier will of course help keep out crime, but at the same time it will also keep out the service providers. Every housing estate usually has the services provided by the local authority (e.g. garbage collection, tree pruning, laying of road bumps on particular stretches that are close to the dwelling houses to deter speedsters and other services) but because of the barriers, the local authority may not be able to go into the community to provide these services, so residents will therefore have to pay a private entity to provide such services. The residents may therefore be walling in more problems than they are keeping out (Xavier, 2008).

Research shows that some residents in gated communities reported a high degree of community spirit and informal social interaction. Another advantage is that in a gated community, residents have the opportunity to participate in the management of their developments. Together they determine what they want in their community and what they do not want. They are also able to lobby for the services they want very easily.

Residents of gated communities appear to benefit from high levels of advocacy. Many local authority officers believed that the expectations of residents in gated communities were higher than those of other residents, and that they demanded very high levels of service delivery. When services did not meet these expectations, residents of gated communities were likely to take immediate action, ranging from letter writing to the involvement of their legal representatives, to have the issue resolved.

Gated communities reduce public space and the permeability of a city; their physical security measures lead to further social divisions and putting affluent households behind walls produces a negative impact on poorer neighborhoods – in terms of urban sustainability, security and social integration the divide that exist between the rich and poor will be increased (Xavier 2008).

Almost all gated communities appear to have set certain guidelines or criteria for people moving in. These can be in relation to the social class, income level, age or family structure of the inhabitants. Gated communities have residents' associations with strict covenants, contracts and deed restrictions that regulate most aspects of their houses and environment. Many residents find these rules onerous (Xavier, 2008).

Gated communities built by private development companies are mainly meant to cater to the "scared middle class" and therefore represent a questionable trend of city development accentuating inequality; they still show the connection between a chosen lifestyle and a certain kind of city environment (Xavier, 2008).

2.10 Conceptual Framework

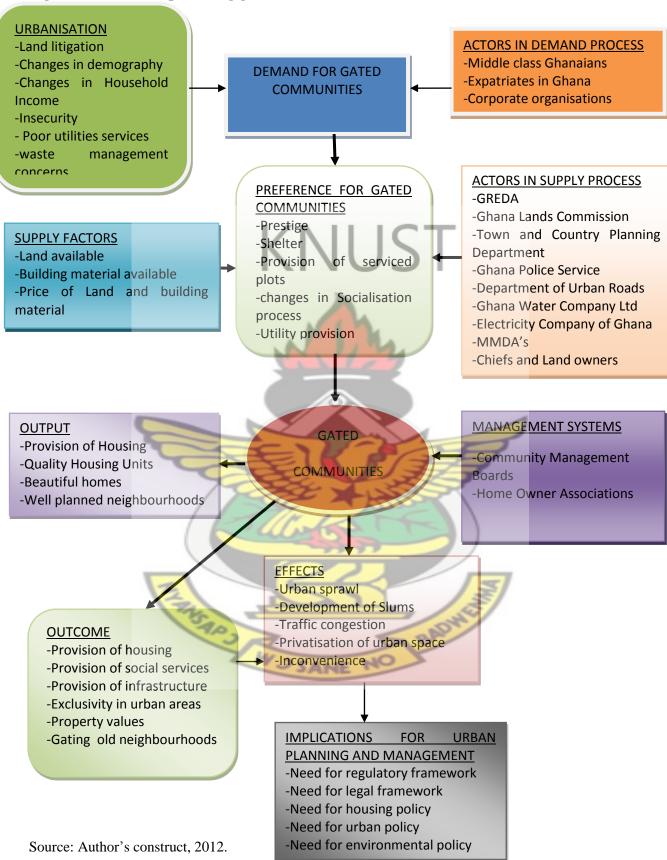
This identifies the key issues and presents them in relation to gated communities in Ghana. It relates the stakeholders involved with the emergence of gated communities in Ghana. The causes and demand factors for the provision of gated communities are mostly demographic factors such as natural increase in population and in-migration to the cities, some other factors include the need for security, the cost of housing and household income and also the utilities and services that are provided to homes. Those people who usually demand the gated communities are the middle income class Ghanaians, corporate organizations and some expatriates in Ghana. With urbanization there is usually pressure on destination facilities and services. This can eventually lead to a deficit in housing for most urban residents. This brings

about competition for space to build houses leading to land litigation and people building on any piece of land they find. This eventually leads to slums and other low quality homes being provided.

On the supply side of gated communities, land available and the price attached to that piece of land is very crucial. The kind of building materials available is also important as people who demand gated communities require a certain standard of homes that are of a very good quality. The actors in the supply side are the real estate developers who build the gated communities, the various planning bodies who regulate the activities of the real estate developers, the Ghana police which also monitors the security systems in place at the gated communities and the service providers such as the Ghana Water Company and the Electricity Company of Ghana.

Their output is therefore homes that are prestigious and of a high quality which are found in the gated communities. However, as the gated communities emerge they lead to urban sprawl and distortions in the urban environment. They also add to the congestion that is already occurring in the city since they block their roads and prevent non residents from going through them. There is segregation also as non residents are not allowed into the communities. Property values around areas where they are built immediately shoot up and if they are not regulated, residents of old suburbs could begin to gate off their neighbourhoods. With the growth of these gated communities in Ghana, Ghana's planning systems therefore need to come out with a legal and regulatory framework to guide the activities of the real estate companies, there is also the need for an environmental policy and a housing policy. Figure 2 below shows the conceptual framework for the provision of gated communities in Ghana.

Figure 2: Process of providing gated communities



CHAPTER THREE

METHODOLOGY AND PROFILE OF HOUSING IN GREATER ACCRA, GHANA

3.1 Introduction

The chapter entails the techniques and procedures used in undertaking the study. It also gives a concise description of the research design, how sampling is done for the various gated communities, the households, the real estate agencies and the various planning institutions. It takes a cursory look at the manner in which data was collected and presented as findings. The housing situation in the Greater Accra region is also briefly presented.

3.2 Methodology

3.2.1 Research Design

The study looks at the emergence of gated communities in the Greater Accra Region alone. Hence, the case study approach was used in the study since it relies on multiple sources of evidence such as the various planning institutions in the region, households and three gated communities and the findings are generalized in other spheres of study based on theoretical propositions. It also allows for an empirical inquiry that investigates the phenomenon of gated communities within its real-life context and it is based on an in-depth investigation of how it affects urban planning and management.

Both quantitative and qualitative approaches are used in the collection of data from the various real estate agencies and the planning institutions. These approaches are useful in gathering data from existing literature in the study and the contribution they make in uncovering in-depth information from respondents in their own language and environment. The choice of sample design and how well it represents the population of gated communities has an impact on the results. The sample therefore encompasses the residents of gated communities, the real estate developers, the planning institutions and the institutions

responsible for providing certain services and infrastructure. The study used a 91 percent confident interval to ensure that data gathered are reliable and valid.

3.2.2 Data Requirements and Sources

Variables identified included the land, housing conditions, the size, quality and naming of streets and drains, the sources of water and electricity supply, the security provided, the social facilities and infrastructure provided to gated communities and sanitation conditions. It also identified the urban planning regulations, existing policies on housing in Ghana as well as the opportunities and challenges of gated communities. Table 3 shows the variables, data categories and sources of data.

Table 3: Variables, Data Categories and Sources of data

| | and the second second | |
|---|--|--|
| VARIABLES | DATA CATEGORIES | SOURCES OF DATA |
| Land Housing Streets and Drains | Lease Land titles Material used in building houses Housing policies Housing regulations Size Quality Naming | AMA Town and Country Planning Ghana Lands Commission Households Real estate developers Town and Country Planning Lands Commission Department of Urban Roads Households |
| | | • Town and Country Planning |
| Water Supply | Regularlarity of water flowSource of water supply | Ghana Water Company Households Real Estate Developers |
| • Electricity and | Transformers used | • ECG |

| Energy | Number of phasesAlternative sources of electricity | • Households |
|---------------------------|---|---|
| • Security | Crime rate Restrictions used at gates | Ghana Police ServiceHouseholds |
| • Facilities and Services | Health Education Playground Eating place Library Telecommunication | Households Real Estate developers |
| • Sanitation | Solid waste management Black water | Households AMA Real Estate Developers |

Source: Authors Field Survey, 2012

3.2.2.1 Primary Source of Data

It involved a guided tour of the selected gated communities where personal observations were made. It was also carried out through the institutional surveys and real estate agencies questionnaire. A visit to the various gated communities allowed the research team to understand the existing situation in the gated communities even before the actual interview begun. The physical features of gated communities such as the types of buildings; small self contained, flats, apartments, detached or semi-detached, facilities provided, such as shops, clinics, schools, playgrounds, police post, swimming pools, the size of roads, the sizes of gutters, the type of electricity transformers, source of water supply, landscaping, waste management all helped to give an understanding of what happens with regards to gated communities.

3.2.2.2 Secondary Sources of Data

Relevant information was extracted from already existing data on gated communities, urban planning and management and refined to suit the purpose of this study. Government and non-governmental sources, publications were all reviewed. The availability of the data, the reliability of the data and biases were considered in using such data. It is hoped that such data helped in making the eventual findings and recommendations of the study relevant and useful.

3.2.3 Sampling procedure and Sample size determination

3.2.3.1 Selection of Study Communities

According to the Bank of Ghana, the Ghana Real Estate Developers Association (GREDA) since its inception in 1988 has constructed about 10,954 houses. Gated communities are said to be among the homes that the real estate developers have built. However, most of the existing gated communities in Ghana are currently located in the Greater Accra Region. Hence, the selection of Accra as the region of study. However, the communities selected were based on which real estate developers were willing and available to respond to the survey and which gated community management and residents were also willing to respond to the survey.

3.2.3.2 Sampling Design

A cross sectional study of the population of gated communities was done to bring about an observation that is fairly representative of all gated communities in Ghana. It therefore looked at the pattern of relation between gated communities and urban planning and management.

3.2.3.3 Sampling Process

Probability and non-probability sampling techniques were used. Accidental sampling was used to select the households so as to have a very representative cross section of residents being sampled. It was based on which household was available to respond to the survey. Purposive sampling was used to select the various planning institutions in Ghana and a few of the institutions that are tasked with the provision of certain social amenities and services. The Ghana Lands Commission was selected for their role in housing and land issues, the Ghana Police service for their role in the provision of security, the Ghana Highways Authority for the roads and highways. Also, the Ghana Water Company was selected for their role in domestic water supply, the electricity company of Ghana for their role in power and energy supply. This enabled the researcher to have an idea about the existing situation.



Figure 3: Map of Accra showing sampled gated communities

Source: Googlemaps.com, 2012.

Snowball sampling was used to select the gated communities because GREDA did not have any information on gated communities built by their members. Also, the AMA, the Town and

Country Planning Department which are in charge of zoning the city of Accra and issuing permits to real estate developers did not also have details of gated communities or which real estate developers who have built these gated communities.

The seed or initial contacts came from the Executive Director of GREDA who directed the researcher to Regimanuel Grey Ltd and Lakeside Estates. However, these estate developers were not able to respond to the survey. An internet search was made for real estate developers in Accra and the output of which helped in the listing. It resulted in sampling Trassaco Valley, Redrow Estates Ltd and Kwate Estates by the researcher.

Purposive sampling, a technique of non-probability sampling was used to collect data from the various planning institutions in Accra. The reason for using this method of sampling is that it identifies the various individuals and institutions that are responsible for urban planning and management and see what role they play. Since the issue of gated communities is a multi facetted one, the contributions of these institutions was very important to this study as any future emergence; planning and management of gated communities will still affect and be affected by them.

Key informants, such as the Executive Director of Ghana Real Estate Developers Association (GREDA), planners from the Accra Metropolitan Assembly, The Town and Country Planning Department, the Lands Commission, Area engineers and managers of the various institutions were singled out and interviewed with a well structured questionnaire.

3.2.3.4 Sample Size Determination

This is a collection of all houses built by the Ghana Real Estate Developers Association (GREDA). The data was adopted from a Bank of Ghana Survey Report. Additionally, the various planning institutions and service providers were sampled. The sample frame helped in the sample size determination. Alternatively, the sample size was determined using a

statistical or a mathematical formula. (that is $n = \frac{N}{1 + N(\alpha)^2}$), where n=sample size, N=sample frame, (Total number of houses built by GREDA) α =confidence interval.

According to the Bank of Ghana (2007), there were 10,954 housing units built by GREDA. Thought not all the houses built by members of GREDA are in gated communities, this number of houses is used as the sample frame. Hence N=10954. In order to have a fair and representative sample size, the sample size was determined at a 91% confidence level (At a 0.09 significance level). The sample size is therefore approximately 122 households. Table 3 shows the distribution Respondents.

Table 4: Distribution of Respondents

| No. | Unit of Analysis Number Sampled |
|-----|---------------------------------|
| 1. | GREDA 1 |
| 2. | Real Estate Developers 3 |
| 3. | Households 122 |
| 4. | Planning Institutions 5 |
| 5. | Service Providers 5 |
| 6. | Total 136 |

Source: Authors construct 2012.

In addition, three real estate agencies and gated communities, five planning institutions and five service providers are interviewed. These are the Department of Town and Country Planning, the Lands Commission, the Lands Valuation Board, Stool Lands and the Survey Department, the Accra Metropolitan Assembly, the Department of Urban Roads, Ghana Water Company Limited, Electricity Company of Ghana and the Ghana Police Service. The choice of this methodology was to make the research more scientific, reliable and valid for the purpose of the study and further investigations.

Table 5: Sample size determination

| Gated Community | Number of Households | Percentage share of sample | Sample Size | |
|------------------|-------------------------|----------------------------|-------------|--|
| Redrow Estates | 405 | 46 | 56 | |
| J. Kwate Estates | 70 | 8 | 10 | |
| Trassaco Valley | 400 | 46 | 56 | |
| Total | 875 | 100 | 122 | |

Source: Field Survey, 2012



3.2.4 Data collection instruments

3.2.4.1 Research Tools

The study employed both structured and semi-structured interviews to gather primary data. The essence of this activity was to ascertain the views of persons with regards to gated communities. A questionnaire was developed for the real estate agencies that provide gated communities, the concerned planning units, households and GREDA. It also combined both closed and open-ended questions which are useful in gathering in-depth information from qualitative data.

3.2.5 Data Processing and Analytical Procedure

The information gathered from both Secondary and Primary sources were organized and critically examined. The various responses collected from the primary sources were coded before inputting. The various variables were also categorised and defined to eliminate ambiguity. The data of the study was then transformed into usable formats such as tables, frequencies, percentages among others to ensure easy analysis and clarity of the data.

3.3 Data Analysis

Both statistical and descriptive techniques are used in the data analysis since it included both qualitative and quantitative data. The research is based on the following units of analysis; the number of residential units in the gated communities, the streets in the communities, the source of water, the sanitation situation in the communities, the kind of facilities available and the form of security provided. The various variables were arranged in an order that made for easy analysis and also ensured the objectives of the study were met.



CHAPTER FOUR

THE RELATIONSHIP BETWEEN GATED COMMUNITIES AND URBAN PLANNING AND MANAGEMENT IN GHANA

4.1 Introduction

This chapter seeks to examine the contributions of gated communities to urban planning and management in Ghana by presenting the data collected from the Greater Accra Region. Several factors affect and are affected by urban planning and management. Some of these factors include housing, infrastructure and service provision, accessibility to basic services among others.

This chapter discusses issues that arose from the field in relation to the above factors. It includes an overview of the type of facilities provided in gated communities and how accessible they are to residents and non-residents, the planning involved and why people choose to live in gated communities.

4.1.1 Description of the Study Area

4.1.1.1 Number of rooms occupied by households

The year 2000 census indicated 42.2 per cent of households occupy one room, 29.5 per cent occupy two rooms while 28.3 per cent occupy three or more rooms. The proportion of households occupying one or two rooms varies from 45.7 per cent in Dangme East to 78.4 per cent in AMA.

4.1.1.2 Sleeping room occupancy by district

The average room density for the region (2.5) is higher than the national average (2.3). The highest is in the Accra Metropolis (2.8), while the lowest is in Dangme West (2.0). Two of the 5 districts have populations per sleeping room higher than the national average but only

the Accra Metropolis has a population per sleeping room higher than the regional average.

Generally, the more urbanized a district, the higher the population per sleeping room.

4.1.1.3 Main material for outer walls

Cement block or concrete is the main type of material for outer wall in the region (74.2%). The proportion of houses with cement blocks or concrete as the main material for outer walls ranges from 77.8 per cent in AMA to 44.6 per cent in Dangme West, where the proportion of houses with mud for outer wall is about the same as the proportion with cement (46.4%). Tema with the least proportion of mud houses (2.5%) has 16.0 per cent of houses having wood as the main material for outer walls.

4.1.1.4 Main material for floor

It is estimated that 84.8 per cent of households in the region live in houses with cement or concrete floor; the proportion ranges from 75.9 per cent in Dangme East to 87.4 per cent in Tema. While terrazzo is the second most widely used material for the construction of the floor in AMA (4.3%), Ga district (7.2) and the Tema (4.4), it is earth/mud brick in Dangme East (22.5%) and Dangme West (20.2%).

4.1.1.5 Main material for roofing

Slate/asbestos and corrugated metal sheets are the main materials that were used up to the 1980s. Except in Tema and Dangme West, where the order is reversed, slate or asbestos sheet is the most popular roofing material, followed by the corrugated metal sheet. Thatch or palm leaf is mainly used for roofing in rural areas. It is therefore not surprising that the two Dangme districts have between 20 and 30 per cent of households living in structures roofed with thatch or palm leaves.

The use of roofing tiles is a new phenomenon in the country, but particularly in the more urbanized areas. Nationally, roofing tile constitutes only 0.5 per cent of materials, but in

Greater Accra the proportion is 1.5 percent. This is explained in terms of the increasing use of tiles for roofing new buildings and even replacing existing ones. The fact that the proportion is much higher in the Ga (2.8%) and Tema municipality (2.1%), which are the areas of new housing development, attests to this.

4.1.1.6 Main source of lighting

More than three quarters of households in the region use electricity for lighting. The use of electricity for lighting appears to be related to the level of urbanization of the district. Thus in AMA, 89.7 per cent of households use electricity for lighting, while less than a quarter of households in Dangme East enjoy this facility.

In the region and in particular AMA, Ga and Tema, the alternative source of lighting is the kerosene lamp, the use of which increases among the least urbanized districts. About 75 per cent of households in Dangme East and 66 per cent in Dangme West use mainly kerosene lamps as the main source of lighting.

Map of Greater Accora Region showing Districts

Adentan

Dongme East

Astholman

Terma

Go West

Weiger Values Legend-UME

Go West

S S

Adaptives

S S

Adaptives

Figure 4: Administrative Map of Greater Accra Region

Source: ghanadistricts.com, 2012

4.1.1.7 Main source of drinking water

The main source of drinking water in the region for 80.9 per cent of households is pipe borne water, either inside or outside the house. At the district level, while 90.7 per cent of households in AMA and 85.9 per cent in Tema have this facility available to them, this does not seem to be the case in Ga (57.6%), Dangme West (64.2%) and Dangme East (24.4%).

In all districts, it is more common for households to access pipe borne water from outside than from inside the house. It is noted that water tanker supply is prominent in Ga (19.2%) and Dangme East (21.2%). The main source of drinking water for Dangme East is the well

(29.5%). It is also the district with a high proportion of households whose main source of drinking water is dugout (13.3).

4.1.1.8 Toilet facility

In general, households in the region use mainly public toilet facility (27.0%) or water closet in their houses (22.1%). In the AMA, Dangme West and Dangme East, the use of public toilet facility exceeds that of the use of the water closet in houses.

While the public toilet is the most widely used in the AMA (32.7%), a large proportion of households in Dangme East (53.1%) and Dangme West (43.8%) have no toilet facility and use the bush, beach or the field. Households in Dangme West (20.9%) use pit latrines as a second choice, while those in Dangme East (15.7%), use public toilet as the second choice.

4.1.1.9 Liquid waste disposal

Liquid waste is produced as a result of cooking, bathing and washing, among others. If it is not properly disposed of it could lead to a lot of health hazards such as malaria, cholera which could bring social and economic problems to the people. Disposing of liquid waste into gutters is the most widely used method (38.9%) in the region. In the AMA, over half of the households dispose of their liquid waste into gutters, while almost a third of households in Tema also use this method.

4.1.1.10 Solid waste disposal

Solid waste can also be a health hazard if not properly disposed of. Over half of households in the region dispose of solid waste at a public dump. Disposal of solid waste at a public dump is by far the most widely used method in all the districts except Dangme East. Top on the list is the AMA, where over 60 per cent of households use this method. Burning of solid waste as a method of disposal is the most widely used method in Dangme East and the

second for households in Ga. In Dangme West, 32.8 per cent of households dump their solid waste elsewhere.

The introduction of waste management systems where vehicles are used to collect waste from households for disposal has also gained popularity in the region, as about 20 per cent of households in the region use this method. In Tema, close to a third of households use this method, while about 20 per cent of households in the AMA also have their waste collected. A very small proportion of households in both Dangme East and Dangme West patronize the collection of solid waste from households. - Source: ghanadistricts.com.

4.2 Characteristics of Respondents

In total, 113 responses representing 93% of the sample size were collected out of the 122 questionnaires given out to households from selected communities. This could be explained by the fact that most household are working or employed and spend most of their time away from home making it difficult for the researcher to locate them and collect the questionnaire.

In order to find out what the trend was in people opting for gated communities, it came out that, sixty one respondents representing 54% of respondents started living in gated communities within the past five years. Forty eight respondents who represent 42.5% also started living in a gated community for more than five years but not more than ten years now, whilst only 3.5% representing four respondents lived in gated communities for ten years and over. Figure 5 shows the trend in living in gated communities.

Trend in Living in a gated community

70
60
50
40
30
20
10
Above 10 years

6-10 years

0 - 5 years

Figure 5: Demand for gated communities

Source: Authors Field Survey, 2012.

Of the total number, only one respondent had lived in a gated community before the current gated community. The respondent moved to the current gated community because the earlier home belonged to a friend who was out of the country. From the above Figure 5, it is therefore indicative that the concept of gated communities in Ghana is gaining more grounds as more and more people are opting to live in such a community as the days goes by.

With the current trend in the demand for gated communities, more real estate developers would go into the production of gated communities. Atkinson et al (2005) cited Webster as saying more gated developments will be seen in the very near future. As more gated communities are built the more public spaces would be turned into private spaces and this could lead to a conflict between those who live in gated communities and those who live in surrounding areas because those living outside the community may eventually have to depend on the gated communities for certain facilities and infrastructure such as schools and health facilities. It could also mean that more communities will be built beautifully with good

quality housing. Atkinson et al (2005) cited Minton as saying that the numbers of gated communities in the UK is rising as some historic houses and industrial sites with existing gates are being converted to gated communities in addition to the new ones that are being built.

4.3 Why People Choose to Live in Gated Communities

There are several reasons why people choose to live in gated communities. The Table 6 below shows the various responses given and the number of respondents.

Table 6: Factors for choosing a gated community.

| Rank | Reason Why People choose gated communities | Frequency | Percent of |
|------|---|-----------|------------|
| | | | responses |
| 1 | Quality homes | 91 | 80.5 |
| 2 | Safety and Security | 84 | 74.3 |
| 3 | Class of residents/ Prestige | 75 | 66.3 |
| 4 | Services provided in the community | 72 | 63.7 |
| 5 | Beautiful and Organised environment | 57 | 50.4 |
| 6 | Sense of community | 31 | 27.4 |
| 7 | Ease in acquiring home | 9 | 8 |
| 8 | Buffer from extended family system/ peace of mind | 6 | 5.3 |
| 9 | Proximity to work | 5 | 4.4 |

Source: Author's Field Survey, 2012.

However, the predominant reasons include class of residents, safety and security, peace and calm environment, beautiful and a well planned community, ease in acquiring a home in a gated community, services provided in the community, buffer from extended family and proximity to work. From the survey, it shows that most respondents chose to live in a gated community because they felt the homes in the gated communities were of a very high quality

as about 80 % of the respondents indicated. Also, it can be seen that safety and security is another major issue that home owners require because 74.3% of the respondents said they chose to live in a gated community because of this reason.

The third predominant reason why most home owners chose gated communities is that they believed a class of people lived in those communities. These people they may consider to be responsible persons whom they could eventually make business connections with due to their association with them.

80.5
74.3
66.3
63.7

Beautiful Prestige Quality Homes Safety and Security Services

Figure 6: Top 5 reasons why People live in a gated community.

Source: Field survey, 2012.

From the survey, it can also be seen that the kinds of service provided to the gated community counts a lot for most respondents. For example, the fact that water might flow regularly for people to use for domestic purposes alone is a motivating factor for some people to choose the gated community. Over 63% of respondents gave this option as one of the reasons why they prefer to live in a gated community. The diagram above shows the top five reasons why people prefer to live in a gated community.

SANE

An interesting reason that came out was that, some respondents said they chose to live in a gated community because they wanted to be away from the pressures that family members try to put on them. Since residents are seen to be at least in the middle income brackets, their standard of living might be better off than some of their friends and family and such relations would always visit them and demand one thing or the other. But as they live in gated communities such relations are prevented from entering the community anytime they try to visit without their prior permission. Also, in the gated community hawkers are not allowed in, yet when you live in an area that is not a gated community, you might find people coming and knocking on your doors to advertise their wares which can really be a nuisance for many people.

From Figure 7 below, it can be seen that proximity to places of work does not look like it is currently an issue that concerns most residents because most people can be seen as having inverted values such that they are ready to stay long in traffic as far as they can tell people they live in a gated community. However, with the current rate of traffic congestion that seem to be occurring in Accra, it could gradually become a major concern to many people though. The graph below shows the bottom three responses given by residents for choosing to live in a gated community.

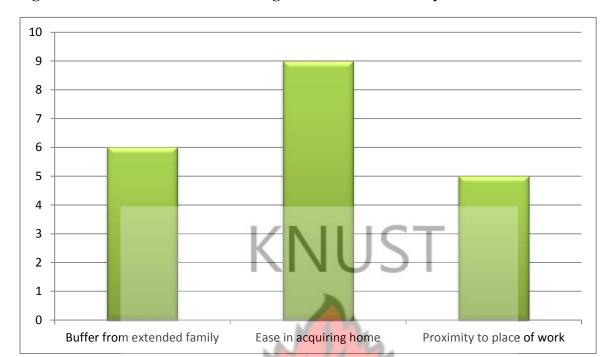


Figure 7: Bottom 3 Reasons for Living in a Gated Community.

Source: Field Survey, March 2012

4.4 Features of Gated Communities

The types of homes found in most gated communities include the detached, the semi-detached and flats. However, most respondent lived in detached homes. Out of the total number of respondents fifty eight respondents representing about 51% lived in detached homes, thirty-two respondents who are 28% of respondents lived in semi-detached houses and 20.3% of (twenty three) respondents lived in flats.

About 106 respondents said they had bought their homes whilst seven respondents had rented their homes. A check with the real estate developers also show that their homes are basically for sale and not for rent. They however said that they have a facility where they could assist home owners who wanted to rent out their home get renters.

Most houses found in the urban areas of the Greater Accra have their roofing being either asbestos or corrugated iron sheets, yet the houses in the selected gated communities had aluminium roofing sheets and shingles and roofing tiles being their form of roofing. It can

therefore be said that there is a new trend in roofing of houses since most of these gated communities are newly built.

The ceiling material too, unlike the normal plywood used extensively in Accra and other parts of the country, it was realised that 53% of (sixty) respondents said their homes had plastic T&J ceiling, about 17% (nineteen) had plastic boards as their ceiling whilst the 30% (thirty-four) had Plaster of Paris (POP) ceilings in their homes. The walling for all respondents was cement blocks and walls and all the respondents said their floors had floor tiles as their finish.

All respondents said their communities had walls around them they also said that they had security gates which were manned by security guards. The gates and security guards prevent and restrict the kind of people who enter and leave the community. No respondent said their community had a CCTV camera at the gates to monitor who enters or leaves the community and what the person enters the community to do. Also, most respondents said that they are aware the Police come to patrol round their community to ensure they scare away potential criminals who might be thinking of coming into the community to commit a crime. Atkinson et al (2005) also described gated communities as residential developments that restricts public access and may use security guards and/or closed-circuit television (CCTV), walls and gates.

4.5 Facilities and Infrastructure

The following facilities were present in all selected communities. They had playgrounds and community spaces; there was a health facility present; security post and shops. They also had eating places. However, none of the gated communities visited had a school or a library. All the respondents said it took them less than thirty minutes to drive or walk to the nearest school. Upon further probing it became clear that there were schools within walking distances but most respondents preferred to go by vehicle rather than walk. The other reason could be

that most residents had some preferred schools that they wanted their children to attend. So even in situations where a school is provided in a particular gated community, it is still possible that residents may still send their wards to other schools not located within the community. However, if over time a school located inside a gated community produces good results, all things being equal, residents would send their children to those schools. Hence, to locate a school in a gated community, it would be advisable to ensure the management is experienced and has been in the educational sector for a long time and has already made a name in that field. Also, the quality of teaching and learning should also be of a high standard. An example could be those already existing private school that have already made a name can be given such a school and enrolment levels will be instantly high. According to Fiadzo (2004), it takes an average of 35 minutes from a Ghanaian housing unit to the nearest food market or to public transport, it also takes 44 minutes to the nearest health or medical clinic, and 50 minutes to the nearest secondary school. On average, distances to important amenities are much greater in the rural areas than in urban areas.

About forty-two respondents representing 37% of respondents did not know how the facilities present in their communities were managed. Also, sixty-four respondents believed they were under private management and ownership whilst the rest (seven) of the respondents did not respond to this question. It also came out that non-residents are not allowed into the community to use the facilities that exist there, yet during certain occasions when a program such as a funeral or party is being held in the community, non-residents that are invited are permitted into the community and therefore can utilise the facilities at that time. Some 104 residents, representing about 92% of respondents affirmed this and said non-residents are not allowed to use the facilities in their community whilst the remaining (8% of) nine respondents said non residents were allowed to use the facilities. Hence, these gated communities are therefore encouraging segregation among urban residents by ensuring that

non residents do not use the facilities in them. It can also be seen that as non residents are prevented from entering and using the facilities in gated communities, possible criminals are also prevented from entering those communities and the seemingly low to nonexistent crime in gated communities could be a result of this policy. Figure 8 shows the residents who said non residents could either use or are prevented from using facilities in their communities.

No Yes ST 8% 92%

Figure 8: Use of facilities in gated communities

Source: Field Survey, 2012

4.5.1 Energy for lighting

All respondents said they had their major source of energy and lighting from the Electricity Company of Ghana (ECG). However, seventy-six (67.2% of) respondents said they used Generators as an alternative source of lighting when the power supplied by the ECG goes off. Only seven respondents said they used some form of solar energy in the case where the national grid goes off. The rest did not use either solar or generators hence could be using other alternative sources of energy such as gas, dry or wet cells. Hence though housing is seen to be already expensive for most people yet when you acquire a house you still have to incur more cost if you want to have uninterrupted power supply by either buying a generator

or getting a solar lighting system in place. Also, the high use of generators by households in gated communities would mean that during the times that the national electricity grid goes off the air quality around gated communities would be quite polluted since the generators use fossil fuel which emits carbon monoxide. Also, most of generators produce noise when they are turned on and if about sixty percent of households use them, it shows that there would be so much noise being produced by these generators and those who like calm environments will definitely be disturbed. Figure 9 illustrates the alternative energy and lighting source for residents of gated communities.

70
60
50
40
30
10
Generator Solar Others

Figure 9: Alternative source of energy

Source: Field survey, March 2012

4.5.2 Accessibility to Water

All respondents said they got their water from the Ghana Water Company Ltd (GWCL). However in situations when the water does not flow for some time, they buy it from vendors who supply them using water tankers. None of the communities visited had a water reservoir that served just the community. This could be explained by the fact that they receive their

water from the Ghana water company which has its own water distribution networks and who regularly supplies them with water. As a precautionary measure, households acquire their own water reservoirs which are in the form of overhead tanks. These are connected to the Ghana Water Company water lines at their homes and they use them to store their domestic water needs. All residents had these water tanks for storing water.

A total of ninety-two (81% of) respondents said they had water flowing for an average of five days a week yet they said the flow was constant and that it usually flowed throughout the day. The other twenty-one respondents (19%) said their water flowed on an average of four days a week.

It can therefore be said that these gated communities are prime customers of the Ghana Water Company and if they have their water flowing about five days a week then other non priority areas will be facing water problems. Also, it can be said that relatively, accessibility to water from gated communities is quite good. With the rate of flow of the water being relatively good, it might still be better for gated communities to have their own water system where they will have their own underground water pumps and their own large water reservoir so that they may not depend entirely on the Ghana Water Company for their water supply needs. In this manner, they will be supplementing the efforts of the Ghana water company and they can even sell their excess water to surrounding communities. This could help generate some revenue for the community and such revenue could be used for other developmental purposes within the community. According to the UN-HABITAT (2010) access to adequate housing, safe water and sanitation facilities, is an important ingredient in efforts to improve the health and livelihood of Ghanaians.

4.5.3 Waste Management

Waste management is a challenge to most local authorities in Ghana. This is compounded in the urban areas where the daily waste generated seems to be above the capacity of those charged with collecting them. About 99% of respondents said it was the duty of the Metropolitan Assembly to collect their waste. They also said a refuse container was placed in their communities where they deposited their waste. However, residents had to pay for the waste to be collected and they usually pay directly to the private waste collectors assigned to their area by the Assembly. Residents were also provided with waste bins in their homes where they kept their refuse

4.5.4 Road Infrastructure

On the condition of the roads leading to the communities, 21.2% (twenty-four) of the respondents said they were very good, 53.1% (sixty) said they were good and 21.2% (twenty-five) said they were okay and 3.5% (four) said they were bad.

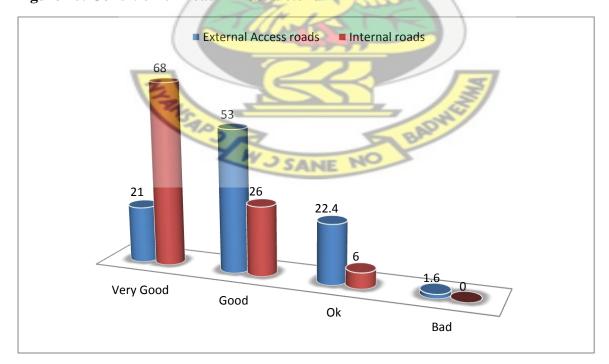


Figure 10: Condition of Road Infrastructure

Source: Field Survey, 2012

On the conditions of the streets inside the communities, 68.1% (seventy-seven) of respondents said the streets were very good, 26.5% (thirty) said they were good and 5.3% (six) said the streets inside the community were ok. It can be concluded from the above that, the streets provided by the real estate developers are of a very good quality and are also regularly maintained. It can also be said that private sector participation in the provision of certain infrastructure such as roads could be beneficial to the state. The state could allow the private sector to build operate and transfer certain streets that they have problems in building and maintaining.

4.6 Institutions Surveyed

4.6.1 Accra Metropolitan Assembly (AMA)

The Accra Metropolitan Assembly was not aware of all the Gated communities in Accra. Hence they were not aware of the number of housing units in the various gated communities within their jurisdiction. According to the AMA, there is no national policy on gated communities that is currently in place and the Assembly did not also have any by-law governing the establishment of gated communities. However, the staff of the Assembly go round to inspect facilities and buildings within communities to ensure people were not building un-approved structures in unapproved places.

The Accra Metro Sewage Unit (AMSU) for example was in charge of inspecting water facilities. The road works unit was responsible for ensuring drains were regularly emptied to prevent flooding from occurring. The waste management department and the Accra Metro Sewerage Units were responsible for managing waste in the Metropolis.

Mostly, the Assembly assigns a private waste management company to specific areas, and the companies regularly collect both the solid and liquid waste for a fee. Most households have refuse bins which they keep their solid waste in until the waste management company comes

to collect it or they send it to the nearest refuse dump site. However, some communities have large containers where residents go to dump their waste.

The Assembly in collaboration with the Real Estate Developers and the various gated communities name the various streets in the gated communities. These streets are mostly built by the real estate developers according to the Metro Planning Unit. The drains are usually opened and "U" shaped, referred to as 0.6 U drains and because they are usually emptied regularly, no flooding has been recorded in any gated community yet.

It can be said that gated communities are sited in areas which are not prone to flooding or they take proper care of their drains. This is because all the flooding that has been taking place in Accra over the years has not yet affected any gated community. It might be useful if the Town and Country Planning Department takes a second look at the areas where flooding has been taking place and see what lessons they could learn from the existing gated communities. This is because it is believed that these gated communities are usually well planned and if existing settlement are re-planned it could help in reducing the incidence of flooding that occurs there. (Daabu, 2011)

4.6.2 The Town and Country Planning Department (TCPD)

At the Town and Country Planning Department, it was realised that they did not have any database on all gated communities in Accra. It was asserted that the various Municipal and Metro offices may have some data of the communities within their jurisdiction. The department is supposed to give permits to real estate developers before they build their homes, yet some real estate developers build without coming for a permit. They usually have to follow certain requirements such as is in the plan of the particular area, ensure there is enough space between the houses, provide parking space, perform an environmental impact assessment especially when the project is big such as in the case of a gated community.

Those who in the past built their homes without the approval of the Department of Town and Country Planning had to modify some of their plans to incorporate the demands of the department. Also, some real estate developers also build their gated communities in areas which have not yet been zoned so such developments are easily incorporated into the plan of the department. The management problems usually encountered are those within the gated communities where residents complain of the developers not providing them with certain facilities. The other problem is that, sometimes workers from the department are temporarily prevented from entering some gated communities to inspect their structures there.

It is believed by the department that, gated communities have contributed greatly to the housing supply in Accra in particular. This is because the houses in most gated communities are well planned and beautifully built. The homes are also usually of a very good quality. For security reasons, it is good if gated communities block their streets from non residents.

The department of Town and Country Planning is in charge of zoning and making site plans yet it does not allocate the land where gated communities must be built. However, if a certain kind of facility or infrastructure such as a market, shopping mall, clinic or school was planned for a specific area, the department liaises with the real estate developer to at least provide such in their community. However, some gated communities are sited in areas which could have been used for other ancillary purposes such as industrial, commercial, education, civic and cultural therefore disrupting how the spatial plan would have been.

This explains why the Greater Accra Metropolitan Area Structure plan which was developed in 1991 to plan for the future growth of the city has not yet been implemented. There is very limited coordination between the Town and Country Planning Department and the metropolitan assemblies. It has obviously created a gap within the planning structure and has benefited the private sector because there is not any active enforcement of planning

standards. Hence, any individual can hire a surveyor (who may or may not be certified by the District Assembly) to develop a layout plan for their development. These layout plans are developed randomly without any consideration for trunk roads and traffic flows, educational zones and commercial areas (World Bank, 2008).

4.6.3 The Lands Commission, Survey Department and Land Valuation Board

The Lands Commission, Survey department and the Land valuation board were equally not aware of all the gated communities in Acora, hence could not tell how many residential units have been built through gated communities. They did not also know of any national policy governing the establishment of Gated Communities.

Yet it was the duty of the Lands Commission in collaboration with the survey department to give out lease permits to real estate agencies. However, some real estate agencies build their homes without getting the required permits leading to a lot of land litigation cases in Accra. The Ghana Lands Commission currently has not experienced any management or planning challenges with regards to gated communities and they believe the emergence of gated communities has contributed so much to the supply of housing in Accra. According to the Lands Commission, the advent of gated communities has added to increasing the value of lands surrounding or adjacent to gated communities.

They believe the pricing of housing might be a little high than in other areas but that such prices were commensurate with the value of the houses. Also just like most homes in Ghana, the prices of houses in gated communities they say is not usually so much linked to the lease years of the land. They rather are linked to the materials used in building the homes. Hence as the lease years reduce, the prices of the home continue to increase because the pricing does not depend so much on the years left for the lease to expire.

The Government of Ghana through the Land Administration Project (LAP), an initiative of the Ghana Government with support from the World Bank and other development partners is trying to develop a sustainable and properly functioning land administration system that will be fair, efficient, cost-effective, decentralized and enhances land tenure security (MLNR, 2011). A prominent characteristic of the land economy in Ghana is the dual land ownership and management that exist between the customary (informal) system and the state (formal) system. It is expected that most of the challenges identified in the land sector will be addressed through the Land administration project.

What is evident in the Ghanaian context is that urbanization has led to rapid increase in consumption of land in the last few years. The factors that have influenced the increase of land values are a combination of the following: population growth, inefficient town planning, activities of the Central Government, and the monopoly of land holdings.

4.6.4 The Department of Urban Roads

According to the Area engineer of the Department of Urban roads (DUR), it is not the duty of the department to construct roads that go through gated communities and they have not constructed a single road in any gated community. They however agree that blocking of roads that go through gated communities increases travel times for most commuters who live beyond and around the gated communities and this goes to add to the congestion that takes place in certain parts of the city of Accra. The department also said that gated communities do not have the right to block their roads and streets.

The Department of Urban Roads said that real estate developers construct their own roads and streets but with technical advice from the department. There is a general specification for constructing a road and these real estate developers use that standard in their construction. The real estate developers usually have a layout of their streets which fits into the layout of

the community they build and hence do not rely upon the department to draw it for them. They also said that after inspection of the streets and roads in gated communities they find them to be of good quality and shape. Maintenance of these roads and streets are also carried out by the real estate developers. Drains are also constructed by the real estate developers using the required specifications from the department of urban roads. The drains are usually open and the size depends on the size of the settlement.

Most of the roads that lead to gated communities are in good shape and regularly maintained and hence people who live in surrounding communities also benefit from using such roads. It is estimated that about three hours are spent commuting to and from work each day by the working population living at the periphery of Accra, and this situation has the tendency to reduce productivity of most people, cause an increase in air pollution through the exhaust fumes of vehicles, lead to an increase in the fuel consumption bill of the nation, and cause stress and deterioration in the overall health condition of the population.

In order to help reduce the congestion of Ghana's main cities, it will be prudent if the department undertakes the development of arterial roads and links throughout these cities. If funds could be sourced, it would be better to develop overpasses at all the major intersections where there usually is heavy congestion. This will help in reducing travel times for people who live at the periphery of the cities and that way more people will be willing to live out of town, possibly in a gated community and commute to work daily.

4.6.5 Ghana Water Company (GWCL)

The regional Distribution manager said they are not aware of all the gated communities in the greater Accra region. Currently, there is no national policy on connecting large settlements such as gated communities to the Ghana water company system. Mostly, it is homeowners who apply for their homes to be connected and not the real estate developers. So it is only

when the house has been built that the home owner come for a water meter to be allocated to him. Basically, most homes in gated communities have overhead water tanks where they store their water. The company has not built any reservoir for any gated community and no gated community has built their own water reservoir that they are aware of.

The only challenge they face with regards to connecting water to gated communities is that of infrequent flow of water to these communities. However, they try to connect them to their pipes where water flows most of the time. During times that the water does not flow for some time, residents can buy from vendors into their overhead tanks.

Homes in gated communities are connected to the post paid meters and on the average, most customers in gated communities pay their water bills regularly and on time. They also maintain and ensure that water flows to gated communities by regularly maintaining the pipe lines. The Company however feels that the supply of water to homes in gated communities does not in any way affect the supply of water to surrounding communities. Yet, because of the infrequent flow of the water, it can be said that Accra suffers from insufficient quantities of treated water and this implies that when someone is supplied water, the other person may not be supplied.

4.6.6 The Electricity Company of Ghana (ECG)

The Regional safety engineer did not know of all the gated communities in the Greater Accra and that there was no national policy on connecting such urban settlements to the national grid. Some gated communities apply for their transformers and meters before they complete building their communities. They are usually allocated a dedicated transformer which ensures that they have lights most of the time.

However, it came out that some real estate developers try to acquire their own transformers for their gated communities. These transformers mostly have a capacity bigger than what is

required. This allows for the transformer not to get overloaded and also take on more new connections. Most gated communities have their electricity connection being three (3) phases so that chances of them having power cuts is minimal. The ECG said that if an individual acquires his own electricity pole or transformer for his home or community, 24 hours after installation, it becomes the property of the state.

The challenges they face with regards to gated communities is that some people illegally connect to the system before applying for the meters. Others also apply for the meters when they have not finished building their homes. The ECG said because their revenue depends on the number of their customers, they sometimes simply overlook these illegalities and still connect people who apply for meters. They also said there are times they delay in giving out meters especially when at the particular time so many people have already requested for meters.

The ECG usually inspects the wiring done at the homes before supplying them with electricity so as to prevent fires and other illegal connections. Homes in gated communities are given either prepaid or post-paid meters and most post paid customers do not pay their bills on time. The ECG therefore, should rather install only prepaid meters in these gated communities as this will allow households to become conscious of their energy consumption. Also with the prepaid system, default rate of payment will be eliminated as people will only consume what they have already paid for. The ECG said that the supply of electricity to gated communities does not affect the supply to surrounding and neighbouring communities though sometimes it leads to low voltage in such communities.

Ghana obtains its energy supplies from electricity, petroleum, wood products, and other renewable energy sources such as solar energy. This indicates that electric power is only a component of Ghana's energy supply mix, it is seen as the major player in terms of powering

industrial, commercial and urban development in Ghana. The other sources of energy should be developed and enhanced to ensure there is not an over reliance on electricity.

4.6.7 The Ghana Police Service

The Ghana Police Service said there were about twenty gated communities in Greater Accra. Most gated communities are protected by private security companies and that the Ghana Police service licenses the security agencies that operate in gated communities. Some gated communities have also built police post in their communities and anytime there is a crime, the communities and the private security report to the Police for further action.

The police have also initiated efforts of ensuring collaboration between the Ghana Police Service and gated communities by responding swiftly to any call from gated communities. Their patrol teams also move around gated communities to scare prospective criminals away. According to the Ghana police, the crime recorded in gated communities is very low and in most cases non-existent as compared to other parts of the city. They also said for security reasons gated communities can block the streets from the rest of the public. They said, though the provision of security to gated communities can redirect crime to adjacent and neighbouring communities it does not mean that the crime in surrounding communities is as a result of the security in the gated communities.

4.6.8 Real Estate Developers

All the sampled real estate developers had built walls around their communities and also provided the communities with security gates. None had provided CCTV cameras at their gates yet. The real estate developers said they got their building certification from the Lands Commission and the Town and Country Planning Departments. They however contended that getting these permits was sometimes strenuous and time consuming for them. The real estate

developers said they had never had any encounter with city authorities with respect to their properties.

The estate developers also say they provide their gated communities with playgrounds and community parks, clinics and pharmacies, a security post for the security at the gates and shops in a bid to ensure residents have easy access to them. Such facilities are also present in surrounding communities and residents can also opt for those located outside the community. All the necessary facilities are within the proximity of their gated communities making accessibility to them very easy. They also said they provide their communities with the necessary infrastructure and facilities for their residents to use and so do not expect non-residents to patronise them.

On the provision of electricity to their communities they said they provided electricity poles for their communities and also installed street lights in their estates. They also agreed that, they ensured all the homes in their communities are correctly wired before they are connected to the national grid. None of the real estate developers had their own source of energy for their community. They agreed with the electricity company of Ghana that gated communities are having three phases of electricity connection.

The real estate developers also said they connect their communities to the pipe line of the Ghana Water Company. None of the sampled real estate developers had built a large water reservoir for their gated communities. They said mostly, residents of their gated communities buy water from vendors to supplement their water needs when the need arises. They all said they were confident that the water supply to their communities could still take on more housing units.

Waste management to gated communities was provided by private waste management companies. Predominant amongst them is Zoomlion Company. Residents usually pay to the

agents of these waste management companies to collect their waste. The waste management usually provides the households with an invoice upon which payment is done. Initial landscaping in the community is done by the real estate agencies but clearing of lawns and gardens is done by the various households. None of the real estate agencies had provided a black water treatment plant for their community currently. They all depend on the public system for such services.

On the issue of their roads and streets, the real estate developers construct and maintain the streets inside the gated communities whilst the department of urban roads also handles those roads leading to the gated communities. Streets in gated communities are of high quality and have single lanes as set out by the department of urban roads. In addition to the streets, they real estate developers also provide the drains in the gated communities and they are usually opened and "U" shaped and they are regularly cleaned. None of the sampled gated communities has experienced flooding so far.

Real estate developers build their gated communities where residents are able to access the internet, television, telephone services. These services are the public services available to all in the greater Accra region. Hence no gated community has set up their own internet service provider which provides internet services to only the gated community. None of the real estate developers has also established a private television station for the residents of their gated communities yet, neither has any of them set up their own telephone service where residents can connect to their homes.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary of findings

It can be inferred from the discussions that the emergence of gated communities affect urban planning and management in the area of infrastructure and services provision such as water, electricity, roads, education, health, telecommunication. It leads to urban sprawl and its attendant challenges such as traffic congestion and pollution since residents have to travel daily to their work places. However, the NDPC (2010) has it that the government's human settlements development policy focuses on spatial/land use planning and management; urban development and management; housing/shelter; with slum upgrading and prevention as a core component.

In general, there is no policy, legal or regulatory framework governing the establishment of gated communities in Ghana. This could be attributed to the fact that such urban forms are still new in Ghana and have not yet posed any serious spatial development challenge to planners in general and also, there seem to be very little collaboration between the various planning institutions.

The various real estate developers provide the necessary infrastructure and services such as the roads/streets, drains, laying of pipeline and electricity wiring during the construction phase of the gated communities. The study revealed that the housing and infrastructure provided by these real estate developers are mostly of a good quality. However, when the residents move in, the management of the community is shifted to the community management boards. The homeowners have to get their own water and electricity meters for their homes. The utility companies also get their services to their consumers who apply for them.

From the study, the emergence of gated communities seem to be contributing to the sprawl of the city of Accra as no gated community can be found in the center of Accra but rather at the outskirts. The gated communities are basically residential in nature and not commercial or civic land uses leading to residents of gated communities commuting daily between home and work adding to the congestion already taking place in the streets of Accra. It can also be seen that spaces that were once public become private as a result of the gated communities since non residents are excluded from using facilities in the gated communities. Also, the high prices associated with gated communities, displaces the core poor and immigrants from the housing and land markets, leading to the formation of slums in the city. According to the Bank of Ghana (2007), high property prices in the urban centers of Ghana added to the fast growing middle-class has made the housing industry one that policymakers must have a look at.

5.2 Conclusions

Waste management is one of the most frequently raised concerns by people in urban areas such as Accra Ghana. Most MMDAs spend a large part of their revenues on solid waste management yet the situation seems to be far from being solved. No matter where people live, they try to keep their environments clean even those who live in slums try in their own way to ensure their environment is also clean. However, residents of gated communities have a well planned neighbourhood and their environments are much cleaner. Living in gated communities will ensure people live in much cleaner environments. However, it would also lead to segregation in the urban areas as developments are gated off from the public.

The government should assist the Metropolitan and Municipal Assemblies to develop the institutional and regulatory framework and capacity to manage social services and facilities in the cities. Services such as water and electricity are usually provided by monopolistic public agencies which are not subject to pressure of competition for improving performance and

users are also not usually well positioned to demand for quality services. However, government could ensure services are affordable to all and a type of incremental supply standards should also be demanded from service providers such as the Ghana Water Company and the Electricity Company of Ghana. Such agencies should also be effective and efficient and be able to increase their coverage to all newly developing areas ahead of demand. Real estate developers who build gated communities should consider establishing or liaising with other private agencies to provide their communities with alternative services such as solid waste disposal and recycling systems. This will ensure high quality services are provided to their gated communities.

5.3 Recommendations

The emergence of gated communities has led to certain challenges for urban planning and management and based on the findings the following recommendations are made.

1. Gated communities should be built in such a way that they always incorporate the zoning already done for the area. This will ensure that the distribution of certain facilities such as markets, clinic/ hospitals, police station and office spaces are available. This will help to decentralise their concentration in certain areas only such as the central business district. One of the major challenges facing most African cities including Accra is congestion on the roads. It is envisaged that a time will come when people will value living close to their work places and because the current crop of gated communities are all located at the periphery of the city it will be difficult for people to commute from their homes to the central business district. People may therefore prefer to live nearer their places of work and though gated communities may have almost all the services and facilities that are needed people may still not opt for them due to the fact that they are located far from their workplace. If this happens, it

would have very serious financial implications for the real estate developers and the national economy as a whole.

Also in areas where zoning has not yet been done, the real estate developers should collaborate with the Town and Country Planning Department before they start their developments. This way the communities will be helpful in ensuring the city develops according to plan. The gated communities in Ghana are basically residential gated communities which means real estate developers are concerned with the provision of basically residential units. This in the long run might lead to the distortion of urban plans. However, it will be recommended that real estate developers begin to go into the provision of industrial gated communities too so that certain business and industries which acquire their gated communities would equally ensure they provide residential units for their employees. Land cost could also be met by spreading payment over a long period of time so as to make it more affordable to those in the lower income brackets too. This way the slums that also emerge beside the gated communities could be reduced.

2. According to the UN-HABITAT (2010) the housing delivery system has not been able to meet demand over the years and this has led to strains on the existing housing stock and infrastructure, especially in urban areas such as Accra. With regards to the provision of infrastructure such as roads, it is the duty of the state to provide citizens with good roads, water and energy. Yet real estate developers have to provide roads, water and electricity to gated communities and residents even pay to maintain the streets in their communities. It shows that people are willing to pay more for certain services, so planners should zone so many places where they can have gated communities developing. This would ensure that the private sector directly

contributes to the development of most cities. It is a generally accepted notion that housing units in gated communities are relatively more expensive than those found outside gated communities yet when you add the value of the infrastructure that the real estate developers provide to these gated communities, it will be realised that the cost of all these facilities and infrastructure are factored into the cost of the houses, making them seem expensive. The state should therefore give some tax relief to people who buy homes in gated communities. This will in the long run reduce the price burden of homes in gated communities and residents who were possibly paying double for such services and facilities. Since government funds most of its developments from the taxes its citizens pay and residents of gated communities pay for same facilities provided in their communities. Alternatively, the Department of Urban Roads for example could construct trunk roads to newly developing areas before development starts on those areas so as to be able to restrict anybody from blocking the road in a gated community and ensure those living in surrounding settlements can conveniently use those roads.

3. The Town and Country Planning Department in collaboration with the Lands Commission and Survey Department and the various MMDAs should ensure that they come out with a code of conduct for real estate developers who build gated communities for example, to publish all their activities and make sure they are followed. This they can implement if they effectively collaborate with GREDA. Also, government should come out with clear cut policies that target and regulate gated communities in the manner in which they restrict non residents from entry. This could be done through GREDA or the city planners such as the MMDA's, the Ghana Lands Commission or the Town and Country Planning Department.

- 4. The Ghana Real Estate Developers Association (GREDA) should ensure that all their members report on their activities to them. This way the association will know exactly how much they are contributing, how much each member is contributing, which members are building gated communities and which are not. GREDA is aware that some of their members build gated communities yet they do not have accurate data on numbers. Knowing the number of gated communities and how many units are in each community is very important for planning since it is only when you know exactly what is being done that you can effectively plan for it.
- 5. AMA and the Town and country planning Department should issue laws for real estate developers to have their own black water treatment system. This will reduce the burden on the Assembly in their provision of waste management in the major cities. Waste generated from gated communities could even be recycled into some usable forms such as energy for lighting.

5.3.1 Long Term (National Level Interventions)

- 1. The Ministry of Water, Works and Housing should actively involve GREDA in their housing projects and programs. Government could guarantee loans for recognized and well performing members of GREDA to use in building houses for citizens. This way the pricing could be affordable for most Ghanaians.
- 2. To help reduce the exclusion of non residents from gated communities, real estate developers can have a commercial area, educational area and a health area exclusively, where entrance could be through a different gate from the residential area. This way, non residents could enter and benefit from the facilities provided without going into the residential area. When developers build their gated

communities in such manner, residents who want their privacy will be accorded that and non-residents who wish to use facilities within gated communities will also become satisfied. The Ghana Real Estate Developers Association (GREDA) must come out with a policy which binds all members to regularly declare and publish their activities such as the number of homes they have built, where they have built them and facilities they have provided to those homes. This will ensure healthy competition among members.

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3. From the study, remittances play a key role in the housing sector in Ghana. The Bank of Ghana says that the expansion in the housing sector is driven to a large extent by the increase in remittances. It also has it that it could be basically driven by improved access to global financial markets due to the political and economic stability that Ghana enjoys. Hence, the state should bring policies which reduce the cost of sending money to Ghana. This way, most Ghanaians living abroad will be motivated to send money home and build homes in Ghana.

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APPENDICES

Appendix 1: GREDA Survey

Kwame Nkrumah University of Science and Technology College of Architecture and Planning

Department of Planning

TOPIC: The emergence of gated communities in Ghana and their implications for urban planning and management.

(A) GREDA SURVEY

| (a)Per | sonal | Data of Respondent | ιKNU | JST | |
|--------|-------|---------------------------------|----------------------------------|----------------------|------------------|
| 1. | | 1 | | | |
| 2. | Date | of interview | | | |
| 3. | When | n was GREDA forme | ed? | | |
| 4. | As of | today, how many m | ember <mark>s do you have</mark> | nationwide? | |
| 5. | How | many can be found i | n the Greater Accra | alone? | |
| 6. | How | many of your memb | ers have built gated | communities? | <u> </u> |
| 7. | How | many g <mark>ated commur</mark> | nities are in Ghana a | nd which regions are | they located in? |
| | No | Region | Number of Gated | Number of real | Total Number of |
| | | | Communities | estate developers | units |
| | | | Mul | | |
| | 1 | Ashanti | | | |
| | 2 | Brong Ahafo | 355 | | |
| | 3 | Central | Wasser | S BAD | |
| | 4 | Eastern | SANE | | |
| | 5 | Greater Accra | | | |
| | 6 | Northern | | | |
| | 7 | Upper East | | | |
| | 8 | Unner West | | | |

| | | 10 | Western | | | |
|------------|-----------------|----------|--------------------------------------|------------------------------------|---|--------------------|
| | | | TOTAL | | | |
| | 8. | | • | GREDA been able | e to build through | gated communities? |
| (b) | 9. Fe | How | many of such units of the gated comm | VNII | ed communities? | |
| | 10. | . Whic | h gated community | is the oldest in Ghai | na? | |
| | | | _ | - | | |
| | 12. | . How | many units does it h | ave? | | [|
| | 13. | . Whic | h gated community | is the biggest in Gha | ana? | |
| | | | | | | |
| | 15. | . How | many units are there | e? | |) |
| | 16 | . How | many residential un | its can be found the | re? | |
| | 17 | . What | is the housing tenur | re status?(a) rent { | (b) sale { } (c) bot | h { } |
| | 18 | . What | materials do membe | ers of GREDA use t | to build their houses? |) |
| | | • | Roofing | |))) | |
| | | • | Ceiling | | | |
| | | • | Wall <mark>ing</mark> | | | / |
| | | • | Floor finish | | NO. W. | |
| | 19 | . Do al | l the gated commun | ities <mark>have</mark> walls arou | and them? (a) yes { | } (b) no { } |
| | 20 | . Has t | he communities got | security gates that r | estricts access? (a) y | es { } (b) no { } |
| | 21. | . If no, | what kind of access | restrictions do they | ggest in Ghana? e found there? ?(a) rent { } (b) sale { } (c) both { } REDA use to build their houses? e walls around them? (a) yes { } (b) no { } gates that restricts access? (a) yes { } (b) no { } | |
| | | i. | | | | |
| | | ii. | | | | |
| | | iii. | | | | |
| | | | | | | |

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22. Are there security personnel at the gates of gated communities? (a) yes { } (b) no { }

.....

| | 23. | Do some gated communities have CCTV cameras at their gates? (a) yes { } (b) no { |
|-----|-----|--|
| | | } |
| | 24. | If yes, who monitors them? |
| | 25. | What role do the police play in the provision of security in gated communities? |
| | | |
| | | |
| | | |
| (c) | Fac | cilities and Infrastructure |
| (-) | | Who gives building certification to real estate developers to build their gated |
| | _0. | communities? |
| | | |
| | 27 | What processes do you go through in acquiring development and building permits? |
| | 21. | |
| | | |
| | | |
| | 20 | WILLIAM CONTRACTOR OF THE CONT |
| | 28. | What types of permits do you get? |
| | | |
| | | |
| | 29. | Have some of your member's encountered problems with city authorities regarding |
| | | their gated communities? (a) Yes { } (b) No { } |
| | 30. | If yes what kind of encounter? |
| | 31. | Can the following be found in gated communities in Ghana? |
| | | (i) school (a) Yes { } (b) No { } |
| | | (ii) playground (a) Yes { } (b) No { } |
| | | (iii) clinic (a) Yes { } (b) No { } |
| | | (iv) police post (a) Yes { } (b) No { } |
| | | (v) shops/ mall/ supermarket (a) Yes { } (b) No { } |
| | | (vi) community parks or spaces (a) Yes { } (b) No { } |
| | | (vii) eating places (a) Yes { } (b) No { } |
| | | (viii) library (a) Yes { } (b) No { } |
| | 32. | Which of them? (please list and tick) |

| Gated | School | playg | Clinic | Police | Community | Eating | library |
|-----------|--------|-------|--------|----------|-----------|--------|---------|
| community | | round | | Posts | park | place | |
| | | | | | | | |
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| | 240 | - | | | SACHE | | |
| | 7 | WS | SANE | NO | | | |
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- 33. Are non-residents allowed to utilize these facilities? (a) yes { } (b) no { }
- 34. If they are not located within the community, what is usually the travel time between gated communities and these facilities?
 - (i) school (a) less than 30 minutes drive { } (b) more than 30 minutes drive { } (c) less than 30 minutes walk { }

| (ii) playground (a) less than 30 minutes drive { } (b) more than 30 minutes drive { } |
|---|
| (c) less than 30 minutes walk { } |
| (iii) clinic (a) less than 30 minutes drive { } (b) more than 30 minutes drive { } (c) |
| less than 30 minutes walk { } |
| (iv) police post (a) less than 30 minutes drive { } (b) more than 30 minutes drive { } |
| (c) less than 30 minutes walk { } |
| (v) shops/ mall/ supermarket (a) less than 30 minutes drive { } (b) more than 30 |
| minutes drive { } (c) less than 30 minutes walk { } |
| (vi) community parks and spaces (a) less than 30 minutes drive { } (b) more than 30 |
| minutes drive { } (c) less than 30 minutes walk { } |
| (vii) eating places (a) less than 30 minutes drive { } (b) more than 30 minutes drive { |
| } (c) less than 30 minutes walk { } |
| (viii) Library (a) less than 30 minutes drive { } (b) more than 30 minutes drive { } |
| (c) less than 30 minutes walk { } |
| (d) Energy Provision |
| 35. Do real estate developers provide electricity to their gated communities? |
| (a) Yes { } (b) No { } |
| 36. If no, is it the state that provides the electricity? (a) Yes { } (b) No { } |
| 37. Are they normally connected to the national grid? (a) Yes { } (b) No { } |
| 38. If no, what other source of electricity do they use? |
| |
| 39. Do real estate developers buy their own transformer? (a) Yes { } (b) No { } |
| 40. How many phases are gated communities usually connected to? |
| 41. Do gated communities share their transformers with neighbouring settlements? |
| (a) Yes { } (b) No { } |
| 42. Does the transformer have the capacity to take on future expansions and |
| developments? (a) Yes { } (b) No { } |
| |
| (e) Water Provision |
| 43. Do all gated community get their water supply from the Ghana water company? |
| (a) Yes { } (b) No { } |
| 44. If no from where? (a) Boreholes provided by real estate developer { } (b) buys from |
| vendors { } (c) other { } |
| 45. In other, please specify |

| | 46. | Is the water supplied, regular and constant? (a) yes { } (b) no { } |
|-------------|-----|---|
| | 47. | Do gated communities have their own reservoirs? (a) yes { } (b) no { } |
| | 48. | If yes, who provides the reservoir? |
| | 49. | Are the sources of water supply usually having the capacity to take on future |
| | | expansions and developments in and around the community? (a) Yes { } (b) No { } |
| (f) | Wa | ste Management and Landscaping |
| | 50. | Who cleans in and around gated communities? |
| | 51. | Do residents pay for this service? (a) yes { } (b) no { } |
| | 52. | If yes, how is payment done? |
| | 53. | How is refuse in gated communities usually disposed off? (a) refuse dump/container in the community { } (b) refuse dump/container outside the gated community { } (c) |
| | | Door to door collection by private collector { } (d) Open space { } |
| | 54. | Do residents pay for their domestic refuse to be collected? (a) Yes { } (b) No { } |
| | | . Who's duty is it to provide waste collection in the community (a) the real estate |
| | | developer { } (b) the local authority (AMA) { } |
| | 56. | Who takes care of landscaping in the gated communities? (a) residents { } (b) real |
| | | estate developer { } (c) department of parks and gardens { } (d) private organization |
| | | |
| | 57. | . Who pays for the landscaping to be done? |
| | 58. | . Do gated communities have their own waste (black water) treatment system or they |
| | | depend on the public system? (a) Private { } (b) Public { } (c) other { } |
| | 59. | If other, what is the system? |
| (g) | Ro | ad infrastru <mark>cture</mark> |
| | 60. | Who provides the access roads to the community (a) the real estate developer { } (b) |
| | | Urban roads { } (c) Local authority { } |
| | 61. | . Who provides the access roads and streets in the community (a) the real estate |
| | | developer { } (b) Urban roads { } (c) Local authority { } |
| | 62. | The streets in gated communities are usually made up of how many lanes? (a) 1 lane { |
| | | } (b) 2 lanes { } (c) both { } |
| | 63. | Are these roads and streets made to the standards of the department of urban roads? |
| | | (a) Yes { } (b) No { } |
| | 64. | If no, what are the standards? |
| | 65. | Who determines the standards? |
| | 66 | Is enough space reserved for future expansions of the roads to take place? |

| (h) | Telecommunication Infrastructure |
|-----|--|
| 72. | Has flooding ever occurred in any gated community before? (a) Yes { } (b) No { } |
| 71. | Who determines this standard? |
| 70. | Do gated communities usually have open or covered drains? |
| 69. | If no, what standard is used? |
| 68. | Are the drains also standardized? (a) Yes { } (b) No { } |
| | and trucks { } (b) heavy duty vehicles { } (c) any vehicle { } |
| 67. | What types of vehicles are allowed to use such roads and streets? (a) small vehicles |
| | (a) Yes { } (b) No { } |

73. Do gated communities have the following telecommunication infrastructure in them? (*Please list and tick*)

| Gated Community | Internet | Telephone | Television | Remarks |
|-----------------|-------------|-----------|--------------|---------|
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74. What is their coverage? (a) limited to only the gated community { } (b) extended to surrounding neighbourhoods { }

Appendix 2: Real Estate Developers Survey

Kwame Nkrumah University of Science and Technology College of Architecture and Planning

Department of Planning

TOPIC: The emergence of gated communities in Ghana and their implications for urban planning and management.

(b) REAL ESTATE DEVELOPERS SURVEY

| (a)Pers | sonal Data of Respondent |
|---------|---|
| 1. | Name of real estate developer: |
| 2. | Date of interview. |
| 3. | Is it a Ghanaian company? (a) Yes { } (b) No { } |
| 4. | If no, what is the ownership type? |
| 5. | What is the coverage of your operations? (a) only in the greater Accra region { } (b) |
| | in other regions of Ghana { } (c) Ghana and other countries { } |
| 6. | How many years have you operated in Ghana? (a) less than 5 years { } (b) 5 years to |
| | 10 years { } (c) more than 10 years { } |
| 7. | How many gated communities have you built in Ghana: |
| 8. | In total, how many residential units have you built since you started operating in |
| | Ghana? |
| 9. | Are they all located in the Greater Accra Region? (a) Yes { } (b) No { } |
| | itures of the <mark>gated co</mark> mmunity |
| 10. | How old is your gated community? |
| 11. | How many residential units do you currently have in your gated (sampled community) |
| | community? |
| 12. | Type of house (a) detached { } (b) semi detached { } (c) Flats { } (d) all |
| 13. | Housing tenure status?(a) rent { } (b) sale { } (c) both { } |
| 14. | What materials are your houses made up of? |
| | • Roofing |
| | • Ceiling |
| | • Walling |
| | Floor finish |

15. What are your prices?

| Housin | ng Type | Sale (Gh¢) | Rental (Gh¢) |
|---------------|------------|------------|--------------|
| Detached | 3 bedrooms | | |
| | 2 bedrooms | | |
| | 1 bedroom | | |
| Semi-detached | 3 bedrooms | | |
| | 2 bedrooms | | |
| | 1 bedroom | | |
| flats | 3 bedrooms | ICT | |
| | 2 bedrooms | | |
| | 1 bedroom | 001 | |

| 16. Is there a road that goes through the community? (a) yes { } (b) no { } |
|--|
| 17. Is the road open to the public? (a) yes { } (b) no { } |
| 18. Do you think there are other uses that this road could be put to? (a) yes { } (b) no { } |
| 19. If yes, what are these uses? |
| |
| |
| 20. Do you have a wall around your community? (a) yes { } (b) no { } |
| 21. Has the community got a security gate that restricts access? (a) yes { } (b) no { } |
| 22. If no, what kind of access restrictions do you use? |
| 23. Do you have security personnel at your gates? (a) yes { } (b) no { } |
| 24. Do you have CCTV cameras at your gates? (a) yes { } (b) no { } |
| 25. If yes, who monitors them? |
| 26. What role do the police play in the provision of security in your community? |
| |
| |
| |

| (c) Facilities and Infrastructure | |
|--|----|
| 27. Where did you get the building certification? | |
| | |
| 28. Are you issued with occupation permit? (a) Yes { } (b) No { } | |
| 29. What processes do you go through before getting a permit? | |
| | |
| | |
| | |
| 171 11 10= | |
| 30. Have you encountered problems with city authorities regarding your gated community? (a) Yes { } (b) No { } | l |
| 31. If yes what kind of encounter? | |
| 32. Do you have the following facilities at your community? | |
| (i) school (a) Yes { } (b) No { } | |
| (ii) playground (a) Yes { } (b) No { } | |
| (iii) clinic (a) Yes { } (b) No { } | |
| (iv) police post (a) Yes { } (b) No { } | |
| (v) shops/ mall/ supermarket (a) Yes { } (b) No { } | |
| (vi) community parks/spaces (a) Yes { } (b) No { } | |
| (vii) eating places (a) Yes { } (b) No { } | |
| (viii) library (a) Yes { } (b) No { } | |
| 22. A | |
| 33. Are non-residents allowed to utilize them? (a) yes { } (b) no { } | |
| 34. If they are not present at the community, how far away are the nearest from the | Э |
| community? | .\ |
| (i) school (a) less than 30 minutes drive { } (b) more than 30 minutes drive { } (c) |) |
| less than 30 minutes walk { } | 1 |
| (ii) playground (a) less than 30 minutes drive { } (b) more than 30 minutes drive { | } |
| (c) less than 30 minutes walk { } | ` |
| (iii) clinic (a) less than 30 minutes drive { } (b) more than 30 minutes drive { } (c) |) |
| less than 30 minutes walk { } | 1 |
| (iv) police post (a) less than 30 minutes drive { } (b) more than 30 minutes drive { | } |
| (c) less than 30 minutes walk { } | |

| minutes drive { } (c) less than 30 minutes drive { } (b) more than 30 minutes drive { } (c) less than 30 minutes walk { } | 50 |
|---|-----|
| | 20 |
| (vi) community parks/ spaces (a) less than 30 minutes drive { } (b) more than 3 | ou |
| minutes drive { } (c) less than 30 minutes walk { } | , |
| (vii) eating places (a) less than 30 minutes drive { } (b) more than 30 minutes drive | ; { |
| } (c) less than 30 minutes walk { } | |
| (viii) library (a) less than 30 minutes drive { } (b) more than 30 minutes drive { } (| c) |
| less than 30 minutes walk { } | |
| (d) Energy Provision 35. Do you provide electricity to your community? (a) Yes { } (b) No { } | |
| 36. If no, is it the state that provides the electricity? (a) Yes { } (b) No { } | |
| 37. Are you connected to the national grid? (a) Yes { } (b) No { } | |
| 38. If no, what is the source of electricity to your community? | |
| 39. Do you think of using alternative sources of power such as solar energy and | |
| generators? (a) Yes { } (b) No { } | |
| 40. How would you want to use them? | |
| | |
| | • |
| (Marie) | • |
| | • |
| 41. Did you buy your own transformer? (a) Yes { } (b) No { } | •• |
| 42. How many phases is your electricity connection? | |
| 43. Do you share your transformer with neighbouring settlements? (a) Yes { } (b) No { | } |
| 44. Does the transformer have the capacity to take on future expansions and | , |
| developments? (a) Yes { } (b) No { } | |
| (a) Water Branisian | |
| (e) Water Provision | , |
| 45. Does your gated community get water from the Ghana water company? (a) Yes { | } |
| (b) No { } | |
| 46. If no from where? (a) Boreholes provided by real estate developer { } (b) buys fro | m |
| vendors { } (c) other { } | |
| 47. In other, please specify | |

| | 48. | Does the gated community have its own water reservoir? (a) yes { } (b) no { } |
|--------------|-----|---|
| | 49. | If yes, who provided the reservoir? |
| | 50. | Is the water supply, regular and constant? (a) yes { } (b) no { } |
| | 51. | How many times does water flow in a week? |
| | 52. | Does the water flow throughout the day? (a) yes { } (b) no { } |
| | 53. | Is your source of water supply having the capacity to take on future expansions and |
| | | developments in and around the community? (a) Yes { } (b) No { } |
| (f) | Wa | ste Management and Landscaping |
| | 54. | Who cleans in and around the gated community? |
| | | Do residents pay for this service? (a) yes { } (b) no { } If yes, how is payment done? |
| | | How is refuse disposed off in the community? (a) refuse dump/ container in the |
| | | community { } (b) refuse dump/ container outside the gated community { } (c) Door |
| | | to door collection by private collector { } (d) open space { } |
| | 58. | Do residents pay for their domestic refuse to be collected? (a) Yes { } (b) No { } |
| | 59. | Who's duty is it to provide waste collection in the community (a) the real estate |
| | | developer { } (b) the local authority (AMA) { } |
| | 60. | Who takes care of landscaping in the community? (a) residents { } (b) real estate |
| | | developer { } (c) department of parks and gardens { } (d) private organization { } |
| | 61. | Who pays for the landscaping to be done? |
| | 62. | Do your gated community have its own waste (black water) treatment system or they |
| | | depend on the public system? (a) own { } (b) Public { } (c) other { } |
| | 63. | . If other, what is the system? |
| | | |
| (g) | Ro | ad infrastructure |
| | 64. | Who provides the access roads to the community (a) the real estate developer { } |
| | | (b) Urban roads { } |
| | 65. | Who provides the access roads and streets in the community (a) the real estate |
| | | developer { } (b) Urban roads { } |
| | 66. | How many lanes are your streets made of? (a) 1 lane { } (b) 2 lanes { } |
| | 67. | Are these roads and streets made to the standards of the department of urban roads? |
| | | (a) Yes { } (b) No { } |
| | 68. | If no, what are the standards? |
| | 69. | Who determines the standards? |

| 70. Do they take the future expansion of the roads into consideration during construction |
|---|
| (a) Yes { } (b) No { } |
| 71. What type of vehicles can use the roads? (a) small vehicles and trucks { } (b) heavy |
| duty vehicles { } (a) all vehicles { } |
| 72. Are the drains also standardized? (a) Yes { } (b) No { } |
| 73. If no, what standard is used? |
| 74. Do you have open or covered drains in your community? |
| 75. Who determines this standard? |
| 76. Does your community get flooded when it rains? (a) Yes { } (b) No { } |

Telecommunication Infrastructure

77. Does your gated community have the following telecommunication infrastructure in place? (*Please tick*)

| Ownership | Internet | Telephone | Television | Remarks |
|-----------|----------|-----------|------------|---------|
| Private | 4 | 113 | | |
| Public | | | | |

78. What is their coverage? (a) limited to only the gated community { } (b) extended to surrounding neighbourhoods { }

Appendix 3: Household survey

Kwame Nkrumah University of Science and Technology College of Architecture and Planning

Department of Planning

TOPIC: The emergence of gated communities in Ghana and their implications for urban planning and management.

(c) HOUSEHOLD SURVEY

| (a)P | ers | sonal Data of Respondent | | | |
|--------------|--------------------------------------|---|--|--|--|
| | 1. | Status of respondent: | | | |
| , | 2. | Date of interview. | | | |
| | 3. | Name of gated community: | | | |
| 4 | | Name of developer: | | | |
| : | 5. | Location of gated community | | | |
| (| 6. | How many years have you lived in the gated community? (a) less than 5 years { } (b) | | | |
| | | 5 years to 10 years { } (c) more than 10 years { } | | | |
| , | 7. | Have you lived in any gated community before this one? (a) Yes { } (b) No { } | | | |
| ; | 8. | If yes, which gated community was that? | | | |
| | 9. | Where is it located? | | | |
| | 10. | Why did you choose to live in this gated community? | | | |
| | (i) | | | | |
| (| (ii) | | | | |
| (| (iii) | 100 | | | |
| (| (iv) | WO SANE NO | | | |
| (b)] | Fea | atures of the gated community | | | |
| | 11. | What is the type of your home (a) detached { } (b) semi detached { } (c) Flats { } | | | |
| | 12. How many bedrooms are there? | | | | |
| | 13. | Did you buy or rent it? | | | |
| | 14. How much did you buy or rent it? | | | | |
| | 15. | What materials is your house made of? | | | |
| | | • Roofing | | | |

Ceiling

| Walling |
|--|
| • Floor finish |
| 16. Do you have a wall around your community? (a) yes { } (b) no { } |
| 17. Has the community got a security gate that restricts access to non-residents? (a) yes |
| } (b) no { } |
| 18. If no, what kinds of access restrictions are used in your community? |
| 19. Do you have security personnel at your gates? (a) yes { } (b) no { } |
| |
| 20. Are you aware if there are CCTV cameras at your gates? (a) yes { } (b) no { } 21. If yes, who monitors them? |
| 22. Are you aware of the role the Ghana police plays in providing security to your |
| community? |
| |
| |
| (c) Facilities and Infrastructure |
| 23. Are the following facilities present in your community? |
| (i) school (a) Yes { } (b) No { } |
| (ii) playground (a) Yes { } (b) No { } |
| (iii) clinic/ health facility (a) Yes { } (b) No { } |
| (iv) police posts (a) Yes { } (b) No { } |
| (v) shop/ mall/ supermarket (a) Yes { } (b) No { } |
| (vi) community parks or spaces (a) Yes { } (b) No { } (vii) eating places (a) Yes { } (b) No { } |
| (vii) eating places (a) Yes { } (b) No { } |
| (viii) library (a) Yes { } (b) No { } |
| 24. How are they managed? |
| |
| |
| 25. Are non-residents allowed to utilize these facilities? (a) yes { } (b) no { } |

| 26. If they are not present at the community, how long do you have to travel to the neares |
|--|
| from the community? |
| (i) school (a) less than 30 minutes drive { } (b) more than 30 minutes drive { } (c) |
| less than 30 minutes walk { } |
| (ii) playground (a) less than 30 minutes drive { } (b) more than 30 minutes drive { } |
| (c) less than 30 minutes walk { } |
| (iii) clinic (a) less than 30 minutes drive { } (b) more than 30 minutes drive { } (c) |
| less than 30 minutes walk { } |
| (iv) police post (a) less than 30 minutes drive { } (b) more than 30 minutes drive { } |
| (c) less than 30 minutes walk { }(v) shops/ mall/ supermarket (a) less than 30 minutes drive { } (b) more than 30 |
| minutes drive { } (c) less than 30 minutes walk { } |
| (vi) community parks or spaces (a) less than 30 minutes drive { } (b) more than 30 |
| minutes drive { } (c) less than 30 minutes walk { } |
| (vii) eating places (a) less than 30 minutes drive { } (b) more than 30 minutes drive { |
| { (c) less than 30 minutes walk { } |
| (viii) library (a) less than 30 minutes drive { } (b) more than 30 minutes drive { } (c) |
| less than 30 minutes walk { } |
| (d) Energy Provision |
| 27. Are you aware of the source of your electricity supply? (a) Yes { } (b) No { } |
| 28. If yes, what is your source? |
| 29. Do some residents use alternative sources of power in case there is a general cut in |
| power? (a) Yes { } (b) No { } |
| 30. If yes, what are these other sources of energy? |
| SANE NO. |
| SANE |
| (e) Water Provision |
| 31. Is your community connected to the lines of the Ghana water company? (a) Yes { |
| (b) No { } |
| 32. If no, where do you get your water? (a) Boreholes provided by real estate developer { |
| } (b) buy from vendors { } (c) other { } |
| 33. If other, please specify |
| 34. Does the gated community have its own water reservoir? (a) yes { } (b) no { } |
| 35. If yes, who provided the reservoir? |

| | 36. Is the water supply regular and constant? (a) yes { } (b) no { } | | | | | | |
|------------|--|------------------------------------|-------------------------------|--------------------------------|----------------------------|------------------------|--|
| | 37. How many times does water flow in a week? | | | | | | |
| | 38. I | Does the water flow | throughout the | day? (a) yes { } | (b) no { } | | |
| (f) | Was | ste Management an | d Landscaping | g | | | |
| | 39. Who cleans in and around the gated community? | | | | | | |
| | 40. I | How is refuse dispo | osed off in the | community? (| (a) refuse du | mp/ container in the | |
| | C | community { } (b) r | efuse dump/ co | ontainer outside t | the gated com | nmunity { } (c) Door | |
| | t | to door collection by | private collecte | or { } (d) open | space { } | | |
| | 41. I | Do you pay to have y | your refuse coll | ected? (a) Yes { | } (b) No { | } | |
| | 42. V | Who is in charge of | waste collectio | n in the commu | nity (a) the re | eal estate developer { | |
| | } | (b) the local author | rity (AMA) { } | AOT |) | | |
| | 43. V | Who does landscapir | ng in the comm | unity? (a) reside | ents { } (b) re | eal estate developer { | |
| | } | (c) department of p | oarks and garde | ns { } (d) priva | te organizatio | on { } | |
| | 44. I | Do you pay for the la | andscaping to b | e done? (a) Yes | { } (b) No { | } | |
| | 45. I | How do you dispose | off your liquid | waste (black wa | iter)? | | |
| (g) | Roa | d infrastructure | | |) | | |
| | 46. V | What are t <mark>he conditi</mark> | ons of the road | ls leading to you | ur communit <mark>y</mark> | y? (a) very good { } | |
| | (| (b) good { } (c) ok { | } (d) bad { } | (e) very bad { } | 777 | | |
| | 47. V | What are the condition | ons of the road | s/ streets inside | your commu | nity? (a) very good { | |
| | } | } (b) good { } (c) ok | () (d) bad { | } (e) very bad { | I | | |
| | 48. A | Are the drains also la | ar <mark>ge enough? (a</mark> | Yes { } (b) No | o { } | | |
| | 49. <i>A</i> | Are they able to cont | ain your li <mark>quid</mark> | waste and are th | ney cleaned re | egularly? | |
| | | | | | | / | |
| | 50. <i>A</i> | Are the drains open o | or covered? | | 207 | | |
| | 51. | Have you ever expen | rien <mark>ced floodin</mark> | g in yo <mark>ur comm</mark> ı | unity? (a) Yes | s { } (b) No { } | |
| | (h) 7 | Felecommunication | infrastructur | e | | | |
| | 52. I | Does your gated cor | nmunity have | the following te | lecommunica | tion infrastructure in | |
| | ŗ | place? (Please tick) | | | | | |
| | | Ownership | Internet | Telephone | Television | Remarks | |
| | I | Private | | | | | |
| | I | Public | | | | | |

Appendix 4: AMA Survey

Kwame Nkrumah University of Science and Technology College of Architecture and Planning

Department of Planning

TOPIC: The emergence of gated communities in Ghana and their implications for urban planning and management.

(d) INSTITUTIONAL SURVEY: AMA PLANNING UNIT

| 1. | Date of interview. |
|-----|--|
| 2. | Status of respondent. |
| 3. | Are you aware of all the gated communities in the metropolis? (a) Yes { } (b) No { } |
| 4. | If yes, how many gated communities are currently in the metropolis? |
| 5. | Is there a national policy governing the establishment of gated communities? (a) Yes |
| | { } (b) No { } |
| 6. | If yes, what is the policy? |
| | |
| 7. | Do you give permits to real estate developers before they build gated communities? |
| | (a) Yes { } (b) No { } |
| 8. | What is the nature of the permit? |
| | |
| | |
| 9. | Do some real estate developers construct their gated communities without coming for |
| | a permit? (a) Yes { } (b) No { } |
| 10. | Does the metropolis have bye-laws and policies governing the establishment of gated |
| | communities? (a) Yes { } (b) No { } |
| 11. | If yes, what are they? |
| | (i) |
| | (ii) |
| | (iii) |
| | (iv) |
| | (\mathbf{v}) |

| 12. | In th | ne | past, | have | you | encountere | d some | challenges | with | regards | to | gated |
|-----|--------|------|---------|---------|---------|---------------|------------|---------------|---------|--------------|-------|---------|
| | comr | nun | ities? | (a) Yes | s { } | (b) No { } | | | | | | |
| 13. | What | we | ere the | se chal | lenge | s? | | | | | | |
| | (i) | | | | | | | | | | | |
| | (ii) | | | | | | | | | | | |
| | (iii) | | | | | | | | | | | |
| | (iv) | | | | | | | | | | | |
| 14. | How | did | l you r | esolve | these | challenges? | • | | | | | |
| | (i) | | | | | | | | | | | |
| | (ii) | | | | | \mathbb{Z} | | CT | | | | |
| | (iii) | | | | | | V U | \mathcal{L} | | | | |
| | (iv) | | | | | | | | | | | |
| 15. | Have | yo | u initi | ated a | ny eff | ort to forge | collabor | ration betwee | n gate | ed commu | ıniti | es and |
| | surro | und | ling se | ttleme | nts? (a | a) Yes { } (| b) No { | } | | | | |
| 16. | If yes | s, w | hat are | e they? | | | | K | | | | |
| | (i) | | | | | | |) | | | | |
| | (ii) | | | | | | | <u></u> | | , | | |
| | (iii) | | | · | | | | | 7 | | | |
| | (iv) | | | | | | | | | | | |
| 17. | What | are | e the k | key ma | nagen | nent and pla | nning pr | oblems you | face w | ith regard | ls to | gated |
| | comr | nun | ities? | | | un | 350 | |) | | | |
| | (i) | | | | | | | | , | ······ | | |
| | (ii) | | | 2 | | | | | 3 | | | |
| | (iii) | | | 5 | a | •••• | | - NOW | | | | |
| | (iv) | | | | | WJEA | | 3 | | | | |
| | (v) | | | | | | | | | | | |
| 18. | Does | the | assen | nbly in | spect | the facilitie | s and ser | vices provide | d to ga | ated com | nuni | ties to |
| | ensur | e th | ney are | e up to | stand | ards? (a) Ye | es { } (b) | No { } | | | | |

19. If yes, which units are responsible for the following?

| No. | Facility/ services | Unit Responsible |
|-----|--|------------------|
| 1 | Water | |
| 2 | Electricity | |
| 3 | Streets, roads, gutter, drains, culverts | |
| 4 | Waste management - Liquid - Solid | KNUST |
| 5 | Clinics, schools, play grounds etc | with the |

| 20. What are the challenges you face when you go to inspect these facilities? |
|---|
| (i) |
| (ii) |
| (iii) |
| 21. In your opinion, has gated communities contributed in the supply of housing in |
| Ghana? (a) Yes { } (b) No { } |
| 22. What effects have they had on the communities around them? |
| |
| |
| 23. Is it right for gated communities to restrict non residents from entering them? (a) Yes |
| { } (b) No { } |
| 24. Is the Metropolitan Assembly responsible for cleaning in and around these gated |
| communities? (a) Yes { } (b) No { } |
| 25. Do residents pay for the AMA to clean the community? (a) Yes { } (b) No { } |
| 26. If yes, how is payment effected? |
| |
| |

| 27. Does the AMA collect and dispose of refuse from gated communities? |
|--|
| (a) Yes { } (b) No { } |
| 28. If yes, has the AMA provided gated communities with containers for refuse |
| collection? (a) Yes { } (b) No { } |
| 29. Are the refuse containers located inside or outside the gated communities? (a) inside { |
| } (b) outside { } |
| 30. Who cares for the lawns and landscape in gated communities? |
| 31. Who provides the access roads and streets in the community (a) real estate developer |
| { } (b) Urban roads { } (c) AMA { } |
| 32. How are they named? |
| |
| |
| 33. Who is in charge of emptying the drains in gated communities? |
| |
| 34. What types of drains are usually found in gated communities? |
| 35. Has flooding occurred in any gated community before? (a) Yes { } (b) No { } |
| THE STATE OF THE S |
| W SANE NO BADWE |

Appendix 5: Lands Commission Survey

Kwame Nkrumah University of Science and Technology College of Architecture and Planning

Department of Planning

TOPIC: The emergence of gated communities in Ghana and their implications for urban planning and management.

(e) INSTITUTIONAL SURVEY: LANDS COMMISSION

| 1. | Date of interview. |
|-----|--|
| 2. | Status of respondent. |
| 3. | Are you aware of all the gated communities in the metropolis? (a) Yes { } (b) No { } |
| 4. | If yes, how many gated communities are currently in the metropolis? |
| 5. | Are you aware of the total number of housing units in gated communities? (a) Yes { |
| | } (b) No { } |
| 6. | If yes, how many are they? |
| 7. | Is there a national policy governing the establishment of gated communities? (a) Yes |
| | { } (b) No { } |
| 8. | If yes, what is the policy? |
| | |
| | |
| 9. | Do you give lease to real estate developers before they build gated communities? |
| | (a) Yes { } (b) No { } |
| 10. | . What is the nature of the lease? |
| | 403 |
| | W. Sans NO. |
| 11. | Do some real estate developers build their gated communities without getting a lease |
| | from your outfit? (a) Yes { } (b) No { } |
| 12. | If yes, who are they? |
| | (i) |
| | (ii) |
| | (iii) |
| | (iv) |
| | (v) |

| 13. | | past, have you encountered some challenges with regards to gated unities? (a) Yes { } (b) No { } | | | | |
|-----|---|--|--|--|--|--|
| 14. | 14. If yes, what were these challenges? | | | | | |
| | (i) | | | | | |
| | (ii) | | | | | |
| | (iii) | | | | | |
| | (iv) | | | | | |
| 15. | How d | id you resolve these challenges? | | | | |
| | (i) | | | | | |
| | (ii) | KNUST | | | | |
| | (iii) | | | | | |
| 1.0 | (iv) | | | | | |
| 16. | - | you initiated any effort to forge collaboration between gated communities and | | | | |
| 1.7 | | nding settlements? (a) Yes { } (b) No { } | | | | |
| 17. | • | what are they? | | | | |
| | (i) | | | | | |
| | (ii) | | | | | |
| | (iii) | | | | | |
| | (iv) | | | | | |
| 18. | | are the key management and planning problems you face with regards to gated | | | | |
| | commu | unities? | | | | |
| | (i) | | | | | |
| | (ii) | | | | | |
| | (iii) | | | | | |
| | (iv) | | | | | |
| | (v) | | | | | |
| 19. | In you | r opinion, has gated communities contributed in the supply of housing in | | | | |
| | Ghana | ? (a) Yes { } (b) No { } | | | | |
| 20. | What | is the major role that the Lands commission plays with regards to gated | | | | |
| | commu | unities? | | | | |
| | | | | | | |
| | | | | | | |

| 21. Are the areas that we have our current gated communities originally meant for |
|--|
| residential development? (a) Yes { } (b) No { } |
| 22. Are there other uses that the lands could be used for instead of residential purposes? |
| (a) Yes { } (b) No { } |
| 23. What are some of these ancillary uses that the land could be put to? |
| (i) |
| (ii) |
| (iii) |
| (iv) |
| 24. How has the growth of gated communities affected the values of land in the city of |
| Accra? |
| (i) |
| (ii) |
| (iii) |
| (iv) |
| |
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Appendix 6: Town and Country Planning Department Survey

Kwame Nkrumah University of Science and Technology College of Architecture and Planning

Department of Planning

TOPIC: The emergence of gated communities in Ghana; their contribution to the housing supply and their implications for urban planning and management.

(f) INSTITUTIONAL SURVEY: DEPT. OF TOWN AND COUNTRY PLANNING

| 1. | Date of interview. |
|-----|--|
| 2. | Status of respondent. |
| 3. | Are you aware of all the gated communities in the metropolis? (a) Yes { } (b) No { } |
| 4. | If yes, how many gated communities are currently in the metropolis? |
| 5. | Are you aware of the total number of housing units in gated communities? |
| | (a) Yes { } (b) No { } |
| 6. | If yes, how many are they? |
| 7. | Is there a national policy governing the establishment of gated communities? (a) Yes |
| | { } (b) No { } |
| 8. | If yes, what is the policy? |
| | |
| | |
| 9. | Do you give permits to real estate developers before they build gated communities? |
| | (a) Yes { } (b) No { } |
| 10. | What is the nature of the permit? |
| | |
| | W.J.Sanie NO. |
| 11. | Do some real estate developers build their gated communities without approval from |
| | your outfit? (a) Yes { } (b) No { } |
| 12. | If yes, what are they? |
| | (vi) |
| | (vii) |
| | (viii) |
| | (ix) |
| | (\mathbf{x}) |

| 13. | In the | e past, have you encountered some challenges with regards to gated | | | |
|-----|---|---|--|--|--|
| | comm | unities? (a) Yes { } (b) No { } | | | |
| 14. | 14. If yes, what were these challenges? | | | | |
| | (v) | | | | |
| | (vi) | | | | |
| | (vii) | | | | |
| | (viii) | | | | |
| 15. | How d | id you resolve these challenges? | | | |
| | (v) | | | | |
| | (vi) | KNIICT | | | |
| | (vii) | KINUSI | | | |
| | (viii) | | | | |
| 16. | Have y | you initiated any effort to forge collaboration between gated communities and | | | |
| | surrou | nding settlements? (a) Yes { } (b) No { } | | | |
| 17. | If yes, | what are they? | | | |
| | (v) | | | | |
| | (vi) | | | | |
| | (vii) | | | | |
| | (viii) | | | | |
| 18. | What a | are the key management and planning problems you face with regards to gated | | | |
| | comm | unities? | | | |
| | (vi) | | | | |
| | (vii) | [3] | | | |
| | (viii) | | | | |
| | (ix) | | | | |
| | (x) | SANE | | | |
| 19. | Does t | he Town and country planning department inspect the facilities and services | | | |
| | provid | ed to gated communities to ensure they are up to standards? | | | |
| | (a) Yes | s { } (b) No { } | | | |
| | | | | | |

| 20. If yes, which units are responsible for the followin | 20. | . If yes, | which units | are respons | sible for | the foll | owing |
|--|-----|-----------|-------------|-------------|-----------|----------|-------|
|--|-----|-----------|-------------|-------------|-----------|----------|-------|

| _ | | |
|-----|-------------------------|------------------|
| No. | Facility/ services | Unit Responsible |
| | | F F F |
| | | |
| 1 | Water | |
| 1 | ** atC1 | |
| | | |
| 2 | Electricity | |
| | Electricity | |
| | | |
| 2 | G 1 | |
| 3 | Streets, roads, gutter, | |
| | | |
| | drains, culverts | |
| | | |
| | | |
| 4 | Waste management | |
| | | LANTILOT |
| | | |
| 5 | Clinics, schools, play | |
| | Cilines, senoois, play | |
| | grounds etc | |
| | grounds etc | |
| | | |
| | | |

| 21. What are the challenges you face when you go to inspect these facilities? | |
|--|-----|
| (iv) | ••• |
| (v) | ••• |
| (vi) | |
| 22. In your opinion, has gated communities contributed in the supply of housing | in |
| Ghana? (a) Yes { } (b) No { } | |
| 23. Is it right for gated communities to restrict non residents from entering them? (a) Ye | es |
| { } (b) No { } | |
| 24. What is the major role that the department of Town and Country Planning plays with | l |
| regards to gated communities? | |
| | |
| SANE NO | |
| | |
| 25. Does the department allocate the site to real estate developers to build their gate | ed |
| communities? (a) Yes { } (b) No { } | |
| 26. Do you already have sites in your plans which you have ear marked for gate | ed |
| developments? (a) Yes { } (b) No { } | |
| 27. Do you design the layout that the real estate developers to use? | |
| (a) Yes { } (b) No { } | |

| 28. If no, who provides the layout? |
|--|
| |
| |
| 29. Do you have copies of these plans with you? (a) Yes { } (b) No { } |
| 30. Are the areas that we have our current gated communities originally meant for |
| residential development? (a) Yes { } (b) No { } |
| 31. Are there other uses that the lands could be used for instead of residential purposes? |
| (a) Yes { } (b) No { } |
| 32. What are some of these ancillary uses that the land could be put to? |
| (v) |
| (vi) |
| (vii) |
| (viii) |
| 33. How has the growth of gated communities affected the spatial plan of the city of |
| Accra? |
| (v) |
| (vi) |
| (vii) |
| (viii) |
| Minte |
| Williams of the state of the st |
| WASANE NO BE |

Appendix 7: Lands Valuation Board

Kwame Nkrumah University of Science and Technology College of Architecture and Planning

Department of Planning

TOPIC: The emergence of gated communities in Ghana and their implications for urban planning and management.

| (g) IN | ISTITUTIONAL SURVEY: LANDS VALUATION BOARD | | | |
|-----------------------|--|--|--|--|
| 1. Date of interview. | | | | |
| 2. | Status of respondent. | | | |
| 3. | Are you aware of all the gated communities in the metropolis? (a) Yes { } (b) No { } | | | |
| 4. | If yes, how many gated communities are currently in the metropolis? | | | |
| 5. | Are you aware of the total number of housing units in gated communities? (a) Yes { | | | |
| | } (b) No { } | | | |
| 6. | If yes, how many are they? | | | |
| 7. | Is there a national policy governing the establishment of gated communities? (a) Yes | | | |
| | { } (b) No { } | | | |
| 8. | If yes, what is the policy? | | | |
| | | | | |
| | The state of the s | | | |
| | | | | |
| | | | | |
| 9. | In the past, have you encountered some challenges with regards to gated | | | |
| 9. | In the past, have you encountered some challenges with regards to gated communities? (a) Yes { } (b) No { } | | | |
| | | | | |
| | communities? (a) Yes { } (b) No { } | | | |
| | communities? (a) Yes { } (b) No { } . What were these challenges? | | | |
| | communities? (a) Yes { } (b) No { } . What were these challenges? (ix) | | | |
| | communities? (a) Yes { } (b) No { } . What were these challenges? (ix) (x) | | | |
| 10 | communities? (a) Yes { } (b) No { } . What were these challenges? (ix) (x) (xi) | | | |
| 10 | communities? (a) Yes { } (b) No { } . What were these challenges? (ix) (x) (xi) (xii) | | | |
| 10 | communities? (a) Yes { } (b) No { } . What were these challenges? (ix) (x) (xi) (xii) . How did you resolve these challenges? | | | |

(xii)

| | surrounding settlements? (a) Yes { } (b) No { } | | |
|-----|--|--|--|
| 13. | If yes, what are they? | | |
| | (ix) | | |
| | (x) | | |
| | (xi) | | |
| | (xii) | | |
| 14. | What are the key management and planning problems you face with regards to gated | | |
| | communities? | | |
| | (xi) | | |
| | (xii) | | |
| | (xiii) | | |
| | (xiv) | | |
| | (xv) | | |
| 15. | Does the Lands Valuation Board inspect the facilities and services provided to gated | | |
| | communities to ensure they are up to standards? (a) Yes { } (b) No { } | | |
| 16. | If yes, which units are responsible for the following? | | |
| No. | Facility/ services Unit Responsible | | |
| 1 | water | | |
| 2 | electricity | | |
| 3 | Streets, roads, gutter, | | |
| | drains, culverts | | |
| 4 | Waste management | | |
| 5 | Clinics, schools, play | | |
| | grounds etc | | |
| 17. | What are the challenges you face when you go to inspect these facilities? | | |
| | (vii) | | |
| | (viii) | | |
| | (ix) | | |
| | 18. In your opinion, has gated communities contributed in the supply of housing in | | |
| | Ghana? (a) Yes { } (b) No { } | | |
| | | | |

| 19. | values? |
|-----|---|
| 20 | What are the taxes that real estate companies pay? |
| 20. | what are the taxes that rear estate companies pay. |
| 21. | Is it right for gated communities to restrict non residents from entering them? (a) Yes { } (b) No { } |
| 22. | What is the major role that the Lands Valuation Board plays in the provision of gated communities? |
| | |
| | |
| 23. | Does the board value the sites where real estate developers build their gated communities? (a) Yes { } (b) No { } |
| 24. | Do you value the sites after they have been developed into gated communities? (a) Yes { } (b) No { } |
| 25. | If yes, do you have the total value of all the gated communities in Accra? (a) Yes { } (b) No { } |
| 26. | If yes, what is the value (approximate)? |
| 27. | Do you think that sites that we have our gated communities are being put to their best use? (a) Yes { } (b) No { } |
| 28. | If no, what are the uses that they could be put to? (i) |
| | (ii) |
| 29. | Do you know if the rent or price of a housing unit in gated communities is commensurate with their values? (a) Yes { } (b) No { } |

| 30. If yes, what is the relation between the pricing and value of houses in gated |
|---|
| communities? |
| (ix) |
| (x) |
| (xi) |
| (xii) |
| 31. Is there a relationship between the prices of houses in gated communities and the |
| lease terms? (a) Yes { } (b) No { } |
| 32. Do the prices of the houses go down as the lease years reduce? (a) Yes { } (b) No { |
| 33. How has the growth of gated communities affected the value and quality of housing it the city of Accra? |
| (ix) |
| (x) |
| (xi) |
| |
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Appendix 8: Survey Department

Kwame Nkrumah University of Science and Technology College of Architecture and Planning

Department of Planning

TOPIC: The emergence of gated communities in Ghana and their implications for urban planning and management.

| (i) IN | STITUTIONAL SURVEY: SURVEY DEPARTMENT |
|--------|--|
| 1. | Date of interview |
| 2. | Status of respondent. |
| 3. | Are you aware of all the gated communities in the metropolis? (a) Yes { } (b) No { } |
| 4. | If yes, how many gated communities are currently in the metropolis? |
| 5. | Are you aware of the total number of housing units in gated communities? (a) Yes { |
| | } (b) No { } |
| 6. | If yes, how many are they? |
| 7. | Is there a national policy governing the establishment of gated communities? (a) Yes |
| | { } (b) No { } |
| 8. | If yes, what is the policy? |
| | |
| | |
| 9. | Do you have maps for all the gated communities in Accra? (a) Yes { } (b) No { } |
| 10 | . Have real estate agencies that provide gated communities follow the maps that you |
| | have provided? (a) Yes { } (b) No { } |
| 11 | . If no, what do they do? |
| | |
| | |
| 12 | . In the past, have you encountered some challenges with regards to gated |
| | communities? (a) Yes { } (b) No { } |
| 13 | . What were these challenges? |
| | (xiii) |
| | (xiv) |
| | (xv) |
| | (xvi) |

| 14. How did you resolve these challenges? |
|--|
| (xiii) |
| (xiv) |
| (xv) |
| (xvi) |
| 15. Have you initiated any effort to forge collaboration between gated communities and |
| surrounding settlements? (a) Yes { } (b) No { } |
| 16. If yes, what are they? |
| (xiii) |
| (xiv) |
| (xv) |
| (xvi) |
| 17. What are the key management and planning problems you face with regards to gated |
| communities? |
| (xvi) |
| (xvii) |
| (xviii) |
| (xix) |
| (xx) |
| 18. What is the major role that the survey department plays in the provision of gated |
| communities? |
| |
| |
| |
| 19. Does the department allocate the site to real estate developers to build their gate |
| communities? (a) Yes { } (b) No { } |
| 20. Do you already have sites in your plans which have been ear marked for gated |
| developments? (a) Yes { } (b) No { } |
| 21. Do you design the layout that the real estate developers use? (a) Yes { } (b) No { } |
| 22. If no, who provides the layout? |
| |
| |

| 23. | Are the area | as that we have our current gated communities originally meant for |
|-----|----------------|---|
| | residential of | development? (a) Yes { } (b) No { } |
| 24. | If no, what | were those areas originally meant for? |
| | | |
| | | |
| 25. | Are there o | ther uses that the lands could be used for instead of residential purposes? |
| | (a) Yes { } | (b) No { } |
| 26. | . What are so | ome of these ancillary uses that the land could be put to? |
| | (xiii) | KNIICT |
| | (xiv) | KINUSI |
| | (xv) | |
| | (xvi) | |
| 27. | How has th | e growth of gated communities affected the spatial plan of the city of |
| | Accra? | |
| | (xii) | |
| | (xiii) | |
| | (xiv) | |
| | (xv) | |
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Appendix 9: Department of Urban Roads Survey

Kwame Nkrumah University of Science and Technology College of Architecture and Planning

Department of Planning

TOPIC: The emergence of gated communities in Ghana and their implications for urban planning and management.

| (j) INSTITUTIONAL SURVEY: DEPARTMENT OF URBAN ROADS |
|--|
| 1. Date of interview. |
| 2. Status of respondent |
| 3. Are you aware of all the gated communities in the metropolis? (a) Yes { } (b) No { } |
| 4. If yes, how many gated communities are you aware of? |
| 5. Is there a national policy governing the building and maintenance of roads in urban |
| areas? (a) Yes { } (b) No { } |
| 6. If yes, what is the policy? |
| |
| |
| |
| |
| 7. Is the duty of the Dept of Urban Roads to build roads that go through gated |
| communities? (a) Yes { } (b) No { } |
| 8. Have you built any road or street in any gated community? (a) Yes { } (b) No { } |
| 9. If yes, can you mention five of such gated communities? |
| i |
| ii. |
| iii. |
| iv |
| v |
| 10. Are you aware most real estate developers restrict entrance into their gated |
| communities? (a) Yes { } (b) No { } |
| 11. Do you think that the gating of such communities help to increase travel time for non- |
| residents who may have to go round such communities when they could easily have |
| just gone through them? (a) Yes { } (b) No { } |

| 12. | communities contribute to the congestion on the main roads of Accra? (a) Yes { } |
|-----|---|
| | (b) No { } |
| 13. | Do gated communities have the right to block or restrict access through such roads? |
| | (a) Yes { } (b) No { } |
| | If yes, do they need a permit before they can do that? (a) Yes { } (b) No { } |
| 15. | What is this permit? |
| | |
| 16. | When real estate developers construct their own streets and roads, do they come to your outfit for your input? (a) Yes { } (b) No { } |
| 17. | What usually is your input? |
| | |
| | |
| | |
| 10 | |
| 18. | Is there a standard for constructing roads and streets in Ghana? |
| | (a) Yes { } (b) No { } |
| 19. | if yes, what is the standard? |
| | (xi) |
| | (xii) |
| | (xiii) |
| | (xiv) |
| | (xv) |
| 20. | Do real estate developers follow the standard when they build their own roads? |
| | (a) Yes { } (b) No { } |
| 21. | In your opinion how would you rate the roads constructed by real estate developers in |
| | their gated communities. (a) very good $\{\ \}$ (b) good $\{\ \}$ (c) fair $\{\ \}$ (d) bad $\{\ \}$ (e) very bad $\{\ \}$ |
| 22. | Do you have a master plan of roads that real estate developers follow and incorporate |
| | into their designs or they design their own roads? |
| | |

| 23. Who maintains the sti | reets and roads in gated communities? |
|------------------------------|--|
| 24. Who is in charge of b | uilding drains in gated communities? |
| 25. Is there a standard for | constructing drains within settlements? |
| 26. If yes, what are the sta | andards? |
| i | |
| ii | |
| iiiiv. | |
| | |
| | ed communities build their own drains? (a) Yes { } (b) No { } |
| | the laid sown standard? (a) Yes { } (b) No { } |
| - | encountered some challenges with regards to roads, streets and |
| - | unities? (a) Yes { } (b) No { } |
| 30. What were these chall | |
| (xvii) | CIMPA |
| (xviii) | 355 |
| (xix) | |
| | |
| 31. How did you resolve | |
| (xvii) | and the chartest of the charte |
| 12/2 | |
| (xix) | 3 = 3 |
| (XX) | JAN 1 |
| , , | y effort to forge collaboration between real estate developers and |
| | pads? (a) Yes { } (b) No { } |
| 33. If yes, what are they? | ads. (a) 163 () (b) 110 () |
| | |
| | |
| | |
| | |
| (ΛΛ) | |

| 34. Have you initiated any effort to forge collaboration between the Dept. of Urban Roa | ıds |
|---|-----|
| and the Town and Country Planning Department? (a) Yes { } (b) No { } | |
| 35. If yes, what are they? | |
| • | |
| • | |
| • | |
| • | |
| 36. Have you initiated any effort to forge collaboration between the Dept. of Urban Roa | ids |
| and the Building Inspectorate Division on actual development? | |
| (a) Yes { } (b) No { } | |
| 37. If yes, what are they? | |
| • | |
| | • |
| | • |
| • | • |
| | |
| 38. What are the key management and planning problems you face with regards to road | ds, |
| streets and drains in gated communities? | |
| (xxi) | |
| (xxii) | • |
| (xxiii) | • |
| (xxiv) | |
| (XXV) | |
| 39. Does the provision of roads to gated communities affect the roads to surroundi | ng |
| communities? (a) Yes { } (b) No { } | |
| 40. If yes, in what ways does it affect the roads? | |
| | |
| | |
| | |

Appendix 10: Ghana Water Company Ltd Survey

Kwame Nkrumah University of Science and Technology College of Architecture and Planning Department of Planning

TOPIC: The emergence of gated communities in Ghana and their implications for urban planning and management.

(k) INSTITUTIONAL SURVEY: GHANA WATER COMPANY LTD 1. Date of interview. 2. Status of respondent. 3. Are you aware of all the gated communities in the metropolis? (a) Yes { } (b) No { } 4. If yes, how many gated communities are currently connected to the GWCL pipelines? 5. Is there a national policy governing the provision of water to large establishments such as gated communities? (a) Yes { } (b) No { } 6. If yes, what is the policy? 7. Do you allocate water reservoirs and meters to real estate developers before they build gated communities? (a) Yes { } (b) No { } 8. If yes, what quota is given? 9. Do some real estate developers build their own reservoirs for their gated communities? (a) Yes { } (b) No { } 10. Do the reservoirs used by gated communities have the capacity to support the gated communities and surrounding settlements? (a) Yes { } (b) No { } 11. Do residents and developers of gated communities allow you to connect surrounding settlements to their water reservoirs? (a) Yes { } (b) No { } 12. Are the reservoirs big enough to support the water needs that might arise as a result of future expansions to these communities? (a) Yes { } (b) No { }

| to gated communities? (a) Yes { } (b) No { } 14. What were these challenges? (i) (ii) (iii) (iv) 15. How did you resolve these challenges? (i) (ii) (iii) (iv) 16. Have you initiated any effort to forge collaboration between GWCL and real estate developers? (a) Yes { } (b) No { } 17. If yes, what are they? (i) (ii) (iii) (iii) (iv) 18. What are the key management and planning problems you face with regards to provision of water to gated communities? (i) (ii) (iii) |
|--|
| (ii) (iii) (iv) 15. How did you resolve these challenges? (i) (iii) (iii) (iv) 16. Have you initiated any effort to forge collaboration between GWCL and real estate developers? (a) Yes { } (b) No { } 17. If yes, what are they? (i) (ii) (iii) (iii) (iv) 18. What are the key management and planning problems you face with regards to provision of water to gated communities? (i) (ii) (iii) |
| (iii) (iv) 15. How did you resolve these challenges? (i) (ii) (iii) (iv) 16. Have you initiated any effort to forge collaboration between GWCL and real estate developers? (a) Yes { } (b) No { } 17. If yes, what are they? (i) (ii) (iii) (iv) 18. What are the key management and planning problems you face with regards to provision of water to gated communities? (i) (ii) (iii) |
| (iv) 15. How did you resolve these challenges? (i) (ii) (iii) (iv) 16. Have you initiated any effort to forge collaboration between GWCL and real estate developers? (a) Yes { } (b) No { } } 17. If yes, what are they? (i) (ii) (iii) (iv) 18. What are the key management and planning problems you face with regards to provision of water to gated communities? (i) (ii) |
| 15. How did you resolve these challenges? (i) |
| (i) (ii) (iii) (iv) 16. Have you initiated any effort to forge collaboration between GWCL and real estate developers? (a) Yes { } (b) No { } 17. If yes, what are they? (i) (ii) (iii) (iv) 18. What are the key management and planning problems you face with regards to provision of water to gated communities? (i) (ii) (iii) |
| (ii) (iii) (iv) 16. Have you initiated any effort to forge collaboration between GWCL and real estate developers? (a) Yes { } (b) No { } 17. If yes, what are they? (i) (ii) (iii) (iv) 18. What are the key management and planning problems you face with regards to provision of water to gated communities? (i) (ii) (iii) |
| (iii) (iv) 16. Have you initiated any effort to forge collaboration between GWCL and real estate developers? (a) Yes { } (b) No { } 17. If yes, what are they? (i) (ii) (iii) (iv) 18. What are the key management and planning problems you face with regards to provision of water to gated communities? (i) (ii) |
| (iv) 16. Have you initiated any effort to forge collaboration between GWCL and real estate developers? (a) Yes { } (b) No { } 17. If yes, what are they? (i) (ii) (iii) (iv) 18. What are the key management and planning problems you face with regards to provision of water to gated communities? (i) (ii) |
| 16. Have you initiated any effort to forge collaboration between GWCL and real estate developers? (a) Yes { } (b) No { } 17. If yes, what are they? (i) (ii) (iii) (iv) 18. What are the key management and planning problems you face with regards to provision of water to gated communities? (i) (ii) |
| developers? (a) Yes { } (b) No { } 17. If yes, what are they? (i) (ii) (iii) (iv) 18. What are the key management and planning problems you face with regards to provision of water to gated communities? (i) (ii) |
| 17. If yes, what are they? (i) (ii) (iii) (iv) 18. What are the key management and planning problems you face with regards to provision of water to gated communities? (i) (ii) |
| (i) (ii) (iii) (iv) 18. What are the key management and planning problems you face with regards to provision of water to gated communities? (i) (ii) |
| (ii) (iii) (iv) 18. What are the key management and planning problems you face with regards to provision of water to gated communities? (i) (ii) |
| (iii) (iv) 18. What are the key management and planning problems you face with regards to provision of water to gated communities? (i) (ii) |
| (iv) 18. What are the key management and planning problems you face with regards to provision of water to gated communities? (i) (ii) |
| 18. What are the key management and planning problems you face with regards to provision of water to gated communities? (i) (ii) |
| provision of water to gated communities? (i) (ii) |
| (i) (ii) |
| (ii) |
| 34 |
| (iii) |
| |
| (iv) |
| (v) |
| 19. Does the GWCL inspect the laying of pipes done at gated communities to ensure they |
| are correctly laid and that there is no any illegal tapping of water? |
| (a) Yes { } (b) No { } |
| 20. Has there ever been a situation when the pipes in a gated community were not |
| properly laid? (a) Yes { } (b) No { } |

| 21. | What are the challenges you face when you go to inspect the laying of pipes in gated |
|-----|--|
| | communities? |
| | (x) |
| | (xi) |
| | (xii) |
| 22. | What is the hierarchy of distribution networks? |
| | |
| | |
| 23. | How do these gated communities conform to these standards? |
| | IVIVOSI |
| | |
| 24. | How do gated communities depart from these standards? |
| | |
| | |
| | |
| 25. | What kind of billing system do you use for gated communities? (a) prepaid meters { |
| | } (b) post paid meters { } (a) Flat rate { } |
| 26. | If post paid, do residents pay their bills on time? (a) Yes { } (b) No { } |
| 27. | Does GWCL regularly maintain the water pipes that go to gated communities to |
| | ensure there is no leakage? (a) Yes { } (b) No { } |
| 28. | Does the supply of water to gated communities affect the supply of water to the |
| | surrounding suburbs? (a) Yes { } (b) No { } |
| 29. | If yes, in what way does it affect it? |
| | |
| | |
| | |

Appendix 11: Electricity Company of Ghana Survey

Kwame Nkrumah University of Science and Technology College of Architecture and Planning Department of Planning

TOPIC: The emergence of gated communities in Ghana and their implications for urban planning and management.

| (I) INSTITUTIONAL SURVEY: ECG / VRA 1. Date of interview | | |
|---|---|--|
| | | |
| 3. | | |
| 4. | If yes, how many gated communities are currently on the national grid? | |
| 5. | Is there a national policy governing the provision of electricity to large establishments | |
| | such as gated communities? (a) Yes { } (b) No { } | |
| 6. | If yes, what is the policy? | |
| | | |
| | | |
| 7. | Do you allocate transformers and meters to real estate developers before they build | |
| | gated communities? (a) Yes { } (b) No { } | |
| 8. | What is the nature of the allocation? | |
| | | |
| | | |
| 9. | Do some real estate developers acquire their own transformers for their gated | |
| | communities? (a) Yes { } (b) No { } | |
| 10 | . Do the transformers at the gated communities have the capacity to support the gated | |
| | communities and surrounding settlements? (a) Yes { } (b) No { } | |
| 11 | . Do residents and developers of gated communities allow you to connect surrounding | |
| | settlements to their transformer? (a) Yes { } (b) No { } | |
| 12 | 2. Do the transformers have the capacity to take on future expansions that might take | |
| | place in the gated communities? (a) Yes { } (b) No { } | |
| 13 | . How many phases do you usually connect for gated communities? | |
| 14 | . In the past, have you encountered some challenges with regards to connecting gated | |
| | communities with electricity? (a) Ves { } (b) No { } | |

| 15. | . wnat v | were these challenges? |
|-----|-----------|---|
| | (i) | |
| | (v) | |
| | (vi) | |
| | (vii) | |
| 16 | . How d | id you resolve these challenges? |
| | (i) | |
| | (ii) | |
| | (iii) | |
| | (iv) | KNIICT |
| 17. | . Have y | you initiated any effort to forge collaboration between the ECG and real estate |
| | develo | pers? (a) Yes { } (b) No { } |
| 18 | . If yes, | what are they? |
| | (i) | |
| | (ii) | |
| | (iii) | |
| | (iv) | |
| 19 | . What | are the key management and planning problems you face with regards to |
| | provisi | ion of electricity to gated communities? |
| | (i) | |
| | (ii) | |
| | (iii) | |
| | (iv) | |
| | (v) | Ac. |
| 20 | . Does | the ECG inspect <mark>the wiring done at gated c</mark> ommunities to ensure they are |
| | correct | tly wired? (a) Yes { } (b) No { } |
| 21. | . Has th | ere ever been a situation when a gated community was not properly wired? |
| | (a) Yes | s { } (b) No { } |
| 22. | . What | are the challenges you face when you go to inspect the wiring done in gated |
| | comm | unities? |
| | (i) | |
| | (ii) | |
| | (iii) | |
| | | |

| 23. Is there a need for expansion or setting up of system or upgrade? |
|--|
| (a) Yes { } (b) No { } |
| 24. If yes, how does it affect the gated communities? |
| |
| |
| 25. What kind of billing system do you use for gated communities? (a) prepaid meters |
| } (b) post paid meters { } (c) flat rate { } |
| 26. If post paid, do residents pay their bills on time? (a) Yes { } (b) No { } |
| 27. Does ECG regularly maintain the electricity lines that go to gated communities |
| (a) Yes { } (b) No { } |
| 28. Do you think the supply of electricity to gated communities affect the supply of |
| electricity to surrounding communities? (a) Yes { } (b) No { } |
| 29. If yes, in what way does it affect the supply? |
| |
| |
| |
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| |
| |
| BIII LANGE |
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Appendix 12: Ghana Police Service Survey

Kwame Nkrumah University of Science and Technology College of Architecture and Planning

Department of Planning

TOPIC: The emergence of gated communities in Ghana and their implications for urban planning and management.

| (o) INSTITUTIONAL SURVEY: GHANA POLICE SERVICE | | |
|---|--|--|
| 1. Date of interview. | | |
| 2. Status of respondent. | | |
| 3. Are you aware of all the gated communities in the metropolis? (a) Yes { } (b) No { } | | |
| 4. If yes, how many gated communities are currently in the metropolis? | | |
| 5. Do real estate developers consult you to provide their gated communities with | | |
| security? (a) Yes { } (b) No { } | | |
| 6. Is the security provided usually from the Ghana police service? | | |
| (a) Yes { } (b) No { } | | |
| 7. If no, are you aware of the private companies that provide the security? | | |
| (a) Yes { } (b) No { } | | |
| 8. Do you regularly patrol around these gated communities? (a) Yes { } (b) No { } | | |
| 9. Do have posts in some gated communities? (a) Yes { } (b) No { } | | |
| 10. If yes, which are these gated communities? | | |
| (i) | | |
| (ii) | | |
| (iii) | | |
| (iv) | | |
| (v) | | |
| 11. In case of a crime, do the gated communities call on the police? | | |
| (a) Yes { } (b) No { } | | |
| 12. In the past, have you encountered some challenges with regards to gated | | |

communities? (a) Yes { } (b) No { }

| 13. | 3. What were these challenges? | |
|-----|--------------------------------|--|
| | (i) | |
| | (ii) | |
| | | |
| | (iii) | |
| | (iv) | |
| 14. | How d | id you resolve these challenges? |
| | (i) | |
| | (ii) | |
| | (iii) | KNUST |
| | (iv) | |
| 15. | • | you initiated any effort to forge collaboration between gated communities and |
| | the Gh | ana Police Service? (a) Yes { } (b) No { } |
| 16. | If yes, | what are they? |
| | (i) | |
| | (ii) | |
| | (iii) | |
| | (iv) | |
| 17. | What a | are the key management and planning problems you face with regards to gated |
| | commi | unities? |
| | (i) | |
| | (ii) | |
| | (iii) | |
| 18. | In you | opinion, is the crime rate in gated communities high? (a) Yes { } (b) No { } |
| 19. | Is it rig | tht for gated communities to restrict non residents from entering them? |
| | (a) Yes | s { } (b) No { } |
| 20. | Does th | he provision of security to gated communities redirect crime to surrounding |
| | suburb | s? (a) Yes { } (b) No { } |
| 21. | Does th | he provision of security to gated communities affected the provision of security |
| | to surre | ounding suburbs? (a) Yes { } (b) No { } |

| 22. If yes, how has the provision of security at gated communities affected the provision |
|---|
| of security to the surrounding suburbs? |
| (iv) |
| (v) |
| (vi) |
| (vii) |
| 23. How has the growth of gated communities affected the value and quality of policing |
| in the city of Accra? |

(xvi)
(xvii)

