# 2010 POPULATION & HOUSING CENSUS



## **HOUSING IN GHANA**











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#### PREFACE AND ACKNOWLEDGEMENT

The mandate of the Ghana Statistical Service (GSS), like many other national statistical offices, includes data collection, compilation and analysis as well as dissemination of statistical information in an accessible and user-friendly manner. In order to satisfy the needs of users, GSS is required to analyse and interpret statistics in a form that makes it easily understandable for people to appreciate the value of the statistical information. There is also the need to disseminate widely all the statistics produced by GSS so that all data users including potential data users can have access to them.

Ghana, like many other developing countries, relies mainly on survey and population census data for planning at the national and the sub-national levels. Detailed analysis of such data provides users with a wealth of information for planning and policy formulation. Analysis of the 2010 Population and Housing Census data on topical issues, therefore, provides information for effective planning at all levels.

Several reports, including six monographs, were prepared using the 2010 Census data and published in 2012 and 2013. The published reports from the census data was a collaborative effort between the GSS and Local Consultants from research institutions and universities in Ghana, with funding from the Government of Ghana and various Development Partners (DPs). In order to strengthen the report writing capacities of the Ghana Statistical Service (GSS) and Ministries, Departments and Agencies (MDAs) which are engaged in population-related activities, professional staff of GSS and these MDAs were paired up with consultant writers to prepare the reports.

The monograph on 'Housing in Ghana' is one of the additional eight monographs that have been prepared from the 2010 Population and Housing Census data and is meant to inform policy makers on the current housing situation in Ghana. Policies, institutional and legal frameworks for housing in Ghana, access to land for housing, demand and supply of housing, types of houses and materials used in their as well as infrastructure and access of households to basic services such water, light, etc. are presented in the report.

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Dr. Philomena Nyarko Government Statistician

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#### LIST OF ABBREVIATIONS

BBC Bank for Housing and Construction

COHRE Centre on Housing Rights and Evictions

CSOs Civil Society Organisations

CWSA Community Water and Sanitation Agency

DUR Department of Urban Roads

ECG Electricity Company of Ghana

EPA Environmental Protection Agency

ERP Economic Recovery Programme

FGBS First Ghana Building Society

GAMA Greater Accra Metropolitan Area

GDP Gross Domestic Product

GHAFUP Ghana Federation of the Urban Poor GHACEM Ghana Cement Company Limited

GIZ Deutsche Gesellschaft für Internationale Zusammenarbelt

GoG Government of Ghana

GPRSI Ghana Poverty Reduction Strategy

GPRSII Growth and Poverty Reduction Strategy

GREDA Ghana Real Estate Developers Association

GSGDA Ghana Shared Growth and Development Agenda

GSS Ghana Statistical Service

GWCL Ghana Water Company Limited

INGOs International Non-Governmental Organisation

IMF International Monetary Fund

ISSER Institute of Statistical, Social and Economic Research

LAP Land Administration Project

MDGs Millennium Development Goals

MoE Ministry of Energy

MLGRD Ministry of Local Government and Rural Development

MLNR Ministry of Lands and Natural Resources

MMDAs Metropolitan, Municipal and District Assemblies

MNCs Multi-National Corporations

MWRWH Ministry of Water Resources, Works and Housing

NBFI Non-Banking Financial Institutions

NDPC National Development Planning Commission

NGO Non-Governmental Organisation

NHPF National Housing Policy Framework

PHC Population and Housing Census

PPP Private-Public Partnership

PURC Public Utility Regulatory Commission

SAPs Structural Adjustment Programmes

SCALE-UP Slum Communities Achieving Liveable Environments with Urban Partners

SHC State Housing Corporation

SMC Supreme Military Council

TCPD Town and Country Planning Department

TDC Tema Development Corporation

WRC Water Resources Commission

#### **EXECUTIVE SUMMARY**

#### Introduction

Across the world and especially in the developing world, housing remains one of the critical development challenges because of the huge gap between the supply and demand for housing. Consequently, some have described the situation as a global crisis. In broad terms, the housing question is largely a case of housing demand outstripping supply and/or the price of housing being over and above the wage of the average worker. In both or either situation, individuals and households resort to officially unapproved means to secure housing leading to the development of slums, especially in large cities and towns.

Many of the challenges faced by the poor can be linked to housing. This is because the housing environment represents an everyday-landscape, which can either support or limit the physical, mental, and social well-being of the residents (Bonnefoy 2007; Songsore and McGranahan 1993). The view is that adequate housing can be positively correlated with socio-economic benefits to both the occupants and the larger society (Newman 2008).

Rapid increase in population in Ghana has resulted in a large housing deficit, especially in urban areas. It is projected that the country needs at least 100,000 housing units annually while supply is estimated at 35 percent of the total need. Other studies put the country's overall annual deficits between 70,000 and 120,000 housing units with only 30-35 percent of the annual estimated requirement being supplied (ISSER 2013). While there may be disagreements as to the exact estimate of the annual requirement, there is a general consensus of a shortfall in the supply of housing, particularly in urban Ghana.

Drawing heavily on the 2000 and 2010 Population and Housing Censuses, this Report assesses the housing situation in Ghana and its implications for the country's socio-economic development. Specifically, the Report analyses the trend of stock of houses, facilities and amenities within houses across different districts, namely metropolitan, municipal and other localities; land access and current land tenurial arrangements and their implications for housing; level of housing deficits; the various options for financing housing in Ghana and; policy recommendations and implications for the housing sector.

#### Policy, Institutional and Legal Frameworks for Housing in Ghana

Across the world, housing policies, institutional and legal frameworks are formulated with the explicit or implicit purposes of addressing the interrelated issues of housing quantity, quality and cost. In articulating measures to address these issues a careful balance needs to be struck between housing provision and access to housing for majority of the population that takes into account the issues of quantity, quality and costs.

Despite the numerous challenges in the Ghanaian housing sector which relate to quantity, quality and costs, the country lacks a comprehensive National Housing Policy Framework (NHPF), though a draft policy has been in the offing since the 1990s (UN-Habitat 2011). The absence of a comprehensive NHPF seems to undermine the policy coherence of agencies involved in housing provision. In addition to similar experiences in other Sub-Saharan African countries, policies on housing in Ghana are made by many public agencies to fit into their own view of the world and seem to lack co-ordination among them (UN-Habitat 2011).

Though Ghana lacks a comprehensive housing policy, it is possible to distil distinct policy focus on housing in line with global trends over the years. The post-independence era, late 1950s and early 1980s, can be described as the period of active and direct involvement of the state in the provision of public housing, with the establishment of the State Housing Corporation (SHC) and Tema Development Corporation (TDC) for the regions of Ghana and te port and industrial town of Tema, respectively. In addition, two state-owned financial institutions, the Bank for Housing and Construction (BHC) and the First Ghana Building Society (FGBS) were established to provide financial support for public housing. The direct involvement of the state in housing delivery continued from the 1950s through the 1970s with the construction of what was referred to as the 'low-cost houses' in district and regional administrative capitals. Although the state was actively involved in direct housing provision during this period, the bulk of the housing (about 80%) was provided by the private informal sector (Songsore 2003).

The mid-1980s to the early 1990s represents the era of Structural Adjustment Programmes (SAPs) and Economic Recovery Programmes (ERP) in Ghana. At the heart of SAPs/ERP was the economic liberalization, and state withdrawal from key sectors of the economy to give way to the private sector (privatization). Consequently, government's policy on housing took a different turn with emphasis on creating an enabling environment for private sector participation in housing delivery leading to the emergence on the Ghanaian housing market of private real estate developers and the establishment of the Ghana Real Estate Developers Association (GREDA).

The mid-1990s to the present can be described as the post-structural adjustment and globalization era. Government's policy on housing over the period remained largely the same as from the ERP/SAP era, with greater emphasis on the private sector participation in housing delivery. However, ISSER (2013) has argued that the private sector is unlikely to provide housing for poor and low-income groups without appropriate incentives to the sector. This is because the private sector has never played any meaningful role in housing delivery for the urban poor (ISSER 2008).

The multiplicity of sectors and sub-sectors related to housing such as land, land use planning, development control, finance, construction, etc., indicates that, there would be various institutions and agencies involved in the housing sector. In all, the Ministry of Water Resources, Works and Housing (MWRWH) is responsible for housing policy, but this function is placed under one of the eight directorates of the Ministry, referred to as the Housing Policy Directorate, which lacks technical capacity. Besides the weak institutional framework for housing, Ghana's legal landscape is replete with numerous and sometimes outdated laws on land ownership and management, land use planning, development controls, housing financing and mortgage, construction, rent charges, etc., which have direct and indirect impact on housing delivery.

#### **Housing and Land Access**

The market for land in Ghana is highly unorganized. Information about who owns what piece of land is not readily available and the legal and administrative systems for transferring titles are cumbersome. These features have serious repercussions on housing supply. Currently, property transactions are slow and costly, and financial institutions are unwilling to extend credit to property holders without clear title.

More importantly, the country presents a complex mix of constitutional and legislative sources as the basis for land governance, which is a microcosm of the different tenure

systems currently in operation – formal and informal. Managing these systems to ensure security of tenure for developers' present challenges, especially on the issue of conflicts where allodia title is normally contested by different entities claiming ownership of the same piece of land.

Historically, the acquisition of land for development purpose was through the donation of drink money. However, in recent years, rapid urbanization and increasing land scarcity have made the commercialization of land a normal practice and indeed made land a tradable commodity. Increasing land prices has translated into increasing rental costs and housing prices, especially in metropolitan centres. The survey of housing types and values undertaken by the Rent Control Department reveals the extent of the 'dollarization' of the rental market and its impact on prices and access, resulting in increasing numbers of the population confiding themselves to fourth class residential areas largely dominated by compound houses (single bedrooms and chamber/halls) with shared facilities (toilet, bathroom, and kitchen). Even in these places, the monthly rental charge could be as high as US\$70 per month (excluding utility charges) with 2-3 years of rent advance payment.

The challenges with the land market and high rental charges of which are beyond the income of many Ghanaians has resulted in increasing incidence of slums and informal settlements, especially in major metropolitan areas notably, Accra and Kumasi. In these large towns and cities, where the search for better livelihood has led to the congregation of most people, and with poverty as the principal reason for migrating, settling in informal areas becomes a necessary condition as access to land and housing in the city is almost dictated by one's financial ability to pay.

Rising land and housing prices, congestion and poor sanitation and waste management within inner city areas as well as weak development controls are resulting in uncontrolled city expansion and spread. Increasingly, peri-urban areas are being acquired for mainly housing/residential development with serious negative consequences for agricultural livelihoods, encroachment on sensitive ecological and cultural sites, ever growing vehicle dependent communities (high transport costs and traffic congestions) and overstretched utility lines and poorly serviced communities.

#### **Demand and Supply of Housing**

Understanding the interplay of the drivers of the demand and supply of housing is critical towards addressing any shortfall in housing. Consequently, where there are challenges, the supply side in broad terms is usually constrained by poor policy environment (e.g. control of rents and prices of land and building materials) and weak institutional framework. While the imposition of price controls are aimed at making housing affordable, they have the unintended consequences of demotivating developers from investing in the sector, which in the long term impacts negatively on the poor as new housing are seldom developed leading to hikes in rents due to housing shortage. In fact, Ghana's current housing shortage is partly blamed on the policy of rent control and the general price control regime imposed throughout the 1970s through the early 1980s.

Though the magnitude of the housing deficit differs depending on the basis of the computation (such as the number of persons per household and the number of persons per room), there is a general consensus that a wide deficit or gap exists between the supply and demand for housing in Ghana. This Report reveals that overall, national cumulative housing deficit seems to have peaked at about 970,000 units in 2000 and then declined to a little over 717,000 when the deficit is computed on the basis of 6-persons per household per 2-bedroom

unit. However, when the cumulated deficit is calculated on the basis of 4-persons per household per 2-bedroom unit, it increases from over 2.5 million in 2000 to 2.7 million in 2010, a relatively smaller increase than previous decades. Similar trends are observed for the regions and the different city sizes. However, these computations do not take into account the number of shelters which do not have adequate facilities to be habitable and those requiring repairs or renovation before use, as these housing conditions are not captured by the population and housing censuses and other national surveys. If these are taken into account, the deficit would be larger than computed. Overall, following national trend as of 2010, the housing deficits across all the regions and different city sizes appear to be declining or increasing at a slower pace compared to previous decades.

With the exception of semi-detached houses, flats/apartments, and compound houses, all other types of houses can be described as unofficial and unapproved as they are not captured in Ghana's building codes and regulations. Nevertheless, these officially unapproved dwelling units which include huts, tents, kiosk/container, etc. are used as living places, especially in informal areas of urban centres. More importantly, these unapproved dwelling places are officially included and counted as part of the country's housing stock.

For the first time in Ghana's history, there were more houses in urban areas than rural areas: from 47.2 percent in 2000 to 55.8 percent in 2010. This reflects the shift of the population from rural to urban. In terms of the housing types, there was a significant increase in the proportion of all housing types in the Metropolitan and Municipal Assemblies compared to the rural District Assemblies. Of significance here, is compound housing, which is very popular among the poor and low-income households as rent tends to be low and affordable. Data from the 2010 PHC indicate that compound housing recorded the highest annual growth rate of 5.5 percent for the period 2000 to 2010. This is significant given the fact that analysis of the growth in housing types over the 1984 to 2000 period has indicated a drastic reduction in this type of housing (Grant 2009). The growth rate of compound houses was even more impressive for the large cities, Accra, Kumasi, Tema and Sekondi-Takoradi, where access to housing by the poor and low-income groups is widely viewed as more challenging (World Bank 2014).

The materials used in the construction of a house give indications of not only the durability and the cost of the house but also, the health and socio-economic status of the residents or occupants. Therefore, a consistent improvement in the materials used in majority of housing units over time reflects an improvement in the living standards and well-being of the population. However, the type of building materials used in housing construction is dependent on the cost and availability, and the ability of the people to pay for the cost of a given material. This Report reveals that local and poor quality building materials such as mud bricks/earth, bamboo and leaf/thatch are extensively used in rural Ghana for construction of dwellings, including the floor, outer wall and roof. On the other hand, urban households tend to build with expensive and durable materials, many of which are imported from outside Ghana. The differences in the type of housing between rural and urban areas is partly due to the strict enforcement of the country's building codes and regulations which strictly forbid the use of local materials such as earth in urban areas; the relatively high purchasing power of the urban population and; the influence of foreign designs and architecture of urban housing.

#### **Infrastructure and Access to Services**

When housing is developed without the necessary basic infrastructure such as accessible roads and drainage systems as well as access to house services (water, toilet, waste collection,

electricity, etc.) and community services (education, health, playgrounds, markets, etc.), housing can described as inadequate. The availability of basic infrastructure and services as well as the governance systems for maintaining these contribute to liveable environment for households and promote the general well-being of the larger community (Newman 2008). According to Owusu (2010), poor housing and living environment are often conceptualized and captured in health terms, however, they go beyond health to encompass other aspects of human well-being.

The institutional and regulatory framework for infrastructure and services provision in Ghana has undergone significant reforms in the last three decades. In line with the policy trend since the mid-1980s under the broad banner of economic liberalization and privatization, the state has increasingly drifted away as a provider to 'an enabler' and 'facilitator' of infrastructure and services provision. However, households' access to these services remained poor, and in many communities these services are simply not available, especially those in rural and periurban areas.

In general, while government's intention with respect to the provision of infrastructure and services is clearly defined, financing and governance aspects remained critical challenges. The MMDAs, utility companies and other public and parastal institutions are mandated to provide these community infrastructure and services but inadequate funding and the lack of coordination both vertical and horizontal across various institutions remained daunting leaving many communities poorly serviced. Consequently, many neighbourhoods developed without the requisite or commensurate infrastructure and services. In urban areas, this situation contributes to the development of slums and accounts for the growing incidence of the phenomenon in large Ghanaian cities while in rural areas, these services are simply unavailable.

#### **Housing Financing**

According to Teye et al. (2013), the existing housing financing system of the country is small and only targets a limited segment of the population, basically high-income earners in the urban formal sector as well as Ghanaians living in the diaspora. Indeed, Warnock and Warnock (2008) in their assessment of housing finance systems in 62 countries including Ghana found that the country ranked least in terms of housing finance as a proportion of GDP: Ghana's total housing finance was 0.5 percent of GDP compared to Africa's average of 15.7 percent of GDP. As a result of the difficulties with the housing financing system, the Bank of Ghana (2007) notes that the typical Ghanaian household is often faced with three choices in the acquisition of shelter, namely, rent, build or mortgage a home.

The great bulk of housing in Ghana is provided through informal means by individuals acting out of their own volition to supply a home for themselves and members of their household and family, and with financing through informal sources, mainly self-financing and use of remittances. However, the informal means of financing housing usually results in incremental building. It has been estimated that the process of incremental building could take up to 15 years for a single building to be completed, with funds subsequently getting tied into these uncompleted projects and the costs of construction ballooning in an unstable macro-economic environment (Bank of Ghana 2007), plagued by high inflation and persistent depreciation of the local currency, the Ghana cedi. For a low-income earner, Obeng-Odoom (2008), it is estimated that it will take about 54 years for this individual to acquire a two-bedroom house, assuming such a person had zero expenses.

Nevertheless, the self-financing option remains the key viable option for many households desiring to own their homes, especially within the context of Ghana's existing limited and severely challenged formal housing finance system. This is because it allows households to acquire homes in the long term and to extricate themselves from the pressures of the unregulated rental market with its 2-3 years rental advance payments. In addition, the self-financing option has the advantage of allowing households to build at their own pace without undue financial pressure.

#### **Conclusion and Policy Recommendations**

Housing in Ghana is challenged in it all aspects – from land acquisition through to construction of the physical structure and access to basic services and infrastructure as well as financing. Consequently, individuals and households adopt various informal strategies including self-financing and incremental building to be able to provide housing for themselves, their households and families. The overall effect of the challenges is that the Ghanaian housing market is constrained leading to the situation whereby aggregate housing supply is unable to meet effective demand.

Given the plethora of challenges confronting the Ghanaian housing sector, a number of studies and public policy documents have made several recommendations with the explicit aim of improving the housing sector. One such key public document formulated in recent times is the Draft National Housing Policy, 2013, which provides a comprehensive set of policy recommendations for the Ghanaian housing sector as follows:

- Promote greater private sector participation in housing delivery through provision of incentives and public-private partnership (PPP) arrangements.
- Create an environment conducive to investment in rental housing through among others, the promotion of rent-to-own and review of existing legislative frameworks on renting.
- Promote housing schemes that maximize land utilization through compact development and urban regeneration.
- Accelerate home improvement (upgrading and transformation) of existing housing stock: promote neighbourhood level house maintenance through enhancing capacities of community management associations and property management companies by MMDAs.
- Promote orderly human settlement growth with physical and social infrastructure by ensuring that housing projects conform to environmental sustainability standards.
- Promote social and low-income housing by involving communities and households in the development of infrastructure and services.
- Upgrade existing slums and prevent occurrence of new ones through revitalization, redevelopment and regeneration schemes.
- Undertake legislative and institutional reforms to delay with outdated, repetitive, inconsistent and ambiguous legal regimes and re-definition of institutional responsibilities and streamlining of functions for effective harmonization and coordination of efforts in the housing sector.

The policy recommendations if implemented, will impact positively on the Ghanaian housing sector. However, these recommendations have far-reaching policy implications which policy makers must pay attention to:

- Placing emphasis on the private sector must guarantee a balance between addressing the housing needs of the rich and the poor. It is suggested that without proactive measures by the state (such as subsidized land values, facilitating land acquisition, and other measures that incentivized the private sector), the private sector is unlikely to meet the housing needs of the poor and low-income groups.
- Many of the policy recommendations with respect to housing development fall under the ambit of the MMDAs and the TCPD with respect to the enforcement of building codes and regulations. However, the ability of these agencies to enforce building codes and regulations are inadequate due to their weak capacities (logistic, human resources and other challenges). The policy implication here is that unless these institutions are well-resourced, many of the recommendations made are unlikely to be fulfilled.
- Related to the role of the MMDAs and TCPD is the enforcement of building codes and
  regulations as they currently exist, by these public agencies. Clearly, many of the
  proposed recommendations require the enforcement of existing building codes and
  regulations. However, enforcing these building standards risk alienating further, the
  majority of the citizenry without access to decent housing. Therefore, a balance needs
  to be struck between enforcing of regulations and the minimum required acceptable
  standards relating to safety and hygiene of housing.
- Again, many of the recommended policy measures are directly and indirectly related to an effective and efficient land management system. To be able to achieve these laudable proposals would require that the challenges in the land sector relating to difficulties in determining ownership and boundaries; increasing land prices; conflicts, etc., are addressed.
- Proposed recommendations require significant investments in the housing sector, which are unlikely to come from the state given the pressures from other equally important sectors of the national economy. The implication is that new and innovative ways would have to be developed involving the active participation of the private sector. In the strict sense, active involvement of the private sector as earlier noted, means to a large extent, alienating the low-income groups from the housing market.

## CHAPTER ONE INTRODUCTION

#### 1.1 Background

While the majority of the world's population lives in some form of dwelling, roughly one half of the world's population does not enjoy the full spectrum of entitlements necessary for housing to be considered adequate. ... In order for housing to be adequate it must provide more than just four walls and a roof over one's head; it must, at a minimum, include the following elements: security of tenure, affordability, adequacy, accessibility, proximity to services, availability of infrastructure and cultural adequacy.

(UNESC 2005, p. 6)

Across the world and especially in the developing world, housing remains one of the critical development challenges of which some analysts have described as a global crisis (Tipple 1994; ISSER 2013). The housing question is largely a case of housing demand outstripping supply and/or the price of housing being over and above the wage of the average worker. In both or either situation, individuals and households resort to officially unapproved means to secure housing. The consequence is that housing is secured but lacking security of tenure, accessibility and proximity to services, availability of infrastructure, etc.

It has been argued that many of the challenges faced by the poor can be linked to housing (UNFPA 2007). This is because as Songsore and McGranahan (1993) note, although all constituents of the environment exert some influence on human health and well-being, the component that exerts the greatest and most immediate influence on people's well-being is the intimate environment of their home and neighbourhood. In other words, as Bonnefoy (2007, p. 411) argued, the immediate housing environment and the neighbourhood represent an everyday-landscape, which can either support or limit the physical, mental, and social well-being of the residents. The view is that adequate housing can be positively correlated with socio-economic benefits to both the occupants and the larger society (Newman 2008). According to Newman (2008), these benefits include better health, fewer behavioural problems especially among children, greater educational attainment, and increased labour force participation (Newman 2008).

The effects of housing on health have particularly been stressed because of its consequent impact on other aspects of socio-economic well-being, particularly productivity. According to Bonnefoy (2007), the quality of housing conditions plays a decisive role in the health status of the residents as many health problems are either directly or indirectly related to the building itself (construction materials used, equipment installed, or the size or design of the individual dwellings). Bonnefoy (2007) adds that dwelling also represents not only as the spatial point of reference for each individual but also has a broad influence on the psychosocial and mental well-being by providing the basis for place attachment and identity as well as a last refuge from daily life.

According to GoG/NDPC (2010), rapid increase in population in Ghana has resulted in a large housing deficit, especially in urban areas. It adds that current estimates indicate that the country needs at least 100,000 housing units annually while supply is estimated at 35% of the

total need. Other studies put the country's overall annual deficits between 70,000 and 120,000 housing units with only 30 percent to 35 percent of the annual estimated requirement being supplied (ISSER 2013). While there may be disagreements as to the exact estimate of the annual requirement, there is a general consensus of the shortfall in the supply of housing, particularly in urban Ghana. In addition, there are other numerous challenges which impact negatively on the supply of housing, including:

- (i) cumbersome land acquisition procedures;
- (ii) weak enforcement of standards and codes in the design and construction of houses;
- (iii) ineffective rural housing policy;
- (iv) haphazard land development that needs to be addressed; and
- (v) inadequate housing finance (limited funds to support the construction industry; high cost of mortgages; and low production of, and poor patronage of local building materials).

Besides the above, Ghana's housing sector is also challenged by a large number of vacant and uncompleted housing structures. This is partly attributed to the limited availability of mortgages and other flexible financing arrangements. Consequently, individuals build incrementally relying on personal savings and other personal resources.

According to ISSER (2013), the housing question in Ghana is largely an urban phenomenon. Of the total housing stock of nearly 3.4 million in 2010, rural areas accounted for about 58 percent even though it contains about 49 percent of the total population (GSS 2013). This trend has been consistent over the census although the rural share of the housing stock is on the decline to urbanization. While the main challenge of rural housing is due to poor quality building materials (clay or mud and roofed with thatch) which come under pressure of weather vagaries, that of the urban is associated with both quality and quantity leading to homelessness and streetism (ISSER 2013).

#### 1.2 Rationale and Objective

The performance of the housing sector provides good indications of the performance of the other sectors of the society. This is because the housing sector is directly and indirectly linked to key sectors of the economy such as banking and finance, construction, health, manufacturing, etc. In addition, housing provides employment not only directly in the actual construction of dwellings but a host of allied activities. The role of housing as a key kingpin linked to critical sectors of an economy is demonstrated by the impact of the sector on the economies of advanced countries during the recent global financial and economic crisis in Europe and North America. Indeed, the collapse of the housing sector triggered a series of economic and financial consequences, including the collapse of banks and soaring unemployment.

On the other hand, the underperformance of the sector has several socio-economic ramifications. These include loss of employment, especially in the construction industry as well as the possible increases in the incidence of slums and homelessness. According to Aldrich and Sandhu (1995), the presence of slums and squatter settlements within a society gives an indication of the failure of society and government to provide adequate habitat or housing for human development. More specifically, the housing sector can provide indications of the functional role of human settlements, particularly cities and towns. This is because poor housing can be a cause and consequence of weak planning. Indeed, poor

housing can exacerbate weak planning and its consequences in terms of urban sprawl and long commuting times as well as reduce the competitiveness of cities in terms of doing business and employment creation.

According to GoG/NDPC (2005, p. 52), there is the need to treat housing provision as a strategic area for stimulating economic growth while at the same time improving the living conditions of Ghanaians. GoG/NDPC (2005) adds that the very activity of providing housing contributes to economic growth through multiplier effect of housing construction on the economy, estimating that for every ten thousand dollars (US\$10,000) spent on housing construction, more than seven (7) jobs are created in related industries and enterprises. In this sense, housing provision can be a key driver of economic growth and employment generation through its multiplier effects on an economy.

The main objective of this Report is to analyze housing conditions in Ghana and their implications for the country's socio-development. Specifically, the Report examines the following:

- Identify and analyze the trend of stock of houses, facilities and amenities of houses across different settlement sizes, namely metropolitan, municipal and other localities;
- (ii) Assess the level of housing deficits across regions, city sizes and locality (rural and urban);
- (iii) Analyze the various options for financing housing in Ghana;
- (iv) Examine land access and current land tenurial arrangements and their implications for housing;
- (v) Propose policy recommendations and the Report's policy implications.

#### 1.3 Methodology

This Report draws heavily on the 2010 Population and Housing Census conducted by the Ghana Statistical Service. Data on housing and related issues were analyzed at the national, regional, different city sizes levels and by rural-urban residence, where appropriate. Though the main source of data for the Report is the 2010 Population and Housing Census, where possible, comparisons are made drawing on previous censuses.

Besides the census data, the Report also makes extensive use of other studies on housing in Ghana and elsewhere. These include journal articles, research reports and national policy documents on housing and related issues.

#### 1.4 Definition of Terms

#### **Housing**

Housing is defined to encompass all factors and conditions that go to produce a dwelling with all the attribute of adequate and decent dwelling. It includes the physical shelter, available services and infrastructure both in-house and within the neighbourhood, and the input markets (land, materials, labour and finance) required to producing and maintaining it. In essence, the concept of housing covers the solutions geared towards improving the shelter and the environment in which it exists. When housing is reduced to shelter or living space

only, dwellings tend to be built without regard to the environment and services needed to support their inhabitants (GoG/MLGRD 2012).

#### **Housing Deficit**

It refers to the gap between the supply and demand for housing. Housing deficit is measured by taking into account the existing housing stock and number of persons per dwelling. When the housing delivery system (supply) is unable to meet effective demand, this leads to a strain on the existing housing stock and infrastructure.

#### **Compound house**

A compound house is described as 'Ghana's traditional house' (Afram, 2009). It usually consists of small rooms housing several households with an open courtyard and shared facilities such as toilets, bathrooms and kitchens (ISSER 2013). This type of dwelling unit is very popular with low-income groups because it is affordable and allows the sharing of facilities with known groups and individuals at a relatively reduced cost.

#### Slum

Though can be visibly recognized on the urban landscape, it is difficult to define in precise terms. It is, however, assumed to indicate housing which falls below a certain level necessary for human development.

#### **Squatter settlement**

Refers to housing that is either the result of illegal occupation or has been developed in an unauthorized fashion (Aldrich and Sandhu, 1995)

#### 1.5 Structure of Report

This Report is made up of seven chapters. Chapter one provides a general background to the housing situation in Ghana. The Chapter also provides the rationale and objectives of the Report as well as the methodology and the definition of key concepts. Chapter two looks at the policy, institutional and legal framework for housing in Ghana. It provides an overview of Ghana's housing policies over the years as well as the institutional and legal framework for housing delivery. Chapter two also discusses the key players in Ghana's housing sector.

Chapter three is on housing and land access. Key discussions include housing and land prices, and the growing incidence of slums and homelessness. The Chapter also looks at housing and urban sprawl and its consequences. The interplay of the forces of demand and supply of housing in Ghana is presented in Chapter four, highlighting the housing and estimation of the housing deficit across the regions and different settlement types. Chapter four also looks at the housing types and the materials used in construction as well as occupancy and tenurial arrangements.

Housing Infrastructure and households' access to basic services are the subjects of discussions in Chapter five. The discussions in the Chapter focus on basic services such as water, toilet, waste, and electricity. The financing of housing in Ghana is presented in Chapter six. It looks at various financing options (formal and informal) and the challenges associated with housing financing in Ghana. The Report ends with Chapter seven which is on conclusion, recommendations and policy implications.

#### **CHAPTER TWO**

### POLICY, INSTITUTIONAL AND LEGAL FRAMEWORKS FOR HOUSING IN GHANA

#### 2.1 Introduction

At the core of the housing crisis are three important and interrelated aspects, namely, quantity, quality and cost, or what K'Akumu (2007) referred to as housing poverty. The quantity of housing refers to the number of housing produced within a given period. This has implications for cost and quality as it determines the supply and demand dynamics. It has been suggested that inadequate housing stock (quantity) can lead to homelessness, overcrowding and consumption of poor quality by households (ISSER 2013).

Quality housing also has cost and quantity implications. This is because not all households are in a position to access high-end quality housing due to pricing. The cost of housing as it relates to the quantity and quality of housing is a primary determinant of access (ISSER 2013). High cost of housing production reflected through land and housing prices, rent, etc. is a major contributory factor to the emergence of informal settlements – communities that do not meet approved standards and regulations both in terms of the construction materials used as well as services provision (water, sanitation and solid waste disposal).

Across the world, housing policies, institutional and legal frameworks are formulated with the explicit or implicit purposes of addressing the interrelated issues of housing quantity, quality and cost. In articulating measures to address these issues, a careful balance needs to be struck between housing provision and access to housing for majority of the population that takes into account the issues of quantity, quality and costs. Despite the numerous challenges in the Ghanaian housing sector which relate to quantity, quality and costs, the country lacks a comprehensive National Housing Policy Framework (NHPF), though a draft policy has been in the offering since the 1990s (UN-Habitat 2011). The absence of a comprehensive NHPF seems to undermine the policy coherence of agencies involved in housing provision. In addition, similar to experiences in other Sub-Saharan African countries, policies on housing in Ghana are made by many public agencies to fit into their own view of the world and seem to lack co-ordination among them (UN-Habitat 2011).

#### 2.2 Overview of Housing Policies and Strategies in Ghana

In line with shifts in the global thinking about development, policies on housing in many countries in the developing world have also changed in significant ways since the 1960s. According to Erguden (2001), most top-down housing planning strategies since the 1960s have given way to market and people-based solutions, process approaches and emphasize on building capacities and institutions (see Table 2.1). Erguden (2001, p. 3) notes broadly that:

housing policy developments since the 1960s ... shows how an early focus on physical planning and public housing give way, first to "self-help" housing projects (which mostly served middle income households and proved to be an unsustainable option to address the needs of the poor due to the high subsidies involved), and then to the "enabling approach" which concentrated on maximizing the contributions of all the actors in housing production within a supportive legal and regulatory framework.

Table 2.1 indicates that the 1950s-1960s' development paradigm of modernization and economic growth was associated with direct provision of housing by public or state agencies under the dictates of master plans and concerted efforts to eradicate informal settlements. From the 1970s, the direct state provision of housing in the 1960s gave way to state-support to self-help housing ownership schemes under the development paradigm of redistribution with growth and basic needs approach. The return of neoliberal development thinking in the 1980s-1990s saw a new approach to housing by the state which emphasize on creating the enabling environment or framework for action by people, private sector and the widespread use of market principles to determine the demand and supply sides of housing delivery

Table 2.1: The evolution of housing policy

Phase and Dates	Focus of Attention	Major Instruments Used	Key Documents
Modernization and urban growth: 1960s-early 1970s	Physical planning and production of shelter by public agencies	Blueprint planning: direct construction (apartment blocks, core houses); eradication of informal settlements	
Redistribution with Growth/Basic Needs: mid-1970s- mid1980s	State support to self- help ownership on a project-by-project basis	Recognition of informal sector; squatter upgrading and sites-and-services; subsidies to land and housing;	Vancouver Declaration (Habitat I. 1976); Shelter, Poverty and Basic Needs (World Bank, 1980); World Bank evaluations of sites-and-services (1981-83); UNICEF Urban Basic Services
The Enabling Approach/Urban Management late 1980s -early 1990s	Securing an enabling framework for action by people, the private sector and markets	Public/private partnership; community participation; land assembly and housing finance; capacity building	Global Shelter Strategy to the Year 2000 (1988); Urban Policy and Economic Development (World Bank 1991); Cities, Poverty and people (UNDP 1991); Agenda 21 (1992); Enabling Housing Markets to Work (World Bank, 1993)
Sustainable Urban Development:mid 1990s onwards	Holistic planning to balance efficiency, equity and sustainability	As above, emphasis on environmental management and poverty alleviation	Sustainable Human Settlements Development: Implementing Agenda 21 (UNCHS, 1994)
HABITAT II: 1996	"Adequate shelter for all" and "Sustainable Human settlements development"	Culmination and integration of all previous policy improvements	The Habitat Agenda (UNCHS, 1996); Global Report on Human Settlements (UNCHS, 1996)
Slum upgrading and safe and inclusive city agenda, 2000*			MDGs (2000)

\*Authors' construct

Source: Erguden (2001, p. 11)

In broad terms, since the mid-1990s, the neoliberal development approach of the use of the market has continued with an added emphasis on sustainable urban development. Under this development paradigm, there was focused attention on holistic planning to balance efficiency, equity and sustainability with strong emphasis on environmental management and poverty alleviation. This development agenda was further deepened with the adoption of the Millennium Development Goals (MDGs) at the turn of the century. Since 2000, there has been focused attention of the world on reducing poverty, improving the poor's access to basic services and reducing the incidence of slums, especially in developing countries. Indeed, many of the goals and targets of the MDGs are related to improvement in housing. However, the MDG Goal 7 (Ensure Environmental Sustainability) and its targets: Target 7C (halving by 2015, the proportion of the population without sustainable access to safe drinking water and basic sanitation) and; Target 7D (Achieve by 2020, a significant improvement in the lives of at least 100 million slum dwellers) – are directly related to housing.

The broad global policy trends on housing outlined in Table 2.1 can be compared to the Ghanaian situation as illustrated in Table 2.2. Indeed, similar to the global trend, the late 1950s-1980s, especially the immediate post-independence era (or the regime of Ghana's first President, Kwame Nkrumah), has been described as the period of active and direct involvement of the state in the provision of public housing (ISSER 2013; Owusu 2014). This period witnessed the establishment of the State Housing Corporation (SHC) and Tema Development Corporation (TDC) for the regions of Ghana and the port and industrial town of Tema, respectively. In addition, two state-owned financial institutions, the Bank for Housing and Construction (BHC) and the First Ghana Building Society (FGBS) were established to provide financial support for public housing. The direct involvement of the state in housing delivery continued from the 1950s through the 1970s with the construction of what was referred to as the 'low-cost houses' in district and regional administrative capitals by the Supreme Military Council I (SMC) regime of General I.K. Acheampong.

Table 2.2: An overview of Ghana's housing policies and strategies since independence

Period	State policy orientation	Actors/agencies	Key policy document
Late 1950s-early 1980s (Post-	Direct state provision of mass housing:	State institution:	7-Year D-Plan
independence Era)	public affordable housing	State Housing Corporation (SHC)	
	cap on rent	Tema Development Corporation	
		(TDC)	
		State financial institutions:	
		Bank for Housing and	
		Construction (BHC)	
		First Ghana Building Society	
Mid-1980s-early	Creating an enabling environment	State	
1990s (Structural	for private sector participation in		
adjustment	housing delivery		
programmes	state withdrawal from direct housing	Private real estate	
(SAPs)/economic	provision	companies/Ghana Real Estate	
liberalization era	removal of cap on rent	Developers Association (GREDA)	
Mid-1990s to date	Same as SAPs/economic	State	
(Post-Structural	liberalization era, but deepening role	MNCs	
Adjustment and	of global and national private sector	GREDA	
Globalization Era)	operations in housing delivery		

The direct provision of housing continued until the early 1980s when almost all the stateowned housing agencies collapsed due to mismanagement and general poor state of the Ghanaian economy. Although the state was active in direct housing provision during this period, the bulk of the housing (about 80%) was provided by the private informal sector (Songsore 2003). In addition, the state's intervention was focused on public sector workers leaving out the informal sector. Furthermore, the policy of placing a ceiling on rent implemented in the 1970s through the early 1980s, though, was meant to make housing affordable, it had unintended consequences as it became a disincentive for the private sector to provide rental housing units (ISSER 2013). Nevertheless, as ISSER (2013) notes, the state's intervention in the housing sector was significant, especially in urban centres as a number of residential units were developed for public workers in an era of relatively small population and low level of urbanization.

The mid-1980s to the early 1990s represents the era of structural adjustment programmes (SAPs) and economic reform programmes (ERP) in Ghana. Supported by the World Bank and the International Monetary Fund (IMF), Ghana implemented SAPs/ERP to reverse the preceding decade's record of poor economic performance and to restore economic growth and stability. At the heart of SAPs/ERP was the economic liberalization, and state withdrawal from key sectors of the economy to give way to the private sector (privatization). Consequently, government's policy on housing took a different turn with emphasis on creating an enabling environment for private sector participation in housing delivery. According to ISSER, the mid-1980s-1990s marked the emergence on the Ghanaian housing market of private real estate developers and the establishment of the Ghana Real Estate Developers Association (GREDA).<sup>1</sup>

The mid-1990s to the present can be described as the post-structural adjustment and globalization era. This era is characterized by deeper incorporation of the Ghanaian economy into the global economy and the rapid urbanization and extensive expansion of Ghanaian large cities such as Accra, Kumasi, Tema, Sekondi-Takoradi and Tamale (Grant and Nijman 2002; Grant 2009). Similar to trends observed in other parts of the world, increasingly, globalization and urbanization are associated with higher land and housing prices as international interest groups and actors compete with national and local actors for land and housing (Owusu 2008).

Within the context of rapid urbanization and globalization, government's policy on housing from the 1990s to the present has remained largely unchanged from the ERP/SAP era (ISSER 2013). Among its key policy objectives, the overarching objective of the Draft Housing Policy, 2013 is the greater promotion of private sector participation in housing delivery. The Draft Policy notes that

... the Government sets out this new policy on the basis of its understanding of the 'enabling framework' whereby the state will play a less direct role in the housing sector in the future and encourage private sector developers, cooperative groups and other actors to take leadership in the delivery with the state facilitating equitable production and allocation.

(GoG/MWRWH 2013, pp. 10-11)

<sup>1</sup>GREDA is an association of private real estate companies in Ghana. Established in 1988, GREDA aim to

provide a united front in making recommendations to government on ways of promoting the development of the Ghanaian real estate sector as well as seeking solutions to the practical problems in the housing market.

However, ISSER (2013) has argued that the private sector is unlikely to provide housing for poor and low-income groups without appropriate incentives to the sector. This is because the private sector has never played any meaningful role in housing delivery for the urban poor (ISSER, 2008). Faced with high costs of land and building materials as well as town planning regulations which set housing standards precluding the use of local technology and raw materials (such as use of thatch/bamboo or raffia roof and mud/mud bricks/earth for wall construction), private real estate companies have delivered housing units to the middle and upper echelons of the Ghanaian society (including those in the diaspora).

#### **Attempts at Developing Comprehensive Housing Policy since 1990**

Even though Ghana's policy response to the housing challenge has been described as piecemeal and fragmented (ISSER 2013; GoG/MWRWH 2013), the last three decades have witnessed efforts to develop a more comprehensive and holistic response (see Table 2.3). Much of the effort in developing comprehensive policy measures and strategies in housing has been coached around affordable housing and slum upgrading and regeneration. According to GoG/MWRWH (2013, p. 11), after three decades of policy vacuum, government developed the National Housing Policy and Action Plan (1987-1990) document as a coherent attempt to specifically guide state and non-state actors in housing sector. This policy document and its actions were, however, not adopted and implemented by the state.

Table 2.3: Housing and related policies: summarized aims and key components

Policy	Aim and Key Components on Housing and Slum Upgrading	Implementation Status
National Housing Policy and Action Plan (1987 – 1990)	Sets government's overall objectives and strategies towards affordable housing:	None
National Shelter Strategy, Vol. 1 & 2 (1993)	Identifies affordable housing and slum upgrading, maintenance and infrastructure development	None
Revised National Shelter Strategy, Part 1 & 2, 1999/2000	Advocates increase private sector participation in housing delivery, especially rental houses for low-income earners	None
Ghana Poverty Reduction Strategy (GPRS I), 2003-2005	Accelerate poverty reduction to meet MDG goals: Slum upgrading including classification of slums based on deprivation extent Strengthening physical planning and planning scheme enforcement	Completed, impact limited due to few projects
Growth and Poverty Reduction Strategy (GPRS II), 2006-2009	Increase economic growth and poverty reduction to attain middle-income status: Affordable housing, slum upgrading/urban regeneration through urban infrastructure development, basic services provision, etc.	Completed, impact limited
Ghana Shared Growth and Development Agenda (GSGDA), 2010-2013	GSGDA approach similar to GPRS I&II approach: Affordable housing, slum upgrading/urban regeneration through urban infrastructure development, basic services provision, etc.	On-going implementation
National Urban Policy Framework, 2012	Comprehensive framework on urban development, including emphasizes on affordable housing and, prevention and upgrading of slum	Cabinet approved and on-going implementation
Draft National Housing Policy, 2013	Review and merger of existing housing policy frameworks to make them more relevant and focused on the housing needs of low-income people	Before Cabinet for approval

The effort to develop a comprehensive policy response in the housing sector continued throughout the 1990s culminating in two policy documents, the National Shelter Strategy, Volumes 1 & 2 (1993) and the Revised National Shelter Strategy, Part 1 & 2 (1999/2000) (see Table 2.3). However, like the earlier policy document, the National Housing Policy and Action Plan (1987–1990), these national policy documents were never implemented and remained basically as draft documents (GoG/MWRWH 2013).

Driven by the need to accelerate poverty reduction to meet the MDG goals, much of Ghana's development agenda in the last decade has been driven by a series of medium-term development policy frameworks: Ghana Poverty Reduction Strategy (GPRS I), 2002-2005; Growth and Poverty Reduction Strategy (GPRS II), 2006-2009 and; Ghana Shared Growth and Development Agenda (GSGDA I), 2010-2013. The focus of these medium-term development policy frameworks has been to create the enabling environment for private sector participation in housing delivery in line with the broad current development thinking dating back to the mid-1980s. In addition, they have emphasized on affordable housing, slum upgrading/urban regeneration through urban infrastructure development, basic services provision, etc. However, the inability of the private sector to provide affordable housing for low-income groups has forced government to directly engage in housing delivery. Nevertheless, the impact of the state has been very limited given the magnitude of the demand for housing in both rural and urban areas.

Since 2005, there have been concerted efforts with support provided by the UN-Habitat to develop a more comprehensive National Housing Policy Framework which takes into account the current development context of Ghana, international housing related frameworks as well as earlier national documents on housing. The Draft Housing Policy, 2013 has four policy goals which centre on adequacy, affordability, sustainable and participatory housing development (see Box 2.1).

#### Box 2.1: Draft National Housing Policy, 2013: Goals and Policy Objectives

#### **Policy Goals**

- To provide adequate, decent and affordable housing that is accessible and sustainable to satisfy the needs of all people living in Ghana;
- To ensure that housing is designed and built to sustainable building principles leading to the creation of green communities;
- To ensure that there is participation of all stakeholders in decision making on housing development in their localities;
- To ensure adequate and sustainable funding for diverse mix of housing in all localities.

#### **Policy Objectives**

- Promote greater private sector participation in housing delivery;
- Create an environment conducive to investment in housing for rental purposes;
- Promote housing schemes that maximize land utilization;
- Accelerate home improvement (upgrading and transformation) of existing housing stock;
- Promote orderly human settlement growth with physical and social infrastructure;
- Make housing programmes more accessible to the poor (social housing);
- Involve communities and other non-traditional interest groups in designing and implementing low-income housing;
- Upgrading existing slums and preventing the occurrence of new ones.

Source: GoG/MWRWH 2013: Draft National Housing Policy, Accra: GoG/MWRWH, p. 20

The four policy goals of the Draft Housing Policy, 2013, are backed by eight policy objectives. Key among the policy objectives is promoting greater private sector participation for the delivery of affordable and orderly development of human settlements in Ghana. In fact, the policy document notes that the 'means to achieving [the policy] goals lay in the creation of a sound foundation to encourage and stimulate the private sector as well as attract investment into housing delivery' (GoG/MWRWH 2013, p. 20). While the draft policy document represents a bold attempt to comprehensively address Ghana's housing challenges, its adaption and implementation still remained a matter of concern, taking into account the fact that it has been in preparation since 2005. In addition, it is unclear, the extent to which the policy's strong emphasis on private sector participation can lead to the promotion of affordable housing for low-income groups. This is because as noted earlier, the private sector has shown in the past not to be interested in targeting low-income groups.

#### 2.3 Institutional and Regulatory Framework for Housing

The multiplicity of sectors and sub-sectors related to housing such as land, land use planning, development control, finance, construction, etc., entails that there would be various institutions and agencies involved in the housing sector. While this may be the case, the overall position for housing in Ghana falls under the ambit of the Ministry of Water Resources, Works and Housing (MWRWH). The name of the ministry suggests quite clearly that its mandate includes other responsibilities and roles other than housing. In reality, the MWRWH exists to provide policy directions in the areas of efficient management of Ghana's water resources and supply; provision of housing; promoting sustainable delivery of various urban and rural physical infrastructure facilities, as well as the provision of basic social services (UN-Habitat 2011).

According to the UN-Habitat (2011, p. 32), there is no dedicated Ministry of Housing in Ghana, but rather the function of providing leadership in terms of government's policy design and housing initiatives is placed under one of the eight directorates of the MWRWH referred to as the Housing Policy Directorate. It adds that the Housing Policy Directorate is short on technical capacity having just three technical officers, including the head of the Directorate, Director of Housing, who are expected to develop and implement the national housing policy as of 2011. Thus, in all estimation, the Housing Policy Directorate is understaffed and lacks the full complement of expertise to articulate and implement a vigorous housing policy agenda in Ghana.

The housing policy role of MWRWH is complemented by the Ministry of Local Government and Rural Development (MLGRD) which is charged with the provision of neighbourhood infrastructure as well as neighbourhood zoning and planning through the Metropolitan, Municipal and District Assemblies (MMDAs). However, the role of MMDAs in providing neighbourhood infrastructure and basic services, and adequate planning has been questioned (Yankson 2000; Yeboah and Obeng-Odoom 2010; Owusu et al. 2012). This situation partly accounts for the increasing incidence of slums and poor underserviced neighbourhoods.

Besides the weak institutional framework for housing, Ghana's legal landscape is replete with numerous laws on land ownership and management, land use planning, development controls, housing financing and mortgage, construction, rent, etc. which have direct and indirect impact on housing (see Table 2.4). These numerous laws and regulations which are scattered throughout the country's statute books are not harmonized and are in some cases inconsistent with each other. A key example is the Local Government Act, 1993 (Act 462) which was passed after Town and Country Planning Ordinance of 1945 (CAP 84) but failed

to harmonize its provisions with the requirements of CAP 84 on the issues of land use and management, and town planning.

Table 2.4: Laws with direct impact on housing and land use

Housing sub-sector	Law/Legal Instrument
Land ownership and management	1992 Constitution (Chapter 20 Clause 257 (1-5) – Vestment of public lands in President; Chapter 20 Clause 266 (1-5) – Exclusion of foreigners from freehold leases; Chapter 20 Clause 267 (1-9) – Stool and Skin Lands and Property) State Lands Act, 1962 (Act 125) – Compulsory acquisition of land by the state Stamp Duty Act, 2005 (Act 689) Office of the Administration of Stool Lands, 1994 (Act 481) Lands Commission Act, 2008 (Act 767)
Land use planning	Town and Country Planning Ordinance 1945 (CAP 84) Town Ordinance 1951 (Cap 86) Land Planning and Soil Conservation Ordinance 1953 (No. 32) Tema Development Corporation (Miscellaneous Provisions) Decree, 1966 (NLCD 108) Volta River Development Act, 1961 (Act 46) as amended Local Government Act, 1993 (Act 462) & MMDAs relevant byelaws National Development Planning Commission (Cap 86 & Act 33) Act 1994 (Act 479) & National Development Systems Act, 1994 (Act 480)
Development control	Local Government Law 1993 - Act 462 Sections 49 to 57 Town and Country Planning Ordinance 1945 (CAP 84) Environmental Protection Agency Act, 1994 (Act 490) and Environmental Assessment Regulations 1999 (L.I. 1652)
Housing finance & Mortgage	Building Society Ordinance 1955 (No.30) Co-operative Societies Act, 1968 (NLCD252) PNDCL 329 Home Mortgage Finance Law 1993 Home Mortgage Finance Act, 2008, Act 770 Credit Reporting Act, 2007, Act 726 Long-Term Savings Scheme Act 2004 (Act 679) Borrower and Lenders Act 2008, Act 773
Construction	LI 1630 National Building Regulations 1996 Building materials standards as set by Ghana Standards Authority
Rent	Rent Act, 1963, Act 220 Rent Tax – Act 592 Internal Revenue Act, 2000

Source: Derived from MLGRD (2010) and UN-Habitat (2011)

In other instances, the application of the existing laws with critical relevance to housing is outmoded and outdated, and inconsistent and inadequate to the current realities. An example is the Rent Act, 1963 (Act 220) which generally regulates the relationships between tenants and landlords as well as stipulate a maximum of 6 months of rent charge. However, due to limited supply of housing, this regulation is openly flaunted and rent advances of 2-3 years are the norm or a common practice rather than an exception.

Another key example is CAP 84 which has not been repealed and remains the most critical land use law in Ghana (Konadu-Agyemang 1998; Owusu 2008). Introduced in 1945, CAP 84 is derived directly from the British Town and Country Planning Ordinance of 1932, and it is currently the main law for the regulation of housing and other land use as well as urban management in Ghana. In particular, Konadu-Agyemang (2001) notes that some of the provisions of CAP 84 which centred around planning schemes, layouts, minimum land plot

sizes, etc. are outmoded and irrelevant and inadequate in the present era of land scarcity and the need to promote compact development and reduce sprawl. Consequently, the inadequacies of CAP 84 are revealing in large Ghanaian cities and towns of rapid urban growth and increasing high demand for physical space (Owusu 2008). In essence, the application of CAP 84 under current circumstances, especially in urban areas results in a disconnection between land use planning and policies for social and economic development (Grant and Yankson 2003).

#### 2.4 Key Players in Ghana's Housing Sector

The Ghanaian housing sector is populated with a number of players or actors. This is partly due to the large informal sector of the housing sector as well as the limited regulation of the sector. Consequently, there is overlapping roles and functions which lead to the presence of a large number of players in the sector. Table 2.5 provides a list of key players in the Ghanaian housing sector, categorized into traditional, public, private, NGO and international actors.

The list of players in the housing sector as provided in Table 2.5 can also be categorized into informal and formal players. To a large extent, the actors listed under traditional players can be described as informal players, while the other categories can be described as formal players. The informal players include customary land owners (chiefs, queen mothers, family and clan heads, etc.) who hold the bulk of the land for housing and other uses; individual households who acquired land from customary owners and; artisans who are engaged by households to develop acquired land/plots for residential purposes. Various studies indicate that between 80-90 percent of the housing stock is delivered through the informal sector (Songsore 2003; UN-Habitat 2011) with none or little support from formal sector players.

Table 2.5: Key actors in Ghana's housing sector

Key Housing Sector Actors						
Traditional	Public	Private	NGO	International		
Chiefs	MWRWH	GREDA	Habitat for	Cities Alliance		
Queen mothers	MLGRD	GHACEM	Humanity	UN-Habitat		
Family heads	MLNR	Universal Banks	People's Dialogue	World Bank		
Clan heads	NDPC	Mortgage companies	COHRE	GIZ		
Land priests	ECG	NBFIs	Housing the Masses			
Individual households	GWCL	Building/architectural	Amnesty			
Artisans/small-scale	CWSA	firms/consultants	International			
contractors	DUR	Steel/roofing	GFUP			
(carpenters, masons,	Lands Commission	manufacturing				
electricians, plumbers,	MMDAs	companies				
steel bender, etc.)	TCPD					
Land/housing agents	EPA					
	State Housing					
	Company Ltd					

According to UN-Habitat (2011), informal players are efficient in that their activities occur on many sites across the country at any one time. However, building takes a long period of time from the starting date to the completion date. This is because the development process of dwellings is done incrementally – as and when finance and other resources are available. Building incrementally partly account for the large number of uncompleted dwellings across the country, a subject matter we explore further in-depth in Chapter 3.

On the other hand, the formal sector dominated by players in public sector is more complex and contributes about 10 percent of dwellings and an even smaller percentage of rooms with the focus mainly on the middle and high-income households (UN-Habitat 2011). As already noted, actors in the public sphere of the formal sector led by the MWRWH and its Directorate of Housing provide the policy design for the Ghanaian housing sector. The activities of other public agencies such as MMDAs, and utility agencies – Electricity Company of Ghana (ECG), Ghana Water Company Limited (GWCL), Community Water Sanitation Agency (CWSA), Department of Urban Roads (DUR), etc. – support policy implementation by providing the necessary neighbourhood and settlement infrastructure and services.

The policy design and the supporting infrastructure and services provided by players in the public sector are utilized by the private sector and households in housing delivery. Non-governmental organizations (NGOs) on the other hand, may be involved in limited direct production of housing, but a greater proportion of them are in the area of advocacy for propoor development agenda and the need to protect slum dwellers and provide affordable housing under the concept of the right to housing.

A key challenge in Ghana's housing sector is the disconnection between public policy and the key players involved in the delivery of housing, namely households and the informal institutions. This is because public policies and regulations on housing do not take into account the capacities and needs of households and informal institutions within the present context of increasing land scarcity and prices, high costs of building materials, etc. For instance, building regulations continue to be spelt in such high standards and in many cases requiring the use of imported building materials at high costs. Unable to meet these high standards, households on the other hand continue to develop dwelling which fall short of official standards. The disconnection between the public policy and households in housing delivery is further complicated by the lack of both vertical and horizontal coordination among the various public agencies and actors involved in housing and settlement planning.

## CHAPTER THREE HOUSING AND LAND ACCESS

#### 3.1 Introduction

Rapid population growth and increasing urbanization have made shelter one of the critical challenges facing Ghana. Increasing overcrowding, declining quality, and lack of access to services characterize much of the housing stock in the country, especially in urban areas. The housing needs of urban inhabitants are often restricted to substandard structures and insanitary environments in squatter and slum settlements. The market for land in Ghana is highly unorganized. Information about who owns what piece of land is not readily available and the legal and administrative systems for transferring titles are cumbersome. These features have serious repercussions on housing supply. Currently, property transactions are slow and costly, and financial institutions are unwilling to extend credit to property holders without a clear title.

#### 3.2 Land Ownership and Tenure

Land ownership in Ghana can generally be categorized into customary and public lands. In principle, customary land ownership reflects those parcels of land owned by stools, skins, families or clan usually held in trust by the chief, head of family, clan, or fetish priests for the benefit of members of that group. Managers of customary lands are expected to be transparent and accountable in their land transactions and also ensure that benefits accruing from the use of customary lands are utilized for the benefit of the larger community (Fiadzigbey 2006). Public lands on the other hand, are lands acquired for the general good of the country and vested in the President of the Republic. Chapter 21 of the 1992 Constitution of Ghana (Article 257 (1)) states that "All public lands in Ghana shall be vested in the President on behalf of and in trust for, the people of Ghana".

For individual development purposes, private ownership of land can be acquired by way of a grant, sale, gift or marriage. In other words, private ownership of land is by way of outright purchase from customary landowners, private individuals or handed over from colonial governments. Consequently, land ownership and tenure arrangements in the country depict three distinct patterns (i.e. stool lands, state lands and family lands), recognized and entrenched by the constitution and governed by the National Land Policy.

As already stated, traditional land-owning authorities (stool chiefs, clan heads and skins) hold allodial (absolute ownership) title to land on behalf of their people. Leases and rentals over a satisfactory period of time for economic/commercial activities are usually possible and involve permission by the allodial titleholders to use the land. However, the land must revert to the community or the allodial titleholder at the end of the lease or cessation of the activity for which the lease was granted in the first place. State lands are for and on behalf of the people by government and administered on behalf of the state by the Ghana Lands Commission and other ancillary agencies. Family lands are owned by families and vested in the family head for the common use of all family members for purposes of agriculture, settlement, among others. Studies (Ministry of Lands and Forestry, 2003) have shown that 78 percent of the total land area of Ghana is under customary lands, while the state owns 20 percent and the remaining 2 percent is held in a dual relationship where the state takes over management while customary retains ownership of the land.

Clearly, the country presents a complex mix of constitutional and legislative sources as the basis for land governance, which is a microcosm of the different tenure systems currently in operation. Managing these systems to ensure security of tenure for prospective developers presents a challenge not only to the legal system but also to the community at large (Agbosu et al. 2007; Sarpong 2006; Runger 2008). The rapid urbanization and the accompanying need for land especially in peri-urban localities has influenced the incorporation of the formal legal system of land title registration into customary land ownership arrangements as it is not uncommon for the rights to land, which has already been leased or rented and compensation duly paid by an investor to one allodial titleholder, to be challenged or disputed by another allodial titleholder.

Historically, the governance of land issues in the country was through the deed registration system until land titling was later introduced and made compulsory in 1986, albeit with sporadic implementation. The National Land Policy was published in 1999 with the intent of addressing series of issues affecting land governance in the country including weak land administration; conflicts in the land market (boundaries, ownership); and expropriation of large tracts of land by the state combined with lack of consultation with landowners. To actualize the objectives of the policy and help undertake the necessary institutional reforms, the Land Administration Project (LAP) was established.

#### 3.3 Housing and Land Prices

Historically, the acquisition of community and ancestral land in the country for development purpose was through the donation of drink money. This practice was merely a tribute, usually made of two bottles of schnapps and a sheep, and regarded as a symbolical gesture to pacify or inform the 'gods' of the disposal of the land to a 'stranger' (Amanor 2001; Aryeetey et al. 2007). In recent years, rapid urbanization, especially in the regional capitals has made the commercialization of land a normal practice and indeed, making land become a tradable commodity (ISSER 2013).

Table 3.1: Trends in price of land per acre in Ghana by location (1995-2005)

	Rur	al	Urba	an	Peri-U	Jrban
•	Mean price (¢)	% change	Mean price (¢)	% change	Mean price (¢)	% change
Indigene housing land price						
1995	48	-	189	-	193	-
2000	103	114.4	556	192.8	502	158.7
2005	342	229.5	1352	143.1	1463	191.5
1995-2005		606.6		611.8		654.3
Indigene farming land price						
1995	43	_	105	_	59	_
2000	94	118.4	203	93.5	140	137.4
2005	191	102.7	605	197.8	446	217.7
1995-2005		342.6		476.1		654.3
Migrant housing land price						
1995	60	_	218	_	217	_
2000	150	149.1	7,85	260.6	605	179.3
2005	430	186.5	1927	145.5	1952	222.5
1995-2005		613.6		785.3		800.9
Migrant farming land price						
1995	29	_	212	_	65	_
2000	67	133.5	371	75.5	141	117.2
2005	270	301.7	931	150.6	609	332.6
1995-2005		838.1		339.7		839.5

Source: Owusu and Agyei (2008, p. 46); Owusu (2008, p. 190; 2009, p. 270)

The rural-urban differences of the mean prizes of an acre of land are shown in Table 3.1. Significantly, these 'prices' are influenced by location and services available; the most preferred areas include those close to major roads and they invariably attract the highest payment or drink. The data presented demonstrate that the price of land is a reflection of the location and services available and, thus, the price of serviced land in urban and peri-urban areas are much higher than in those without services.

The variations in land values manifest greatly in the municipal and metropolitan centres as shown in Table 3.2. These values are way beyond the reach of the low-income households and, therefore, most can only find accommodation in the emerging slums and informal settlements. There are enough evidence showing that land prices have been rising faster than other prices as depicted in Table 3.2 which covers the mean prices of housing land per acre in some selected communities in Accra and Kumasi. In both instances, the price increases were over 400 percent, with Nungua in Accra recording a percentage change of 775.6 percent during the period under consideration while Ayeduase in Kumasi recorded 1,377 percent change.

Table 3.2: Trends in price of indigene and migrant housing land per acre in selected areas of Accra and Kumasi, 1995-2005

	Accra						Κι	ımasi		
	Ofar	nkor/								
	Amas	saman	Nur	igua	Nii Bo	i Town	Aye	duase	Fanky	enebra
	Mean		Mean		Mean		Mean		Mean	
	price	%	price	%	price	%	price	%	price	%
	(GH¢)	change	(GH¢)	change	(GH¢)	change	(GH¢)	change	(GH¢)	change
Indigene h	ousing lan	nd price								
1995	2,950	-	2,210	-	2,780	-	5,000	-	3,120	-
2000	6,210	110.5	5,690	157.5	8,270	197.5	14,500	190	8,340	167.3
2005	20,000	254.3	16,500	190	21,700	162.4	35,400	144	17,200	106.2
1995-2005	_	578	-	646.6	-	680.6	-	608	-	454.5
Migrant ho	ousing lan	d price								
1995	2,840	-	1,560	-	2,500	-	1,740	-	3,300	-
2000	6,610	132.7	4,390	181.4	9,040	261.6	9,250	431.6	8,380	153.9
2005	24,300	267.6	11,700	166.5	20,600	127.9	24,700	167	18,600	122
1995-2000	-	755.6	-	650	-	724	-	1377	-	463.6

Source: Owusu (2008, p. 189; 2009, p. 271).

With land prices spiralling out of control, a process which has been fuelled by increasing land demand by both non-resident Ghanaians and foreigners, this has also translated into increasing land values and rental costs (Owusu 2008, 2009). Accra in particular is in the midst of an accommodation crisis (UN-Habitat 2012), even though most petty-bourgeoisies and some middle class Ghanaians are continuously struggling to get their first foot on the property ladder. Table 3.3 provides information on housing types and rental values in the Accra-Tema region or the Greater Accra Metropolitan Area (GAMA). The survey of housing types and values undertaken by the Rent Control Department reveals the extent of the 'dollarization' of the rental market and its impact on prices and access. Indeed, the last column of Table 3.3 gives indication of where the majority of the population resides, mainly the fourth class residential areas. Even in the fourth class residential areas, a single bedroom

and a chamber/hall with shared facilities (toilet, bathroom, and kitchen) could be as high as US\$70 per month and 2-3 years of rent advance payment.

Table 3.3: Survey of housing types and rental values in Accra-Tema, 2010-2011

	Geographical		Rental Value and	
Category	Location/Area	Type of House	Advance Request	Notable Clients
1 <sup>st</sup> Class	Airport residential area, Cantonments, Labone, Ridge, Ringway Estate, Trasacco Valley Estates	3-4 bedroom houses with outhouses, town houses, gated communities, executive houses with or without swimming pools	US\$3,000 to US\$6,000 per month (initial one- year advance and thereafter six months in advance)	UN agencies, multinational companies (mining, banks, etc.), international NGOs
2 <sup>nd</sup> Class	Manet Court, ManetVille, Regimanuel and Devtraco Estates, all off the Spintex road, Dzorwulu, Abelenkpe, East Legon, North Legon	2-3 bedroom houses and apartments for places in Airport and Cantoments, 3-5 bedrooms with outhouses for all other areas and also within gated communities.	US\$600 to US \$2,500 per month (initial one- year advance and six months in advance)	Multinationals, construction companies, etc.
3 <sup>rd</sup> Class	Teshie-Nungua Estates, Dansoman Estates, North Kaneshie, Awudome Estates, Spintex Road, South Odorkor	2-3 bedrooms and apartments in self-contained compound houses and also shared compounds.	US\$80 to US\$450 (two years' rent advance and one-year rent advance thereafter)	Workers of banks, telecom companies, oil firms, other private firms, young graduates, civil servants, teachers
4 <sup>th</sup> Class	Dansoman Agege, Tema, Golf City, Ashaiman, Odorkor, Banana Inn, Mamprobi, Accra New Town, Nima, Osu, etc.	Single room and chamber and hall units on a shared compound, often sharing common facilities.	US\$5 to US\$70 (initial two to three years' rent advance and thereafter one to two years' advance)	National service personnel, hawkers, factory hands, domestic workers, carpenters, hairdressers, masons etc.

Source: Rent Control Department, Accra, 2010-2011 (ISSER 2013, p. 193)

Table 3.3 reveals that the first and second class categories are exclusive reserve of the high-income and upper-middle classes. With a price range of US\$600-2500 and 6 months to one year rent advance for the second class residential areas, many in the middle-income class category are unlikely to afford this type of housing and must contend themselves with the third and fourth class residential areas. It must be stressed that for a country still aspiring, rather equivocally, to reach an average per capita income of \$1,000 a year by 2015, rental charges and housing prices in Accra and other large towns and cities are increasing pricing all but the very rich out of the property market entirely.

#### 3.4 Incidence of Uncompleted Houses

With the country experiencing rapid population growth especially in the urban areas, so appears the need for accommodation. Not only has the need for residential apartment become visible but the use of uncompleted houses is assuming some legitimacy and normalcy. The survey data depicts a clear trend in the occupied dwelling units by type, and the results rereinforce the socio-economic and to some extent, diverse groups in the country. The

aggregate data about the Metropolitan and Municipal Assembles highlight some level of similarities in the use of uncompleted houses as population expands, while still preserving the diversity and uniqueness of the three most urbanizing metropolitan areas –Accra, Kumasi and Sekondi-Takoradi.

Table 3.4 shows that almost 78 percent of all uncompleted buildings can be found in the urban centres, particularly in the metropolitan and municipal centres. The 2010 PHC suggests that the phenomenon of uncompleted buildings is heavily concentrated in Kumasi and the surrounding municipalities adjoining the Accra Metropolis, mainly Ga South, Ga East, Ga West and Adenta Municipalities. In fact, the Kumasi Metropolis and adjoining municipalities of Accra account for over 52 percent of all uncompleted buildings.

Table 3.4: Number of uncompleted buildings by district and locality (%)

	Total	
District/Town/Locality	Number	Percent
Total (National)	66,624	100.0
Metropolitan Assemblies (Total)	21,664	32.5
Sekondi-Takoradi	1,533	7.1
Cape Coast	173	0.8
Accra	2,241	10.3
Tema	2,953	13.6
Kumasi	14,107	65.1
Tamale	657	3
Municipal Assemblies (Total)	28,676	43
Weija (Ga South)	11,356	39.6
Ga West	2,842	9.9
Ga East	4,372	15.2
Adenta	2,088	7.3
Other Municipalities	8,018	28
Other District Assemblies (Total)	16,284	24.4
Locality		
Urban	51,926	77.9
Rural	14,698	22.1
Total	66,624	100.0

Source: Ghana Statistical Service, 2010 Population and Housing Census

The large number of uncompleted buildings around the Accra Metropolis is not surprising given the high land values within the metropolis (Oteng-Ababio 2011), and thus, new developments generally are driven by the process of gentrification. A recent study, using the consideration of GDP per capita, governance factors, ease of doing business, population growth, national urbanization rates and middle-income household growth reveals Accra as the African city with the most investor appeal and the highest growth potentials (IBM Ghana 2012). The growing economic fortunes of Accra in the face of increasing land values and weak development control have led to the growth of dormitory communities and massive sprawl within the functional areas of the metropolis.

This perhaps accounts for the emerging middle and high-income peripheral areas like Haatso, Kwabenya, Pokuase, Adenta, Taifa, Mallam, where development of engineering infrastructure is not yet complete. These areas developed incrementally ahead of infrastructure and this also explains the high records of uncompleted houses in Ga South, West and East Municipalities. The presence of many uncompleted houses shows recent trends in land use transformation taking place in the peri-urban areas of most urbanizing

cities. In particular, it demonstrates the current intense demand for land and housing within the context of rapid urbanization, and the inability of the existing institutional and governance structures of the supply side of the housing market to meet effective demand.

More importantly, the large number of uncompleted buildings across all the districts in Ghana, but especially in major urban centres can be partly attributed to the incremental process of building – a process by which households and other informal actors build gradually based on available financial and other resources. Though building incrementally can be seen as inefficient in terms of the delays in starting and completing of dwellings, it nevertheless, allows households to acquire their own dwellings in the long-run. For many households, especially low and middle-income households, without the process of incrementalism, they are unlikely to acquire their dwellings given the high interest rates on mortgage, high cost of building materials, high inflation rates, etc.

#### 3.5 Informal Settlements and Growing Incidence of Slums

The incidence of slums and informal settlements is not a recent development in most developing countries most of which have been witnessing rapid population growth through time with increasing rural-urban migration. The global assessment of slums undertaken by the UN-Habitat (2010) shows that 828 million or 33 percent of the urban population of developing countries resides in slums, with 62 percent of the urban population in sub-Saharan Africa residing in such settlements. In Ghana, informal settlements are a common scene in major towns notably Accra and Kumasi where the search for better livelihood has led to the congregation of most people to these areas. With poverty as the principal reason for migrating, settling in informal areas becomes a necessary condition as access to land or housing in the city is almost dictated by one's financial ability to purchase or rent.

Highlighting on the situation in Accra, The Rockefeller Foundation's sponsored NGO – informal city dialogue writes:

As the capital of a country where 43 percent of the urban population lives in slums, and 90 percent of non-agricultural employment is informal, Accra epitomizes the informal city. From public transport to domestic labour to fresh produce, the vast majority of goods and services in this city of 2.3 million are procured informally. Informality is so pervasive, in fact, that it's not unusual to see the homes of millionaires standing adjacent to unfinished informal settlements, or slums occupying some of the most desirable real estate in the city.

A cursory observation of some slums in the city, notably Nima and Old Fadama (commonly referred to as 'Sodom and Gomorrah'), reveal scenarios of poor sanitation, sub-standard buildings and poor utility services provision among others, which inhibit sustainable planning and management of these communities. With approximately 80,000 residents living on 77 acres of land (Housing the Masses 2009), Old Fadama has gained notoriety due to its perceived crime and licentiousness. The increasing commercialization of community and ancestral land in urban and peri-urban areas has greatly limited access to land by most urban dwellers as affordability is difficult.

In principle, while slums are generally considered as settlements with poor environmental conditions, planning and provision of socioeconomic services, concerns for solutions seem to focus disproportionately on ascribing the causation to rapid urban growth from rural-urban migration as the sole or major factor determining the proliferation of slums and squatter settlements. While the rapid pace of urbanization experienced over the last three decades has certainly played an important role in the prevalence of slums, there are other economic,

social, political, institutional and historical factors whose impacts are not known with much degree of certainty, as they have rarely been the focus of rigorous empirical investigation. It is thus important to ascribe equal attention to understanding the underlying conditions that motivate the development of informal settlements in cities.

#### 3.6 Urban Sprawl and its Consequences

With increasing population growth and urbanization, most Ghanaian cities are undergoing major socio-economic transformation. The hitherto concentrated city is giving way to sprawling regional centres built around the emerging transport nodes. In essence, while the "old city" assumes vertical development characteristics, the emerging peri-urban settlements make greater use of low-rise buildings with large spaces between them. This development has historically been attributed to the political problems of the metropolises including traffic congestion, air pollution, central city decay, and the disappearance of open space and recreational areas.

With the current pattern of urban population growth increases, unplanned and uncontrolled urban expansion into peripheral areas of cities, notably in Accra, Kumasi and Sekondi-Takoradi, have become a common and dominant feature of Ghana's urbanization process (GSS 2013). Urban population is now spreading into the hinterland in these cities causing an absolute merger of communities which were merely suburbs into these cities. The emerging living styles, built around car-and-home ownership, which put major emphasis on the values of privacy, spaciousness, and mobility has been as already noted, an upshot of the rapidly urbanizing nature of cities with the accompanying problems of overcrowding, high cost of land for housing and poor living conditions. Whilst urban expansion may cater for the needs of the poor urban population who cannot afford housing in the centre of the city, and create room for the extension of social services and better opportunities in areas beyond the core of cities, the unplanned and uncontrolled expansion undoubtedly comes with a price.

Urban sprawl is a key contributor to increases in traffic, depletion of local resources, and destruction of open spaces in the hinterland. The process also contributes to changes in the physical (form) and spatial structure of cities which eventually threatens the environment, health, and quality of life. Significantly, in Ghana, sprawl resultant areas are often victims of the development process in terms of service provision. Such areas generally require more infrastructures, since it takes more roads, pipes, cables and wires to service these low-density areas compared to more compact developments. The process also has energy consumption implications as it causes more travel from the suburbia to the central city and thus more fuel consumption with its traffic congestion as evidenced during the peak hours in Accra and Kumasi.

Suffice to emphasize that the intent is not to romanticize city living and paint too bleak a picture of life in the peri-urban areas. The reality, however, is that in most developing countries, the rapid loss of agricultural land to urban sprawl means not only the loss of fresh local food sources but also the loss of habitat and species diversity. The presence of farms on the rural landscape provides benefits such as green space, rural economic stability, and preservation of the traditional rural lifestyle. Fundamentally, urban planning and development interventions must therefore, include and adequately serve the needs of both the poor and rich as a prerequisite to effectively controlling the growing levels of slums and other informal activities by the urban poor, especially urban sprawl. Such policies must take into consideration the strong individual preferences for the current 'home and car' culture.

# CHAPTER FOUR DEMAND AND SUPPLY OF HOUSING IN GHANA

#### 4.1 Introduction

The combined effects of a multiplicity of interrelated factors account for the current housing situation in Ghana. These factors shape the supply and demand for housing. It is the scale or the dynamics of demand and supply of housing which dictates whether there is a deficit or otherwise in housing sufficiency or adequacy. Consequently, understanding the interplay of the drivers of the demand and supply of housing is critical towards addressing any shortfall in housing. However, as Mayo et al. (1986) note, many housing problems can be stated simply, and therefore, their solutions may appear simple as well. This approach tends to compound the housing situation as simplified solutions are put up to address a complex issue. Mayo et al. (1986, pp. 184-185) summed up this view by providing four housing problems and usual common solutions (see Table 4.1).

Table 4.1: Housing problems and common solutions

Problem	Common solution
Shortage of housing	Government should build housing. Solution usually wrong as housing shortages are the result of fast growth in demand and of impediments to the supply of housing
Poor quality housing	Raise standards through stricter building codes and better enforcement. Solution often wrong since standards relating to safety and hygiene are relevant only if they are attainable by majority of the population. In addition, most standards are derived from Western codes and may be inadequate for local situations
Too many squatters	Clear the squatter areas. For many reasons this can be the wrong solution as people are likely to relocate somewhere else. In addition, solution tends to destroy people's capital stock, and neglect the fact that informal settlements can be improved through proper policies.
Prices of housing too high	Control rents and price of land and building materials. Wrong solution as rising high prices signal the need to produce more housing. Need to deal directly with the rising prices rather shifts burden on landlords who are likely to reduce quantity of housing for renting under price control regimes.

Source: Based on Mayo et al. (1986, pp. 184-185)

Common problems in the housing sector such as shortage of housing; poor quality housing; presence of many squatters and slums and higher housing and prices, especially in developing countries such as Ghana reflect structural constraints in the sector with implications for the demand and supply of housing. Again, depending on the socio-economic and geographic conditions, it is worth noting that the minimum housing standard supplied and demanded will differ from one country to another or from one region to the other within the same country; or even from one neighbourhood to the other within the same city or town.

# 4.2 Housing and Population

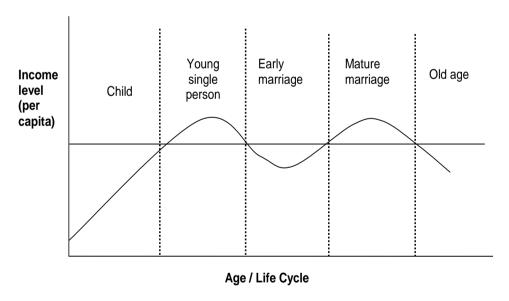
The population of Ghana in 2010 was over 24.6 million from over 18.9 million in 2000 growing with annual inter-censal growth rate of 2.5 percent. This population increase

characterized by its usual youthfulness adds to the pressing need for housing in Ghana. The need to provide adequate, suitable and equitable housing in Ghana has always become a major priority in every government's policies, but the problem is how to execute such policies to become a reality. The problem of housing is complex and a pressing issue all over the world. However, no nation has been able to provide adequate demand for housing of acceptable standard for all its citizens in the decades (GSS 2005).

It needs to be stressed that housing demand can be strongly correlated not only with individuals' per capita incomes but also their life cycle trajectory (see Fig.4.1). This is because the growth of the population and its characteristics influence the rate of household formation, which, in turn, is a key driver of housing demand (GSS 2005). Simply put, a rapidly growing population is more likely to stimulate more housing demand than a slow growing population. Again, housing needs and preferences are shaped by the characteristics of the individuals in the population, particularly by their age, marital status as well as household size.

Fig. 4.1 illustrates the per capita income of an individual throughout his/her life cycle. Thus, for reasons of income and the individual's demographic characteristics (age, marital status, household size), the type of housing required will vary throughout the life course. While single and unmarried individuals may be content with single-room rental housing, the situation will change during mature marriage life with relatively large household size and increased income. In essence, at each stage of life specific types of housing consistent with income level would be required. The inability of the housing sector to deliver the right type of housing at any stage has implications for the quantity, quality and the price of housing.

Fig. 4.1: Per-capita income and the life cycle



#### 4.3 Drivers of Supply and Demand of Housing

Figure 4.2 illustrates the key components of the operations of the housing market (demand and supply). The input markets (land, building materials, infrastructure, finance and labour) dictated by price must be combined with the supply-side agents (landlords, developers and construction firms) to produce houses and housing services. According to Mayo et al. (1986), homeowners and to some extent renters are also supply agents or producers if they maintain and upgrade their houses. In all these processes of housing production, relative price is

critical as it dictates whether more or less housing or inputs are made available by the various actors or agents.

Figure 4.2 indicates that for the housing market to work effectively there must be an interaction between the demand and supply sides of the market. Consequently, where there are challenges with the housing market, the supply side in broad terms is usually constrained by poor policy environment and weak institutional framework. Poor policy environment include the imposition of rent control and prices of land and building materials. While such policy measures are aimed at making rent and housing in general affordable to the majority of the population, they have the unintended consequences of demotivating and preventing developers from investing in the housing sector (Mayo et al. 1986). The long term impact is that new housing are seldom developed as rather than dealing directly with the causes of rising prices, burden is shifted on landlords who are likely to reduce investments in housing under price control regimes. This situation results in housing shortages, and consequently, hikes in rent and housing prices, which hurt most the poor and low-income groups, the very category of groups the policy of controlled rents and housing prices had aimed to assist or support. In fact, Ghana's current housing shortage is partly blamed on the policy of rent control and the general price control regime imposed throughout the 1970s through the 1980s.

On the other hand, the demand side of the housing market is conditioned by the relatively high population and urbanization growth. In particular, rural-urban migration, natural population growth (reflected in an increasing aging population), a growing middle-class and the increasing preferences for small household sizes – all provide the basis for rapid demand for housing which far exceeds the supply of housing, and consequently leads to higher rents.

The combined effects of supply and demand sides' constraints in the housing market trigger the process of housing shortage and the development of slums and informal settlements as illustrated in Fig. 4.2. In urban areas, the incessant demand for housing by rural-urban migrants and city residents – all driven by the desire to explore the economic and life opportunities in the city – results in acute housing shortage under conditions where supply of housing are unable to meet effective demand. Compounded by weak institutional regulations (especially on development control) and poor policy environment, this leads to the development of slums and informal settlements – settlements that are at odds with city authorities' planning and zoning principles as well as their overall vision of the city.

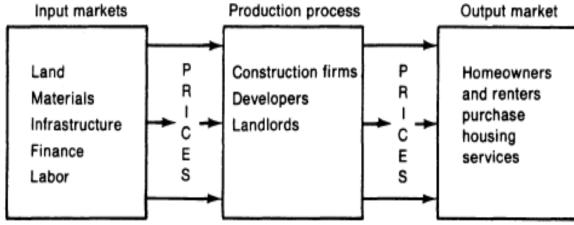
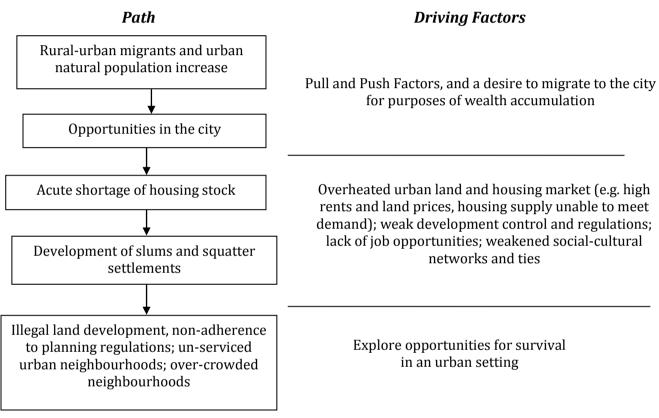


Fig. 4.2: Operation of the housing market

Source: Mayo et al. (1986, p. 189)

While demographic conditions are critical in determining the supply and demand for housing for rural areas and small and medium-sized towns, these are not enough for large metropolitan areas such as Accra, Kumasi, Tema, and Sekondi-Takoradi. For these large metropolitan centres, other factors operating on various spatial scales (global, national and city levels) must be in place to reinforce the initial process triggered by the demographic factors (see Fig 4.3). Fig. 4.3 indicates that a number of factors operating at three different but interrelated spatial levels (global, national and city/local) shape the demand and supply of housing in large Ghanaian cities.

Fig 4.3: Process of housing shortage and slums development



Source:

Starting from the global level, although Ghanaian cities have long had connection to the global economy, the process has been intensified since the economic liberalization beginning in the mid-1980s (Grant and Nijman, 2002; Owusu, 2008; Grant, 2009; ISSER 2013). This process has resulted in the attraction of large metropolitan centres like Accra and Kumasi, attraction of global capital and its actors, including multinational companies (MNCs), international NGOs (INGOs), and foreign expatriate staff. Others include Ghanaian international returned migrants, Ghanaians in the diaspora and migrants from the West African sub-region and others from the African continent. All these global agencies and actors compete with nationals for land and housing, contributing to the shortage and rising prices.

The global level factors interact with national and city/local level conditioning factors, including economic liberalization which facilitates global capital and actor presence; weak urban governance institutions; and out-dated city planning and buildings codes transplanted from the pages of the British Town and Country Planning Act Ordinance of 1932; inadequate

infrastructure; an implicit policy of concentration (rather than de-concentration of resources and investments) and; compulsory land acquisition and economic liberalization (ISSER 2013; Owusu 2014). These national and city/local level factors interact with the global factors to directly and indirectly constrain land and housing supply in Ghana, especially in Accra and Kumasi, and to some extent the other metropolitan centres.

 Economic globalization and capital influx - Real estate developers linked to global capital - Influx of MNCs and international NGOs Global Level - Inflow of expatriates/foreign migrants - International returned migrants - Economic liberalization - National policy of concentration - Land titling/registration Housing National Level - Policy of compulsory land acquisition shortage and for public purposes development of slums - Rapid urbanization/urban growth - Land access and cost City/Local Level - Inadequate infrastructure - Outmoded city planning and building codes - Weak urban governance institutions -Weakened social-cultural networks and ties

Fig 4.4: Factors shaping demand and supply of housing in Ghana

Source: Adapted from Owusu (2008, p. 181)

# 4.4 Housing Stock and Estimate of Housing Deficit

It has been argued that rapid population growth without major corresponding increases in housing stock over the years is the main factor in the current acute housing deficit or shortage in Ghana (Bank of Ghana 2007; GSS 2013; ISSER 2013). Rapid population growth is compounded by rapid urbanization (increasing shift of the population from rural to urban areas) as well as globalization as key drivers of the supply and demand for housing in the country (ISSER 2013). It needs, however, to be stressed that the magnitude of the housing deficit differs depending on the basis of the computation (such as the number of persons per household and the number of persons per room). Nevertheless, there is a general consensus that a wide deficit or gap exists between the supply and demand for housing in Ghana (ISSER 2013).

Table 4.2 provides the cumulative housing stock and deficit in Ghana for the period, 1960-2000. The Table reveals that increasing population in Ghana is associated with increasing housing stock – this increased from 636,189 in 1960 to almost 3.4 million in 2010. However, computed on the basis of either 6-persons or 4-persons per household per 2-bedroom housing unit, Table 4.2 shows that the country has consistently experienced deficits over the decades

with the estimated required housing stock far higher than the actual.<sup>2</sup> This is in spite of the impressive increases in the housing stock over the last two and half decades, especially for the period 2000-2010 when more than 1.2 million houses were added to the national stock.

Table 4.2: Ghana: Cumulative housing stock and deficit, 1960-2010

		Actual	6-persons/Hou bedroo		4-persons/Hou bedroom	-
	Total	Housing	Est. Housing	Est. Housing	Est. Housing	Est. Housing
Year	Population	Stock	Stock	Deficit	Stock	Deficit
1960	6,726,800	636,189	1,121,133	484,944	1,681,700	1,045,511
1970	8,559,313	945,639	1,426,552	480,913	2,139,828	1,194,189
1984	12,205,574	1,204,395	2,034,262	829,867	3,051,394	1,846,999
2000	18,912,079	2,181,972	3,152,013	970,041	4,728,020	2,546,048
2010	24,658,823	3,392,745	4,109,804	717,059	6,164,706	2,771,961

\*Authors' computation based on 1960, 1970, 1984, 2000, 2010 Population Censuses of Ghana

Source: ISSER (2013, p. 184)

The overall national cumulative housing deficit seems to have peaked at about 970,000 units in 2000 and then declined to a little over 717,000 when the deficit is computed on the basis of 6-persons per household per 2-bedroom unit (see Table 4.2). However, when the cumulated deficit is calculated on the basis of 4-persons per household per 2-bedroom unit, it increases from over 2.5 million in 2000 to 2.7 million in 2010, a relatively smaller increase than previous decades. The overall trend suggests an improvement in the housing situation in line with Ghana's improved socio-economic conditions.

It needs to be stressed that the computation of Ghana's housing deficit as presented in Table 4.2 does not take into account the number of shelters which do not have adequate conditions to be habitable and those requiring repairs or renovation before use (see Pérez and Crossley 2010) as these housing conditions are not captured by the population and housing censuses and other national surveys. According to ISSER (2013, p. 184), if these conditions are taken into account, then the figures may possibly be underestimating Ghana's housing deficit. The issue here is that to a large extent, the focus of housing policy has been on provision of new housing stock with little attention paid to the issue of housing maintenance and rehabilitation. A number of government bungalows and housing provided by other institutions are in a deplorable state. Similarly, it is a common sight to come across a number of privately-owned houses in a deplorable or uninhabitable state in both rural and urban areas in Ghana.

Following the overall national trend, as of 2010, the housing deficit across all the regions appeared to be declining or increasing at a slower pace compared to previous decades (see Table 4.3). The two largest populous regions, the Ashanti and Greater Accra Regions, in 2010 hold about 35.6 percent of the total national population and account for about a third of the total national housing stock. In these two regions the cumulative housing deficit is larger than in any other region partly due to the presence of the country's largest metropolitan areas, Accra and Kumasi, in the Greater Accra and Ashanti Regions, respectively.

In essence, regions with large metropolitan areas, and large cities and towns as well as high levels of urbanization tend to have large housing deficit reflecting the view that the housing crisis in Ghana is largely an urban phenomenon (ISSER 2013). However, the three northern

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<sup>&</sup>lt;sup>2</sup> The 6-persons and 4-persons per household per 2-bedroom housing unit respectively are applied on the basis of the UN-Habitat's maximum room occupancy limit of 3 persons per room (3 ppr) (UN-Habitat 2009, p. 9) and Ghana's recommended maximum occupancy rate of 2 ppr for high density areas as contained in the TCPD's Draft Zoning Guidelines and Planning Standards (MEST/TCPD 2011).

regions, Northern, Upper East and Upper West Regions, can be described to some extent as exceptions. This is because they are the least urbanized and have few towns, and are the poorest regions in Ghana but tend to have relatively high housing deficit levels compared to their population sizes. The relatively high housing deficit in the three northern regions could be attributed to the prevailing conditions of high poverty levels and low-incomes in these regions, and the limited impact of economic growth experienced in that part of the country in the last decade – preventing many in northern Ghana from building (ISSER 2013).

Table 4.3: Regional distribution: Housing stock and deficit, 1960-2010\*

	6 Actual		6 persons/Hou		4 persons/Hou bedroor		
		Total	Housing	Est. Housing	Est. Housing	Est. Housing	Est. Housing
Region	Year	Pop.	Stock	stock	Deficit	stock	Deficit
Greater	1960	541,933	36,643	90,322	53,679	135,483	98,840
Accra	1970	903,447	71,189	150,575	79,386	225,862	154,673
	1984	1,431,099	116,211	238,517	122,306	357,775	241,564
	2000	2,905,726	287,840	484,288	196,448	726,432	438,592
	2010	4,010,054	474,621	668,342	193,721	1,002,514	527,893
Ashanti	1960	1,109,133	94,459	184,856	90,397	277,283	182,824
	1970	1,481,698	136,428	246,950	110,522	370,424	233,997
	1984	2,090,100	173,969	348,350	174,381	522,525	348,556
	2000	3,612,950	328,751	602,158	273,407	903,238	574,487
	2010	4,780,380	574,066	796,730	222,664	1,195,095	621,029
Western	1960	626,155	61,103	104,359	43,256	156,539	95,436
	1970	770,087	87,061	128,348	41,287	192,522	105,461
	1984	1,157,807	128,427	192,968	64,541	289,452	161,025
	2000	1,924,577	259,874	320,763	60,889	481,144	221,270
	2010	2,376,021	380,104	396,004	15,900	594,005	213,901
Central	1960	751,392	79,196	125,232	46,036	187,848	108,652
	1970	890,135	111,753	148,356	36,603	222,534	110,781
	1984	1,142,335	129,154	190,389	61,235	285,584	156,430
	2000	1,593,823	223,239	265,637	42,398	398,456	175,217
	2010	2,201,863	346,699	366,977	20,278	550,466	203,767
Eastern	1960	1,044,080	108,136	174,013	65,877	261,020	152,884
	1970	1,209,828	159,246	201,638	42,392	302,457	143,211
	1984	1,680,890	182,690	280,148	97,458	420,223	237,533
	2000	2,106,696	283,461	351,116	67,665	526,674	243,213
	2010	2,633,154	431,697	438,859	7,162	658,289	226,592
Volta	1960	777,300	84,927	129,550	44,623	194,325	109,398
	1970	947,268	141,382	157,878	16,496	236,817	95,435
	1984	1,201,095	164,513	200,183	35,670	300,274	135,761
	2000	1,635,421	264,451	272,570	8,119	408,855	144,404
	2010	2,118,252	399,953	353,042	46,911	529,563	129,610
Brong-	1960	587,920	46,749	97,987	51,238	146,980	100,231
Ahafo	1970	766,509	80,889	127,752	46,863	191,627	110,738
	1984	1,206,608	115,873	201,101	85,228	301,652	185779
	2000	1,815,408	216,275	302,568	86,293	453,852	237,577
	2010	2,310,983	331,967	385,164	53,197	577,746	245,779

Table 4.3: Regional distribution: Housing stock and deficit, 1960-2010\* (Cont'd)

				6 persons/Hou	usehold per 2-	4 persons/Hou	sehold per 2-
			Actual	bedroom unit		bedroon	n unit*
		Total	Housing	Est. Housing	Est. Housing	Est. Housing	Est. Housing
Region	Year	Pop.	Stock	stock	Deficit	stock	Deficit
Northern	1960	531,573	50,333	88,596	38,263	132,893	82,560
	1970	727,618	71,808	121,270	49,462	181,905	110,097
	1984	1,164,583	96,090	194,097	98,007	291,146	195,056
	2000	1,820,806	177,785	303,468	125,683	455,202	277,417
	2010	2,479,461	257,311	413,244	155,933	619,865	362,554
Upper	1960	468,638	58,455	78,106	19,651	117,160	58,704
East	1970	542,858	64,801	90,476	25,675	135,715	70,914
	1984	772,744	70,967	128,791	57,824	193,186	122,219
	2000	920,089	88,401	153,348	64,947	230,022	141,621
	2010	1,046,545	114,034	174,424	60,390	261,636	147,602
Upper	1960	288,706	16,188	48,118	31,930	72,177	55,989
West	1970	319,865	21,082	53,311	32,229	79,966	58,884
	1984	438,008	26,501	73,001	46,500	109,502	83,001
	2000	576,583	51,898	96,097	44,199	144,146	92,248
	2010	702,110	82,293	117,018	34,725	175,528	93,235

<sup>\*</sup>Authors' computation based on 1960, 1970, 1984, 2000, 2010 Population Censuses of Ghana

Source: ISSER (2013, p. 186-187)

Across the metropolitan centres, the last decade (2000-2010) has witnessed a dramatic increase in the actual housing stock (Table 4.4). This may not be too surprising given the boom in housing construction which is mostly large city-concentrated, characterized by rapid urban sprawl, increasing presence of real estate developers and the proliferation of gated-communities. In addition, as noted in Chapter 3, high rent and housing prices as well as congestion in city centres have driven the Ghanaian urban population of the middle and upper-classes to secure their own homes in suitable locations (including gated communities) contributing to the growth in the housing stock in large cities. Nevertheless, the housing deficits remained high in these centres and account for a disproportionate share of the overall national housing deficit.

Table 4.4: Metropolitan centres: Housing stock and deficit, 1960-2010

				6 persons/Household pe		4 persons/I per 2-bedre	
			Actual	Estimated	Estimated	Estimated	Estimated
Metropolis	Year	Total	Housing	Housing	Housing	Housing	Housing
		Population	Stock	Stock	Deficit	Stock	Deficit
Accra	1960	347,815	18,239	57,969	39,730	86,954	68,715
	1970	624,091	35,835	104,015	68,180	156,023	120,188
	1984	969,195	57,250	161,533	104,283	242,299	185,049
	2000	1,658,937	131,355	276,490	145,135	414,734	283,379
	2010	1,848,614	168,863	308,102	139,239	462,154	293,291
Kumasi	1960	180,642	8475	30,107	21,632	45,161	36,686
	1970	346,336	11,775	57,723	45,948	86,584	74,809
	1984	496,628	17,933	82,771	64,838	124,157	106,224
	2000	1,170,270	67,434	195,045	127,611	292,568	225,134
	2010	2,035,064	167,576	339,177	171,601	508,766	341,190
Sekondi-	1960	75,450	4,210	12,575	8,375	18,863	14,653
Takoradi	1970	143,982	4,651	23,997	19,346	35,996	31,345
	1984	188,203	5,056	31,367	26,311	47,051	41,995
	2000	369,166	24,817	61,528	36,710	92,292	67,475
	2010	559,548	60,705	93,258	32,553	139,887	79,182

Table 4.4: Metropolitan centres: Housing stock and deficit, 1960-2010 (Cont'd)

				6 persons/Ho 2-bedro	*	4 persons/Hous bedroom	
			Actual	Estimated	Estimated	Estimated	Estimated
Metropolis	Year	Total	Housing	Housing	Housing	Housing	Housing
		Population	Stock	Stock	Deficit	Stock	Deficit
Tamale	1960	40,443	2,643	6,741	4,098	10,111	7,468
	1970	83,653	6,933	13,942	7,009	20,913	13,980
	1984	135,952	9,728	22,659	12,931	33,988	24,260
	2000	202,317	15,873	33,720	17,847	50,579	34,706
	2010	371,351	35,694	61,892	26,198	92,838	57,144
Cape Coast	1960	41,230	2,194	6,872	4,678	10,308	8,114
_	1970	56,601	3,037	9,434	6,397	14,150	11,113
	1984	65,763	3,636	10,961	7,325	16,441	12,805
	2000	82,291	6,847	13,715	6,868	20,573	13,726
	2010	169,894	17,738	28,316	10,578	42,474	24,736

<sup>\*</sup>Authors' computation based on 1960, 1970, 1984, 2000, 2010 Population Censuses of Ghana Source: ISSER (2013, p. 188)

Table 4.5 reveals that medium-sized towns, mainly regional administrative centres or capitals are also affected by housing shortages, although the magnitude of the deficits are not as large as those of the metropolitan centres. According to ISSER (2013), relatively low housing deficit prevail in these regional administrative centres or medium-sized towns compared to the metropolitan areas partly as a result of their relative small populations and low growth rates.

Table 4.5: Selected key municipal centres: Housing stock and deficit, 1960-2010

				6 persons/Household per 2-		4 persons/Hou	sehold per 2-
Municipal/			Actual _	bedrooi	m unit	bedroor	n unit*
Region			Housing	Est. housing	Est. Housing	Est. housing	Est. Housing
	Year	Pop.	Stock	stock	Deficit	stock	Deficit
Koforidua/	1960	29,849	1,628	4,975	3,347	7,462	5,834
Eastern	1970	46,235	2,332	7,706	5,374	11,559	9,227
	1984	58,731	3,421	9,789	6,368	14,683	11,262
	2000	87,315	7,318	14,553	7,235	21,829	14,511
	2010	183,727	22,619	30,621	8,002	45,932	23,313
Sunyani/	1960	12,160	591	2,027	1,436	3,040	2,449
Brong-Ahafo	1970	23,780	1,114	3,963	2,849	5,945	4,831
	1984	38,834	2,304	6,472	4,168	9,709	7,405
	2000	61,992	5,611	10,332	4,721	15,498	9,887
	2010	123,224	13,226	20,537	7,311	30,806	17,580
Ho / Volta	1960	14,519	1,218	2,420	1,202	3,630	2,412
	1970	24,199	1,871	4,033	2,162	6,050	4,179
	1984	37,777	2,859	6,296	3,437	9,444	6,585
	2000	61,658	6,853	10,276	3,423	15,415	8,562
	2010	271,881	54,178	45,314	-8,865	67,970	13,792
Wa/Upper	1960	14,342	766	2,390	1,624	3,586	2,820
West	1970	13,740	1,212	2,290	1,078	3,435	2,223
	1984	36,067	2,102	6,011	3,909	9,017	6,915
	2000	66,664	5,539	11,111	5,572	16,666	11,127
	2010	107,214	9,592	17,869	8,277	26,804	17,212
Bolgatanga/	1960	5,515	371	919	548	1,379	1,008
Upper East	1970	18,886	1,557	3,148	1,591	4,722	3,165
	1984	32,495	2,514	5,416	2,902	8,124	5,610
	2000	49,162	3,932	8,194	4,262	12,291	8,359
	2010	131,550	14,523	21,925	7,402	32,888	18,365

<sup>\*</sup>Authors' computation based on 1960, 1970, 1984, 2000, 2010 Population Censuses of Ghana Source: ISSER (2013, p. 189)

Furthermore, unlike the metropolitan centres, the medium-sized towns tend to attract relatively low levels of rural-urban migration due to the low economic and employment generating capacities of these urban centres (Burrows, 1992), and thus, shielding them from an influx of employment-seeking rural migrants as well as even international migrants.

# 4.5 Housing Types and Materials Used

Ghana's housing sector has witnessed significant changes in terms of housing types, architecture and general design (Afram 2009; Wellington 2009). The increasing influence of globalization has partly resulted in the introduction of foreign designs and architecture as well as building materials. These have consequently contributed partly to rising housing prices and the pricing out of the majority of the population from accessing adequate housing as articulated in Chapter 3. The influence of foreign building architecture and design is strongly felt in the urban areas where glazed buildings with their high energy consumption capacities are increasingly becoming the norm (Wellington 2009).

#### **4.5.1 Housing Types**

The 2000 and 2010 Population and Housing Censuses indicate that there are various types of housing in Ghana, namely, semi-detached houses, flats/apartments, compound houses (rooms), huts/buildings (same and different compounds), tent, improvised homes (kiosk/container), living quarters attached to office shop, uncompleted buildings and others. It needs to be stressed that with the exception of semi-detached houses, flats/apartments, and compound houses, all other types of houses can be described as unofficial and unapproved as they are not captured in Ghana's building codes and regulations. Nevertheless, these officially unapproved dwelling units which include huts, tents, kiosk/container, etc. are used as living places, especially in informal areas of urban centres. More importantly, these unapproved and sometimes unsecured dwelling places are officially included and counted as part of the country's housing stock.

Table 4.6 and Appendix 1 reveal the different housing types across the different local government areas, Metropolitan, Municipal and District Assemblies (MMDAs) and localities (rural and urban) across the country. The Table does not only provide evidence of the changes in housing types over the last decade but also the shift in the population from rural to urban. According to Table 4.6, while in 2000 over 63 percent of all housing types were located in District Assemblies which are predominately rural, this figure reduced to 48.4 in 2010. Within the same period, there was a rise in the proportion of all housing types in metropolitan areas (19.7% in 2000 to 24.8% in 2010) and municipalities (17.1% in 2000 to 26.8% in 2010). The rise in the proportion of all housing types in cities and towns is made clearer when it is related to that of the rural. Table 4.6 reveals that the proportion of all housing types in urban centres increased from 47.2 percent in 2000 to 55.8 percent in 2010, while within the same period that of the rural declined from 52.8 percent to 44.2 percent. This is significant given the fact that earlier census reports have indicated a higher proportion of housing in rural areas compared to the urban (see ISSER 2013).

In terms of the housing types, Table 4.6 indicates that there has been a significant increase in the proportion of all housing types in the Metropolitan and Municipal Assemblies compared to the rural District Assemblies. Of significance here is compound housing (a dwelling unit which hosts many households with shared facilities such as kitchen, bathroom, toilet, etc.) – the dominant housing type which is also very popular among the poor and low-income households as rents tend to be low and affordable.

Table 4.6: Occupied dwelling units by, type of locality, 2000 and 2010

					2000					
D		Separate	Semi- detached		Compound			W. 16	Attached	0.1
District/Locality	Total	House	house	Flat/Apartment	house	Huts/Building	Tents	Kiosk/Container	to shop	Other
National	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Metropolitan (Total)	19.7	10.3	17.2	44.2	22.5	12.4	34.2	44.5	35.5	23
Shama-Ahanta East	11.9	1.5	2.5	5.8	2.5	1.1	2.8	3.5	4.4	2.4
Accra	50.1	4.8	9.6	19.2	10.9	5.6	19.9	29.2	21.1	16.2
Kumasi	31.8	3.3	4.6	18.7	7.3	3.6	10.8	11.7	9.5	4.4
Tamale	6.2	0.7	0.5	0.6	1.9	2.1	0.7	0.1	0.4	0.1
Municipalities	17.1	17.5	17.5	16	16.7	18.4	11.5	17.5	15.6	17.4
Other District Assemblies	63.2	72.2	65.3	39.8	60.7	69.3	54.3	38	49	59.6
Locality										
Urban	47.2	30.2	45.9	76.1	53.8	26.9	57.2	81.6	68.4	53.6
Rural	52.8	69.8	54.1	23.9	46.2	73.1	42.8	18.4	31.6	46.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
					2010					
Total (National)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Metropolitan (Total)	24.8	12.5	30.7	51.5	27.5	6.8	26.5	62	43.2	41
Sekondi-Takoradi	10.5	12.2	11.2	15	9.9	6.6	9.7	4.5	7.1	12.2
Cape Coast	3	3.7	3.2	3.5	2.9	2.2	2.8	0.9	1.8	4.8
Accra	37.1	26.4	27.9	26.3	42	35.7	41.8	54.9	52.7	43.3
Tema	7.2	11.6	16.9	5.6	4.3	5.2	8.5	14.6	7.7	9.3
Kumasi	37.9	43	38.8	48.4	35.4	38.4	31.9	25	28.6	28
Tamale	4.3	3.1	2	1.2	5.5	11.9	5.4	0.1	2.2	2.5
Municipalities (Total)	26.8	26.8	25.1	24.3	27.3	19.9	26.3	29.3	27.7	27.2
Other District Assemblies	48.4	60.7	44.2	24.3	45.1	73.2	47.2	8.7	29.2	31.8
Locality										
Urban	55.8	37.9	60.7	82.8	62.6	21.4	56.7	91.1	75.2	71.1
Rural	44.2	62.1	39.3	17.2	37.4	78.6	43.3	8.9	24.8	28.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Ghana Statistical Service, 2000 and 2010 Population and Housing Census

Data from the 2010 PHC indicate that compound housing recorded the highest annual growth rate of 5.5 percent for the period 2000 and 2010. This is significant given the fact that analysis of the growth in housing types over the 1984 to 2000 period has indicated a drastic reduction of this type of houses (Grant 2009), with serious implications for the poor. The growth rate of compound houses was even more impressive for the large cities, Accra, Kumasi, Tema and Sekondi-Takoradi, where access to housing by the poor and low-income groups is widely viewed as more challenging (World Bank 2014).

While the proportion of Ghana's total housing stock has increased significantly in urban areas, this growth is also associated with increases in the proportion inadequate and insecure housing such as use of tents, kiosks/containers, shops/offices as accommodation. For instance, the share of kiosks/containers as dwelling places for metropolitan areas increased from 44.5 percent in 2000 to 62 percent in 2010, while for Municipalities it rose from 17.5 percent to 29.3 percent (see Table 4.6). Within the same period the share of District Assemblies for kiosks/containers and other housing types which can be described as inadequate declined significantly. These inadequate housing units are particularly concentrated in the large metropolitan areas such as Accra and Kumasi, reflecting the existing challenges with the urban housing market, especially on the issues of rent and land prices for low-income households. Again, the high concentration of these structures as dwelling places implies that the efforts of Metropolitan Assemblies of large cities to demolish and remove improvised structures (kiosk/container) from these areas under the banner of 'decongestion exercises' have yielded no good results.

#### 4.5.2 Materials Used in Housing Construction

The materials used in the construction of a house give indications of not only the durability and the cost of the house but also the health and socio-economic status of the residents or occupants. Therefore, a consistent improvement in the materials used in majority of housing over time reflects an improvement in the living standards and well-being of the population. However, the type of building materials used by individuals and institutions like estate developers and others in housing construction is dependent on the cost and availability, and the ability of the people to pay for the cost of a given material. In Ghana, there are two main materials used for the construction of the outer walls and floors of houses or dwelling units, namely, mud bricks/earth and cement/concrete. Most households in the rural communities use earth/mud bricks, which are relatively cheaper but have a shorter life span or durability due to limited improvement of these materials as building materials, whereas in the urban areas, cement is widely used as a durable material but very expensive. In other words, the use of raw earth/mud is regarded as inferior and of poor quality compared to cement/sandcrete blocks. Table 4.7 and Appendix 2 provide information on the various types of building materials used for the outer wall of the occupied dwelling units by type of local government and locality for 2000 and 2010.

An observation from Table 4.7 is that with the exception of stone, there is an extensive use of local building materials (such as mud brick/earth and wood) for the outer walls of occupied dwelling units in rural areas compared with urban areas. For instance, the share of urban dwellings with outer walls made of mud brick/earth declined from 47.2 percent in 2000 to about 20 percent in 2010, compared to an increase from 52.8 percent to almost 80 percent for rural areas for the same period. The share of the urban areas was even far less in the Metropolitan Assemblies where in 2010, on the average, only 3.7 percent of occupied dwellings had their outer wall built with earth/mud brick.

Table 4.7: Main material of outer wall for occupied dwelling units by type of locality, 2000 & 2010

				2000						
District/Locality	Mud/ brick/Earth	Wood	Metal sheet/	Stone	Burnt Bricks	Cement blocks	Sandcrete/	Packing cases/Bamboo	Palm leaf/Thatch	Other
National	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Metropolitan Assemblies	19.7	4.3	33.6	46.8	33	30.3	37.1	13.3	20.6	4
Shama-Ahanta East	11.9	23.6	7.9	4.1	6	10.7	10.8	13.5	9.9	10.4
Accra	50.1	21.2	72.4	76.9	57.5	40.9	52.3	31.4	63.6	68.1
Kumasi	31.8	27.3	19.3	17.5	30.4	45.9	33.6	23.4	25.8	16.3
Tamale	6.2	27.9	0.4	1.5	6.1	2.5	3.3	31.7	0.6	5.2
Municipalities (Total)	17.1	15.2	19.9	16.4	13.4	18.2	19.3	13.8	19.2	25.7
Other District Assemblies	63.2	80.5	46.5	36.8	53.6	51.5	43.6	73	60.2	70.4
Locality										
Urban	47.2	20.5	64.6	75.2	64.4	62.1	77.9	49.7	47.5	24.5
Rural	52.8	79.5	35.4	24.8	35.6	37.9	22.1	50.3	52.5	75.5
				2010						
National	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Metropolitan Assemblies	3.7	53.3	39	29.3	17.1	35.8	9.4	21.1	3.5	42.2
Sekondi-Takoradi	19.3	5.8	5.1	8.6	12.3	10.6	9.4	8.5	3.2	6
Cape Coast	9.7	1.1	1.3	2.5	9.2	2.7	4	2.3	3	1.8
Accra	17.2	57	49	46.8	33.2	36.3	17.3	41.1	48.7	51.4
Tema	1.1	17.9	5.9	6.7	4.5	6.7	4.5	8.7	8.3	7.6
Kumasi	23.7	18	36.3	26.5	37.2	40.7	28.6	36.2	30.7	31.9
Tamale	29.1	0.3	2.5	8.9	3.6	3	36.3	3.3	6	1.2
Municipalities (Total)	20.3	25.3	26.4	28.3	29.8	30.7	28	25.3	24.1	28.7
Other District Assemblies	76	21.3	34.7	42.4	53.2	33.5	62.6	53.6	72.4	29.1
Locality										
Urban	20.5	78.2	70.2	64.1	52.3	75.5	37.4	48.4	27.9	70.7
Rural	79.5	21.8	29.8	35.9	47.7	24.5	62.6	51.6	72.1	29.3

Source: Ghana Statistical Service, 2000 and 2010 Population and Housing Census

On the other hand, the share of urban areas in the use of cement as construction material for outer walls of dwellings increased from about 62 percent in 2000 to 75.5 percent in 2010 while that of the rural declined from almost 38 percent to 24.5 percent for the same period (Table 4.7).

At the metropolitan level, the use of inferior materials for the outer walls of dwellings is concentrated in Tamale, Accra and Kumasi. For instance, although mud bricks/earth is used to a limited extent in metropolitan areas, it accounted for almost 38 percent and 53 percent of materials used for the outer walls of dwellings in Tamale and Kumasi in 2000 and 2010 respectively. Within the same decade (2000-2010), the use of packing cases/bamboo and leaf/thatch as building materials for the outer walls of dwellings remained high in the Accra and Kumasi metropolitan areas. The continuous use of these inferior materials reflects the growing incidence of slums and poor quality housing in these large metropolitan areas.

Table 4.8 and Appendix 3 provide information on the type of building materials used for the floor of occupied dwellings for 2000 and 2010. Overall, the pattern of materials used for the floor follows that of the main materials used for the outer walls of dwellings as already discussed (see Table 4.7). Relatively expensive and in some cases imported materials such as tiles, cement/concrete and terrazzo are extensively used in urban areas compared to rural areas. On the other hand, mud bricks/earth is extensively used in rural areas (see Table 4.8). The differences between rural and urban areas is partly due to the strict enforcement of the country's building codes and regulations which strictly forbids the use of local materials such as earth in urban areas; relatively high purchasing power of the urban population and; the influence of foreign designs and architecture noted earlier.

Table 4.8: Materials used for floor of occupied dwelling units, 2000 and 2010

			20	00					
	Earth/ Mud	Cement/		Burnt		Vinyl	Ceramic		
District/Locality	brick	Concrete	Stone	Bricks	Wood	Tiles	Tiles	Terrazzo	Other
National	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Metropolitan (Total)	4.8	23.3	25.2	25.8	44.9	48.4	46	57.8	12.9
Shama-Ahanta East	7.8	12.6	6.7	21.1	8.7	10	6	6.9	4
Accra	28.9	50.7	47	29.7	69.6	66.2	63.6	52.4	61.8
Kumasi	41	31.1	42	45.7	21.5	20.5	29	40.1	18.5
Tamale	22.3	5.6	4.3	3.6	0.3	3.3	1.4	0.7	15.7
Municipal (Total)	16.2	17.4	16.5	31.3	15.5	21.7	18.9	16.2	13.4
Other Districts	79	59.4	58.3	42.9	39.6	29.9	35.1	26	73.8
Locality									
Urban	15.3	56.1	54.1	58.9	79.8	84.8	81.3	91.6	29
Rural	84.7	43.9	45.9	41.1	20.2	15.2	18.7	8.4	71
			20						
Total(national)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Metropolitan (Total)	7.4	26.3	22.5	32.6	62	51.7	44.6	62.7	29
Sekondi-Takoradi	3.9	11.2	7.7	6	5.4	8.8	9.1	11	7.9
Cape Coast	3.5	3.1	1.4	6.2	1.2	2.2	2	2	2.8
Accra	31.1	37	36.7	37.7	65.9	32.2	36.9	29.9	44.5
Tema	3.3	6.7	6.3	12	12.1	17.2	17.5	7.2	7.4
Kumasi	46.9	37.6	42.8	34.9	15.4	38.1	33	49.4	32.9
Tamale	11.3	4.4	5.1	3.2	0.1	1.4	1.6	0.4	4.6
Municipal (Total)	20.5	27.9	26.1	27.8	30.1	33.3	32.6	27.2	26.3
Other Districts	72.1	45.8	51.4	39.6	8	14.9	22.7	10.1	44.7
Locality									
Urban	24.2	60.2	53.9	60.5	90.8	87.6	79.5	91.8	55.3
Rural	75.8	39.8	46.1	39.5	9.2	12.4	20.5	8.2	44.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Ghana Statistical Service, 2000 and 2010Population and Housing Census

It needs to be stressed that the type of materials used for the floors of a house does not only affect the appearance and quality of the house but it also has health implications. Poor quality floor materials within dwelling, especially in places such as kitchen, bathrooms and toilets are likely to be hiding places for rodents, mice, terminates, ants, bugs and other harmful insects/pests as well as exposing residents to indoor odour and poor air quality. As Songsore and McGranahan (1993) have noted, although all constituents of the environment ultimately exert some influence on human health and well-being, the environment which exerts the greatest and most immediate influence on people's well-being is the intimate environment of their home. Poor quality floor materials of dwellings such as earth and mud therefore, have potential negative impact on the health and well-being of its occupants. Unfortunately, Table 4.8 and Appendix 3 indicate that poor quality materials such as earth/mud remained a widely used material in rural areas and to a limited extent in urban areas.

Similar to the pattern observed for the materials used for dwellings, outer walls and floors of dwellings, Table 4.9 and Appendix 4 indicate a large rural share in the use of local materials such as thatch/palm leaf, bamboo and mud/mud bricks as materials for the roof of occupied dwellings. These inferior roofing materials are least used in the large metropolitan area. Table 4.9 indicates that the share of Metropolitan Assemblies in the use of thatch/palm leaf as roof material was only 2.4 percent in 2000 and 2010 with much of it coming from the Tamale Metropolitan Area (66.8% in 2000 and 57.2% in 2010); for the municipalities, it was 14.7 percent and 13.3 percent for the same period. Overall, Table 4.9 reveals that rural areas accounted for over 90 percent and nearly 89 percent of dwellings roofed with thatch/palm leaf in 2000 and 2010 respectively. Similar situations can be observed for the use of bamboo and mud/earth as roofing materials.

On the other hand, cement/concrete, slate/asbestos and roofing tiles are extensively used as roofing materials in urban areas.. Even though asbestos as a roofing material has been banned in many countries as a result of its negative impacts on human health, it is interesting to note that it still continues to be used in Ghana, especially in coastal towns and cities. For instance, though metropolitan areas account for almost half of the dwellings roofed with slate/asbestos, in 2000 the coastal centres of Accra and Shama-Ahanta (Sekondi-Takoradi) accounted for over 95 percent of these dwellings. A similar pattern can be observed for 2010. The continuous use of asbestos as roofing material is partly due to its durability and resistance to rust, especially against the corrosive effects of the salty sea water.

Table 4.9: Main material used for roof of occupied dwelling units, 2000 and 2010

			2	2000					
District/Locality	Thatch/ Palm leaf	Bamboo	Mud/Mud Bricks	Wood	Corrugate d Metal	Slate/ Asbestos	Cement/ Concrete	Roofing Tiles	Other
National	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Metropolitan (Total)	2.4	4.8	3.4	24.8	17.7	49.8	57.1	32.5	16.9
Shama-Ahanta East	13.6	40.9	5.8	8.4	9.1	11.8	33.2	6.4	5.2
Accra	9.8	32	61	38.8	33.2	83.9	33.7	64.7	66.9
Kumasi	9.8	25.2	28.9	51.8	49.6	3.7	32.4	25.7	20
Tamale	66.8	1.9	4.2	1	8.1	0.6	0.7	3.2	7.9
Municipal (Total)	14.7	17.2	22	17.6	18	15.2	17.9	18.9	20.7
Other District Assemblies	82.9	78.1	74.6	57.6	64.4	35	25	48.6	62.5
Locality									
Urban	9.6	14.4	9.8	42.8	50.8	84.3	88.9	70.1	44.7
Rural	90.4	85.6	90.2	57.2	49.2	15.7	11.1	29.9	55.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
			2	2010					
Total (national)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Metropolitan (Total)	2.4	4	4.1	32.3	22.3	47.8	62	41.9	28.4
Sekondi-Takoradi	4.9	16.1	10.1	5.6	7.4	13.7	31.3	10	8.2
Cape Coast	4.5	5.9	3.2	1.7	1.2	7.1	4.2	1.7	2.5
Accra	16.3	45.1	41.1	36.6	26	68.2	23.7	42.6	48
Tema	3.6	9.6	8.4	6.6	6.9	7.9	6.2	17	7.4
Kumasi	13.4	18.7	24.1	46.6	52.8	2.7	33.9	28.1	26.7
Tamale	57.2	4.6	13.1	2.8	5.6	0.4	0.6	0.5	7.2
Municipal (Total)	13.3	31.7	10.7	56	27.8	30.5	19.8	38.5	22.4
Other District Assemb.	84.2	64.3	85.2	11.7	49.9	21.6	18.2	19.9	49.3
Locality									
Urban	11.2	15.5	13.1	55.8	55.8	84.7	86.4	78.9	54.9
Rural	88.8	84.5	86.9	44.2	44.2	15.3	13.6	21.1	45.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Ghana Statistical Service, 2000 and 2010 Population and Housing Census

#### 4.6 Home Ownership and Tenurial Arrangements

According to the Bank of Ghana (2007b), housing constitutes a major component of household wealth, especially for low-income households, and no doubt, housing wealth is increasingly gaining importance in the Ghanaian economy. Consequently, for many households and the larger Ghanaian community, ownership of a house is one of the pricy assets to acquire because of its very importance in terms of social and cultural symbolism; as a form of savings and security as well as the guarantee of a home at old age. It is therefore, the dream of many households and families to own a house in Ghana (Teye et al. 2013).

The tenurial arrangements give indication of the various means by which individuals and households agreed to occupy dwelling units. In a way, it also provides guidelines on policy prescriptions regarding the dominant means by which households accessed and occupied housing, and for which some policy measures may be required to facilitate such a means or otherwise. Table 4.10 provides the four dominant tenancy arrangements in Ghana for 2000 and 2010, namely owner-occupied, renting, rent-free and perching/squatting. The Table indicates that in 2000 the dominant tenancy arrangement was owner-occupied (57.4%), individuals or households who own their houses and living in them. However, in 2010, owner-occupied tenancy arrangement dropped to 47.2 percent but still remained the main means of tenancy.

While owner-occupied seems to have declined, there was a rise in the proportion of households engaged in renting – 22.1 percent in 2000 to 31.1 percent in 2010 (see Table 4.10). The rise in the proportion renting (tenants) in Ghana is in line with trends across the world (see Gilbert 2008). According to Gilbert (2008), while many people around the world, especially in the global south, are renters/tenants, rental housing has not occupied prominent position in policy making. The overall policy prescription has been to turn tenants into homeowners.

Nationally, there was a slight increase in the proportion of households' engagement in rent-free tenurial arrangement from 19.5 percent to 20.1 percent in 2010; perching/squatting also declined marginally from 1.0 percent to 0.9 percent for the same period (Table 4.10). Both tenancy arrangements reflect the challenges in the housing market, particularly high rents which forced low-income earners and the poor to seek secure shelter for free or to occupy dwelling units illegally or without authority.

Table 4.10 also provides information on the pattern of tenurial arrangements across the different localities (rural and urban) and local government areas, MMDAs. Locality wise, the table reveals that in 2000, 66 percent of dwellings in rural areas were owner-occupied but this declined to 61.4 percent in 2010; within the same period the proportion of the urban rose from 34 percent to 36.8 percent. The sharp rise in owner-occupied tenurial arrangement in the urban areas may be attributed to the housing boom by private individuals and households observed in urban areas, especially in the large metropolitan areas of Accra, Kumasi, Sekondi-Takoradi, Tema, Tamale, and other municipalities which have resulted in the massive sprawl observed countrywide.

Similar to the pattern observed for the national average, the proportion of households engaged in renting in urban areas increased from 76.3 percent in 2000 to almost 81 percent in 2010, reflecting the rise in the demand for housing as the population shifts to urban areas (see Table 4.10). Within the same period, the proportion of rural household renters declined from 23.7 percent to 19.2 percent. As of 2010, perching/squatting remained a predominately an urban phenomenon with urban centres accounting for over 80 percent of this tenurial arrangement, probably due to the challenges in the urban housing market as earlier noted.

Table 4.10: Tenancy arrangement, 2000 and 2010

	200	)0		
	Owner-		Rent-	Perching/
District/Locality	occupied	Renting	free	Squatting
National (Total)	57.4	22.1	19.5	1.0
Metropolitan Assemblies	44.0	35.8	19.1	1.0
Shama-Ahanta (Sekondi-Takoradi)	38.7	32.6	27.4	1.2
Accra	38.2	40.7	19.9	1.2
Kumasi	33.6	42.5	22.6	1.3
Tamale	65.5	27.3	6.7	0.4
Municipal Assemblies	60.5	19.5	19.1	0.9
Other District Assemblies	64.0	15.8	19.4	0.9
Locality				
Urban	34.0	76.3	52.3	56.5
Rural	66.0	23.7	47.7	43.5
Total	100.0	100.0	100.0	100.0
	201	10		
National (Total)	47.2	31.1	20.7	0.9
Metropolitan Assemblies	33.4	46.4	18.9	1.3
Sekondi-Takoradi	31.3	41.0	26.8	0.9
Cape coast	28.3	50.3	20.5	0.8
Accra	27.7	52.2	18.6	1.5
Tema	36.6	46.1	14.9	2.5
Kumasi	21.6	53.2	24.0	1.1
Tamale	55.1	35.4	8.4	1.1
Municipal Assemblies	55.0	46.4	18.9	1.3
Other District Assemblies	54.8	23.2	21.3	0.8
Locality				
Urban	38.6	80.8	56.8	80.1
Rural	61.4	19.2	43.2	19.9
Total	100.0	100.0	100.0	100.0

Source: Ghana Statistical Service, 2000 and 2010Population and Housing Census

Across the different MMDAs, the general observed pattern from Table 4.10 is that although there is a decline in owner-occupied dwelling between 2000 and 2010, with the exception of Tamale, it is relatively low in Metropolitan Assemblies compared to Municipal and District Assemblies. Renting as a tenurial arrangement is relatively low in rural District Assemblies and higher in the Municipal and Metropolitan Assemblies (MMAs). With the exception of Tamale, the proportion households renting dwellings (tenants) far exceeded the national average in all the other Metropolitan Assemblies for 2000 and 2010.

#### **CHAPTER FIVE**

#### INFRASTRUCTURE AND ACCESS TO BASIC SERVICES

#### 5.1 Introduction

This Chapter of the Report examines the supporting infrastructure and access of households to basic services such as water, waste collection, toilets, and electricity. It also examines the institutional and regulatory frameworks that govern these services. As earlier noted in Chapter One, when housing is developed without the necessary basic infrastructure such as accessible roads and drainage systems as well as proximity to both in-house services (water, toilet, waste collection, electricity, etc.) and community services (education, health, playgrounds, markets, etc.), housing can be described as inadequate.

The availability of basic infrastructure and services as well as the governance systems for maintaining these contribute to liveable environment for households and promote the general well-being of the larger community (Newman 2008). According to Owusu (2010), poor housing and living environment are often conceptualized and captured in terms of health, however, they go beyond health to encompass other aspects of human well-being. This is because the quality of housing and community open space has an impact on emotional and social well-being (including stigmatization). Much of the thinking and efforts around community and slum upgrading in Ghana are centred on improving community and neighbourhood infrastructure and services in order to improve community liveability. More specifically, recent medium-term development policy frameworks, including the GSGDA (2009-2013), emphasized the need for slum upgrading and affordable housing, and improvement in rural housing as a means of dealing with the broader issues of health and general well-being of the population.

# 5.2 Institutional and Regulatory Framework for Infrastructure and Services Provision

The institutional and regulatory framework for infrastructure and services provision in Ghana has undergone significant reforms in the last three decades. In line with the policy trend since the mid-1980s under the broad banner of economic liberalization and privatization, the state has increasingly drifted away as a provider to 'an enabler' and 'facilitator' of infrastructure and services provision. It is within this broader economic framework that political reforms involving decentralization and local government reforms were implemented in 1988 with the establishment of the Metropolitan, Municipal and District Assemblies (MMDAs). To some analysts, decentralization and local government reforms are logical extension of economic reform efforts (Razin and Obirih-Opareh 2000) – that is, a reaction to the changes in the broader economic and ideological environment of the neo-liberal economic turn (Owusu 2005).

Among a variety of reasons for the introduction of the MMDAs' concept is the view that the concept provided a means of easing the economic pressure on the state by allowing citizens to contribute to the provision of infrastructure and services. Consequently, MMDAs are assigned the overall authority in the planning and implementation of development plans and projects. Initially backed by PNDC Law 207, and subsequently superseded by Chapter 20 of the 1992 Constitution and the Local Government Act, 1993, Act 462, all agencies required to provide housing-related infrastructure and services such as roads and drains, sanitation and waste management, water, electricity, telecommunications, etc. come under the coordinating

umbrella of the MMDAs. This coordinating role of the MMDAs is in line with their broader mandate as the key agency tasked with the overall responsibility for the development of their communities and neighbourhoods within their jurisdiction.

As indicated in Chapter Two (section 2.3, Institutional and Regulatory Framework for Housing in Ghana), there are a myriad of institutions and actors in the housing sector. However, many of these institutions charged with the provision of infrastructure and services for housing are public and parastatal organizations. While the MMDAs through the Town and Country Planning Department (TCPD) can be said to have direct control over the planning, zoning and layouts or general land uses within their jurisdiction, the situation is quite different when it comes to the provision of utilities and services.<sup>3</sup>

Presently, the provision of utilities and services to neighbourhoods and communities in urban and rural areas is governed by institutions such as the Ghana Water Company Limited (GWCL) and Electricity Company of Ghana (ECG). The institutional and legal frameworks of the utilities and services provision by these parastatal institutions are governed by the national Constitution and Acts of Parliament, and these they tend to operate independent of the MMDAs. These institutions have their own institutional and legal frameworks and do not come under the control of MMDAs. MMDAs only provide weak coordination among these agencies and, in many instances there are overlaps of institutional mandates. However, the lack of capacity of the MMDAs has constrained their coordinating role (World Bank 2014).

In general, while government's intention with respect to the provision of infrastructure and services is clearly defined, financing and governance aspects remained critical challenges. The MMDAs, utility companies and other public and parastatal institutions are mandated to provide these community infrastructures and services but inadequate funding and the lack of coordination both vertical and horizontal across various institutions remained daunting, leaving many communities poorly serviced. Consequently, many neighbourhoods developed without the requisite or commensurate infrastructure and services. In urban areas, this situation contributes to the development of slums and accounts for the growing incidence of the phenomenon in large Ghanaian cities as noted in Chapter 3, while in rural areas, these services are simply unavailable.

## 5.3 Water Supply

The management of water supply falls on the Ministry of Water Resources, Works and Housing which provides the policy, planning and monitoring of the sector, the GWCL and the Community Water and Sanitation Agency (CWSA) act as the implementing agencies for urban and rural areas, respectively. The responsibility for water use regulation in terms of rights and management of the utilization of water resources is the mandate of the Water Resources Commission (WRC), while the examination and approval of tariffs for water and the other utility services fall on the shoulders of the Public Utilities Regulatory Commission (PURC). The role of the MMDAs is to coordinate the provision of water supply into their planning of communities, and facilitate the implementation and delivery of the service, but this is rarely the case.

<sup>&</sup>lt;sup>3</sup> Even the direct control of MMDAs with respect to land uses and building regulation and issuance of permits can be contested. This is because while the current regulation requires the TCPD/MMDAs to process and issue development permits within a maximum period of 90 days, this is rarely the case. Development permit applicants normally hope the TCPD would not respond in a timely fashion, since in the absence of a timely response, as a matter of law, the application is deemed approved. Considering that this principle applies also to applications for building permits, it is not difficult to explain the haphazard nature of housing development in the large cities and towns (GSS 2005).

The availability of and accessibility to improved drinking water is an important aspect of the health of household members. The Millennium Development Goal 7(MDG 7) of the UN aimed to reduce by half the proportion of people without sustainable access to safe drinking water by 2015 based on 1990 levels. The source of water supply, particularly for drinking has a tremendous effect on burden of diseases. For instance, one of the main health benefits of clean drinking water supply is a reduction in diarrhoea (GSS 2010).

Water sources are classified as 'improved' or 'unimproved'. Sources considered as improved are piped public water into homes, public standpipe, borehole, protected (lined) dug well, protected spring, and rainwater collection; unimproved sources are unprotected wells and springs, vendors, and tanker-trucks (WHO and UNICEF 2000). A major characteristic of Ghana potable water supply is the geographical disparity across metropolitans, municipalities, districts and between urban and rural areas.

Tables 5.1a and 5.1b indicate that in 2000, more than half (51.2%) households in Metropolitan Assemblies using pipe-borne water inside their dwelling as a main source of drinking water were in Accra Metropolis and this has reduced to less than one-third (31.9%) within ten years (2010). Meanwhile, in 2000, households in Metropolitan Assemblies using pipe-borne water inside dwelling as a main source of drinking water were a little over one-third (36.3%) in Kumasi Metropolis and this increased to 43.4 percent in 2010. This implies that individual households in Accra Metropolis have shifted to other means of drinking water including bottled water (59.6%) and sachet water (74.1%).

Further analysis shows that in 2000 more than two-thirds (67.5%) of individual households using dugout water as a main source of drinking water in the Metropolitan Assemblies were in Tamale Metropolis, with the proportion increasing to 87.9 percent within the ten years period (Tables 5.1a and 5.1b). This shows that, there are lots of individual households in different communities in the Tamale Metropolis that lack potable water for drinking and have resorted to dugout water as their main source of drinking water.

The proportion of urban dwelling units that used pipe borne drinking water within the dwelling was 92.4 percent in 2010, representing a slight increase over the 2000 figure (91.6%). The proportion of households using water supplied by a tanker/vendor in urban dwellings also increased from 71.1 percent in 2000 to 80.6 percent in 2010. On the other hand, the use of water from rivers/streams and dugout by rural households in 2000 (86.7% and 85.7% respectively) increased in 2010 (89.9% and 89.5% respectively). This shows the worsening situation in rural areas where high proportions of households still depend on rivers/streams and dugouts as their source of drinking water which could lead to increases in waterborne diseases.

Table 5.1a: Occupied dwelling units by type of locality and main source of drinking water, 2000

	Pipe-	Pipe-				Spring/			
	borne	borne	Tanker		Bore-	rain	River/		
District/Locality	inside	outside	supply	Well	hole	water	stream	Dugout	Other
National	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Metropolitan Assemblies (Total)	58.7	34.1	18.7	8.2	1.1	4.6	1.0	5.2	24.3
Shama-Ahanta East	7.6	16.0	4.1	13.4	16.4	16.8	18.9	3.4	11.2
Accra	51.2	53.3	72.4	32	14.3	49.1	4.2	12.8	46.4
Kumasi	36.3	24.2	12	53	65.1	32.8	57.7	16.3	31.3
Tamale	4.8	6.4	11.4	1.6	4.2	1.3	19.2	67.5	11.1
<b>Municipal Assemblies</b>									
Total	18.9	18.5	12.4	18.3	19.0	17.6	12.2	10.5	22.4
Nzema East	0.6	1.8	0.9	8.5	3.7	3.5	14.7	1.1	0.5
Cape Coast	11.4	10.2	0.9	0.3	0.2	0.4	0.1	0.2	2.2
Tema	38.4	30	71.4	3.2	0.5	5.0	0.2	7.1	38.3
Keta	1.3	6.0	1.9	12.7	0.5	1.7	3.3	1.9	6.4
Но	6.5	8.8	3.6	6.1	4.7	10.2	16.5	28.5	11.3
Birim North	0.3	1.9	0.5	4.1	10.3	5.4	4.7	2.1	2.5
Koforidua	13.4	5.9	2.6	6.0	0.4	2.6	3.0	1.4	3.3
Amansie East (Bekwai)	1.6	1.6	1.2	7.2	17.4	6.0	9.4	7.8	6.0
Adansi West (Obuasi)	5.8	7.0	3.9	11.7	10.3	7.4	5.2	3.0	2.3
Sekyere West (Mampong)	3.2	2.1	1.5	1.9	4.4	4.0	15	2.8	3.8
Offinso	0.9	5.2	1.8	3.5	3.5	3.8	7.7	2.4	1.1
Sunyani	8.5	7.1	1.1	3.9	4.7	3.9	7.1	4.6	2.2
Dormaa	1.2	5	1.2	7.1	6.9	5.9	3.8	7.3	1.3
Bolgatanga	3.7	3	1.9	7.7	13.1	13.1	2.4	7.9	5.7
Bawku East (Bawku)	1.5	1.6	2.5	12.7	9.7	14.4	3.0	6.2	8.6
Wa	2.0	2.9	3.0	3.7	9.5	12.6	4.0	15.6	4.5
Other Districts	22.4	47.5	68.9	73.5	80	77.9	86.8	84.3	53.3
Locality									
Urban	91.6	73.9	71.1	46.0	12.7	22.5	13.3	14.3	60.4
Rural	8.4	26.1	28.9	54.0	87.3	77.5	86.7	85.7	39.6

Source: Ghana Statistical Service, 2000 Population and Housing Census

Table 5.1b: Occupied dwelling units by type of locality and main source of drinking water, 2010

			•					,							
	Pipe-	Pipe-								Tanker					
	borne	borne	Public	Bore-	Pro-		Pro-			supply/V	Unpro-	Unpro-		Dugout/	
	inside	outside	tap/Stan	hole/Pump	tected	Rain	tected	Bottled	Sachet	endor	tected	tected	River/	Pond/Lake/	
District/Locality	dwelling	dwelling	dpipe	/Tube well	well	water	spring	water	water	provided	well	spring	Stream	Dam/Canal	Other
Total (national)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Metropolitan Assemblies															
Total	63.2	35.7	21.7	5.4	11.1	2.7	24.0	51.7	38.5	15.8	1.6	1.5	0.6	5.0	40.7
Sekondi-Takoradi	9.0	11.6	22.7	4.0	5.4	4.5	6.8	8.6	5.8	7.0	8.4	4.8	52.2	4.3	6.7
Cape Coast	2.7	1.9	8.6	0.3	0.3	1.3	2.3	3.1	3.0	0.4	1.0	4.3	1.8	0.1	3.3
Accra	31.9	38.4	29.6	2.1	2.3	15.3	40.6	59.6	74.1	28.1	7.8	7.5	8.7	0.6	27.6
Tema	8.3	7.5	9.6	0.2	0.3	3.2	5.3	8.7	3.8	46.3	0.5	1.1	0.7	0.9	16.8
Kumasi	43.4	34.3	26.4	92.2	89.6	36.4	39.7	19.6	13.1	13.5	72.9	65.6	19.2	6.2	40.1
Tamale	4.7	6.3	3.1	1.3	2.0	39.3	5.3	0.4	0.1	4.7	9.5	16.7	17.4	87.9	5.4
Municipal Assemblies															
Total	24.1	30.6	27.8	23.1	28.5	20.9	30.2	29.0	41.6	41.2	18.0	22.9	19.4	8.9	24.5
Tarkwa-Nsuaem	0.9	1.3	1.3	1.8	2.3	0.4	1.9	1.2	1.1	0.1	1.3	0.7	3.0	1.2	0.3
Komenda-Edina-Egyafo-Abirem	2.2	2.8	8.1	0.9	0.7	2.7	2.3	2.4	0.7	0.3	1.6	1.8	0.4	2.2	0.7
Mfantsiman	3.6	3.8	7.6	1.7	0.9	10.0	1.8	1.4	0.7	1.8	3.6	8.6	4.1	4.0	14.3
Effutu	2.6	2.5	1.1	0.0	0.0	0.1	0.9	1.3	0.8	0.7	0.0	0.1	0.1	0.8	0.4
Agona West	3.0	2.2	4.8	0.6	0.6	1.3	1.0	1.3	0.8	0.0	2.8	1.2	2.1	5.4	0.4
Assin North	0.1	0.8	1.3	5.8	5.3	2.2	1.2	0.6	1.7	0.0	8.9	1.2	3.6	1.4	6.4
Upper Denkyira East	0.7	0.7	1.0	1.7	0.4	0.1	0.6	0.6	0.3	0.0	1.8	0.3	2.0	1.6	0.3
Weija (Ga South)	11.6	13.1	4.1	1.7	1.4	7.5	6.1	12.0	15.0	21.9	3.4	6.7	1.5	11.8	6.3
Ga West	4.0	2.6	0.9	1.5	1.2	4.9	4.3	11.4	19.4	9.2	0.8	0.4	0.3	1.5	3.1
Ga East	3.5	2.6	1.4	1.0	0.9	3.2	4.4	16.9	18.8	18.8	0.4	0.8	0.1	0.4	7.5
Adenta	0.9	1.0	0.4	0.1	0.1	0.6	1.0	10.4	5.4	11.4	0.0	0.0	0.0	0.1	1.8
Ledzokuku/Krowor	8.3	6.1	2.0	0.2	0.6	0.2	3.3	7.6	7.0	23.4	0.0	0.0	0.1	0.0	2.6
Ashaiman	6.1	8.0	4.4	0.0	0.1	0.2	2.3	2.8	1.6	1.6	0.0	0.1	0.0	0.0	0.9
Keta	1.8	4.8	4.3	0.2	3.2	10.6	1.2	1.4	0.8	4.0	9.9	1.4	1.4	1.5	3.3
Но	7.4	6.4	7.3	3.5	2.0	9.2	5.1	2.0	0.7	0.9	6.1	15.5	8.1	6.4	5.0
Hohoe	3.8	5.3	6.8	2.4	1.5	6.5	11.6	1.6	0.6	0.9	2.1	22.6	15.9	8.3	3.1
Birim	1.4	1.2	2.2	3.1	8.8	2.4	1.0	1.9	3.0	0.0	2.9	0.6	1.3	1.1	1.9
West Akim	0.8	2.0	1.5	3.8	7.4	12.8	6.5	1.0	2.1	0.0	7.5	2.5	10.6	3.3	3.1
Akwapem South	1.9	2.2	1.1	2.6	1.3	6.1	1.6	1.2	2.2	0.8	2.1	5.0	2.9	2.2	1.8
New Juaben	8.4	3.0	2.2	1.0	5.0	6.1	1.9	4.0	5.0	0.2	0.8	0.9	0.8	0.6	0.9
East Akim	1.6	1.7	1.6	4.4	6.3	3.6	1.5	1.1	2.0	0.1	1.0	0.9	6.9	1.3	0.5
Kwahu West	0.9	1.2	0.5	3.1	2.7	1.7	1.2	0.4	1.7	0.1	0.6	0.4	1.5	0.1	0.0
Obuasi	2.7	2.2	2.6	3.9	6.7	0.2	11.4	2.8	2.5	0.0	0.9	1.8	0.2	1.7	2.1
Bekwai	0.6	1.2	3.2	4.4	1.4	0.3	1.9	0.9	0.2	0.1	1.1	1.6	0.8	0.6	3.1

Table 5.1b: Occupied dwelling units by type of locality and main source of drinking water 2010 (cont'd)

	Pipe-	Pipe-	Public							Tanker					
	borne	borne	tap/	Bore-	Pro-		Pro-			supply/	Unpro-	Unpro-		Dugout/	
D:	inside	outside	Stand	hole/Pump	tected	Rain	tected	Bottled	Sachet	Vendor	tected	tected	River/	Pond/Lake/	0.1
District/Locality	dwelling	dwelling	pipe	/Tube well	well	water	spring	water	water	provided	well	spring	Stream	Dam/Canal	Othe
Asante Akim North	1.2	2.3	1.8	4.9	1.7	1.4	1.7	1.3	0.8	0.1	0.4	1.9	1.1	0.4	1.4
Ejisu-Juaben	0.3	1.0	2.1	6.9	2.8	0.4	1.6	1.2	0.4	0.1	1.1	0.8	1.1	0.9	0.6
Offinso	0.5	1.1	1.1	2.1	0.8	0.1	1.0	0.2	0.0	0.0	0.6	0.2	1.5	0.8	0.2
Mampong	2.3	1.0	1.7	1.3	0.2	0.2	2.0	0.5	0.1	0.3	0.2	3.1	4.2	0.2	0.2
Asunafo North	0.4	1.3	2.3	2.6	3.1	0.4	1.7	0.9	0.6	0.0	3.2	3.0	5.2	3.5	0.6
Dormaa	0.8	0.9	1.5	6.6	4.4	0.2	1.5	0.9	0.9	0.0	7.5	5.3	1.3	4.3	0.0
Sunyani	4.5	1.3	2.4	1.5	2.7	0.2	1.0	1.8	1.0	0.4	1.6	0.7	1.3	0.8	6.8
Berekum	2.8	1.8	3.3	3.8	1.3	0.3	1.1	0.6	0.3	0.1	0.4	0.1	0.3	0.6	0.2
Wenchi	0.7	1.0	3.2	1.4	0.9	0.2	0.8	1.0	0.1	0.0	0.5	2.5	2.8	0.4	0.4
Techiman	1.5	4.1	5.6	4.0	2.5	0.4	3.1	1.5	1.1	0.1	1.3	1.9	3.8	0.3	7.0
Kintampo North	0.4	0.4	0.5	1.2	7.4	1.2	1.0	0.5	0.3	0.0	1.3	1.8	4.2	11.4	1.9
Yendi	0.5	0.7	0.9	3.3	0.6	0.9	2.1	0.4	0.0	0.1	2.4	0.4	4.5	13.5	0.5
Bolgatanga	3.3	1.5	0.5	4.2	1.4	0.1	1.2	0.3	0.1	0.1	3.4	0.3	0.4	0.5	8.6
Bawku	0.9	1.1	0.7	4.5	8.2	1.0	2.9	0.3	0.1	0.8	15.5	2.7	0.6	4.1	1.2
Wa	1.2	1.7	0.8	2.3	1.6	0.1	1.4	0.4	0.3	1.2	0.8	0.1	0.2	0.7	0.5
<b>Other Districts</b>	12.7	33.7	50.5	71.5	60.3	76.4	45.8	19.4	19.8	43.1	80.4	75.6	80.0	86.1	34.8
Locality															
Urban	92.4	76.0	62.7	22.6	59.6	39.6	57.6	83.8	86.2	80.1	25.4	14.0	10.1	10.5	64.2
Rural	7.6	24.0	37.3	77.4	40.4	60.4	42.4	16.2	13.8	19.9	74.6	86.0	89.9	89.5	35.8

Source: Ghana Statistical Service, 2010 Population and Housing Census

#### 5.4 Source of Lighting

The Ministry of Energy (MoE) is the policy-making authority for electricity and other sources of energy in Ghana, while the production and distribution is in the hands of a number of parastatal (Volta River Authority, Northern Electricity Department and ECG) and other private power production entities. However, the production and distribution of electricity and other sources of lighting are in the hands of state utility institutions and completely outside the control of the MMDAs (World Bank 2014). Consequently, the programmes of power production and distribution agencies are hardly incorporated into the development plans of the MMDAs so as to synchronise electricity supply with the rate and pattern of physical development of settlements, especially the major cities undergoing extensive sprawl as a result of rapid urbanization and urban growth.

The nature of the source of lighting is one of the indicators of quality of life. In general terms, as the levels of living standards improve, the source of lighting shifts from the use of low quality sources, such as fuel wood, to more efficient ones like electricity (GSS 2010). The two main sources of lighting for homes in metropolitans, municipalities and districts are electricity and kerosene. Electricity is used mostly in the southern part of Ghana compared to the northern part of the country where kerosene lamp is mostly used. The observed dichotomy also exits between rural and urban areas (GSS 2005).

At the metropolitan levels, as shown in Tables 5.2a and 5.2b, the two main sources of non-natural lighting in households in 2000 were kerosene lamp (4.2%) and electricity (39.0%). The proportion of dwelling units using electricity as the main source of lighting has reduced from 39.0 percent in 2000 to 35.2 percent in 2010. Also, the proportion of dwelling units using kerosene lamp as a main source of electricity has increased from 4.2 percent in 2000 to 4.4 percent. The decline in the proportion of dwelling units using electricity may be due to the fact that some dwelling units have switched to the use of private generators within the period.

Within the Municipalities, nearly the same proportions of dwelling units use electricity, kerosene lamp and gas lamp in 2000 (17.6%, 16.6% and 18.0% respectively). In 2010 however, the proportion of dwelling units using electricity and gas lamp increased to 28.9 percent and 28.0 percent respectively.

Tables 5.2a and 5.2b further show that in 2000, more than half (51.2%) of dwelling units in rural areas were using other sources of lighting, and this has increased to 53.5 percent in 2010 within the ten years period. Meanwhile, the proportion of dwelling units in the urban areas using other sources of lighting which was 48.8 percent in 2000 has declined to 46.5 percent in 2010, the reverse of the trend for other source of lighting.

Table 5.2a: Occupied dwelling units by type of locality and main source of lighting, 2000

		Kerosene	Gas	Solar	No	
District/Locality	Electricity	Lamp	Lamp	Energy	Light	Other
National	100.0	100.0	100.0	100.0	100.0	100.0
Metropolitan Assemblies	39	4.2	9.4	18.3	32.6	25.3
Shama-Ahanta East	4.5	0.7	0.8	1.5	2.9	1.5
Accra	20.3	1.5	4.1	5.8	18.2	11.9
Kumasi	12.7	1.1	3	10.7	10.5	10.4
Tamale	1.6	0.9	1.4	0.3	0.9	1.6
Municipal Assemblies						
Total	17.6	16.6	18	11.8	20.4	15.4
Nzema East	3.3	5.9	4.3	2.2	2.6	2
Cape Coast	8.8	1.4	1.6	5.1	5.4	6.3
Tema	27.8	7.4	12.5	13.9	21.5	17.7
Keta	2.4	6.8	4.3	1.6	1	2.9
Но	7.6	9.4	10.9	8.3	5	6.9
Birim North	1.4	6.3	5.5	1	1.1	1.7
Koforidua	9.4	2.2	0.7	2.4	3.9	5.1
Amansie East (Bekwai)	2.7	10.2	10.8	1.2	1.7	2.1
Adansi West (Obuasi)	10.8	5.5	4.6	24.8	5.5	6.3
Sekyere West (Mampong)	3.5	4.9	3.7	2.8	3.1	2.6
Offinso	3.5	4.4	3.7	3.2	4.3	2.6
Sunyani	8.5	4	2.2	2.2	4.2	5
Dormaa	3	6.7	7.5	1.6	3.1	3.9
Bolgatanga	2.7	9.2	8.1	6.1	11.7	9.4
Bawku East (Bawku)	2	9	10.4	8.5	19.7	7.9
Wa	2.7	6.8	9.4	15.2	6.3	17.6
Other Districts	43.4	79.2	72.6	69.9	47	59.2
Locality						
Urban	80.5	20.6	25.8	43	59.2	48.8
Rural	19.5	79.4	74.2	57	40.8	51.2

Source: Ghana Statistical Service, 2000 Population and Housing Census

Table 5.2b: Occupied dwelling units by type of locality and main source of lighting, 2010

	Elec-	Electricity	Kero-				Flash-			
	tricity	(private	sene	Gas	Solar		light/	Fire-	Crop	
District/Locality	(mains)	generator)	lamp	lamp	energy	Candle	Torch	wood	residue	Other
Total (national)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Metropolitan										
Total	35.2	20.7	4.4	14.2	10.8	41.6	5.3	9.3	8.2	17.9
Sekondi-Takoradi	10.7	11.2	10.5	9.2	5.8	5.7	6.7	7.2	8.7	10.2
Cape Coast	3.0	2.4	5.4	3.2	1.3	2.7	1.6	3.7	2.9	5.3
Accra	38.1	35.5	20.3	27.7	28.5	44.0	22.5	27.7	45.5	37.0
Tema	6.6	12.6	17.1	12.0	12.9	11.6	11.5	7.5	9.2	13.5
Kumasi	37.8	32.5	25.9	43.2	46.0	35.0	51.9	41.0	22.4	31.2
Tamale	3.8	5.7	20.7	4.8	5.6	1.0	5.8	12.8	11.3	2.7
Municipal										
Assemblies										
Total	28.9	27.2	24.8	28.0	19.1	35.4	20.5	19.5	21.9	27.4
TarkwaNsuaem	1.6	2.8	0.8	1.4	1.4	0.5	1.9	1.3	0.6	1.2
Komenda-Edina-										
Egyafo-Abirem	2.6	2.7	2.6	1.9	1.1	1.0	0.9	2.5	1.5	3.2
Mfantsiman	3.4	3.8	4.9	2.4	1.8	1.5	0.7	2.3	4.9	1.4
Effutu	1.4	1.3	0.9	1.4	0.5	0.8	0.2	1.2	1.4	1.5
Agona West	1.9	1.6	2.6	1.1	2.2	1.1	1.8	1.4	2.5	3.7
Assin North	1.7	2.7	2.9	2.6	3.6	0.6	6.4	0.9	1.3	1.9

Table 5.2b: Occupied dwelling units by type of locality and main source of lighting, 2010 (Cont'd)

	Elec-	Electricity	Kero-				Flash-			
	tricity	(private	sene	Gas	Solar		light/	Fire-	Crop	
District/Locality	(mains)	generator)	lamp	lamp	energy	Candle	Torch	wood	residue	Other
Upper Denkyira East	0.8	0.5	0.5	0.6	1.0	0.2	2.7	1.0	0.2	0.8
Weija (Ga South)	8.9	9.1	6.3	11.9	11.8	22.4	4.4	7.5	6.0	9.3
Ga West	5.7	3.1	1.6	4.9	6.0	9.6	1.9	2.8	4.8	5.1
Ga West Ga East	5.3	5.2	1.7	8.1	7.6	14.1	2.7	3.8	5.4	9.7
Adenta	1.4	2.2	0.8	1.4	1.8	6.7	1.4	1.5	1.2	3.5
Ledzokuku/Krowor	5.6	3.2	0.8	2.2	1.8	5.5	0.7	2.9	0.9	3.5
Ashaiman	3.0 4.4	2.9	1.1	2.4	2.0	6.0	1.0	1.9	1.7	2.5
Keta	1.6	3.9	8.3	1.7	3.2	0.0	0.6	5.2	4.0	0.9
Но	5.0	5.4	7.5	4.3	3.2	3.8	2.1	6.2	3.6	2.8
Hohoe	3.0 4.1	5.4 6.4	7.3 7.9	3.0	2.5	3.8		8.0	3.5	2.8 1.8
Birim	2.3	2.2	3.5	2.0	2.3 1.7		1.9 2.2	2.0	3.3 1.9	1.8
	2.5	3.2	5.5 6.8		3.5	1.0	2.2	4.8		
West Akim				3.0		0.9			4.3	1.2
Akwapem South	2 4.2	3.1	2.7	3	4.3	1.9	1.5	1.8	1.5	2.3
New Juaben		2.4	1.4	2.8	1.3	2	1.3	1.9	2.3	2.6
East Akim	2.8	2.6	4.7	2.8	2	1.2	1	3.1 1.7	2.2	1.3
Kwahu West	1.5	1.7	1.5	1.4	1.1	1.1	2.5		1.7	5.2
Obuasi	3.7	3.1	0.5	2.4	1.3	0.9	1	0.8	1	1.1
Bekwai	1.9	2	1.2	3.4	2.3	0.7	2.7	1.4	1	0.9
Asante Akim North	2.1	1.7	1.5	1.8	1.7	1.1	4.1	1.3	2	1.8
Ejisu Juaben	2.3	2.4	1.6	2.5	3.2	2.3	3.1	2.4	1.7	2.2
Offinso	0.9	1.2	0.9	1.4	1.4	0.5	2.2	0.7	0.6	2.5
Mampong	1.2	0.8	0.7	1.1	2	0.7	2.7	1	2.5	0.8
Asunafo North	1.3	1.3	0.9	1.9	2.2	0.6	6.5	1.7	0.8	1.4
Dormaa	1.7	1.8	1.3	2.4	1.5	0.9	8	2.3	1	8.8
Sunyani	2.2	1.1	0.4	1.1	0.9	1.1	2.4	1	0.5	2.3
Berekum	2.4	1.8	0.7	1.7	0.6	1	2.6	0.7	0.7	1.4
Wenchi	1	1.3	0.9	1	1	0.5	3.4	1.4	0.9	3.3
Techiman	3.4	2.3	1.2	2.3	2.6	1.4	5.2	3.4	2	1.6
Kintampo North	0.7	1.2	1.5	1.3	1.8	0.5	4.6	1.5	1.1	0.6
Yendi	0.6	1.4	5.3	2.6	2.7	0.2	1.2	5	5.9	0.3
Bolgatanga	1.4	1.5	4.4	2.7	2.7	0.6	0.8	3.2	3.2	1.3
Bawku	1.1	1.5	4.2	2.5	5.1	0.4	5.7	5.8	16.1	1
Wa	1.3	1.4	0.9	1.5	2.1	0.4	1.6	0.9	2	1.7
Other Districts	35.9	52.1	70.8	57.8	70.1	23	74.2	71.2	69.9	54.7
Locality										
Urban	72.8	51.9	26.5	45.1	32.3	79.7	19.4	27.8	29.5	46.5
Rural	27.2	48.1	73.5	54.9	67.7	20.3	80.6	72.2	70.5	53.5

Source: Ghana Statistical Service, 2010 Population and Housing Census

# 5.5 Use of Cooking Fuel

Tables 5.3a and 5.3b show that the main source of cooking fuel for households in the Metropolitan Assemblies is electricity and gas. The use of electricity and gas for cooking declined slightly from 48.0 percent and 52.0 percent respectively in 2000 to 46.9 percent and 50.4 in 2010. These declines resulted in an increase in kerosene usage from 35.1 percent in 2000 to 39.9 percent in 2010. The use of charcoal as cooking fuel also declined in the Metropolitan Assemblies from 41.5 percent in 2000 to 35.6 percent in 2010.

Within the Municipalities, the use of gas increased from 21.7 percent in 2000 to 32.4 percent in 2010 while that of electricity also increased from 19.3 percent in 2000 to 25.6 percent in 2010. The use of charcoal within the Municipalities increased significantly within the ten year period from 18.2 percent in 2000 to 30.0 percent in 2010.

The use of charcoal as cooking fuel within urban households dropped slightly from 85.5 percent in 2000 to 79.1 percent in 2010. Fuelwood and crop residue continue to be used largely by rural households as cooking fuel. More than four out of five rural households also use firewood as the main cooking fuel (80.6 percent in 2000 and 80.8 percent in 2010). The use of gas remained the main source of cooking fuel in urban localities, although the proportion declined from 90.6 percent in 2000 to 88.4 percent in 2010. In contrast, only 11.6 percent in rural localities used gas, an increase from 9.4 percent

Table 5.3a: Occupied dwelling units by type of locality and main cooking fuel, 2000

	None,							
	no		Coconut		Electri-			
District/Locality	cooking	Wood	husk	Gas	city	Kerosene	Charcoal	Other
National	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Metropolitan								
Assemblies	36.2	2.4	12.8	52.0	48.0	35.1	41.5	15.7
Shama-Ahanta East	10.3	29.3	17.8	8.2	12.3	7.5	11.3	12.4
Accra	44.2	10.5	34.4	69.1	51.9	71.3	48.8	50.8
Kumasi	41.8	18.5	40.5	21.1	29.6	19.0	35.7	34.3
Tamale	3.7	41.7	7.3	1.6	6.1	2.2	4.2	2.5
Municipal Assemblies								
Total	16.3	15.7	11.7	21.7	19.3	16.1	18.2	34.6
Nzema East	3.8	6.7	10.8	0.7	1.5	4.7	2.9	0.7
Cape Coast	7.3	1.1	5.5	7.9	9.0	8.8	9.5	0.6
Tema	18.5	1.5	12.2	60.8	24.5	20.4	30.6	2.6
Keta	2.0	5.3	23.6	1.7	0.8	5.9	5.2	1.3
Но	5.6	10.8	10.4	5.4	4.5	7.6	6.8	0.7
Birim North	4.6	7.0	1.4	0.4	0.6	2.9	0.6	0.3
Koforidua	11.4	2.5	2.8	8.7	3.3	8.0	8.9	0.7
Amansie East (Bekwai)	4.2	11.7	3.3	0.9	1.2	5.5	1.3	1.1
Adansi West (Obuasi)	9.1	5.5	9.4	4.0	35.1	5.9	12.1	0.8
Sekyere West								
(Mampong)	5.0	5.8	2.8	0.6	1.4	3.4	3.0	1.1
Offinso	4.7	6.3	1.9	0.4	2.0	3.5	1.5	0.3
Sunyani	9.7	6.1	3.4	5.4	8.9	4.1	6.0	1.0
Dormaa	9.1	8.2	1.8	0.7	0.9	2.8	1.1	0.3
Bolgatanga	2.3	7.5	3.4	1.5	2.6	5.9	4.0	35.7
Bawku East (Bawku)	1.0	7.5	5.5	0.3	1.5	6.9	2.2	51.9
Wa	1.9	6.5	1.7	0.8	2.2	3.5	4.5	0.9
Other Districts	47.5	81.9	75.5	26.3	32.7	48.7	40.3	49.7
Locality								
Urban	72.9	19.4	35.4	90.6	82.8	62.5	85.5	28.5
Rural	27.1	80.6	64.6	9.4	17.2	37.5	14.5	71.5

Source: Ghana Statistical Service, 2000 Population and Housing Census

Table 5.3b: Occupied dwelling units by type of locality and main cooking fuel, 2010

	None, no						Crop		Animal	
District/Locality	cooking	Wood	Gas	Electricity	Kerosene	Charcoal	residue	Saw dust	waste	Other
Total (national)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Metropolitan Assemblies										
Total	38.7	1.8	50.4	46.9	39.9	35.6	2.4	45.3	44.1	47.3
Sekondi-Takoradi	7.0	19.3	10.5	13.9	9.4	10.6	9.0	8.4	8.9	8.1
Cape Coast	1.8	3.7	2.5	0.9	2.4	3.6	2.1	3.1	4.7	3.1
Accra	38.1	12.0	40.8	50.9	60.0	34.8	30.1	38.4	45.9	39.7
Tema	4.0	3.7	9.7	4.8	5.5	6.2	4.8	9.2	8.8	7.4
Kumasi Tamale	46.5	18.8	35.0	23.3	21.0 1.8	40.4	31.7 22.3	29.4	28.2	32.5
	2.6	42.5	1.6	6.2	1.8	4.4	22.3	11.5	3.6	9.3
Municipal Assemblies	25.0	21.6	22.4	26.5	20.0	20.0	22.6	22.5	21.6	25.2
Total	25.9	21.6	32.4	26.5	28.9	30.0	32.6	33.5	31.6	27.2
TarkwaNsuaem	2.0	1.7	1.3	3.7	0.8	1.4	0.4	0.8	1.1	0.3
Komenda-Edina-Egyafo-Abirem	2.5	2.6	0.9	0.9	2.9	3.1	0.5	1.3	1.0	3.7
Mfantsiman	2.7	3.1	1.4	1.8	4.3	4.8	0.6	0.8	2.3	3.3
Effutu	1.1	0.6	1.4	1.1	1.9	1.5	0.3	1.3	2.7	1.8
Agona West	2.6	2.5	1.6	0.7	2.1	1.8	0.6	0.9	1.2	0.6
Assin North	2.0	5.0	0.9	1.1	1.2	1.4	0.8	0.9	1.1	0.3
Upper Denkyira East	1.2	1.5	0.6	0.3	0.5	0.8	0.2	0.3	0.8	0.3
Weija (Ga South)	6.1	2.0	13.8	4.2	12.9	10.4	0.6	10.2	12.1	12.4
Ga West	3.8	0.4	9.9	3.2	6.2	5.2	0.3	5.9	8.2	6.7
Ga East	4.3	0.3	11.1	4.7	7.3	4.3	0.3	6.9	9.0	11.7
Adenta	1.6	0.2	3.0	1.1	1.7	1.5	0.0	2.1	1.8	0.9
Ledzokuku/Krowor	3.8	0.2	9.0	7.2	7.6	4.8	0.2	6.2	9.9	2.2
Ashaiman	5.0	0.1	5.5	1.3	4.6	4.9	0.2	3.2	3.9	5.3
Keta	1.2	3.3	1.4	0.7	5.1	2.8	1.8	1.4	2.6	5.8
Но	2.8	6.7	5.2	3.0	4.9	4.0	1.1	4.0	2.7	1.6
Hohoe	2.5	7.5	2.1	1.4	3.0	3.7	1.6	3.3	1.4	2.9
Birim	3.4	3.3	1.8	1.6	2.3	2.1	1.9	2.2	0.7	0.6

Table 5.3b: Occupied dwelling units by type of locality and main cooking fuel, 2010 (cont'd)

51.1.7.11	None, no	***	G	<b>T</b>	**	GI 1	Crop		Animal	0.1
District/Locality	cooking	Wood	Gas	Electricity	Kerosene	Charcoal	residue	Saw dust	waste	Other
West Akim	2.6	5.6	1.2	1.2	3.2	2.5	1.4	0.7	1.1	0.3
Akwapem South	1.8	1.9	2.0	1.2	3.6	2.3	0.3	1.6	1.8	1.7
New Juaben	4.1	1.1	5.1	2.0	3.8	4.3	0.4	3.6	3.5	2.0
East Akim	2.8	4.2	2.0	0.9	2.9	2.3	0.6	1.9	2.3	1.1
Kwahu West	1.9	1.7	0.9	1.0	1.4	1.8	0.3	1.5	0.7	1.0
Obuasi	4.2	0.6	3.5	40.3	1.7	3.6	0.4	2.2	3.4	6.6
Bekwai	2.0	3.6	0.8	0.9	0.8	1.1	0.9	0.7	1.1	0.3
Asante Akim North	3.3	3.2	1.2	1.2	1.4	1.9	0.6	2.1	0.7	1.1
Ejisu Juaben	2.5	3.1	1.5	1.5	1.2	2.0	0.7	1.4	1.1	2.0
Offinso	1.3	1.8	0.3	0.5	0.3	0.9	0.4	0.6	0.7	1.0
Mampong	1.7	1.8	0.5	0.5	0.6	1.3	0.5	1.0	0.8	1.5
Asunafo North	1.7	3.8	0.5	1.4	0.4	1.1	0.6	0.4	0.1	0.2
Dormaa	3.2	5.0	0.9	1.3	0.6	1.1	1.2	1.8	1.4	0.3
Sunyani	3.0	1.3	3.0	1.3	1.2	1.7	1.4	3.1	2.6	3.7
Berekum	4.3	3.0	1.2	0.9	0.8	1.7	0.7	3.9	2.2	0.3
Wenchi	1.9	2.0	0.4	0.5	0.5	1.2	0.3	1.5	0.4	0.3
Techiman	4.7	3.7	1.4	1.2	1.1	3.8	0.9	14.8	1.5	1.2
Kintampo North	1.4	1.9	0.3	0.3	0.6	1.4	0.3	1.8	0.0	0.2
Yendi	0.4	3.9	0.1	0.6	1.0	0.4	0.6	0.7	0.7	0.9
Bolgatanga	1.4	1.9	1.2	0.7	0.9	1.5	27.2	0.7	1.5	4.3
Bawku	0.8	3.2	0.3	0.7	1.0	1.3	48.7	1.0	9.1	8.8
Wa	0.8	0.9	1.0	1.7	1.8	1.9	0.3	1.3	1.1	0.5
Other District Assemblies										
Total	35.3	76.5	17.2	26.6	31.2	34.4	65.0	21.2	24.4	25.5
Locality										
Urban	71.8	19.2	88.4	78.1	75.5	79.1	16.0	82.9	77.3	74.1
Rural	28.2	80.8	11.6	21.9	24.5	20.9	84.0	17.1	22.7	25.9

Source: Ghana Statistical Service, 2010 Population and Housing Census

## **5.6 Main Cooking Space**

The distribution of cooking space is shown in Tables 5.4a and 5.4b. In 2000, about one-quarter of dwelling units (25.9%) in the Metropolitan Assemblies did not have a cooking space. This proportion increased to more than one-third of dwelling units in 20110 (34.5%). The two Metropolitan Assemblies with higher proportions of dwelling units with no cooking space for household members were Accra (53.1 percent) and Kumasi (31.0%). A little more than half of dwelling units (51.4 percent) in the Metropolitan Assemblies that had a cooking space that is a separate room shared with other households were in Accra Metropolis, and this has declined to 36.9 percent in 2010. In addition, two-thirds of dwelling units (66.7%) that used the bedroom or hall as cooking space in 2000 were in the Accra Metropolis, the proportion declining slightly to 61.7 percent in 2010. On the other hand, the proportion of households using the bedroom or hall as cooking space more than doubled in the Shama-Ahanta East from 15.0 percent in 2000 to 35.6 percent in 2010 (Tables 5.4a 5.4b). The higher proportion of household members who cook in the bedroom or hall in Shama-Ahanta East Metropolis may be due to the nature of housing arrangements.

Within the Municipalities, 23.8 percent of households used an enclosure without a roof as cooking space in 2000, the proportion increasing slightly to 26.7 percent in 2010. The proportion of households using the bedroom or hall as cooking space however, more than doubled from 18.4 percent in 2000 to 38.4 percent in 2010.

As shown in Table 5.4a, the proportion of dwelling units in urban localities using the veranda for cooking in 2000 was 79.4 percent compared with 20.6 percent in rural localities. The percentages of dwelling units using the veranda as a cooking space in urban localities has declined from 79.4 percent in 2000 to 76.7 percent in 2010, but the proportion in rural localities has increased from 20.6 percent to 23.3 percent in the inter-censal period. However, a higher proportion of dwelling units in rural localities used a separate room exclusively meant for cooking (64.8%) in 2000 compared with urban localities (35.2 percent). There has however, been a decline to 57.2 percent in 2010, while in the urban localities it has increased to 47.3 percent within the ten year period.

Table 5.4a: Occupied dwelling units by type of locality and main cooking space, 2000

			~		~				
		<b>G</b> .	Separate		Structure			0	
	No	Separate room for	room shared	En- closure	with roof but	Bed-		Open space in	
	Cooking	exclusive	with	without	without	room/		com-	
District/Locality	space	use	other	roof	wall	Hall	Veranda	pound	Other
National	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Metropolitan Assemblies									
Total	25.9	13	17.4	10.4	5.3	15.1	40	25.2	25.5
Shama-Ahanta East	10.8	16.1	15.5	9.5	18.7	15	10.3	8	15.2
Accra	53.1	51.4	17	63.5	50.1	66.7	52.2	59.7	44.7
Kumasi	31	28	65.8	23.9	28.4	16.3	32	21	35.7
Tamale	5.1	4.5	1.7	3.1	2.9	2.1	5.5	11.4	4.4
Municipal Assemblies									
Total	16.2	18	17.5	23.8	16.3	18.4	16.7	14.8	19
Nzema East	4.8	7	5.4	1	3.7	2.3	4	2.1	2.1
Cape Coast	4.9	3.9	4.1	1.2	1.9	6.3	7.4	6.9	7.5
Tema	19.4	15.4	5.9	9.2	4.8	20.1	30	24.5	15.4
Keta	5	5	1.9	4.6	9.7	11.1	1.4	5.9	3.9
Но	11	8.8	3.4	4.3	29.6	16.1	3.3	6.7	5
Birim North	5.3	5	4.5	1.8	7.1	2.1	2	2.3	7.1
Koforidua	6.8	4.2	7.8	1.6	4.2	7.2	6.9	5.5	7.5
Amansie East (Bekwai)	7.5	9.2	11.2	3.3	6.6	3.5	1.8	3.1	4.7
Adansi West (Obuasi)	6.7	6.9	12.2	2.3	5.1	3.4	17.5	4.1	5.3
Sekyere West (Mampong)	3.6	3	9	2.4	7.1	2.7	2.4	3.7	5
Offinso	3.6	3.1	8.9	2	5	3	1.7	3.4	7.1
Sunyani	5.4	4.7	9.4	1.9	5.5	2.2	8.5	6.1	8.8
Dormaa	8.2	6.4	7.7	1.8	3.9	2.8	1.4	2.9	8.2
Bolgatanga	3	7.4	1.9	35.2	1.6	7.2	5.8	3.5	3.1
Bawku East (Bawku)	2.6	5	3.5	23.1	2.6	6.1	0.9	10.5	4.1
Wa	2.3	5	3.1	4.4	1.5	4.1	5	8.9	5.2
Other Districts	57.8	69	65	65.8	78.4	66.5	43.3	60	55.5
Locality									
Urban	55.8	35.2	49.2	28.6	25.3	40.8	79.4	54.7	59.6
Rural	44.2	64.8	50.8	71.4	74.7	59.2	20.6	45.3	40.4

Source: Ghana Statistical Service, 2000 Population and Housing Census

Table 5.4b: Occupied dwelling units by of locality type and main cooking space, 2010

•	•		•	0 1					
		Separate			Structure	Bed-			
		room for	Separate		with roof	room/			
	No	exclusive	room shared	Enclosure	but	Hall/		Open	
	cooking	use of	with other	without	without	Living		space in	
District/Locality	space	household	household(s)	roof	walls	room	Verandah	compound	Other
Total (national)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Metropolitan Assemblies									
Total	34.5	20.5	26.1	13.2	4.1	30.8	35.6	23.7	23.9
SekondiTakoradi	7.7	13.5	12.0	7.5	16.2	9.0	9.6	8.7	9.0
Cape Coast	2.2	3.3	2.8	2.6	5.7	8.0	2.2	3.7	4.1
Accra	38.2	36.9	14.8	60.0	41.1	61.7	33.7	47.2	45.8
Tema	4.6	11.6	3.3	8.0	5.9	8.4	5.5	6.5	9.4
Kumasi	44.9	32.6	66.2	20.0	28.3	11.6	44.3	24.1	28.1
Tamale	2.5	2.1	0.9	1.9	2.8	1.4	4.7	9.8	3.6
Municipal Assemblies									
Total	26.3	26.1	25.1	26.7	25.7	38.4	29.5	25.6	31.2
TarkwaNsuaem	1.8	1.8	1.8	0.9	1.0	0.4	1.9	0.6	0.7
Komenda-Edina-Egyafo-Abirem	2.6	2.9	2.0	1.8	1.4	1.7	2.0	2.7	3.0
Mfantsiman	2.9	2.6	2.8	3.0	3.5	1.7	3.2	5.0	4.5
Effutu	1.0	0.7	0.9	1.0	1.1	4.0	1.2	1.8	1.3
Agona West	2.4	1.8	2.9	1.7	2.1	1.3	1.5	2.5	3.1
Assin North	2.1	3.6	3.3	1.5	2.6	0.6	1.9	1.4	1.3
Upper Denkyira East	1.1	1.3	1.8	0.5	0.7	0.2	0.9	0.4	0.7
Weija (Ga South)	6.9	8.0	2.3	6.6	3.6	9.3	11.2	8.5	7.8
Ga West	4.0	4.8	1.6	2.8	0.9	5.8	6.7	3.9	6.8
Ga East	4.9	5.4	1.7	2.6	0.9	9.3	4.9	4.2	6.5
Adenta	1.5	1.6	0.4	0.8	0.3	2.5	1.4	1.7	2.5
Ledzokuku/Krowor	4.0	3.7	1.2	2.7	0.6	4.1	6.9	3.9	6.9
Ashaiman	4.5	2.3	0.7	2.0	0.6	5.0	5.1	4.5	8.1
Keta	1.7	2.7	1.3	3.5	5.7	8.4	0.9	3.5	2.4
Но	3.5	6.2	2.3	3.9	13.2	17.5	2.2	4.3	4.7
Hohoe	2.8	5.7	2.1	3.6	13.8	6.9	2.0	4.0	3.5
Birim	3.3	3.0	3.3	1.5	2.7	1.3	1.9	1.9	2.3
West Akim	2.6	3.0	3.8	3.0	7.6	1.8	2.9	2.6	3.2

Table 5.4b: Occupied dwelling units by type of locality and main cooking space, 2010 (cont'd)

		Separate			Structure				
		room for	Separate		with roof				
	No	exclusive	room shared	Enclosure	but	Bedroom/H		Open	
	cooking	use of	with other	without	without	all/Living		space in	
District/Locality	space	household	household(s)	roof	walls	room	Verandah	compound	Other
Akwapem South	1.8	1.7	2.0	1.8	2.7	2.4	2.5	2.1	1.4
New Juaben	3.6	3.2	6.1	1.7	1.7	5.9	3.6	2.7	2.5
East Akim	2.9	3.8	3.8	1.6	3.6	2.0	2.6	1.3	3.4
Kwahu West	1.9	1.6	2.7	1.2	1.9	0.7	1.8	0.8	1.6
Obuasi	3.8	2.5	4.3	0.7	0.7	0.3	5.1	0.9	1.2
Bekwai	2.0	2.0	6.0	1.9	2.2	0.3	1.0	1.1	1.8
Asante Akim North	2.9	2.0	4.9	1.9	2.7	0.5	2.0	1.6	2.1
EjisuJuaben	2.3	1.9	6.1	2.2	2.8	0.5	2.1	1.7	2.0
Offinso	1.1	0.8	2.9	1.0	1.5	0.2	0.7	1.1	0.8
Mampong	1.5	1.0	3.1	0.9	2.3	0.4	1.1	1.3	1.4
Asunafo North	1.8	2.2	3.5	1.6	3.0	0.2	1.1	1.5	0.9
Dormaa	3.2	3.1	3.6	2.1	2.9	0.3	1.3	2.3	2.3
Sunyani	2.9	1.7	2.0	0.6	1.2	0.4	2.6	1.7	1.2
Berekum	3.7	1.9	3.7	1.3	1.6	0.2	1.7	2.3	2.0
Wenchi	1.7	1.0	1.6	0.6	1.4	0.2	1.3	1.7	0.5
Techiman	4.2	2.2	3.0	1.5	2.5	0.5	4.0	4.6	1.5
Kintampo North	1.3	0.6	1.0	0.6	1.3	0.3	1.4	2.8	1.3
Yendi	0.6	0.6	0.5	0.8	0.8	0.2	0.4	5.2	0.7
Bolgatanga	1.3	2.1	0.4	15.6	0.2	0.4	2.1	0.9	0.7
Bawku	1.1	2.2	2.3	16.5	0.6	0.2	0.7	3.4	1.2
Wa	0.9	0.9	0.4	0.7	0.1	2.0	2.4	1.5	0.5
Other District Assemblies									
Total	39.2	53.4	48.8	60.1	70.2	30.7	34.9	50.7	44.8
Locality									
Urban	66.5	47.3	57.2	35.2	24.1	73.8	76.7	54.2	58.7
Rural	33.5	52.7	42.8	64.8	75.9	26.2	23.3	45.8	41.3

Source: Ghana Statistical Service, 2010 Population and Housing Census

#### 5.7 Liquid Waste Disposal

There were various methods used by households to dispose of their liquid waste in their dwelling units. These methods of liquid waste disposal in the country were captured in the 2000 and 2010 Population and Housing Census. Among these methods were throwing the waste either onto the compound, through the sewerage system, into a gutter or any available space outside the house.

Among the Metropolitan Assemblies, the Accra Metropolis had 28.3 percent of dwelling units where liquid waste was disposed of through the sewerage system and this proportion had increased to 38.1 percent in 2010. The Kumasi Metropolis had 2.3 percent in dwelling units where liquid waste was thrown onto the street or any space outside the house, but this figure has increased tremendously to 30.3 percent in 2010. The increase may be due to the increase in urbanization where more housing units have been built in the Kumasi Metropolis without any proper sewerage system. In 2000, 1.4 percent of dwelling units which disposed of liquid waste through a drainage system into a gutter were in Tamale metropolis, and this has increased slightly to 1.8 percent in 2010 (Tables 5.5a and 5.5b).

Table 5.5a: Occupied dwelling units by type of locality and liquid waste disposal method, 2000

		Thrown		Thrown	
	Through the	onto the	Thrown	onto	
District/Locality	sewerage system	street/outside	into gutter	compound	Other
Total	100.0	100.	100.	100.	100.
Total	47.2	8.9	49.8	9.8	19.7
Shama Ahanta East	5.1	0.8	6.2	1.2	8.6
Accra		4.2	24.8	4.7	7.8
Kumasi	12.2	2.3	17.4	3.2	2.6
Tamale	1.6	1.6	1.4	0.7	0.7
Total	28.2	14.7	16.2	15.6	16.4
Nzema East	0.4	0.8	0.6	0.9	1.1
Cape Coast	1.5	0.3	2	0.5	2.1
Tema	17.5	1.2	4.3	2	2.1
Keta Municapal	0.1	1.3	0.1	0.8	0.6
Но	1.2	1.4	1.1	1.8	2.9
Birim North	0.2	0.7	0.3	1	0.5
New Juaben	1.4	0.5	1.9	0.7	1
Amansie East	0.2	1.7	0.6	1.1	0.3
Adansi West	1.1	1.1	2.6	0.9	0.6
Sekyere West	0.2	0.9	0.5	0.7	0.2
Offinso	0.2	0.8	0.2	0.9	0.3
Sunyani	0.6	1.1	0.8	1.1	0.3
Dormaa	0.2	1.4	0.1	0.8	0.3
Bolgatanga	1.5	1.5	0.4	0.9	1.7
Bawku East	1.3	1.3	0.4	1	2.5
Wa	0.6	1.5	0.3	0.5	0.2
Other District	24.6	73.5	33.9	74.6	63.6
Locality					
Urban	85	36.3	82.8	32.9	39.7
Rural	15	63.7	17.2	67.1	60.3

Source: Ghana Statistical Service, 2000 Population and Housing Census

In the rural localities there were two main methods of liquid waste disposal which has declined within the ten year period from the year 2000 to 2010. The liquid waste was either thrown onto the street/outside or thrown onto the compound. In 2000, more than six out of

ten households (63.7%) who disposed of liquid waste onto the street or outside their dwelling units were in rural areas, but this has declined to 58.5 percent in 2010. Nearly 70 percent of households in the country who threw their liquid waste onto their compound in 2000 were in rural localities and this has also declined to 62.2 percent in 2010. This indicates that within the ten year period some households in the rural localities have shifted to other methods of liquid waste disposal (Tables 5.5a and 5.5b).

Table 5.5b: Occupied dwelling units by type of locality and liquid waste disposal method, 2010

			Through				
	Through	Through	drainage	Thrown		Thrown	
	the	drainage	into a pit	onto the	Thrown	onto	
	sewerage	system into	(soak	street/out	into	com-	
District/Locality	system	a gutter	away)	side	gutter	pound	Other
Total (national)	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Metropolitan Assemblies							
Total	58.8	65.8	30.2	8.2	50.1	8.3	17.3
SekondiTakoradi	6.8	10.6	8.2	8.6	11.5	11.8	12.5
Cape Coast	1.3	2.6	2.4	3.9	2.8	4.5	10.9
Accra	38.1	34.6	39.6	26.1	46.3	20.8	40.5
Tema	28.0	3.0	9.8	9.1	4.2	10.6	8.9
Kumasi	24.0	47.1	34.5	30.3	33.4	46.4	23.8
Tamale	1.8	2.0	5.5	21.9	1.8	5.8	3.5
Municipal Assemblies							
Total	22.0	19.6	34.8	28.3	26.5	27.8	31.1
TarkwaNsuaem	1.7	1.4	0.4	1.1	1.8	1.8	0.5
Komenda-Edina-Egyafo-							
Abirem	1.4	1.6	1.0	2.4	2.4	2.6	12.5
Mfantsiman	1.1	2.4	1.3	4.5	2.5	3.2	6.4
Effutu	1.3	2.0	1.0	0.8	1.4	1.1	1.6
Agona West	0.8	3.2	1.5	2.0	3.2	1.3	1.6
Assin North	0.8	0.7	0.8	2.5	1.7	3.6	1.3
Upper Denkyira East	0.4	0.9	0.1	0.8	1.5	1.0	0.8
Weija (Ga South) Ga West	13.1 9.1	6.8 5.8	17.0 9.6	5.8 3.3	5.0 4.2	10.5 4.6	5.7 1.8
Ga West Ga East	17.8	5.8 5.9	14.3	2.6	4.2	3.5	3.2
Adenta	4.1	1.5	3.7	0.7	0.6	1.9	1.7
Ledzokuku/Krowor	9.6	8.6	4.3	2.3	7.6	2.5	6.2
Ashaiman	3.4	7.2	2.2	1.0	11.3	0.7	0.9
Keta	0.5	0.1	2.7	4.2	0.2	3.0	5.9
Но	3.8	3.6	4.8	4.4	5.2	5.6	12.3
Hohoe	1.4	2.4	2.9	4.9	4.1	5.0	15.5
Birim	0.8	2.4	0.8	2.4	3.3	2.5	0.6
West Akim	0.6	1.5	1.0	3.0	2.7	4.4	1.4
Akwapem South	1.1	2.1	1.1	1.3	2.8	2.5	0.9
New Juaben	3.5	5.8	3.0	1.7	7.1	2.3	2.2
East Akim	0.9	2.8	1.3	2.3	3.0	3.6	2.9
Kwahu West	1.0	1.5	1.0	1.4	1.7	1.7	2.0
Obuasi	3.8	9.5	1.5	1.6	5.3	1.2	1.0
Bekwai	0.9	1.3	0.7	2.4	1.5	2.0	1.2
Asante Akim North	0.8	1.8	0.7	2.6	2.2	2.3	0.6
EjisuJuaben	1.9	1.4	2.2	3.3	1.3	2.2	1.0
Offinso	0.2	0.3	0.5	1.6	0.5	1.1	0.3

Table 5.5b: Occupied dwelling units by type of locality and liquid waste disposal method, 2010 (cont'd)

		Through	Through				
	Through	drainage	drainage			Thrown	
	the	system	into a pit	Thrown onto	Thrown	onto	
District/Locality	sewerage	into a	(soak	the	into	com-	Othor
District/Locality	system	gutter	away)	street/outside	gutter	pound	Other
Mampong	1.1	1.7	0.6	1.4	1.2	1.4	0.5
Asunafo North	0.5	0.7	0.3	2.1	1	2.6	0.2
Dormaa	0.8	0.5	1.1	3.8	0.8	2.9	0.5
Sunyani	2.3	2.9	2.2	1.5	2.2	1.9	1
Berekum	0.4	0.9	1	3	0.8	2.7	0.5
Wenchi	0.7	0.5	0.3	1.9	0.6	1.6	0.4
Techiman	1.5	1.4	1	5	1.8	3.4	0.9
Kintampo North	0.2	0.5	0.3	1.7	0.5	1.8	0.5
Yendi	0.9	0.7	2.1	3	0.4	0.9	1.2
Bolgatanga	2	1.9	2.8	4	0.7	0.5	0.6
Bawku	2.3	2	4.7	3.2	0.7	1.8	1
Wa	1.8	1.7	2	2.3	0.5	0.6	0.7
Other Districts	19.2	14.6	35.1	63.5	23.4	63.9	51.6
Locality							
Urban	84.1	90.2	67.9	41.5	84.4	37.8	49.1
Rural	15.9	9.8	32.1	58.5	15.6	62.2	50.9

Source: Ghana Statistical Service, 2010 Population and Housing Census

### 5.8 Solid Waste Disposal

Solid waste disposal has been a problem in the country, with inadequate dumping sites being a contributing factor. At all levels of waste management, inadequate logistics and lack of adequate education on proper waste disposal prevail. This problem has a chain reaction, as improper and indiscriminate waste disposal leads to pollution of water bodies and poses several health problems, which in turn, results in high mortality rates at all ages. The labour force and productivity suffer in the long run. One of most intractable challenges of both urban and rural areas in Ghana is adopting modern and hygienic solid waste disposal systems. Acceptable waste management helps to prevent the spread of some types of infections and improves the quality of the environment (GSS, 2005).

From the Metropolitan Assemblies perspective, in 2000 almost 90 percent of households within the Metropolitan Assemblies who had their refuse collected by a waste management company were in the Accra Metropolis, but this has declined to 63.8 percent in 2010. Also, 45.4 percent of households in Metropolitan Assemblies who dumped their solid waste at a public dump were in the Accra Metropolis (Tables 5.6a and 5.6b). Within the Municipal Assemblies, in 2000, Tema had about three-quarters of households (75.6%) whose solid waste was collected by a waste management company.

An interesting observation is that in 2000, more than three-quarters of households (77.3%) who dumped their solid waste indiscriminately or elsewhere were in the rural localities and this has increased in ten year period to 80.9 percent in 2010 (Table 5.6a and 5.6b). It is necessary for Metropolitan, Municipal and District Assemblies to embark on public education to help reduce or eliminate potential waste-related health hazards.

Table 5.6a: Occupied dwelling units by type of locality and solid waste disposal method, 2000

		Burned			Buried	
		by	Public	Dumped	by	
District/Locality	Collected	household	dump	elsewhere	household	Other
National	100.0	100.0	100.0	100.0	100.0	100.0
<b>Metropolitan Assemblies (Total)</b>	48.6	16.2	23.7	7	14.2	18.9
Shama Ahanta East	4	10.3	12.9	12.6	12.4	7.4
Accra	89	53.5	45.4	32.6	54.6	39.4
Kumasi	6	18	37.3	36	26.7	51.9
Tamale	1.1	18.2	4.4	18.8	6.3	3.8
<b>Municipal Assemblies (Total)</b>	23.4	19.1	16.7	15.9	19.4	15.9
Nzema East	0.9	2.1	4.7	7.1	2.8	0.9
Cape Coast	1.4	4.9	6.2	2.3	3.1	1.4
Tema	75.6	22.1	11.3	9.8	22.2	4.3
Keta	1.4	8.4	3.7	5.9	9.8	0.7
Но	2.3	11.5	9.4	7	9.2	1.6
Birim North	0.9	1.6	4.6	4.7	2.9	0.5
Koforidua	1.8	7	6.8	2.6	6.4	0.2
Amansie East	0.2	1.8	10.5	2.4	2.7	0.3
Adansi West	5	2.5	11.1	3.8	4.4	0.5
Sekyere West	0.7	1.2	5.7	3.2	3	0.4
Offinso	0.4	1.5	5.6	2.6	1.5	0.5
Sunyani	0.8	4.4	7.5	5	4.4	3.8
Dormaa	0.2	1.9	7	3	3.2	3.5
Bolgatanga	4.3	15.7	1.9	13.4	5.6	3.6
Bawku East	2.4	10.3	1.3	15.3	12.4	0.8
Wa	1.9	3.2	2.7	12	6.3	0.1
Other Districts	28	64.7	59.7	77.1	66.3	65.2
Locality						
Urban	82.8	49.6	54.9	22.7	44.7	37
Rural	17.2	50.4	45.1	77.3	55.3	63

Source: Ghana Statistical Service, 2000 Population and Housing Census

Table 5.6b: Occupied dwelling units by type of locality and solid waste disposal method, 2010

				Public			
		D 11	Public	dump	Dumped	<b>5</b>	
D:		Burned by	dump	(open	indis-	Buried by	0.1
District/Locality	Collected	household	(container)	space)	criminately	household	Other
Total (national)	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<b>Metropolitan Assemblies</b>	<b>=0</b> =	44.2	46.5	0.0		0.4	40.
Total	59.5	11.6	46.2	8.0	5.6	8.4	18.5
SekondiTakoradi	6.9	16.7	11.2	15.9	7.0	19.5	6.9
Cape Coast	0.5	5.5	3.8	5.3	3.2	4.7	11.6
Accra	63.8	19.8	26.1	14.3	19.3	9.2	33.8
Tema	10.2	14.8	4.0	6.5	10.3	3.8	18.1
Kumasi	17.8	31.5	50.7	50.6	35.0	49.9	26.1
Tamale	0.8	11.7	4.2	7.4	25.3	13.0	3.6
<b>Municipal Assemblies</b>							
Total	25.0	36.0	28.0	26.1	17.6	32.2	22.9
TarkwaNsuaem	0.3	0.4	0.5	2.8	2.2	2.1	1.0
Komenda-Edina-Egyafo-							
Abirem	0.2	1.3	1.7	4.4	1.1	1.5	5.2
Mfantsiman	0.5	1.3	2.0	1.0	0.3	0.4	2.4
Effutu	0.5	1.3	2.0	1.0	0.3	0.4	2.4
Agona West	0.4	0.8	3.7	2.2	1.0	1.1	1.4
Assin North	0.7	1.9	1.4	3.6	4.6	3.9	2.7
Upper Denkyira East	0.2	0.3	1.3	1.1	2.5	0.9	1.1
Weija (Ga South)	13.2	22.8	4.4	3.4	5.4	9.1	4.5
Ga West	16.2	8.2	2.2	1.1	1.3	4.0	2.3
Ga East	19.6	6.1	2.1	0.8	1.1	2.5	3.7
Adenta	4.8	2.6	0.6	0.4	0.9	0.5	0.5
Ledzokuku/Krowor	8.5	3.5	8.3	0.8	0.7	0.6	8.7
Ashaiman	15.9	0.7	3.9	0.3	0.4	0.2	9.2
Keta	0.5	3.3	0.8	3.4	3.6	8.7	3.0
Но	2.1	6.1	5.3	5.2	5.4	6.6	7.0
Hohoe	1.7	4.6	3.6	5.8	4.8	5.8	6.6
Birim	0.3	2.2	2.1	3.8	1.4	2.7	1.4
West Akim	0.6	2.2	2.8	4.6	4.4	4.1	2.0
Akwapem South	0.4	2.1	2.7	2.3	1.8	2.4	1.5
New Juaben	2.2	3.0	8.3	1.0	1.0	3.7	2.0
East Akim	0.4	4.6	1.0	3.9	3.0	6.4	2.9
Kwahu West	0.5	1.4	2.4	1.4	1.3	2.9	1.7
Obuasi	2.5	1.3	5.5	2.3	0.8	0.6	0.9
Bekwai	0.1	0.5	1.2	3.7	1.2	1.0	1.7
Asante Akim North	0.7	1.4	2.4	2.8	2.8	2.7	1.7
EjisuJuaben	0.2	1.2	1.6	4.0	1.6	2.3	0.9
Offinso	0.1	0.3	0.7	2.0	1.4	0.4	1.3
Mampong	0.3	0.4	1.4	1.8	2.1	1.5	1.1
Asunafo North	0.2	0.6	1.2	2.8	5.1	1.9	1.4
Dormaa	0.5	0.8	2.0	4.2	2.6	2.1	0.8
Sunyani	1.2	1.4	4.1	0.9	1.8	2.2	1.6
Berekum	0.2	0.6	3.4	2.7	1.6	1.4	1.5
Wenchi	0.1	0.3	1.9	1.6	2.9	0.7	0.7
Techiman	0.8	0.4	3.9	5.1	2.6	1.6	1.4
Kintampo North	0.2	0.2	1.6	1.6	3.8	0.7	1.6
Yendi	0.5	0.7	1.2	1.5	6.9	0.9	1.3
Bolgatanga	0.9	2.1	1.8	1.9	2.5	2.0	1.1
Bawku	1.1	4.0	1.0	1.8	5.8	4.6	3.8
Wa	0.4	0.7	2.3	0.8	3.8	0.5	0.7
Other Districts	15.5	52.5	25.8	65.9	76.8	59.4	58.6
Locality							
Urban	85.8	53.0	90.9	33.6	19.1	39.2	45.4
Rural	14.2	47.0	9.1	66.4	80.9	60.8	54.6

Source: Ghana Statistical Service, 2010 Population and Housing Census

## CHAPTER SIX HOUSING FINANCING

### 6.1 Introduction

Like many Sub-Saharan African countries, housing financing is a critical issue in Ghana due to a myriad of factors, including demand and supply side constraints (Teye et al. 2013). According to Teye et al. (2013), in reality, the existing housing financing system of the country is small and only targets a limited segment of the population, basically high-income earners in the urban formal sector as well as Ghanaians living in the diaspora. Indeed, Warnock and Warnock (2008) in their assessment of housing finance systems in 62 countries (including Ghana) found that Ghana ranked least in terms of housing finance as a proportion of GDP: Ghana's total housing finance was 0.5% of GDP compared to Africa's average of 15.7% of GDP. The UN-Habitat (2011, p. 98) notes that:

The pattern through history has been to establish institutions to provide housing finance ostensibly targeted at ordinary urban Ghanaians. Governments have then watched them decline and fail and then established new institutions which have also failed. In the cycle of decline, each has turned to the high-income market for a safe environment for its lending. In reality, none of the institutions has really targeted the majority of urban households who have remained without any recourse to housing finance.

While the UN-Habitat as noted above refers to the absence of any formal housing financing system for the majority of urban Ghanaians, the situation of the rural population is even direr. In rural areas, low-income and general high levels of poverty make their situation entirely unattractive to the existing limited housing financing system. This partly accounts for the poor housing quality in rural Ghana as the population has very limited resources on their own to improve their housing conditions.

As a result of the difficulties with the housing financing system, the Bank of Ghana (2007) notes that the typical Ghanaian household is often faced with three choices in the acquisition of shelter, namely, rent, build or mortgage a home. The Bank adds that in well developed countries, the mortgage industry has proved to be the most capable and superior financier of the housing needs of the population (Bank of Ghana 2007). Nevertheless, an effective housing finance system is critical for the supply and demand for houses and housing services. As illustrated in Chapter Four with respect to the operation of the housing market, finance is critical to the effective operation of such market. Indeed, finance is required to activate the input market (land, building materials, infrastructure and labour) which must combine with the housing production process and the supply-side agents (landlords, developers and construction firms) and finally to support the output market in terms of homeowners and renters' access to mortgages to purchase houses and housing services.

This Chapter of the Report examines the different sources of housing financing systems in Ghana and the challenges of mortgage financing. It proposes at the end a number of recommendations to enhance housing financing in Ghana.

### **6.2** Formal Sources of Housing Financing

Formal sources of housing financing refer to registered institutions such as banks, mortgage companies, savings and loans companies, microfinance firms, NGOs, and other entities which have been established with the aim of among others, providing funding for the housing sector. Such financial support in the housing sector can come in different forms and under different arrangements, namely:

- Home purchase finance which is normally used for purchasing new houses. In many instances under this arrangement, the homeowner or the borrower is expected to make a minimum down payment of the total value of the property, while the financial institution or the bank provides a loan equivalent to cover the value of the property. In addition, the owner will be expected to provide documentary evidence regarding title or ownership of the land as well as building permit.
- Home improvement mortgage is intended for renovation or rehabilitation of already acquired property. The homeowner or borrower is required to provide documentations in respect of registered, clear and undisputed title to the property
- Home completion mortgage is meant to be used to complete a house under construction.
- Home equity mortgages are to assist applicants who own homes, or have already invested in residential properties, to release equity locked up in them.

Despite these varied forms of financing arrangements in the housing sector, the existing financing system remains small and also unattractive to a large majority of the Ghana populace. Consequently, among a large section of the Ghanaian population, housing financing has remained informal with individuals making their own saving and building incrementally.

### **6.2.1** Mortgage/Commercial Banks

The Ghanaian banking and financial sector has witnessed a phenomenal expansion in recent years. Consequently, the number of banks and other financial institutions in the country has increased significantly. According to the Bank of Ghana (2012), as of 2012, there were 26 Universal Banks, 136 Rural and Community Banks and 145 Non-banking Financial Institutions (made up of 28 finance companies, 21 savings and loans companies, 2 leasing companies, 1 mortgage financing company, 3 credit bureaux and 90 microfinance companies). This phenomenal expansion in the country's financial sector is as a result of the improvement and stabilization of the macro-economic environment including well-planned financial sector liberalization policies that enhanced competition (including from abroad) (UN-Habitat 2011, p. 100).

According to the UN-Habitat (2011), the phenomenal growth of Ghana's financial sector has resulted in the rapid growth of the banking system as well, which has fuelled credit expansion with the banks now accounting for about 70 percent of the financial sector. Despite these successes, the amount of loans disbursed for financing housing remains very small. It is estimated that,

Less than 3% of loans granted by banks in the whole country go into housing finance (Bank of Ghana 2011). The total loan portfolio is too small, even when compared with some developing countries. Sri Lanka, for instance, has outstanding housing finance portfolio of over \$1 billion (Moss 2003). Even in Africa, Senegal has a housing portfolio of \$150 million, whereas that of Kenya's was about \$668 million in 2005. In contrast, the figure for Ghana as at 2005 was just \$21.7 million (Asare and Whitehead 2006).

(Teye et al. 2013, pp. 6-7)

Indeed, a survey of selected real estate firms in March 2007 by the Bank of Ghana indicated that almost 73 percent of the housing projects embarked on by the firms were self-financed, that is, the firms themselves using their own generated funds to build. There was limited use of domestic bank loans for housing construction. Consequently, the Bank of Ghana (2007, p. 38) concluded that 'this development is not encouraging at a time when efforts are being made to bridge the housing deficit gap the country is currently confronted with'.

According to Teye et al. (2013) and Bank of Ghana (2007), a number of factors account for the limited supply of mortgage products to prospective homeowners. Key among these supply side factors are opaque land tenurial arrangements and general insecurity in the land market; lack of collateral security; difficulty in checking the credit worthiness of potential borrowers and; macro-economic instability (Obeng-Odoom 2010; Teye et al. 2013; Arku and Asiedu 2009). Besides the supply side constraining factors, there are also demand-side factors: high interest rates; limited availability of long-term borrowing regimes; high land and housing prices; low income levels of the majority of the population, etc. (Teye et al. 2013). These constraints or challenges of the demand and supply sides of the Ghanaian housing financing system will be explored further in subsequent sections of this chapter.

### **6.2.2** Microfinance Institutions

Microfinance institutions in the housing sector in Ghana are defined to include rural and community banks; deposit taking non-banking financial institutions (NBFIs) such as savings and loans companies and; non-deposit taking NBFIs (finance and leasing companies) (see CHF-Ghana 2004). It needs to be stressed that in recent times, other universal banks such as Ecobank, Standard Chartered Bank and Barclays Bank have also established microfinance units to enable them reach informal economy operators and low-income groups in general.

According to Biitir (2009), housing microfinance can be defined from two perspectives, namely, the product and provider-centred perspectives – each defines the approach and characteristics of the financial arrangements and products provided by microfinance institutions. The product-centred perspective provide housing microfinance to poor or low-income households to finance their housing needs based on microfinance methodologies such as relatively small amounts of loans with market interest rates and shorter repayment durations compared with mortgage lending; and the use of collateral substitutes. According to Daphnis (2004), housing microfinance under these arrangements tends to allow low-income households to address their housing needs in incremental fashion linked to reflect the survival strategies of households. As Batiir (2009) notes, participation of individuals and households in these microfinance arrangements is in many instances linked to their prior participation in savings or traditional microfinance loan services for a period before qualifying for a housing loan.

As the name implies, the provider-centred perspective is based on the principle of the microfinance company or agency providing a range of product innovation and wide range of

housing-focused financial services which may deviate from the basic principles of microfinance but are necessary to ensure that appropriate housing finance is available for the low-income households to meet their habitat needs (Daphnis 2004). This housing microfinance arrangement may be provided to low-income groups with or without the credit history of the beneficiaries. The idea is for the microfinance institution to provide all the shelter and various housing services necessary for the beneficiaries to meet their housing needs.

Although these two approaches to housing microfinance exist, the product-centred perspective is the commonest approach. However, as a result of high land and housing prices, and housing services as well as the shorter durations for repayment, limited loans are provided in this direction. In addition, similar to universal banks, prevailing conditions of high interest rates are high among microfinance operators — as low-income and informal operators are generally regarded as high risk borrowers (see Baah 2007) — prevent borrowers from borrowing higher sums of loans. Consequently, as the UN-Habitat (2011) noted, many Ghanaians tend not to borrow to build housing but rather borrow to do business and then use the business profits to incrementally financing the construction of their houses. It adds that housing microfinance as a direct financing arrangement within the Ghanaian housing finance sector is therefore, insignificant.

### **6.2.3** Non-governmental Organizations (NGOs)

Although non-governmental organizations (NGOs) are not new to Ghana – they date back to the colonial era (Gyimah-Boadi et al 2000) – there has been a phenomenal growth in their number and the scope of activities since the 1980s (Opoku-Mensah 2004). This is as a result of the liberalization of the political and economic environments since the last three decades. The economic reforms and liberalization created the space for the active involvement of the private sector and NGOs in service delivery such as the provision of health, education, waste management, etc. This situation has been further facilitated by political liberalization – providing the space for NGOs and civil society organizations (CSOs) in general, to increasingly defining the nature of the development landscape in Ghana (Opoku-Mensah 2004).

In the housing sector, NGOs have been involved in supporting efforts to a limited scale, mainly urban areas, to improve the housing conditions of low income households and poor communities. The activities of NGOs in this direction have centred on facilitating and mediating between the low-income households and the MMDAs, financial institutions and central government to access funds for housing development and community development in general. According to CHF-Ghana (2004, p. 54),

NGOs [and other CSOs] are unregulated by the central bank although they are registered under the Companies code as companies limited by guarantee (not for profit). NGOs cannot take deposits from the public and traditionally use external (donor) funds for micro-credit projects. NGOs have also partnered with Rural and Community Banks in developing deposit and savings instruments for their borrowers. NGOs typically include other non-financial services in their programming to support low-income rural households.

In a nutshell, the NGOs use approaches and the mode of operation of microfinance but without a profit motive. In addition, the target beneficiaries of NGOs in the housing financing sector are poor and low-income households. Even though NGOs and other CSOs are yet to make significant impact on the huge backlog of housing, especially in large cities and towns,

they have demonstrated through various housing pilot projects that it is possible to provide decent and livable housing for the urban poor.

A typical case to illustrate NGOs' contribution to provide housing for the poor is the Amui Djor Housing Project in the Ashaiman Municipality. With the support of two NGOs, Peoples Dialogue-Ghana (PD-Ghana) and Ghana Federation of the Urban Poor (GHAFUP), the Amui Djor Housing Cooperative was established with the aim of encouraging savings among members towards the upgrading of housing and provision of basic services in Amui Djor. The pilot project eventually led to the completion of a 3-storey housing complex which houses 32 families; commercial stores and commercial bathrooms and toilets. In fact, the Amui Djor housing project has been acclaimed internationally as a model for housing the urban poor. In addition, CHF-Ghana has through its Slum Communities Achieving Livable Environments with Urban Partners (SCALE-UP) initiative provided several communities in Accra and Sekondi-Takoradi with basic housing and community services.

### **6.3 Informal Sources of Housing Financing**

As already noted, the great bulk of housing in Ghana is provided through informal means by individuals acting out of their own volition to supply a home for themselves and members of their household and family (UN-Habitat 2011). Though the sources for financing of housing informally vary, two sources are very significant. These are self-financing and use of remittances.

### **6.3.1** Self-financing

As already noted the urge or the desire to acquire a house is linked loosely with the life cycle model (Bank of Ghana 2007). At early stages of life, many rent accommodation as the size of the household is normally small and income in many cases, low. However, as the household size increases and 'as incomes increase above the basic consumption needs, investment opportunities in the housing industry become prime objectives for many households' (Bank of Ghana 2007, p. 17). In an ideal situation, households at this stage should have housing finance options which will provide opportunities for them to own a home long before they could save enough money to build out of savings.

It needs to be stressed that it is the challenges of the existing housing finance options, high housing prices as well as unfavourable repayment terms of real estate forms which drive individuals and households to pursue self-financing of their homes. In addition, high rental charges, whereby landlords demand between 2–4 years of rents in advance payments places severe financial burdens on households. Though the ability to pay rent advance absolves households from monthly payments for the duration for which they have paid, these lump sums are however, adjusted and hiked after every duration which absorbs housing savings accumulated over a period. For many households, the cycle of accumulating savings or borrowing to honour rent advance payments over and over again ends with a household owning a home through self-financing (funds that would have been used for rent advance payments).

Self-financing of housing involves savings accumulated over many years which are applied to housing construction and the provision of housing services. Using this approach, households are able to build on incremental basis by dividing the whole housing delivering process into stages, starting from land acquisition through sub-structure and super-structure construction to roofing and the provision of in-house services (electricity, water, etc.). Depending on the availability of funds from savings, each stage of the housing delivery

process will be completed, and then time will be allowed for the accumulation of savings before proceeding to the next stage.

It has been estimated that the process of incremental building could take up to 15 years for a single building to be completed, with funds subsequently getting tied into these uncompleted projects and the costs of construction ballooning in an unstable macro-economic environment (Bank of Ghana 2007), plagued by high inflation and persistent depreciation of the local currency, the Ghana cedi. For a low-income earner, Obeng-Odoom (2008), it is estimated that it will take about 54 years for this individual to acquire a two-bedroom house, assuming such a person had zero expenses.

Nevertheless, the self-financing option remains the key viable option for many households desiring to own their homes, especially within the context of the existing limited and severely challenged Ghana's formal housing finance system. This is because it allows households to acquire homes in the long term and to extricate themselves from the pressures of the unregulated rental market with its 2-3 years rental advance payments. In addition, the self-financing option has the advantage of allowing households to build at their own pace without undue financial pressure.

#### **6.3.2** Remittances

Foreign remittances or international flow or transmission of funds to Ghana has attracted a lot of attention in recent years. According to Obeng-Odoom (2010), no sector of the Ghanaian economy has attracted attention in terms of remittances than the housing sector. The Bank of Ghana (2007, p. 4) notes that remittances had played and continued to play a significant role in the housing market since most non-resident Ghanaians transfer funds either directly or indirectly for the purposes of purchasing or building houses.

Although the quantum of remittances channelled into the housing sector is yet to estimated, it is widely acknowledged in the remittances and housing literatures of Ghana that remittances has shaped the housing sector in many significant ways, especially in large metropolitan areas such as Accra and Kumasi (Owusu 2014). For instance, Grant (2009) estimated that about 47% of new houses in Accra were owned by non-resident/returned migrant Ghanaians. Driven by factors such as social status/symbol of prestige, family obligations and security for the other generations (dependants and successors) and rental income (Tipple and Willis 1992; Yeboah 2001; Obeng-Odoom 2010), many diaspora Ghanaians remit to build and own homes. This phenomenon has partly contributed to the increasing 'dollarization' of land and housing prices in large Ghanaian towns and cities (ISSER 2013; Owusu 2014).

Similar to self-financing, the use of remittances also results in incremental building of homes. Ghanaians living abroad remit as and when they have saved enough, to their family members, friends, caretakers or any other persons they have assigned responsibility to act on their behalf and to supervise the construction of their homes. Though the average income of an international Ghanaian migrant is higher than that of the average non-migrant Ghanaian, it takes about 3-6 years and 5-7 years for the Ghanaian living in Australia and Britain respectively, to complete their homes in Ghana (Diko and Tipple 1992; Obeng-Odoom 2010). The process of building is divided into stages and proceeds accordingly as and when remittances are received.

### **6.4 Challenges of Housing Financing**

Teye et al. (2013) provide a comprehensive discussion of the supply and demand side challenges of Ghana's mortgage system and by extension the difficulties of the entire formal housing financing system of the country. These challenges which are summarized in Box 6.1 impede the growth of the housing sector as a major source of economic growth and development, particularly in terms of job creation and household wealth, and broader macroeconomic variables. This is because activities in the housing industry in general tend to stimulate other economic activities as well as consumer spending with multiplier effects that impact positively on the size and composition of household wealth, accessibility to credit, labour productivity, employment and other macroeconomic variables (Bank of Ghana (2007).

### Box 6.1: Summary of Supply Side Challenges in Ghana's Mortgage system

- *Collateral problems*: relating to poor collaterals (due to sub-standard construction and building materials); lack of collateral (as financial institutions require the use of another property as collateral rather than the property in question) and; limited and poor documentation of ownership of collateral properties.
- Challenges of establishing credit worthiness of potential borrowers due to the lack of
  proper and credible national personal identification and house/street naming
  systems; poor documentation of properties and; limited presence of credit-checking
  agencies. This partly accounts for the demand for immovable properties as
  collaterals.
- Capital inadequacy of the banks: beyond high interest rates and other constraints, most banks in Ghana are not able to supply mortgage loans because their capital size is small.
- Macro-economic instability: high inflation rates and rapid depreciation of the Ghana
  cedi make long-term loans to the housing sector unprofitable to the banks, as the
  value of the amount lent declines over time. This is compounded by high rate of
  government borrowing through issuance of treasury bills and other bonds which
  stifle private sector's access to credit as well as providing banks a risk-free and
  yielding source of lending.
- *Insecure and non-transparent titled land*: a cumbersome process which perpetuates multiple sale of land resulting in land litigations and conflicts with the effect that the land market cannot operate effectively to either enable the development of a formal market for mortgage or to act as security for mortgage finance.

Source: Teye et al. (2013, pp. 6-10); Bank of Ghana (2007, pp. 30-31)

### 6.5 Conclusion

The overall impact of the supply side of the mortgage challenges as captured in Box 6.1 is the unwillingness and/or lack of interest of banks and other financial institutions to lend loans and other facilities for prospective homeowners and real estate developers. On the other hand a number of factors on the demand side have also made loans and credit unattractive to prospective homeowners (see Box 6.2). It needs to be stressed that the demand and supply constraining factors are related to each other, and the overall combined effect is the existing

limited formal channels for housing finance in Ghana. In other words, while the banks and other financial institutions feel reluctant to lend to homeowners due to supply side constraints, homeowners on the other hand do not find the existing limited mortgage and other financial instruments for housing attractive due to demand side constraints. It is within this context that self-financing and informal means of housing in Ghana thrived.

### Box 6.2: Summary of Demand Side Challenges in Ghana's Mortgage system

- High interest rates and unfavourable repayment terms or conditions: relatively short repayment period (usually 15 years) and high interest rates (about 30% for payments in cedis and 13.5% for payments in dollars) mean that the monthly instalment payments are very high. Further compounding the repayment terms is pricing of loans in foreign exchange primarily as a hedge against cedi currency depreciation implying each time the cedi depreciates the borrower is required to pay more cedis for the same instalment.
- High prices of houses and unfavourable repayment terms: prices that estate developers charge for their houses make the use of loans for repayment unattractive even for the high-income group. Conditions include prospective homeowner making 25-50% advance payment; 20-40% at roofing level and; 10-20% upon completion and final handing to owner.
- Low income levels: result in high mortgage payment-to-income ratio for many loan applicants, thus pricing them out of the market.
- *Cultural values*: often create apprehensions about the use of loans or "debts" to construct one's residential property. In general terms, the Ghanaian society to a large extent see borrowing from the bank as negative and the belief that people in debt are not hard-working.

Source: Teye et al. (2013, pp. 10-13); Bank of Ghana (2007, p. 31)

# CHAPTER SEVEN CONCLUSION, RECOMMENDATIONS AND POLICY IMPLICATIONS

### 7.1 Introduction

The last Chapter of this Report provides the overall summary and conclusion of the aggregate picture of the housing sector in Ghana, with reference to the quantity and quality of housing and households' access to basic social amenities (such as water, sanitation, electricity and other facilities) as well as housing financing. It also proposes policy recommendations to enhance the supply and demand for housing services (including relevant basic services) as well as the overall policy implications of the Report.

### 7.2 Summary and Conclusion

Housing in Ghana is challenged in all aspects. From land acquisition through to construction of the physical structure and access to basic services and infrastructure as well as financing, the Ghanaian housing sector is severely challenged. Consequently, individuals and households adopt various informal strategies including self-financing and incremental building to be able to provide housing for themselves, their households and families. The overall effect of the challenges is that the Ghanaian housing market is constrained leading to the situation whereby aggregate housing supply is unable to meet effective demand.

Although the large decade has witnessed a significant increase in the total national housing stock from almost 2.2 million in 2000 to about 3.4 million in 2010, yet across all the regions and districts in Ghana, there is a gap between the existing actual housing stock and the estimated required housing needs of the population. Using the UN-Habitat's maximum room occupancy limit of 3 persons per room (3 ppr) and Ghana's recommended maximum occupancy rate of 2 ppr for high density areas as contained in the TCPD's *Zoning Guidelines and Planning Standards*, the Report estimates the cumulative housing deficits countrywide, and across the regions and the different city-sizes and local government areas. On the basis of 6-persons per 2-bedroom unit (UN-Habitat standard) and 4-persons per 2-bedroom unit (Ghana's standard), the estimates revealed housing deficits across all the regions and localities. The housing deficits are, however, severest in the large metropolitan centres as well as secondary or medium-sized towns. Consequently, the housing deficit in Ghana to a large extent can be described as an urban phenomenon.

The overall picture from the analysis in this Report indicates that at 6-persons per household per two-bedroom unit, the deficit as at 2010 stands at over 717,000. However, the deficit balloons to nearly 2.8 million when computed on the basis of 4-persons per household per two-bedroom unit; what is described in the Draft Housing Policy, 2013 document as the preferred threshold (GoG/MWRWH 2009, p. 16). Given future natural population growth in cities and new migrants and economic growth with a greater demand for a diversity of housing forms to match the changing household structures, the demand for housing is likely to be greater than is the case presently.

Nevertheless, the general picture in housing deficits across Ghana reveals a declining trend or decreasing rate of the deficit due to significant increases in the stock of houses. However, the national housing stock does not take into account uninhabitable and dilapidated dwellings requiring replacement or maintenance which are dotted across the country in both rural and

urban areas. In addition, the overall national housing stock includes significant numbers of dwellings which are used as homes (such as tents, huts, kiosks/containers, etc.) but can at best be described as 'insecured and inadequate' housing units due to the materials used in their construction, vulnerability to vagaries of the weather, security of tenure and location as well as their ability to sustain and provide the minimum liveable environment required.

Moreover, the general observation is that even at that gross level, housing and associated accessibility and proximity to available basic services and infrastructure for households remained poor and inadequate. Indeed, if cognisance is taken of the proportion that assumes poor quality status and the need for improvement; the proportion of insecured/inadequate housing in the national stock and; the inadequate basic services and infrastructure, then the conclusion of declining deficit would probably differ.

Partly accounting for the poor and inadequate housing in Ghana is the severely challenged existing housing financing system. As a result of prevailing high interest rates, demands for collaterals as well as other teething challenges, housing is largely financed through informal channels (mainly through personal/household savings and remittances). This situation, however, results in incremental development and therefore, a long time lapse between the start and completion of housing. Though the incremental approach allows households to build according to their financial strength and relieved them of undue pressures from loans and mortgages repayment, it nevertheless, results in locked-up capital and savings in uncompleted buildings as well as high costs of building.

### 7.3 Policy recommendations

Given the plethora of challenges confronting the Ghanaian housing sector, a number of studies and public policy documents have made several recommendations with the explicit aim of improving the supply and the demand for housing in the country (see CSIR/GIA 2009; GoG/NDPC 2009; ISSER 2013; MWRWH 2009, 2013). One such key public document formulated in recent times which attempts to provide a comprehensive assessment and policy recommendations for the Ghanaian housing sector is the *Draft National Housing Policy*, 2013. The Draft National Housing Policy, 2013, has ten policy initiatives with recommended measures ranging from promotion of private sector participation to upgrading and social housing, and local participation and use of local building materials in housing delivery, and finally, institutional reforms and coordination for effective implementation of the policy (see Box 7.1)

### Box 7.1: Policy Recommendations to improve the supply, demand and efficiency of the housing market in Ghana

- **Promote greater private sector participation in housing delivery**: facilitate private sector access to land; establish and operate National Housing Trust Fund as a mechanism to leverage private capital into housing and infrastructure investments; promote housing development through PPP; establish collaborative partnership between built environment professionals and MMDAs/MDAs.
- Create an environment conducive to investment in rental housing: promote rent-to-own housing schemes; review Rent Act, Act 220 (1963)/Rent Control Law, PNDCL 18 (1986) to empower Rent Control Department and encourage rental housing construction; encourage rehabilitation of disused/abandoned properties into rental housing; encourage mandatory inclusion of rental housing in slum upgrading; encourage Houseowners' Associations to adapt rental housing expansion schemes.
- **Promote housing schemes that maximize land utilization**: MMDAs/MWRWH to promote urban regeneration through inner city mixed residential/commercial development; secure nature conservation and retain land for agricultural, forestry and related uses to check urban sprawl; establish and mainstream inner city revitalization and regeneration programmes in D-plans of MMDAs.
- Accelerate home improvement (upgrading and transformation) of existing housing stock: promote neighbourhood level house maintenance through enhancing capacities of community management associations and property management companies; develop maintenance bonds where house owners pay to fund/maintain their houses through facility management firms; enforce building codes and regulations.
- Promote orderly human settlement growth with physical and social infrastructure: guide and ensure housing projects conform to environmental sustainability standards; MMDAs/state demonstrate strong commitment towards retaining and improving green belts in all settlements; mainstream and scale-up on-going floods disaster mitigation and coastal management measures; promote water conservation; develop engineered landfills.
- **Promote** social and low-income housing: consult, train and involve communities and households to provide offers in development of infrastructure; establish MMDAs Rent Deposit Guarantee Scheme in conjunction with financial institutions to provide rent advance guarantees; encourage housing cooperatives to access funds through banks; promote use of local building materials; promote community-led infrastructure financing arrangements.
- *Upgrade existing slums and prevent occurrence of new ones*: formulate and implement slum infrastructure improvement policy; progressively integrate slums through revitalization, redevelopment and regeneration; empower slum dwellers to be economically viable to sustain their livelihoods and participate in decision-making.
- Legislative and institutional reforms to deal with outdated, repetitive, inconsistent and ambiguous legal regimes and; re-definition of institutional responsibilities and streamlining of functions, including establishing an Inter-ministerial Technical Committee to serve as a focal point for coordination of activities of MDAs, MMDAs and other relevant agencies in the housing sector.

Source: GoG/MWRWH 2013: Draft Housing Policy, 2013, Accra: GoG/MWRWH, pp. 21-38

The policy recommendations contained in the Draft Housing Policy, 2013, represent by far the most comprehensive response to the housing challenge to be formulated in recent times. Nevertheless, it remains a draft national document yet to receive the necessary endorsement by Cabinet and legal backing. Indeed, the passage and implementation of the policy document would require strong political will on the part of the state as well as commitment of resources towards its actual implementation. The implementation of the housing policy and other related policies such as the National Urban Policy Framework and its Action Plan, will provide a comprehensive policy environment for housing development rather than the past approach of piecemeal and fragmented responses to the question of housing.

### 7.4 Policy Implications

The Policy recommendations as captured in Box 7.1 are very much laudable and if passed and implemented will improve the demand, supply and market efficiency of the Ghanaian housing sector. However, these recommendations have far-reaching policy implications which policy makers must pay attention to.

### Role of the private sector

In line with the development thinking of recent years, the recent policy recommendations for improving the supply and demand for housing have strongly emphasized the role of the private sector. This approach has been the main focus of public policy since the 1980s, yet the private sector has failed to provide adequate quality and quantity of houses to meet the needs of all segments of the Ghanaian population. As highlighted several times in this Report, the private sector has focused exclusively on the upper and to some extent, the middle-class. It has been suggested that without proactive measures by the state (such as subsidized land values, facilitating land acquisition, and other measures that incentivized the private sector), the private sector is unlikely to meet the housing needs of the poor and low-income groups (ISSER 2013; Owusu 2014 forthcoming).

The alternative approach is for the state to engage directly in housing delivery, especially targeting the poor and low-income groups. However, experience has shown that the state is not 'a good provider' of housing for the poor, as such initiatives are likely to be hijacked by the political elites and the rich. In addition, such public initiatives tend to be used as a means for scoring political points and as such, likely to be discontinued or abandoned by successive governments, or not taken serious by beneficiaries as they regard them as political windfall, especially in instances where they are supposed to pay back. In the absence of public policies and programmes to provide housing for low-income groups, the poor are likely to be left to fend for themselves in the disorganized and exploitative land and housing markets (ISSER 2013).

### Role of MMDAs and their Capacity

Many of the policy recommendations with respect to housing development fall under the ambit of the MMDAs and the Town and Country Planning Department (TCPD) which operate at the district and local levels. However, the ability of these agencies to enforce building codes and regulations are inadequate due to their weak capacities (logistic, human resources and other challenges). The policy implication here is that unless these institutions are well-resourced, many of the recommendations made are unlikely to be fulfilled.

### **Enforcement of building codes and regulations**

A key role of the MMDAs and TCPD is the enforcement of building codes and regulations. However, as noted in Chapter Four, a common proposed solution to poor quality housing is to raise standards through stricter building codes and better enforcement. Clearly, many of the proposed recommendations as contained in Box 7.1 require the enforcement of existing

building codes and regulations such as those under CAP 84. Moyo et al. (1986) have argued that this could be a wrong approach since enforcing existing building standards risk alienating further the majority without access to decent housing.

Therefore, the policy recommendations on enforcement require a thorough review of the existing building codes and regulations in terms of providing the minimum acceptable standards relating to safety and hygiene of housing. Within the context of the present decentralization frameworks, MMDAs should have the flexibility in setting their minimum standards as socio-economic and environmental conditions vary across the districts and regions of Ghana. In addition, the review of the existing building codes and standards should take into account the current socio-economic context of Ghana and also the fact that many of these laws have their origins in the British codes of the 1940s.

### Land acquisition

Again, many of the recommended policy measures are directly and indirectly related to effective and efficient land management system. However, despite concerted efforts through the Land Administration Project (LAP I&II) since the last decade, Ghana's land delivery mechanism for housing and other uses remained challenged. It is recommended that Ghana promotes housing schemes that maximize land utilization; orderly development of human settlements with physical and social infrastructure; social and low-income housing and; slum upgrading and revitalization of inner-city development. To be able to achieve these laudable proposals would require that the challenges in the land sector relating to difficulties in determining ownership and boundaries; increasing land prices; conflicts, etc. are addressed.

### **Funding options**

The proposed recommendations to enhance the supply and demand for housing would require significant investments in the sector. However, these are unlikely to come from the state given the pressures from other equally important sectors of the national economy. The policy implication is that new and innovative ways would have to be developed, involving the active participation of the private sector. In the strict sense, active involvement of the private sector as earlier noted means to a large extent, alienating the low-income groups from the housing market.

More importantly, as Ghana consolidates its status as a middle-income country, donor concessionary loans and grants are likely to decline substantially over time and this will necessitate more market-based financing options involving the private sector. Therefore, a balance needs to be struck or established between the private sector-driven housing supply modes needed to improve the quantity and quality of housing as well as the needs of the low-income households for housing. This situation, nevertheless, imposes higher standards of transparency on revenue generation and expenditure management on the part of the state and its agencies, especially MDAs directly involved in housing as well as the MMDAs.

### REFERENCES

- Afram, S.O., 2009. The traditional Ashanti compound house: A forgotten resource for homeownership for the urban poor. CSIR/GIA eds. *Proceedings of the 2009 National Housing Conference*, Accra, 7-8 October 2009.
- Agyei-Mensah, S. and Owusu, G., 2010. Segregated by Neighbourhoods? A Portrait of Ethnic Diversity in the Neighbourhoods of the Accra Metropolitan Area, Ghana. *Population, Space and Place*, Vol. 16(6), pp. 499-516.
- Aldrich, B.C. and Sandhu, R.S., 1995. The global context of housing poverty. In: Aldrich, B.C. and Sandhu, R.S. eds., *Housing the Urban Poor: Policy and Practice in Developing Countries*. London: Zed Books, pp. 17-33.
- Aryeetey, E., Al-hassan, R.M., Asuming-Brempong, S. and Twerefou, D.K., 2007. *The Organization of Land Markets and Production in Ghana*. Accra: ISSER.
- Benjamin, C., 2007. *A Brief History of Housing in Ghana*. Available at http://thestatesmanonline.com/pages/news\_detail.php?section=7&newsid=2158 [Accessed on 20 January 2010].
- Bortei-Doku Aryeetey, E., Kotey, N.A., Amponsah, N. and Bentsi-Enchill, K., 2007. *Legal and Institutional Issues in Land Policy Reform in Ghana*. Accra: ISSER.
- Catalano, R. and Kessell, E., 2003. Comment: Housing policy and health, *Journal of Social Issues* 59(3), pp. 637-649.
- GSS (Ghana Statistical Service), 2005. Ghana Population Data Analysis Report: Socio-Economic and Demographic Trends, Vol. 1. Accra: GSS.
- GSS (Ghana Statistical Service), 2012. 2010 Population and Housing Census: Summary of Final Results, Accra: GSS
- GoG/MLGRD. 2012. National Urban Policy Framework, May 2012. Accra: MLGRD.
- GoG/MWRWH. 2009. *Draft Housing Policy 2009*. Accra: Government of Ghana/Ministry of Water Resources, Works and Housing.
- Grant, R., 2005. The emergence of gated communities in West African context. *Urban Geography* 26, pp. 661-683.
- Grant, R., 2009. Globalizing City: The Urban and Economic Transformation of Accra, Ghana. New York: Syracuse University Press.
- Grant, R. and Nijman, J., 2002. Globalization and the corporate geography of cities in the Less Developed World. *Annals of the Association of American Geographers* 92, pp. 320-340.
- Grant, R. and Yankson, P., 2003. Accra, Cities 20, pp. 65-74.
- GTZ, 2002. Pluralism and Gender Project: State Land Management Regime Impact of Land Rights of Women and the Poor in Ghana. Accra: GTZ.

- Institute of Statistical, Social and Economic Research, 2007. *The State of the Ghanaian Economy in 2006*. Accra: ISSER.
- ISSER, 2008. Situational Analysis of Selected Slum Communities in Accra and Sekondi-Takoradi. A Report submitted to CHF-Ghana.
- K'Akumu, O.A., 2007. Strategizing the decennial census of housing for poverty reduction in Kenya", *International Journal of Urban and Regional Research* 31(3), pp. 657-674.
- Konadu-Agyemang, K., 2001. Structural adjustment programs and housing affordability in Accra, Ghana. *The Canadian Geographer* 45, pp. 528-544.
- Mahama, C. and Adarkwah, A., 2006. Land and Property Markets in Ghana. London: RICS.
- Mitchell, J.P., 1985. Historical overview of direct federal housing assistance. In: Mitchell, J.P. ed., *Federal Housing Policy and Programmes, Past and Present*, New Brunswick, NJ: Rutgers University Center for Urban Policy Research, pp. 187-206.
- National Development Planning Commission, 2005: Ghana Shared Growth Development Agenda (2009-2013. Vol. I. Policy Framework. NDPC: Accra.
- National Development Planning Commission, 2005: Growth and Poverty Reduction Strategy (2006-2009). Vol. I. Policy Framework. NDPC: Accra.
- Newman, S.J., 2008. Does housing matter for poor families? A critical summary of research and issues still to be resolved. *Journal of Policy Analysis and Management* 27(4), pp. 895-925.
- Nsiah-Gyabaah, K., 2009. The urban housing challenge and prospects for meeting the housing needs of the urban poor in Ghana, CSIR/GIA eds., *Proceedings of the 2009 National Housing Conference*, Accra, 7-8October 2009.
- Obeng-Odoom, F., 2009. Oil and urban development in Ghana. *African Review of Economics & Finance* 1(1), pp. 17-39.
- Owusu, G., 2008. 'Indigenes' and migrants' access to land in peri-urban areas of Ghana's largest city of Accra. *International Development Planning Review (IDPR)*, 30(2), pp. 177-198.
- Owusu, G., 2010. Social effects of poor sanitation and waste management on poor urban communities: A neighbourhood-specific study of Sabon Zongo, Accra. *Journal of Urbanism: International Research on Placemaking and Urban Sustainability*, 3(2), pp. 145-160.
- Owusu, G., 2014. Housing the urban poor in Ghana's largest metropolitan area, Accra: What is the role of the state in the era of liberalization and globalization?. In: Brun, C., Jones, M. and Blaikie, P. eds., *Unravelling Marginalisation and Voicing Change: Alternative Geographies of Development*, London: Ashgate Press, pp. 73-85
- Owusu, G., Agyei-Mensah, S. and Lund, R., 2008. Slums of hope and slums of despair: Mobility and livelihoods in Nima, Accra. *Norsk Geografisk Tidsskrift Norwegian Journal of Geography*, 62, pp. 180-190.

- Pérez, C.R. and Crossley, J.C.M., 2010. Measurement of the Urban Housing Deficit: Strategies, Tools and Sources of Information. A report submitted to the Chilean Ministry of Housing and Urban Development (MINVU).
- Rosen, G., 1993. A History of Public Health. Baltimore: Johns Hopkins University Press.
- Songsore, J., 2003. The urban housing crisis in Ghana: Capital, the state versus the people. *Ghana Social Science Journal* (New Series) 2, pp. 1-31.
- Songsore, J. and McGranahan, G., 1993. Environment, wealth and health: towards an analysis of intra- urban differentials within the Greater Accra Metropolitan Area, Ghana. *Environment and Urbanization*, 5, 10-34.
- Stamsø, M.A., 2008. Housing and the Welfare State in Norway. *Scandinavian Political Studies*, 32(2), pp. 195-220.
- Tipple, A.G., 1987. The Development of Housing Policy in Kumasi, Ghana. Tyne: University of Newcastle.
- Tipple, A.G., 1994. The need for new urban housing in sub-Saharan Africa: Problem or opportunity? *African Affairs*, 93(373), pp. 587-608.
- UNFPA, 2007. UNFPA State of World Population 2007: Unleashing the Potential of Urban Growth. New York: UNFPA.
- UN-Habitat 2011: Ghana Housing Profile, Nairobi: UN-Habitat
- UN-Habitat, 2009. *Urban Indicators Guidelines: Monitoring the Habitat Agenda and the Millennium Development Goals- Slums Target*, Nairobi: Un-Habitat
- Wellington, H.N.A., 2009. Gated cages, glazed boxes and dashed housing hopes In remembrance of the dicey future of Ghanaian housing. CSIR/GIA eds., *Proceedings of the 2009 National Housing Conference*, Accra, 7-8 October 2009.
- Yeboah, I., 2001. Structural adjustment and emerging urban form in Accra, Ghana. *Africa Today*, 7, pp. 61-89.
- Yeboah, I., 2003. Demographic and housing aspects of structural adjustment and emerging urban form in Accra, Ghana. *Africa Today*, 10, pp. 106-109.