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Title: Financing Urban Infrastructure/Services through Property Tax and Land Leasing: A Case Study of Sekondi-Takoradi Metropolis, Ghana

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# Financing Urban Infrastructure/Services through Property Tax and Land Leasing: A Case Study of Sekondi-Takoradi Metropolis, Ghana

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# Executive Summary

The land value capture (LVC) concept has recently gained stance in the global discussion among the academia and policy makers. The Vancouver Declaration in 1976 sparked its discussion and consideration as revenue generation source for governments worldwide. The concept seeks to give public authority justification to recover part or whole of land values increment attributable to its action or the general public. Several LVC instruments exist but property tax and land leasing have been considered in this study. The choice was inspired by the current land based instruments in Ghana used to generate revenue. Property tax in Ghana is based on improvements only and depreciated replacement cost which in principle alone does not capture land values. This shortfall necessitated the combination of land leasing (ground rent) with property tax to achieve that purpose.

This research was carried out in the Sekondi-Takoradi Metropolis with the main objective to explain how property tax complements land leasing in capturing land values to finance urban infrastructure/services. In order to achieve this objective, a primary research question "To what extent does property tax and land leasing capture land values to finance urban infrastructure/services?" was posed.

In an attempt to answer the research question, state-of-the-art literature on land value capture, property tax, land leasing and urban infrastructure/services concepts were reviewed. Based on the conceptual framework espoused in chapter two, a research methodology was designed and adopted. The research was more of descriptive type but with explanatory and exploratory components. The approach to the research was a mixture of quantitative and qualitative approach with data collection method being both primary and secondary. The research strategy was a case study with singled embedded based on best case scenario. The sampling techniques adopted in this research comprised simple random sampling, stratified sampling and purposive sampling techniques. The data collection instruments comprised questionnaires, interview schedules, observation list and templates.

It was unravelled from the field that there were several laws regulating land leasing in Ghana. Four (4) land tenure systems including state, vested, stool and family lands were identified in Sekondi-Takoradi metropolis to be managed in accordance with the laws and customary practices of the locality. In Sekondi-Takoradi metropolis, it was revealed that stool lands covered 55.22%, state lands occupied 20.35%, family lands accounted for 24.10% while vested lands occupied 0.33% of its land size. It was shown that the central government and Sekondi-Takoradi Metropolitan Assembly (STMA) did not benefit from ground rent revenue under family lands. However, Sekondi-Takoradi Metropolitan Assembly enjoyed 49.5% of stool lands ground rent and 100% of all property rate revenue.

Property rate was regulated by few laws linked to the land leasing laws. It was found to be assessed based on improvements only with the depreciated replacement cost approach. A maximum depreciation of 25% was found to be applied based on physical state of the premises but not on age. The research revealed that property rate was one of the main sources (19.79% - 38.83%) of internally generated funds (IGF) revenue for the Sekondi-Takoradi Metropolitan Assembly. Property rate revenue was found to be increasing at a decreased rate over the years (2006 – 2013) with the Sekondi-Takoradi Metropolitan Assembly's internally generated fund while ground rent was steadily increasing over the last 3 years after a sharp fall in 2009.

Stool lands ground rent revenue could not meet urban infrastructure/services expenditure nonetheless property rate revenue covered over and above the infrastructure expenditure. It was

realized that if revenue from state and vested lands ground rent were added to the stool lands revenue, it could finance far more infrastructure expenditure than the property rate.

In terms of land value capture, ground rent could capture a little (0.41% - 22.04% per $m^2$) of the land values but the value captured was largely kept by land owners especially the stool and family. The central government and the local government (STMA) benefited a little of the value captured. Out of this value captured, more (highest 22.04% per $m^2$ but a total of 47.54% per $m^2$) was being captured under state and vested lands than under stool lands (highest 11.76% per $m^2$ but a total of 19.71% per $m^2$).

Cumulatively, property rate complemented ground rent to generate more revenue for the STMA. It was concluded that property tax did not capture land values but complemented ground rent to capture the land values. The value captured was not much but could finance urban infrastructure over and above the expended which implied surplus revenue was available to cater for other expenditure.

**Key Words:** ***Property rate, ground rent, Sekondi-Takoradi Metropolitan Assembly (STMA), land values and urban infrastructure/services***

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## Dedication

This research is dedicated to my beloved mum (late)

***Mrs. Hannah Pigri Mabe***

# Abbreviations and Terminologies

## Abbreviations:

| | | |
|---|---|---|
| AE | – | Annual Equivalent |
| CEPACs | – | Certificate of Additional Building Rights |
| CHF | – | Cooperative Housing Foundation International |
| CPI | – | Consumer Price Index |
| CV | – | Capital Value |
| DACF | – | District Assembly Common Fund |
| DRC | – | Depreciated Replacement Cost |
| GDP | – | Gross Domestic Product |
| GHACEM | – | Ghana Cement Limited |
| GHAPOHA | – | Ghana Ports and Harbour Authority |
| GIS | – | Geographic Information System |
| GSDA | – | Ghana Shared Growth and Development Agenda |
| IGF | – | Internally Generated Funds |
| LC | – | Lands Commission |
| LILP | – | Lincoln Institute of Land Policy |
| LVC | – | Land Value Capture |
| LVD | – | Land Valuation Division |
| MLGRD | – | Ministry of Local Government and Rural Development |
| MMDAs | – | Metropolitan Municipal District Assemblies |
| MPR | – | Monetary Policy Rate |
| NGO | – | Non Governmental Organisation |
| NRCD | – | National Redemption Council Decree |
| OASL | – | Office of Administrator of Stool Lands |
| PNDCL | – | Provisional National Defence Council Law |
| PVLMD | – | Public and Vested Lands Management Division |
| RCC | – | Regional Coordinating Council |
| SPSS | – | Statistical Package for Social Scientist |
| STMA | – | Sekondi-Takoradi Metropolitan Assembly |
| TCPD | – | Town and Country Planning Department |
| YP | – | Years Purchase |

## Terminologies and their equivalence:

| **International Context** | – | **Ghana Context** |
|---|---|---|
| Assessable jurisdiction | – | Valuation district |
| Assessable property | – | Rateable property |
| Assessed value | – | Rateable value |
| Land rent | – | Ground rent |
| Premium | – | 'Drink money' |
| Property tax | – | Property rate |
| Property taxation | – | Property rating |
| Tax rate | – | Rate impost |
| Unit cost value | – | Cost rate |

Exchange Rate as at July 31, 2013 (Bank of Ghana), US$1.00 = GH¢1.9925

Inflation Rate for July 2013 was 11% (Bank of Ghana)

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# Chapter 1:

# Introduction

## 1.1 Background

In recent years, the rapid population growth of the world has become topical due to its ripple effects on humankind and physical development. It is more important as researches with statistical evidence show that the growth is more prevalent in urban areas. UN-Habitat (2012) indicated that more than half of the world population are living in urban areas as at 2010 and was marked as "urban millennium". Currently, more than half of the world population is in the urban areas and by the middle of the century, it is expected that 7 out of every 10 persons will be living in urban areas. This trend is faster in developing countries and Africa has been tagged to be increasing at an unprecedented rate of 0.23 million people per week. (UN-Habitat, 2012).

The rapid growth of population in recent times in urban areas have been ascribed to countless reasons including cities as 'engines' of economic development, home of prosperity (ambitions, aspirations and others) and quality of life for the inhabitants. While the reasons are important, it is more vital to look at the implications of this trend – led to urbanisation and its sophisticated attendant results both positive and negative. The negative impacts seem to be dominating the centre stage of the world, international and national policy discussions. Paramount among these problems are urban sprawl, poverty, land use problems, social exclusion, environmental, poor infrastructure and health problems. (UN-Habitat, 2012, Harvey and Jowsey, 2004).

Undoubtedly, all activities in the cities rely or touch on land hence the population growth have direct link with the urban land development. According to Angel (2012), the world population growth rate is 1.6% per annum but the land coverage growth rate of cities stands at 3.66% per annum thus doubled. This puts more pressure on land and city authorities to provide infrastructural needs to meet the teeming population. While classical economist advocate for perfect competitive market in allocation of land resources (highest and best use), the current population trend in urban areas coupled with market failure such system will rather create more urban problems – growth of cities in unexpected pattern (Harvey and Jowsey, 2004).

The concept of land value capture has not been prevalent in public financing since the Vancouver Action Plan in 1976 until the 21st century. According to the Vancouver Action Plan (UN-Habitat, 1976) the concept means " *the unearned increment resulting from the rise in land values resulting from change in use of land, from public investment or decision or due to the general growth of the community must be subject to appropriate recapture by public bodies (the community)*…" [Recommendation D3 pp. 30].

Smolka and Amborski (2000) defined the concept as capturing part or whole of the unearned increment attributable to the city through varying instruments for the benefit of the public or city. The concept seeks to share the benefits of the increment in value enjoyed by the private landowner with the community directly or indirectly through the provision of public infrastructure and services. In achieving these, the local government (representing the community/city) uses different instruments including property taxes, development charges, land leasing, zoning, betterment charges, fees and other regulations to capture such increments.(Smolka and Amborski, 2000, Hong and Ingram, 2011).

In order to ensure continuing economic growth and social welfare of the city and its inhabitants, municipal authorities need funding to provide urban infrastructure. Economic development and quality of life in cities is directly linked to infrastructure or services. Basic infrastructure and

services (water supply, schools, hospitals, waste management, transport, electricity and energy) are essential for society to function hence make cities grow. Also, poverty is linked to infrastructure especially the basic services as its unavailability make life difficult. Cities and countries are rated as poor due to lack of infrastructure. For instance Estache (2010) indicated that Sub Saharan Africa is one of the poorest sub-regions because the infrastructure gap is above the average. Due to its volume of scale, capital intensive and length of investment of the projects, the traditional sources of funding – grants, loans and inter-governmental transfers have not sufficed neither has it been sustainable (Estache, 2010).

Property tax is one of the main instruments of land value capture for municipal financing especially in infrastructure and services provision. The term property tax has been used to mean any tax on bare land, improvements/buildings or both bare land and buildings (Franzsen and McCluskey, 2013). The history of property tax in Ghana can be traced to the pre-colonial era. Property tax referred to as property rate in Ghana is locally called "*Ntokura tow"* meaning window tax[1]. In 1951, four (4) municipalities thus Accra, Kumasi, Sekondi-Takoradi and Cape Coast were empowered to impose tax on properties after a recommendation from Coussey Committee. Property rating has since evolved till its current legal status viz. Local Government Act, 1993, Act 462. The rationale of the tax is to provide infrastructure and services for the cities. (Kuusaana, 2010).

Land leasing has also been used as land value capture (LVC) tool to finance public goods through revenue from premiums or ground rent. It has potential to finance urban infrastructure especially when it is public lands (Hong and Bourassa, 2003). Though property tax usually comprises a land tax[2] and/or tax on buildings or improvements, it is important to point out that ground rent from land leased from stool, vested and family lands are considered as land tax in this particular research.

The history of land leasing in Ghana dates back to the Gold Coast period and directly linked to the landownership systems. According to Ollenu (1962 as cited in Mabe, 2008) land belongs to many generations who are dead, a few living and countless yet unborn hence should not be sold forever. In view of this, lands are leased in exchange of premiums and ground rent or in kind. Different stools/skins[3] had different statutes guiding their leasing systems until 1962 when the Administration of Lands Act, Act 123 was promulgated to control the management of those lands. Under that Act, ground rents were supposed to be shared between the stool and the local authorities.

The land value capture concept has now been advocated for by many scholars in academia as the sustainable way to provide infrastructure without distorting the land market. More importantly, property tax and land leasing have been tipped as the easiest way to such sustainability as they does not distort the land market but generate streams of income (Hong and Bourassa, 2003, McCluskey et al, 2013, Dye and England, 2009).

[1] As the assessment was based on the number and size of windows in the property or building has.

[2] Land tax is different from ground rent

[3] Stool/skin is used to represent the land owning group or customary system as a whole.

## 1.2 Profile and Land Tenure System of the Study Area

This section illustrates a brief history and description of the study area as well as the land tenure systems existing in the city in order to understand the discussion within the theoretical and geographical context.

### 1.2.1 Study Area Profile

Ghana has a population of about 24.66 million with a growth rate of 2.5 according to 2010 Population Census (Ghana Statistical Service, 2012). Out of this population 50.9% live in the urban areas which include the five (5) major cities such as Accra, Kumasi, Tamale, Sekondi-Takoradi and Tema. Currently half of the country's urban population is housed by these five major cities.

Sekondi-Takoradi, a twin city in Ghana, is located in the south-western part of the country along the coast. The twin city started as two (2) separate settlements, Sekondi and Takoradi in the early 17$^{th}$ century that that has grown into two towns. Sekondi is older and larger than Takoradi as the colonial masters preferred to settle there. Takoradi grew spontaneously due to the port activities while Sekondi steadily grew mainly because of the transport of minerals via the rail infrastructure. With passage of time and population growth, the two towns merged into a twin city. (CHF International Ghana, 2012).

It has 559,548 (23.5% of western region's population) inhabitants and has recently been designated as the 'Oil City' as it hosts the offshore activities of the oil. It has a land size of 49 square kilometres and is bounded to the north by Mpohor Wassa East District, to the east by Shama District, to the southwest by the Ahanta West District and to the southeast by the sea (Gulf of Guinea). (Ghana Statistical Service, 2012, MLGRD, 2006 and STMA, 2010). See figure 1 below. In terms of population, it is the third largest city (STMA, 2010).

Administratively, Sekondi-Takoradi is the capital city of Western Region as well as the Metropolitan capital and managed by Sekondi-Takoradi Metropolitan Assembly (STMA). It operates on a 4-tier local government system comprising the STMA (upper tier), Sub-Metros, Town/Area Councils and Unit Committees (lower tier). There are 4 Sub-Metros comprising Takoradi, Sekondi, Essikado-Ketan and Effia-Kwesiminstim (see annex 1). The Metropolis has 49 electoral areas and 5 constituencies represented by elected Assembly Members for the local government administration and Members of Parliament for the central government respectively. Each electoral area also has 5 unit committees represented by elected unit committee members. Decisions are mostly taken at the Assembly level (upper tier) however depending on the context it may be initiated at the lower tier and carried up at to the upper tier for finalisation. (CHF International Ghana, 2012 and MLGRD, 2006).

The city has infrastructure and services including educational facilities, road infrastructure, port infrastructure, water, waste management systems, public toilet facilities, health facilities and electricity supply for the inhabitants. For instance, Effia Nkwanta Hospital, Takoradi Hospital, Kwesimintsim Polyclinic, Takoradi port, Takoradi Airport, Takoradi Market Circle and Takoradi

Airforce and Naval Bases are key infrastructure and services available in the city. These facilities support economic activities including port, oil and gas, industrial, commercial and agricultural activities. (CHF International Ghana, 2012).

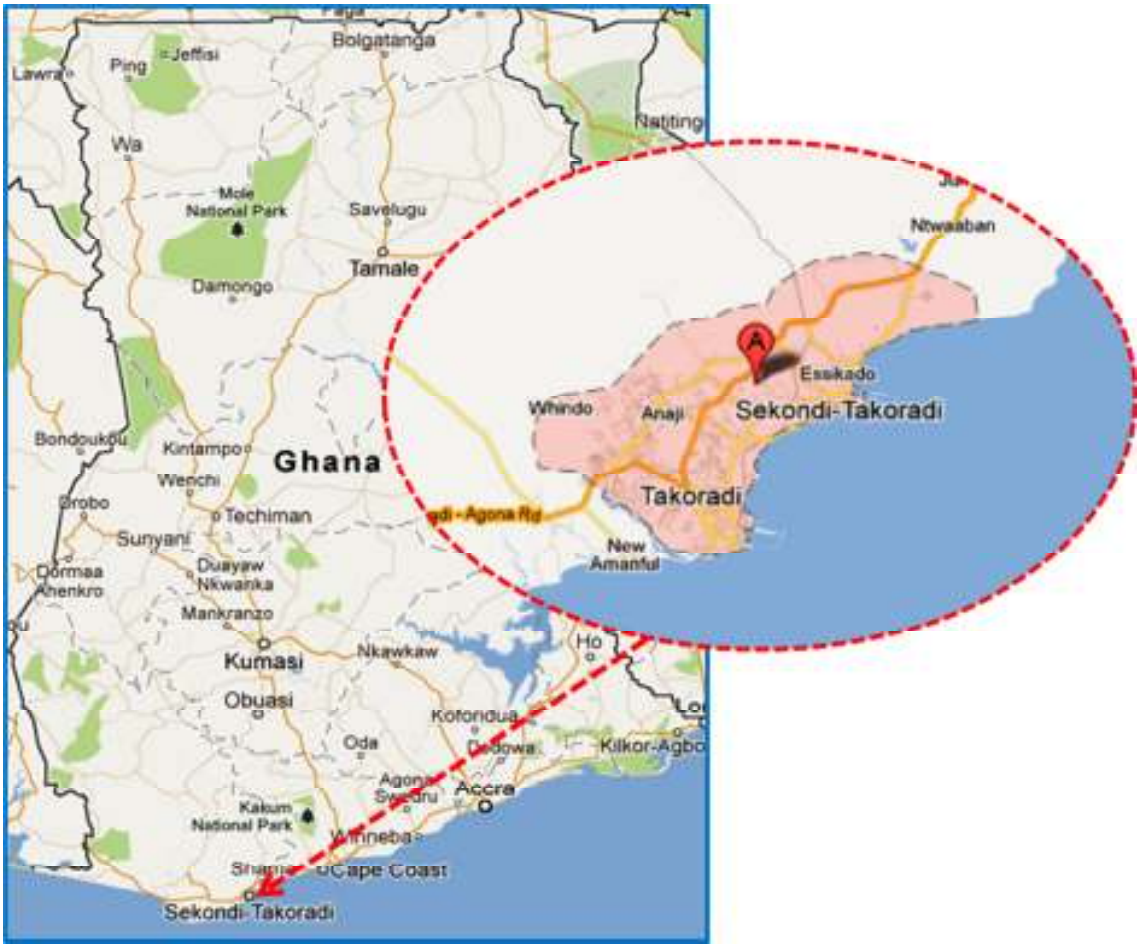



**Figure 1: Map of Ghana showing Sekondi-Takoradi Metropolitan Area (*Source: Google Maps 2013*)**

## 1.2.2 Overview of the Land Tenure System in Ghana

In order to understand the context of property tax and land leasing in Ghana, it is important to present an overview of the land tenure systems in the country. This is to appreciate the link and choice of property tax and land leasing (ground rent) as tools for financing urban infrastructure.

Land ownership in Ghana comprises a mixture of public, customary and private tenure systems. According to Kasanga and Kotey (2001), about 80% of all lands are customarily owned while public lands and private lands together constitute 20%. See table 1 below. The tenure regimes in the country are scattered all over and the 1992 Constitution categorises them into public lands, stool or skin[4] lands, family lands and private lands.

[4] Represented by what the chief sit on – in the south on a stool and in the north on animal skin

Public lands are lands compulsorily acquired by the state and vested in the president for the citizens while stool or skin lands are lands owned by a group of people with common clan or tribe lineage that are ruled by a chief and his council of elders (Kasanga and Kotey, 2001). The stool or skin lands are managed by the chiefs and the principal elders but sometimes can be vested by the state to give a dual ownership system if the chiefs do not manage it properly or there is a long dispute over it. This gives rise to another land ownership system called vested lands – is a form of land ownership where the power to transfer or dispose the land is vested in the state while the benefits accruing from such transactions goes to the land owning group (the stool/skin). Family lands on the other hand are lands owned by a particular family either through conquest, inheritance, gift, purchase or first discovery. Private lands are large tracts of lands owned by individuals but through inheritance most of them have transformed to family lands.

Legally, public lands, vested lands and stool lands cannot be sold except for a 99-year lease maximum. (Kasanga and Kotey, 2001 and Mabe, 2008). However, it is not clear whether family lands can be sold forever or not because the law is silent on that. Nonetheless the practice varies from place to place (while some grant freehold, others do not). For individual or private lands, the owner has liberty to dispose the land in perpetuity or for a maximum of 99 year lease.

In each of the land ownership systems, the bona fide owner decide how much he wants to lease out the land – usually at the market price – and fixes the ground rent payable by the lessee. According to the 1992 Constitution, 55% of the total revenue from stool or skin lands and vested lands are to be paid to the local government in which the land is located while the entire ground rent of state lands are for the central government.

**Table 1: Estimate of the Overview of Land Ownership Systems in Ghana**

| Type of Land Ownership | Proportion in the Country | Transfer of Ownership |
|---|---|---|
| Stool/Skin Lands | 70% | Lease |
| Family Lands | 11% | Lease or Outright Sale |
| State Lands | 10% | Lease |
| Vested Lands | 7% | Lease |
| Private Lands | 2% | Lease or Outright Sale |

***Source: Author based on Kasanga and Kotey 2001***

## 1.3 Problem Statement

The Local Government Act, 1993, Act 462 mandates the Metropolitan, Municipal, District Assemblies (MMDAs) to be planning and development authorities in their jurisdictions. It further empowers the MMDAs to generate revenues through various sources including property tax, betterment charge, market tolls, development charge, ground rent, royalties and building permit fees for the development of their areas.

As Ghana is increasingly urbanised, the resultant urban problems such as poor infrastructure, poverty, urban sprawl, land and environmental problems will continue to exist if pragmatic measures are not taken by authorities to tackle them. Population and urbanization has led to increase in poverty, poor water supply, poor infrastructure, poor waste and sanitation management in Sekondi-Takoradi (Owusu and Afutu-Kotey, 2010).

The STMA (2010) in its poverty map outlined serious problems that need immediate attention. According to the map, only a paltry 8% of the households in the city are connected to stand alone pipe or public sewerage systems while 12 communities have none. In terms of water supply, 20% of the households are connected to domestic water supply while 48% of the households have access to desirable water supply. It was indicated that 30 (representing 64%) communities are in high poverty zone due to lack of desirable water supply. Sanitation (public and household toilet facilities) facilities are insufficient. 78% of the households in Sekondi-Takoradi do not have access to desirable sanitation facilities. (STMA, 2010).

Also, the citizens' report card of Sekondi-Takoradi ranked water as the highest priority of need while basic education follows as second in the entire city (CHF International Ghana, 2012). However, the 4 Sub-metros comprising Takoradi, Sekondi, Essikado-Ketan and Effia-Kwesiminstim ranked them as follows (see table 2).

**Table 2: Urban Services in high need by Inhabitants of Sekondi-Takoradi**

| Sub-Metro | Rank of Priority | | |
|---|---|---|---|
| | 1st Priority | 2nd Priority | 3rd Priority |
| Takoradi | Water | Electricity | Education |
| Sekondi | Sanitation | Education | Road |
| Essikado-Ketan | Education | Water | Health |
| Effia-Kwesimintsim | Sanitation | Health | Education |

***Source: CHF International Ghana, 2012.***

These problems are mainly due to the weak infrastructure and services provision, inadequate funds to provide those services and low institutional capacity of the Metropolitan Authority. Critical amongst them is the lack of funds to handle the huge responsibilities of the Sekondi-Takoradi Metropolitan Assembly (STMA). (Owusu and Afutu-Kotey, 2010). It is important to note that these indicators stress the need for sustainable ways of financing the provision and maintenance of these infrastructure and services.

Though STMA is active in the provision of infrastructure and services, evidence showed that they are constraint in their delivery due to inadequate funding leading to lack of logistics and weak capacity (Kasanga and Kotey, 2001 and Owusu and Afutu-Kotey, 2010). In tackling the problems, the city authority has mostly resorted to the traditional sources of funding which includes transfers from central government, grants, internally generated funds (IGF), concessional and non-concessional borrowing. These sources are inadequate and unsustainable due to huge infrastructural gaps.

Over the past two decades of decentralization in Ghana, property tax (property rate) has been the main source (24% of IGF in 2004) of internal revenue due to its effectiveness and economic sustainability coupled with the fact that the other land related sources are difficult to implement or collect. Nonetheless, the amount generated over the years is not commensurate with the value of the land or the property which ultimately affects the financial capacity of MMDAs to provide basic infrastructure. (Mogues and Benin, 2012). It is insignificant compared to the Gross Domestic Product (GDP) of the country. For instance in 2004, IGF was only 1.8% of the GDP hence the 24% of IGF is insignificant (Osei et al, 2007). CHF International in collaboration with the STMA initiated a program in 2011 dubbed 'IncluCity' with the objective of increasing citizens' participation in local governance and increasing the STMA internal revenue generating capacity with emphasis on property rate to indicate its importance in urban management.

However, not much attention has been given to revenue from land leasing in the form of ground rent to finance urban infrastructure despite the 55% contribution from stool and vested lands. According to Boakye et al (2008), the city has per capita total revenue above the average of GH¢75,000.00 (US$ 37,600.00) however, this is still insignificant with regards to the current land values hence not enough to help solve the City's urban infrastructural problems.

Property rate in Ghana lacks the efficacy to capture land values because the basis is improvements only, it is not properly administered or its potency is not recognised. The land leasing system is the complementary land based instrument to actually capture land values. It is against this backdrop that the researcher is motivated to choose this 'Oil City' as a case study to find out how property tax and land leasing can be used as land value capture tool to finance urban infrastructure.

## 1.4 Research Objectives

To explain how property tax complements land leasing in capturing land values to finance urban infrastructure or services in the Sekondi-Takoradi Metropolis. It was aspired that the following specific objectives will be achieved;

- ∇ To explain how the land leasing and property works.
- ∇ To examine how property tax and land leasing captures land value.
- ∇ To explain how the value captured is used in financing urban infrastructure or services.

## 1.5 Research Question(s)

The research questions were formulated based on four (4) main dimensions for easy description, understanding and explanation. These comprised the legal, economic, financial and social which respectively dealt with the legal framework, land values, amount of revenues generated and public goods. For clarity and easy comprehension, the main research question has been broken down into 2 sub-questions before asking the specific questions.

### 1.5.1 Main Question:

To what extent does land leasing and property tax capture land values to finance urban infrastructure/services?

**Sub-questions:**

- ∇ How does land leasing and property tax capture land values?
- ∇ How does the value captured finance urban infrastructure/services?

#### 1.5.1.1 Specific Questions:

| | LEGAL | ECONOMIC | |
|---|---|---|---|
| LEGAL | a. How does property tax work?<br>i. What is the legal and institutional framework?<br>ii. What is the basis for the property tax assessment?<br>iii. How is the property tax assessment done?<br>b. How does land leasing system work?<br>i. What is the legal and institutional framework?<br>ii. What is the basis for calculating the premium and ground rent?<br>iii. How is land leasing system done? | c. To what extent does each of them captures land values?<br>i. Does it capture land values?<br>ii. How much is captured?<br>iii. What percentage of the land values is captured?<br>iv. How much is collected? | ECONOMIC |
| FINANCIAL | d. To what extent are revenues from both used to finance urban infrastructure or services?<br>i. Does infrastructure/services increase land values?<br>ii. Is that enough to finance urban infrastructure/services? | e. Which one has the higher potential to finance urban infrastructure or services? | SOCIAL |
| | FINANCIAL | SOCIAL | |

## 1.6 Scope and Significance of the Study

The scope of this research is categorised into theoretical and geographical scope. Theoretically, the research is centred around land value capture and the related concepts with particular emphasis on the instruments such as property tax and ground rent under land leasing. On the other hand, the geographical scope is pinned to Sekondi-Takoradi City in Ghana with particular emphasis on property owners, local authority and the property market.

This research has a variety of relevance in academia, policy and society. In the academia, this research will add to the existing scientific knowledge on the concept of land leasing, property tax and urban infrastructure. Specifically, between the two competing but complementary instruments. Also, it presented empirical data that could serve as source of reference to policy makers in the country and beyond to guide them in planning in that sphere of administration. Finally, the study brought to the fore societal needs and concerns on urban infrastructure, land leasing and property tax which could help authorities and the inhabitants.

## 1.7 Organisation of the Study

This research is categorised into five (5) chapters. Chapter one is the introduction which entails the background, profile and land tenure system of the study area, problem statement, research questions and objectives, scope, significance, organisation and limitations of the study. Chapter two is the state-of-the-art literature review of the land value capture, property tax, land leasing and urban infrastructure concepts around the world with a conceptual framework. The chapter three is the research methodology comprising the methods for analysing the objectives and operationalization of variables. In chapter four, data presentation, analysis and interpretation of field data were clearly mapped out. Finally, chapter five is the summary, conclusion and recommendations of the research.

## 1.8 Limitations of the Study

This research had some limitations including time constraints, inadequate funds and difficulty in retrieving certain data from the archives. Also, the researcher was limited with time to conduct a survey on property tax payers and land users to get a wider picture of the situation to validate the data from the governmental agencies. In addition, appointment for interviews and surveys were disrupted by the official duties of the interviewees whereas some appointments could not be made outside office environment. In the office environment, interview sessions were interrupted by clients.

# Chapter 2:

# The Concepts of Land Value Capture, Property Tax, Land Leasing and Urban Infrastructure in Retrospect

## 2.0 Introduction

This chapter reviews the concepts on land value capture, property tax, land leasing and urban infrastructure or services. It presents and analyses the academic debate around those concepts while highlighting on their relationships and key points in the context of this research.

## 2.1 Land Value Capture Concept

In order to understand the land value capture concept one fundamental question that needs to be asked is 'what drives land values or in other words what controls the property market? Classical economists are of the view that the main driver of land values is the interaction of demand and supply – the market. Based on the highest and best use theory, the property market allocates resources efficiently that lead to higher land values. Due to the uniqueness of the property market – immovable, localised, abstract, nature of transaction, segregated, deal with property rights/interest and legal dimension – it operate differently from other markets. Harvey and Jowsey (2004) argued that the property market is imperfect because of the high cost of transactions, lack of information, special motives apart from price, special features of the properties and fixity in supply. However, they pointed out that it is a free market albeit few government interventions.

Because of the imperfect competitiveness of the property market and market failure, public goods such as infrastructure and services cannot be supplied by the market. This is premised on the fact that landowners will rationally sell to the most lucrative land uses (highest and best use) while land users will demand land uses that can offer them highest return on their investment in land. Infrastructure or services cannot compete with other land uses such as shops because no one will be willing to pay for the higher price offered by those other uses because of its non-excludable, non-rival and merit characteristics. An action by government to correct this anomaly through public investments and change in land uses lead to the rationale of land value capture concept.

The concept of land value capture[5] (LVC) has a long history, the mention of scholars like John Stuart Mills, Adam Smith, Karl Marx and Henry George brings its memory to the fore. Mills (2001 as cited in Walters, 2012) in his 1848 treatise indicated that the ordinary growth of society increases the values of land of which the owners are wealthier without doing anything hence has no moral justification under the principles of social justice to enjoy such increments.

In an attempt to explain the concept, Smolka and Amborski (2000) asserted that all land policies are underpinned by it. According to them, capturing a part or whole of the unearned increment attributable to the city through varying instruments for the benefit of the public or city is what the

[5] Based on the Vancouver Action Plan (UN-Habitat, 1976), which states " *the unearned increment resulting from the rise in land values resulting from change in use of land, from public investment or decision or due to the general growth of the community must be subject to appropriate recapture by public bodies (the community)…*" [Recommendation D3 pp. 30].

concept is about. The authors acknowledged that some increments are also attributable to the private land owners, they however argued that such contribution is insignificant hence should be captured by the community. Though the authors argued that sharing the unearned increment with the community is a necessity, they catalogued three motivations for value capture including to deepen land value taxation, finance urban infrastructure and control land use. Walters (2011) on the other hand, argued that increment in value is as a result of both the public and the private landowner and each should be entitled to the value. However, the author agrees with Smolka and Amborski (2000) that the publicly created increment must be captured for the community and also pointed out that such step should be founded on the three ingredients thus public investment, changes in land use or regulation and general population growth resulting in increased demand.

Also, Walters (2012) clearly distinguished the concept from cost recovery approach. According to the writer, cost recovery approach is a specific public investment that has increased identifiable land values and a fee apportioned to such increment with no attempt to measure market value of the impact on the land. Land value capture is to share the benefit of the increment in value without necessarily linking it to public investments (Walters, 2012). Most of the arguments in favour of the concept in light of the three ingredients are strongly pinned on public investments followed by change in land uses or densification while the least is general population growth (Hong and Bourassa, 2003, Smolka and Amborski, 2000, Walters, 2011, McCluskey et al, 2013). This seems to be the foundation on which the arguments are in favour of government to capture land values from private land owners.

A plethora of literature on the various types of land value capture instruments are available so this research will not delve into them. However, it is important to highlight on key instruments used across the world. The land value capture instruments at the local government level include land and property taxation, land leasing, tax increment finance, betterment charges, developer exactions, development fees and permit fees (Walters, 2011, Hong and Bourassa, 2003, Smolka and Amborski, 2000, Hong and Ingram, 2011). In Ghana, while some of these land-based instruments are effective, others are not. The effective ones are property tax and land leasing hence the discussion in this research focused on them.

## 2.2 Land Tenure Systems around the World

Payne (2000) pointed out that prior to his review of land tenure systems, a UN study (1973) had identified inter alia formal and customary land tenure systems to the neglect of the informal or unauthorised tenure systems. The author tried to lay a solid foundation and contextualize the land tenure system by clearly and succinctly defining land tenure and property rights. According to Payne (2000) land tenure is the way land is owned with the perceived relationship among people whereas property right[6] is the interest in land that is recognisable lawfully or customarily. Before categorizing the land tenure systems, the author acknowledged the complexity of land ownership systems across the world just as Hong and Bourassa (2003) pointed out that it is 'intractable' because of the different viewpoints – economic, social, ideological and political – that are ascribed to it. Nonetheless, Payne (2000) underscored the existing land tenure systems common

[6] Property rights mostly referred to as 'bundle of rights' denoted as 'bundle of sticks' that can be separated (in legal literature).

to all especially developing countries[7] to include (a) customary tenure, (b) private tenure, (c) public tenure, (d) religious tenure and (e) non-formal tenure categories.

(a) Customary Tenure: A tenure regime where land is governed and ruled by customary traditions with the allodial[8] title vested in the traditional leader or head who could be a chief, priest or family/clan head. In this regime land is held by the traditional leaders on behalf of the land owning group. It is said to have evolved since civilization where land is believed to be sacred hence the leaders hold it for the current generation and the generation yet unborn to ensure its sustainability. This is predominant in Africa including Ghana, Kenya, and Middle East.

(b) Private Tenure: Private individuals own unrestricted interest in land in perpetuity. This regime recognises the private individual property rights with all the bundle of rights. Capitalist countries such USA where private property rights is founded practices this regime while many other countries like Ghana, Netherlands and part of UK also have it.

(c) Public Tenure: A tenure regime where all the interests are vested in the state forever or without restrictions. This tenure regime seeks to address the problems associated with the private tenure to make land more accessible for all, affordable and for public purposes. Almost every country has it especially socialist countries such as Cuba and Russia. This regime also extensively practiced other countries including Ghana, Netherlands, Nigeria, China and Ethiopia (Hong and Bourassa, 2003).

(d) Religious Land Tenure: Land held for religious purposes especially in Islam. There are four (4) kinds comprising [i] *Waqf* – land held for God (Allah), [ii] *Mulk* – private lands protected by law [iii] *Min* – land held by the state and protected by law and [iv] *Musha* – land held by the community. For example *Waqf* is predominant in Bagdad and some Islam dominated countries.

(e) Non-Formal Tenure Categories: These are forms of tenure where the interest or rights subsisting in the land are either not recognised by law or customary rules (considered as illegal or unauthorised) but exist as a result of circumstances. This could be due to bureaucratic bottle necks in the formal system or affordability issues. They include squatters, tenants, unauthorised owner, licence, pavement dwellers, caretakers and illegal tenants. This is prevalent in the urban areas across the world. (Payne, 2000).

## 2.3 Concepts of Property Tax

Property tax variously called property rate, land value tax, land tax or real estate tax is one of the oldest taxation and the most widely used across the world. Dye and England (2009) asserted that it is as old as civilization and illustrated that it was used in Egypt and the Roman Empire to build temples and palaces. In a similar vein, Andelson (2000) demonstrated how old property tax is using Leviticus in the Bible to explain it. The definitions of property tax may not be so essential to be discussed but to understand the debate it is important to clarify certain issues. Generally, it is an annual tax levied by local government on real or immovable property usually based on the value of the property (Gerald and Kathleen, 2005). Property tax is unique in that it is conspicuous, inelastic and immovable (difficult to avoid). The tax is very visible to tax payers unlike income tax or sales tax that is hidden. Its inelasticity nature stems from the fact that it does

[7] As that is where the author has more evidence on the tenure systems.

[8] Allodial title refers to the freehold or paramount or highest interest (almost equivalent to absolute bundle of rights) in land.

not respond easily to change over time while the tax burden cannot be shifted geographically making it difficult to evade. (Slack, 2013).

The rationale of property tax from most of the authors' views is linked to the land tenure system and the property right regime in that particular jurisdiction. Most of the authors agree that the tax is good source of revenue for local government (Walters, 2011, Walters, 2012, Andelson, 2000, Dye and England, 2009, Ingram and Hong, 2010). Dye and England (2009) indicated that it accounted for more than half of local revenues in United States and Australia. It has accounted for 23% of the total internally generated funds (IGF) revenue in Ghana between 1994 and 2004 while the one in 2004 alone accounted for 24% (Mogues and Benin, 2012). The IGF for 2004 was 1.8% of the Gross Domestic Product (GDP) (Osei et al, 2007).

Nonetheless most authors pointed out that it is controversial due to the effects of the different components which form the basis. The controversy has to do with equity and fairness as well as differentials in the components (Dye and England, 2009, Kitchen, 2013). Slack (2013) shared this view and indicated that it is unfair because it does not consider the ability to pay and unrelated to the benefits. Despite the controversy, property tax is still seen as sustainable and stable source of revenues because it is economically efficient, reduces speculation, predictable and difficult to avoid (Kitchen, 2013, Walters, 2012, Dye and England, 2009).

In any case, they all seem to toe a certain direction and categorized property tax into either benefit tax or wealth tax. If property tax is to finance municipal services then the view is seen more as a benefit tax hence tax payers should enjoy proportionate services. On the other hand where property right is seen as social good, then the value of land arising from the services provided by the municipality must be shared with the community because the community created the wealth hence entitled to it from the rich (landowners). In this vein the property tax is seen as wealth tax. (Walters, 2011, McCluskey and Trinh, 2013).

According to Walters (2012) for property tax to thrive, four (4) conditions must be met and thus include (a) property right ownership system, (b) forms of recognising those ownership rights, (c) the maturity of the property market and (d) institutional and administrative capacity. The author further stressed that there must be training of at least three (3) categories of stakeholders including policy makers, tax administrators and land developers to make it work.

### 2.3.1 Property Tax Base

In order to appreciate how property tax captures land values, it is important to discuss the tax base into details. Generally property tax base is used to refer to a tax or levy on only land, only improvements/buildings or both. However, land value tax is mostly used when only the land is taxed, whereas property tax[9] connotes taxes on only the improvements or buildings. Tax on both the land and improvements is usually denoted as land and property tax or property tax. (Walters, 2011, Walters, 2012, Andelson, 2000, Dye and England, 2009).

Property tax base in simple terms seek to answer two basic questions thus 'what should be included in the taxation and how it should be included?' Broadly, it is defined by law and usually includes immovable property based on capital improved, capital unimproved and annual rental value or non-value based approaches. It helps determine the revenue base of the taxing authority.

[9] Also, refers to as improvement tax or tax on improvements in this case.

The basis on which the tax is applied varies according to the context of what property tax[10] constitutes – land only, improvements/buildings only or both. The choice of the tax base is dependent on a lot of factors including the legal framework of the country, institutional capacity, property right regime and property market conditions. While some countries tax only land (Australia, New Zealand, Ukraine and some counties in U.S), countries like Tanzania and Ghana tax only improvements and other countries like UK, Germany, Japan, Chile and Colombia tax both land and improvements. (Kitchen, 2013, Franzsen and McCluskey, 2013, Dye and England, 2009, Slack, 2013).

#### 2.3.1.1 Tax on Land Only and Basis of Assessment

Henry George is the main proponent of taxing land only when he advocated for the single tax system in Pennsylvania, USA (Bourassa, 2009). Taxing land only is what is referred to as Land Value Taxation. The exponents of the land value taxation argue that it is the only tax that does not distort the land market but rather encourages more efficient use of land, stimulate rapid economic development, reduces land speculation and promotes more compact urban development (Dye and England, 2009). Nonetheless, it has drawbacks including fairness and equity issues as well as assessment problems. The critics of this tax base argue that excluding the improvements is inequitable because there is a latent value of improvements embedded in the total land value (Franzsen and McCluskey, 2013).

The basis of assessment mainly comprises unimproved capital value, split-rate system and annual rental value depending on the country and context. For instance, Australia uses rental value while Germany uses capital value and split-rate system. The value of the land is ascertained by determining the site value or unimproved value of the land as if it was 'virgin' or pure land. However, the challenge with this method is how to ascertain the value of unimproved land if such land is developed. In such case the valuers will have to rely on comparative sales in the neighbourhood and even that the quantity and quality of such information may not be reliable. (Kitchen, 2013, Franzsen and McCluskey, 2013). On the other hand, where market data are not easily available, the non-value based approach such as area based or hybrid system may be adopted. Table 3 below shows a summary of the tax base and the general basis of assessment, method of valuation and some country examples.

#### 2.3.1.2 Tax on Improvements/Buildings Only and Basis of Assessment

Taxing on improvements is based on the building value including plant and machinery. This tax base has not gained much favour as the Georgists advocate against its implementation. (Franzsen and McCluskey, 2013) ascribed reasons such as it does not encourage efficient use of land, it is complex, costly and time consuming. Amidst these criticisms, they acknowledged that it is buoyant, politically convincing and where the property market is not very active, it is useful. The method of valuation is usually depreciated replacement cost nonetheless it can still be assessed on annual rental base like in Ghana or capital improvement value or non-value based approach. The traditional methods of valuation such as income, comparative and cost (depreciated replacement cost) method could be used depending on the context and capacity of the taxing authority. (Bourassa, 2009, Franzsen and McCluskey, 2013). See table 3 below.

[10] Property tax is used to refer to the general context of both improvements and land. Where the meaning refers to only the improvements it will be indicated.

**Table 3: Tax Base Scenarios and the Basis of Assessment for Property Tax**

| CASES or SCENARIOS | CASE 1 (Land) | CASE 2 ( Improvements) | CASE 3 (Land & Improvements Together) | CASE 4 (Land & Improvements Separately) | CASE 5 (Land with Improvements) |
|---|---|---|---|---|---|
| **TAX BASE (On What)** | Land Only | Improvements Only | Land & Improvements | Land & Improvements Separately (Split-rate System) | Land with Improvements |
| **TAX BASE (How Should it be Taxed/Measured)** | Land Only | Improvements Only | Land & Improvements together but with single rate | Land separately from Improvements with different rates | Land differently from improvements but one rate |
| **BASIS OF ASSESSMENT** | + Unimproved Capital Value<br>+ Annual Rental Value | + Annual Rental Value<br>+ Building Value<br>+ Capital Improved Value | + Unimproved Capital Value<br>+ Annual Rental Value<br>+ Building Value<br>+ Single Rate<br>+ Capital Improved Value. | + Unimproved Capital Value<br>+ Annual Rental Value<br>+ Building Value<br>+ Split-Rate<br>+ Capital Improved Value. | + Unimproved Capital Value<br>+ Annual Rental Value<br>+ Building Value<br>+ Single Rate<br>+ Capital Improved Value. |
| **METHOD OF VALUATION** | + Market Value (Income/expenditure, Comparative and Residual Method).<br>+ Non-Value Based Approach (Area Based, Banding and Hybrid). | + Market Value (Income/expenditure, Comparative and Depreciated Replacement Cost Methods).<br>+ Non-Value Based Approach (Area Based, Banding and Hybrid). | + Market Value (Income/expenditure, Comparative and Depreciated Replacement Cost Methods).<br>+ Non-Value Based Approach (Area Based, Flat Rate, Banding and Hybrid). | + Market Value (Income/expenditure, Comparative and Depreciated Replacement Cost Methods).<br>+ Non-Value Based Approach (Area Based, Flat Rate, Banding and Hybrid). | + Market Value (Income/expenditure, Comparative and Depreciated Replacement Cost Methods).<br>+ Non-Value Based Approach (Area Based, Flat Rate, Banding and Hybrid). |
| **MOST PREFERRED VALUATION METHOD** | + Comparative or Residual. | + Depreciated Replacement Cost or Rental | + Comparative if both owned by single entity.<br>+ Residual or rental if own separately. | + Comparative or Residual for Land.<br>+ Depreciated Replacement Cost or Rental for Improvements. | + Comparative, Residual or Area Based for Land.<br>+ Depreciated Replacement Cost or Rental for Improvements. |
| **EXAMPLE** | Ukraine, Australia, New Zealand and Vietnam | Ghana, Nigeria and Tanzania | Namibia, Grenada, Japan, Chile, UK and Colombia | Namibia, South Africa, Australia, and Swaziland | Mexico City, Colombia and Latin America |

***Source: Author (based on Kitchen, 2013; Franzsen and McCluskey, 2013 and Morales, 2013)***

#### 2.3.1.3 Basis of Assessment of Tax on both Land and Improvements

Taxing on both land and improvements is the most preferred compared to the land only or building only especially if the rates are different. The tax assessment could be single rate or split-rate system. Flat or single rate is refers to when both land and improvements are taxed on the same rate while differential rate or split-rate system means each of them are taxed separately with different rates. For example South Africa, Swaziland and Australia have separate rates for land and improvements. Different bases of assessment could also be applied for example when capital value system is used for land and annual rental value used for improvements as in New Zealand, Namibia, Kenya and Japan. While any of the traditional methods of valuation could be used, non-value based approach could also be adopted. For instance India, Slovakia and Czech Republic uses area based approach while UK uses banding[11] for residential properties. (Franzsen, 2009, Franzsen and McCluskey, 2013, Kitchen, 2013, McCluskey and Franzsen, 2013). The various scenarios are summarily put in Table 3 above.

### 2.3.2 Property Tax as a Land Value Capture Tool/Instrument

According to Bourassa (2009), basing his argument on Henry George's single land tax system, property tax is a very good value capture tool. Many other authors (Walters, 2011, McCluskey and Trinh, 2013, Franzsen and McCluskey, 2013, Dye and England, 2009) argued in the same line because it does not distort the market. De Cesare, (1998) indicated that local authorities in Porto Alegre, Brazil used land value taxation to reduce land speculation, stimulate urban land occupation and development, reduce housing deficit, recover land values generated by the public because it was fair and promoted social and economic growth.

Also, tax on both land and improvements have been tipped by most authors as a good land value capture tool. Especially where a split-rate system is used and tax on land is higher, it has been seen as the best (Franzsen, 2009).

However, many writers (Walters, 2011; Franzsen, 2009 and Dye and England, 2009) see tax on improvements as a cost recovery tool than LVC. Walters (2012) thinks that taxing on improvements only help to defray part of the cost of services supplied to such improvements especially when non-market based approach is used in the assessment. This assertion is nevertheless full proof, in that the value of the improvements includes the land and it is difficult to utterly separate the two values in valuation.

Franzsen and McCluskey, (2013) pointed out that one of the disadvantages of determining the values of vacant land is when the area is built up. Also, in valuation principles the value of the land has an embedded value of the building. Therefore the fact that the tax is on the improvements does not make it a bad land value capture tool but dependent on the approach (mode of assessment), type of property, age and size as well as the neighbourhood characteristics. For instance newer properties tend to have higher unit area values than their equivalent land values. In addition, land size (plot) is fixed as compared to building size because the total area of the building can be increased vertically while that of the land cannot unless it is done in the form of the improvements. So advocating for the removal of taxing[12] on improvements implies land values gained vertically will be lost to private landowners since only

[11] Banding refers to the categorisation of properties into groups (bands) and assigning a range values to each band based on their capital or rental value (Franzsen and McCluskey, 2013).

[12] As proposed by Henry George to tax only land.

a small portion will be reflected in the land size horizontally. In view of this, a split-rate tax system balances the extremes between land only and improvements only to capture the land values attributable to the community. (Franzsen and McCluskey, 2013).

## 2.4 Land Leasing

Prior to discussing land leasing, it is vital to briefly present the history of the term leasing in order to appreciate land leasing. Historically, the term leasing was largely limited to rentals of real estate until the 1950s when the term was extended to movable properties (Grenadier, 1995). This new dimension created ambiguity in distinguishing movable and immovable property lease hence necessitated the introduction of the term land leasing to refer exclusively to rentals of immovable/real estate property or land (Grenadier, 1995).

Land leasing system is directly hinged on the land tenure systems hence it is important to understand land leasing from that perspective. From the real estate viewpoint, the interests subsisting in land or property comprises freehold (fee simple), leasehold, freehold ground rent and mortgage (Harvey and Jowsey, 2004). The authors explained freehold to mean an interest in land with full financial risk of ownership, which could be held by owner occupier or investor. In other words it is the unrestricted interest held in perpetuity. Leasehold is a grant of part of the rights held by the freeholder for a specific term (fixed years) in exchange of a capital sum (premium) and/or regular fixed income (ground rent). On the other hand freehold ground rent is the annual payment of long leases for a specified period usually on undeveloped site . However, it can also be leased on developed sites with the rent relatively lower than the value of the real property (land and improvements). A mortgage is a loan or lien on the property for the repayment period of the loan. (Harvey and Jowsey, 2004). The authors categorised these based on the recognised interest perhaps in formal property market without recourse to which category of entities or individuals owned them. Nonetheless, it is important to consider the interest in land cognisance of the social, economic, political and cultural connection to land because they affect transactions in land. Refer to section 2.2 above for the discussion on land tenure systems.

Leasehold can be created from any of the above categories (as discussed in section 2.2) of tenure except non-formal tenure because it has no legal support. It follows that lease coined from customary, public, private and religious tenures are named customary, public, private and religious leasehold respectively. The term land leasing is therefore used to refer to the embodiment of any of these arrangements where lease is granted from any of these categories. Public land leasing is granted by the state, private land leasing granted by the bona fide freeholder while customary land leasing is granted by the traditional leader(s) vested with such power to transfer. It is important to clear the misconstrued notion that land leasing refers to only public land leasing thus a lease emanating from the state but rather can be any of the above.

The conditions and nature of any leasehold – be it public, private or customary – is dependent on the legal, cultural, historical, political and economic connotations attached to the land as well as the specific lease contract (terms, conditions and covenants). Irrespective of the category, certain common features prevail namely fixed term of years, can be renewed after it elapses, transfer of land rights and payment methods – one time or annually. (Hong and Bourassa, 2003 and Hong 2013).

The term of years of a lease is not uniform but varies from country to country. For example, in the Netherlands after the 2007 land regulation, the minimum lease term is 6 years as against the previously 1 year minimum term (Slangen and Polman, 2008). However, the generally evident

term of years ranges from 50 to 99 years (Hong and Bourassa, 2003 and Hong 2013). The lease could be short or long lease. A short lease could have a minimum term of three (3) years or five (5) years depending on the land use (Elam, 1975 and Goodacre, 2003), while a long lease could have longer term from 50 years to 99 years maximum (Hong and Bourassa, 2003 and Harvey and Jowsey, 2004). The lessee has rights such as right to assign, sublet and mortgage the lease for the subsisting unexpired term subject to the terms, conditions and covenants of the lease.

From public leasing perspective, Hong and Bourassa (2003) favoured Dale-Jonhson (2003) and Brzeski's (2003) argument that long term leases with an option to renew and claim the residual value of the improvements is better while they agreed with Strong (2003) and Baxter (2003) contrasting argument that short term leases with flexibility to repossess is also better (Dale-Jonhson and Brzeski, 2003, Strong, 2003, Baxter, 2003). From the forgoing arguments, Hong and Bourassa (2003) clarified that the point should not be whether long or short leases but which of them stimulate higher land values as well as captures it. From the authors stance, long term leases is preferred if the private involvement stimulate higher land values hence Dale-Johnson and Brzeski's (2003) argument holds. On the other hand, Strong (2003) and Baxter's (2003) argument will be valid if government involvement and management of the land is vital to stimulate land values. Concluding their view of the two sides, Hong and Bourassa indicated that both can coexist provided they contribute to the future land value increment that can be recaptured. This line of argument can be extended to the other forms of leasehold systems.

Hong (2013) discussed two types of leasehold systems based on mode of payment. He classified the public leasehold system into premium system (also called leasing fee) and land rent system. The term premium system is used when lump sum or capital value of the land is paid for the subsisting term whereas land rent system refers to when the lease is paid by the lessee on annual basis only for the duration of the lease. For instance Canberra, Australia, Israel and China use the premium system while Ukraine, Russia and Sweden practice land rent system (Hong, 2013, Hong and Bourassa, 2003). However, there are also cases where both exist as pointed out by Harvey and Jowsey (2004) earlier. Needham (2003) pointed out that such combination does not lend a clear distinction between the premium and ground rent system. Netherlands and Ghana have both the premium and land rent systems. Though these authors discussion is centred on public leasing, the other forms of leasehold system – customary, religious and private – operate on the same principles but of course with few variations to suit the context.

### 2.4.1 Basis of Calculating Premium and Ground Rent

The basis of calculating premium and ground rent is the market value of the land capitalised over the leased period. According to Harvey and Jowsey (2004) the price of land could be economic value or commercial value. The authors explained that economic rent/value is the rent/price/value the land commands when put to its highest and best use while commercial rent/value is the rent that a land commands in its present use thus the actual value or rent leased out. In other words, economic value is the future use value while commercial value is the current use value. From the authors view, the value of the former is preferred since it put the land to its most profitable use.

The market value of the land could be arrived at an arms-length negotiation between parties, public auction, bidding or fixed value based on the property market information or professional valuation analysis. Needham (2003) pointed out that mere arms-length negotiations do not reflect the full market value (highest and best use value) as one party may be disadvantaged (especially the lessee) because of the nature of the property market. Deng (2005) and Hong and Bourassa

(2003) collaboratively illustrated that Hong Kong and China have been able to realise almost full market value using public auction system.

Needham (2003) demonstrated how Netherlands arrive calculate the premium. The residual method is used to do the calculation. This is shown in the Table 4 below.

**Table 4: Summary of the Calculation of Land Rent**

| Mode of Payment | Premium | Ground Rent |
|---|---|---|
| Undeveloped Land | Present capital value of the land (H) | $\frac{H}{\text{Discount Factor}}$ |
| Developed Land (Both Land & Improvement Value = A) | Capital value of A | - |
| Developed Land (Improvement Value = B) | Capital value of B | - |
| Land Rent | Capital value of (A – B) | $\frac{(A-B)}{\text{Discount Factor}}$ |

***Source: Needham, 2003***

## 2.4.2 Land Leasing as a Land Value Capture Instrument

Hong and Bourassa (2003) argued that land leasing has great potential to capture land values especially public land leasehold systems. In their view, land values attributable to the community at large can be recaptured through premiums or ground rents. According to them the potential is however not fully realised because the premium or ground rent is very low relative to the value of the land. Hong (2013) emphasized that this is partly so because land rent or ground rent is often misconstrued to mean land tax in practice especially in public leasehold system. While ground rent is payment for the use of the land, land tax is form of property tax (land value tax) for the provision public infrastructure. It is important to note that this problem is not evident in the other categories of leasehold because the landowner (freeholder) is different from the taxing authority unlike public land leasing where the state is seen as both the landowner and the taxing authority.

Deng (2005) indicated that land leasing in China is a good value capture tool while Bourassa and Hong (2003) catalogued other potentials of public land leasing as urban infrastructure financing, promote economic development and promote equitable distribution and access to land. In similar vein if government capture land values in either customary or private leasehold systems, it can serve the same purposes.

## 2.5 Complementing Property Tax with Land Leasing

Property tax and land leasing coexisting is contradictory especially in public leasehold system. Hong (2013) acknowledged the contradictory nature of the two instruments in practice though they are different in principles. However, the two do not necessarily conflict in whole but only components of it. There is not much problem when property tax is levied on improvements only but rather when it is levied on land. Also, not much of a problem if land leased is paid on the

capital value (premium) because the lessee must have agreed on the premium knowing the property tax (land value tax) obligation. Ground rent on the other hand when revised sometimes coincide with the land value tax that can lead to double burden on the land user. For example Hong (2013) quizzed the burden of land value tax and land rent or ground rent when the owners of the improvements and land are different. He further argued that this has ripple (capitalization) effect on the capital value of the land hence will affect the premium. It is clear from his line of argument that public land leasing coexisting with property tax (taxes both land and improvements) will be difficult unless there is a trade-off to cater for the effects. However, other forms of land leasing could coexist with property tax in similar vein albeit few effects because the taxing authority is different from the landowners.

## 2.6 Relevance of Urban Infrastructure and Services in Economic Development

Fulmer (2009) in an attempt to explain infrastructure emphasised that the definition of the term is very crucial as it lays the foundation for further discussion of the subject. There is no standard widely accepted definition but certain common ingredients are necessary in defining infrastructure. The term infrastructure is the totality of the systems, physical assets and facilities that are interconnected to meet societal needs (Fulmer, 2009). Services are the components of infrastructure that are visible (physical). It enables society to function because it improves the standard of living and facilitates the production of goods and services. Infrastructure could be hard (transport, energy, water supply, electricity and solid waste) or soft (social – educational and healthcare facilities, cultural and institutional). (Fulmer, 2009). Infrastructure can be undertaken at national, regional or local level however in the context of this research infrastructure at city or urban level are of the great emphasis.

Urban infrastructure is sine qua non to city development. Urban infrastructure and services by their nature are public goods and cannot be provided by the market because its use will be competed away with the highest and best land uses as landowners tend to be destined to profits. City authorities therefore intervene to provide these infrastructure and services for their inhabitants. Due to the limited financing options and nature of investment in infrastructure and services – capital intensive, large volume, long term financing and constant operation maintenance – municipalities are unable to meet their budget. For instance American cities have to deal with the fiscal shortfalls by reducing spending (Ingram and Hong, 2010). There is infrastructure gap in cities. Estache (2010) presented evidence on the infrastructure needs using the gaps in power/electricity, energy, water and sanitation, transport and telecommunication. According to him most countries are poor because they do not have basic infrastructure as the gap is wider (Sub-Saharan Africa seen as the poorest region in the world). He pointed out that electricity supply gap is 88% in rural areas and 42.5% in urban areas while transport gap is 60% in Sub-Saharan Africa. (Ingram and Hong, 2010, Estache, 2010).

City authorities require more sustainable forms of financing and not the traditional sources – intergovernmental transfer, loans and grants finance urban infrastructure and services. The participants of the 2009 Lincoln Institute of Land Policy (LILP) Conference on municipal revenues noted that [1] there is no single or fast way for municipal finance, [2] property tax should be strengthened to increase revenue because it is sustainable [3] long term infrastructure should be financed by public debt and [4] intergovernmental collaboration is very essential in municipal revenue generation. In that conference participants were optimistic that land based financing option is preferred but should be complemented by other sources of financing. (Ingram and Hong, 2010).

### 2.6.1 Land Based Municipal Financing

The challenges in municipal urban infrastructure financing could best be tackled through land based financing options. Peterson (2008) suggested that municipalities can finance urban infrastructure through public land leasing. According to the author land based financing is very vital because it complements the traditional options as well as makes the urban market more efficient.

Land based financing in urban infrastructure is increasingly taking centre stage in developing countries (Peterson, 2008). It is categorized into developer exactions, value capture and land asset management (Peterson, 2008). Developer exactions refer to the arrangement whereby the developer is asked to construct public infrastructure aside the one provided on site. The developer is usually required to build or finance part or all the cost of the infrastructure in exchange for land. For instance, in Cairo, Egypt developers were required to invest US$1.45 billion in infrastructure in return for desert lands (Peterson, 2008). In land asset management financing option, the public sector exchanges its assets (under used or vacant land) with the private sector for public infrastructure.

Value capture form of financing involves betterment charge, land leasing, property taxation and land sales. Peterson (2006) maintained that there are several ways that municipalities can capture value – land leasing, sale of development rights, betterment charge – but argued that land sales or land leasing has advantage over betterment charge and property tax. While some of the value capture instruments provide upfront revenues – land leasing (premium), land sales, CEPACs[13] and betterment levies – others such as property tax and ground rent (land leasing) provides stream of income (Peterson, 2008). For instance, public land leasing (premium) in China and CEPACs in Sao Paulo, Brazil provided huge upfront revenue while ground rent in the Netherlands and property tax in Colombia provided streams of income for the government (Hong and Bourassa, 2003, Sandroni, 2009, Peterson, 2009).

Despite the above potentials of the land based financing of urban infrastructure some risks are apparent. According to Peterson (2008), these include volatility of the property market, government may overuse the developer exactions in serious financial need and secrecy of land transaction obscures transparency and accountability.

Based on these Peterson (2009) concluded that land based financing alone cannot finance urban infrastructure (capital and operation) but should be supported by other forms of financing. Vetter and Vetter (2011) conducted a research in Brazil in some municipalities and concluded that most of them are performing better in infrastructure investment because of the land based financing instruments – property tax, transfer tax, transfer of development rights, CEPACS and land readjustment.

It is worth noting that the urban infrastructure finance is crucial and for municipalities to be self-sustaining, then land based financing will be important in that direction. It follows logically then that land value capture is the tool to sustainable, stable and efficient way of financing urban infrastructure.

[13] Sale of additional development rights in Brazil (Sandroni, 2009).

## 2.7 Urban Infrastructure and Land Values

Public investments especially infrastructure and services have mostly influenced land values – positively, neutrally or negatively. Many authors (Peterson, 2006, Peterson, 2009, Marciel, 2009, Mendieta et al, 2007 and Sandroni, 2009) have argued in favour of positive impact on land values while a few literatures supports the neutral or negative impacts. For instance, Maciel (2009) found out that the 'Rodoanel' investment (a ring road or beltway around the city) in Sao Paolo, Brazil increased land values towards the west of the 'Rodoanel' while land values declined at the eastern side. Most of the literature that support the increase in land values attributable to public investments are centred around transportation infrastructure. Mendieta et al (2007) revealed in a study conducted on the TransMilenio Mass Transit in Bogota, Colombia that land values have greatly been increased by the project especially those within close proximity.

McDonald and Osuji (1995) also presented empirical evidence on how residential property values have increased in Chicago due to improved transport system. The study revealed that properties within 1.5 mile radius vicinity have been increased by 17% in 1990 due to improved rapid transit line.

Jaeger (2012) demonstrated similarly in a paper that illustrates the determinants of urban land values in California cities. Based on economic model (opened city model and closed city model)[14] approach, Jaeger (2012) found out that there is a strong influence of remoteness and amenities on land values in the opened city model while population and income per capita greatly influenced land values in the closed city model. The author further showed that the elasticity of population and income per capita to land values is 0.9. The author concluded that remoteness from city centre and availability of amenities in the city offers more explanation to positively influence land values. It is worth noting that amenities refers to the public infrastructure and services in the city.

In a similar vein, Leggett and Bockstael (2000) used the hedonic model to portray that water quality increased land values of properties within close proximity to the water infrastructure or services in Maryland. However, the authors acknowledged the negative environmental impacts on property values and considered that in their methodology. Property values were positively and significantly affected by improvements in water quality hence the study concluded that property owners in the vicinity were willing to pay high land price to enjoy such benefits (Leggett and Bockstael, 2000).

## 2.8 Conceptual Framework

The review of land value capture, property tax, land leasing and urban infrastructure concepts has provided a foundation for a conceptual framework. From the literature, two schools of thoughts have been identified (viz. economics and land value capture) to influence land values. The economics theory seeks to liken the land values to the pure interaction of demand and supply while the land value capture associate land values purely to public investment, change in land use and general population growth. Based on the land value capture theory which most authors favours, a conceptual framework has been formulated for this research as shown in figure 3 below.

[14] According to Jaeger (2012), the closed-city model considers population and income as exogenous determinant of market outcome while the open-city model deals with endogenous factors.

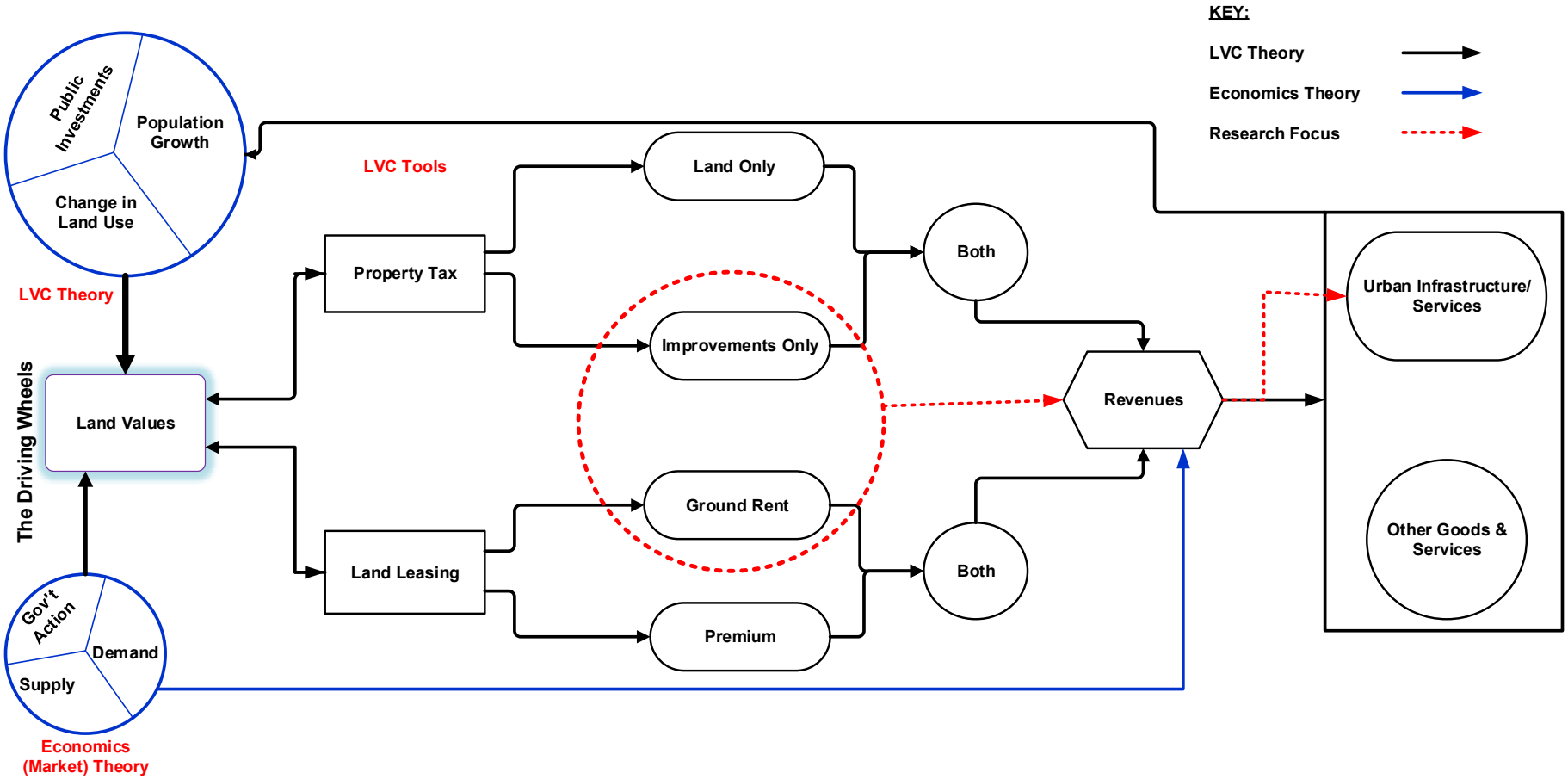



**Figure 2: Conceptual Framework (*Author, 2013*)**

## 2.9 Conclusion

After reviewing the literature on the concepts, it is important to conclude with key highlights. The foundation on which property tax or land leasing thrives is closely hinged on the legal and institutional framework as well as the land tenure regime of the country. It was unravelled that the basis of property tax could be on land or improvements. It was shown that taxing on improvements only does not capture land values. On the other hand, in land leasing the basis of assessing ground rent or premium is market value (current use value or future use value) usually through arms-length negotiation, public auction or fixed amount (administrative). Because taxing on improvements does not capture land values in principles and coupled with the argument that land leased through arms-length negotiation do not also capture enough land values, it was found out that property tax could be combined with land leasing to generate more revenue. Also, in a similar vein, land leasing could substitute property tax when it is based on improvements only to properly capture land values. Provision of urban infrastructure and services have mostly increased land values hence offers the strong justification for public authority to capture land values to finance either the capital cost or operation and maintenance cost of such investments.

Finally, the literature also revealed that urban infrastructure and services can only be financed sustainably through land-based instruments such as property tax and land leasing.

# Chapter 3:

# Research Methodology and Operationalization

## 3.0 Introduction

This chapter presents the research methodology adopted, the rationale behind the choice, the selection of respondents/interviewees and how the data collected was analysed. It further translates key concepts into workable variables that were validated using different instruments.

## 3.1 Operational Definitions of Key Variables

Based on the conceptual framework espoused in chapter two, key variables such property tax, land leasing and urban infrastructure or services were identified. These variables were technical hence difficult to operationalize unless translated to a layman's understanding using some indicators. However, before these key variables were defined, it is important to clarify the technical words used in the research question. The word 'capture' referred to any lawful means that the government used to get money from land or landed property. In other words, it is the gathering of revenues from land through leasing, sales or taxation by the government or public authority. 'Land values' on the other hand is the market value or price of either vacant land or developed land. It also referred to the price agreed and paid on a piece of vacant land or developed land between the parties concerned. In the context of this research, 'finance' is used to mean any form of payment made out of the money generated by the two instruments or any budget allocation made out of the two instruments either fully or partially. (Oxford Dictionary, 2005 and Encarta Dictionaries, 2009). The operational variable are shown in Table 5 below.

**Table 5: Operationalization of Variables**

| **Main Research Question: To what extent does land leasing and property tax capture land values to finance urban infrastructure/services?**<br>**Sub-question: How does land leasing and property tax capture land values? How does the value captured finance urban infrastructural services?** | | | | | |
|---|---|---|---|---|---|
| **Specific Research Questions** | **Key Variables** | **Indicators** | **Dimension** | **Data Sources** | **Data Analysis** |
| **How does property tax work?** | Property tax base, revenue base | Coverage, assessment approach, institutional structures, tax rate and collection. | Legal | Ghana Constitution, statutes, regulations and administrative practices. | Qualitative |
| **What is the legal and institutional framework?** | Legal framework of the tax base | Rateable properties, institutional structures, applicable tax rate, tax burden – owner or occupier of the property. | Legal | Statutes and interviews | Nominal and ordinal scale |
| **What is the basis for the property tax assessment?** | Assessment criteria of the tax base | Rateable properties – type of property (residential, commercial or industrial), valuation method, tax rate, coverage and exemptions. | Legal Economic | Statutes and interviews | Nominal and ordinal scale |
| **How is the property tax assessment done?** | Assessment procedures | Valuation process, rate application process and collection process | Legal | Acts, regulations, and interviews | Nominal and ordinal scale |
| **How does land leasing system work?** | Bundle of rights, revenue base of land leasing (ground rent) | Consideration for the transfer of the bundle of rights. Payment of | Legal | Ghana Constitution, statutes, | Qualitative |

| | | | | | |
|---|---|---|---|---|---|
| | and ingredients of a lease. | ground rent and premium. | | operational manuals, regulations and administrative practices. | |
| **What is the legal and institutional framework?** | Legal framework | Right to use, occupy, develop, transfer and farm, number of years, contractual relationship between the parties, registrable interest of more than 3 years. | Legal | Statutes and interviews | Nominal and ordinal scale |
| **What is the basis for calculating the premium and ground rent?**<br>**How is the land leasing system done?** | Assessment criteria | Market value (negotiation, cadastre or administrative), basis for the value and procedure for transferring the rights. | Legal<br>Economic | Statutes, regulations and interviews | Nominal and ordinal scale |
| **To what extent does each of them captures land values?** | Land values and revenue base | Market land values and the amount captured. | Economic | Property market, estate developers, valuers, OASL and PVLMD | Quantitative |
| **Does it capture land values?**<br>**How much is captured?** | Market value of the land,<br>Amount of value captured | Value of land and property sales, land transactions in the property market. Amount of money generated from ground rent and property rate. | Economic | Analysis of data of collected | Interval and ratio scale |
| **What percentage of the land values is captured?** | Market value captured, total amount from property | Percentage of amount captured compared to the market values | Economic<br>Financial | Analysis of data of collected | Interval and ratio scale |

| | | | | | |
|---|---|---|---|---|---|
| | rate and leased land. | | | | |
| **How much is collected?** | Amount of value collected | Total amount money collected annually from property rate and leased land (ground rent). | Financial Social | Analysis of data of collected | Interval and ratio scale |
| **To what extent are revenues from both used to finance urban infrastructure or services?** | Revenues generated versus infrastructure or services expenditure (capital or operation and maintenance) | Total revenue base per year for each instrument– market (potential) value versus actual value, budgeted/planned revenue versus collected revenues. Total annual budget. | Financial Social | Annual budget accounts of revenue and expenditure of STMA and interviews | Quantitative – Interval and ratio scale. |
| **Does infrastructure/services increase land values?**<br>**Is that enough to finance urban infrastructure/services?** | Value increased through infrastructure<br>Revenue captured and cost of infrastructure | Land values of locations with and without infrastructure/services<br>Total annual revenue compared to total annual infrastructure expenditure. | Economic<br>Financial | Interviews<br>Analysis of annual budget of infrastructure expenditure | Quantitative – Interval and ratio scale. |
| **Which one has the higher potential to finance urban infrastructure or services?** | Total revenues in relation to land values & total infrastructure expenditure. | Percentage of infrastructure financed by the instruments | Financial<br>Economic | Analysis of data of collected | Interval and ratio scale |

***Source: Author, 2013***

## 3.2 The Research Approach and Techniques

This research was carried out in the Sekondi-Takoradi Metropolis in the Western Region of Ghana. The choice of this twin city as a case study was premised on its economic and social diversity, business and economic opportunities and different land tenure systems. Sekondi-Takoradi has been hailed as the next business hub city in Africa as it hosts the oil activities in addition to the already commercial port activities. The city "is the future of Africa" according to Arnold Meyer. (Harding, 2013). Sekondi-Takoradi has different land ownership systems comprising stool, family, state and vested lands that were worth studying to understand this plurality in the property market. Historically also, the city is one of the few Municipal Councils that were established in 1951 to levy property tax in Ghana hence worth researching to know how far it has fared in that aspect. Sekondi-Takoradi was selected as case study in a single embedded situation using the best case scenario. This was premised on the fact that its total revenues was slightly above the average revenue (GH¢75,000 or US$ 37,600) of District Assembly in the country as at 2004 (Boakye et al, 2008).

A study in this multi-faceted city did not only give diverse overview of coexisting situations but also provided different cases for comparison and contrast. The research took its baseline of study from 2006 to 2013. This period spanned over two political seasons while the 2006 preceded the oil discovery year, that gave much to be appreciated on the turn of events before and after the oil discovery. It also enhanced easy access and retrieval of data from the local government as well as good foundation for the explanation of the results. Finally, the period of 2006 to 2013 was enough to make meaningful and useful explanations.

In terms of substance of the research, property tax and land leasing were both land based instruments that generated constant streams of income. Also, these instruments were effective in the Sekondi-Takoradi metropolis unlike betterment and development charges which were not implemented and generated insignificant incomes respectively (Boakye et al, 2008). Land leasing and property tax were also directly linked to public goods.

Infrastructure and/or services was one of the main public goods provided by the metropolitan authority out of the revenues from the land based instruments. In addition, infrastructure and/or services needed constant streams of income to finance its operation and maintenance hence directly linked to property tax and land leasing (ground rent). Finally infrastructure and/or services were the physical link between the society, community or city as whole to the land based instrument used – property tax or land leasing.

This research was more of descriptive type but with explanatory and exploratory components. The descriptive aspect stemmed from the fact that certain processes and events needed to be described for a clearer understanding of the research. It was seen as explanatory because the research sought to explain how property tax and land leasing together relates to urban infrastructure or services. Exploratory in the sense that some of the events were not clear to the researcher hence he probed to further understand how and why that took place. (Black, 1993 and Zucker, 2009).

The data collected comprised both primary and secondary sources of data. The approach to the research was mainly quantitative with a bit of qualitative approach as well. The research strategy was a case study. The case study research strategy was founded on the 'how' research question as well as to understand the concepts of land leasing and property tax in a particular context – land value capture – and also get an insight of the Ghana situation. (Black, 1993 and Zucker, 2009).

## 3.3 Population and Selection of Sample Size

Information from STMA, Lands Commission (LC) and Western Regional House of Chiefs revealed that the total population of the various sub-groups was 42 comprising land government departments, stools and families that own land as well as estate developers, CHF International Ghana and valuers in Sekondi-Takoradi. See Table 6 below and Annex 7 for details.

**Table 6: Summary of Interviewees**

| Name of Subgroup | № of Interviwees |
|---|---|
| Public & Vested Lands Management Division | 1 |
| Office of Administrator of Stool Lands | 1 |
| Land Valuation Division & Rating Office | 1 |
| Regional Co-ordinating Council | 1 |
| Budget Office | 1 |
| Accounts Department | 1 |
| Estate/Land Developers and Estate Agents | 4 |
| Valuers/Valuation Firms | 2 |
| CHF International Ghana | 1 |
| Total | 13 |

***Source: Author, 2013***

In order to arrive at the research sample size for the landowners, the Sample Size Calculator and the Formula,

$$\mathbf{n} = \frac{N}{[1+N(e^2)]}$$ where,

$\mathbf{n}$ is the sample size to be determined, $\mathbf{N}$ is the size of the population and $\mathbf{e}$ is the limit error of tolerance (confidence limit) assured to be 12% (0.12) (Murray and Larry, 1999).

Therefore, $$\mathbf{n} = \frac{29}{[1+29(0.12^2)]} = 20.45$$

According to Creative Research Systems (2012), a population of **29** with a confidence level of **95%** and confidence interval of **12** gave a sample size of **20** using the sample size calculator. In view of the above, a sample size of 20 was selected randomly as summarized in Table 7 below.

**Table 7: Summary of Respondents**

| Land owner Subgroup | № of Respondents |
|---|---|
| State Lands | 2 |
| Vested Lands | 1 |
| Stool Lands | 11 |
| Family Lands | 6 |
| Total | 20 |

***Source: Author, 2013***

## 3.4 Sampling Techniques

The choice of any of the numerous sampling techniques is founded on whether the data required is qualitative or quantitative, nature of target group and what the research question seeks to answer. Though there were various sampling techniques – probability or non-probability – available for case study research, the sampling techniques that were adopted in this research comprised simple random sampling, stratified sampling and purposive sampling techniques. (Black, 1993 and Zucker, 2009).

The city was categorised into four (4) sub groups according the land ownership systems comprising stool, family, state and vested lands. This categorisation was done using information from the cadastre and Geographic Information System (GIS) data base prepared by CHF International Ghana in order to track and segregate revenues from each tenure system.

In selecting landowners, only the leaders managing the lands (chiefs, family head & government agency) were considered using a combination of simple random and purposive sampling techniques. Purposive sampling was used based on the role of the leaders and knowledge of the subject matter. Landowners were selected randomly based on the age[15] of 21 and above years to ensure that the selected respondents have the legal status to own property as well as have the financial capacity to own land or pay property tax.

The Metropolitan authorities such as the Accounts Department, Budget Office, Rating Office and Regional Coordinating Council were selected using the stratified and purposive sampling because they were of different levels and had expertise knowledge and information about the subject matter. Purposive sampling was used to interview CHF International Ghana since they were the only non-governmental organisation (NGO) partnering and championing the improvement of property tax in Sekondi-Takoradi. See Annex 7.

Also, government agencies such as the Office of Administrator of Stool Lands (OASL), Regional Coordinating Council (RCC), Lands Commission (Public & Vested Lands Management Division [PVLMD] and Land Valuation Division [LVD]) were selected using the stratified and purposive sampling techniques. On the other hand, Valuers/Valuation Firms, Estate/Land Developers and Estate Agents was selected based on simple random sampling technique because their population was small and information required was secondary.

[15] In Ghana, the law requires that one has to be 21 years and above to be able to legally own or acquire property though the adult age is 18 years.

The data collection methods for the research comprised questionnaires, expert interviews and observation – video and imaging. The research instruments that was used to collect data included questionnaires, interview schedules, observation list and templates. For instance, questionnaire and observation list was used for landowners while expert interview guide and observation list was used for Lands Commission, Valuers, Estate Developers and Estate Agents. The questionnaire had both close ended and open ended questions in order to elicit the required information from the respondents. See Annex 3 and 4.

The other subgroups mentioned above were administered using interview guide and observation list except the Budget Office and Accounts Department that used designed templates since they provide quantitative data. The expert interview guide was a semi-structured one to allow for flexibility and elicitation of vital information. To ensure all data were captured and recorded, the researcher wrote the answers in the field note book, recorded audio and video voices and took some pictures with the help of a field assistant.

## 3.5 Techniques for Analysing Data

The data collected was analysed using qualitative and quantitative methods. Qualitative data was analysed using Atlas-Ti computer software while the quantitative data was analysed using Microsoft excel and SPSS software. These data were presented in pie charts, bar charts, frequency tables, graphs, maps and valuation calculation that gave a clearer picture and meaning of the field data.

## 3.6 Validity and Reliability

Triangulation, testing and pre-testing was adopted to resolve the problem of reliability and validity. To ensure construct validity was attained, the questions were structured and designed in clear and simple terms while the flow of ideas were closely kept. Also, to ensure internal reliability, questions were rephrased while external validity and reliability were taken care of by the secondary data available on the subject matter. (Black, 1993 and Zucker, 2009).

The validity and reliability of the research was greatly ensured through the use of different respondents in the various subgroups to validate and streamline data from the different sources. For instance, data on property tax obtained from the metropolitan authority was triangulated with Land Valuation Division (LVD) to ensure the validity of such data. In a similar vein, land values data obtained from the valuers, developers, Lands Commission and estate agents were crosschecked among each other while landowners validated some of the data. In addition, the Regional Coordinating Council was interviewed to validate data from STMA and Lands Commission. Ultimately, CHF International Ghana was used as independent organisation to validate and crosscheck some of the data collected about STMA.

# Chapter 4:

# Presentation of Data and Analysis of Research Findings

## 4.0 Introduction

In this chapter, the researcher discusses the legal foundations and presents the data gathered from Sekondi-Takoradi Metropolis on property rate and land leasing with emphasis on ground rent. The chapter further analyses and discusses the findings from expert interviews and secondary data from the field.

## 4.1 Legal Foundation of Property Tax and Land Leasing in Ghana

The supreme law of the Republic of Ghana is the 1992 Constitution. According to the Constitution, the laws of Ghana comprises the 1992 Constitution, enactments by parliament (Acts), any orders, rules and regulations, the existing law and common law. The recognisable sources of law in the country therefore includes common law as adopted from the colonial masters, customary laws pertaining to a particular community, conventions, acts, decree, law and the 1992 Constitution itself. (1992 Constitution: Article 11).

Based on the above, the legal foundation of property tax in Ghana is mainly drawn from the 1992 Constitution (chapter 20); the Local Government Act, 1993, Act 462, Lands Commission Act, 2008, Act 767 and Internal Revenue Act, 2001, Act 592.

On the other hand, the legal basis of land leasing in the country is primarily drawn from the 1992 Constitution (chapter 21 and article 20); State Lands Act, 1962, Act 125; Administration of Lands Act, 1962, Act 123; Conveyancing Decree, 1973, NRCD 175; Land Registry Act, 1962, Act 122; Land Title Registration Law, 1986, PNDC Law 152; Lands Commission Act, 2008, Act 767; Office of Administrator of Stool Lands, 1994, Act 481 and Chieftaincy Act, 2008, Act 759. Each of the various acts, decrees and laws specifically deals with one or more components of the land. Since 1960, a total of about 160 Acts that deal with land have been passed. However, a new Lands Bill which seeks to synchronize all these scattered laws under one umbrella law is yet to be passed in parliament after 3 years of its first reading.

With regards to infrastructure/services provision, budgeting and financing, the 1992 Constitution; Financial Administration Act, 2003, Act 654; Local Government Act, 1993, Act 462; Public Procurement Act, 2003, Act 663 and Internal Revenue Act, 2001, Act 592 are applicable as shown in Figure 3 below.

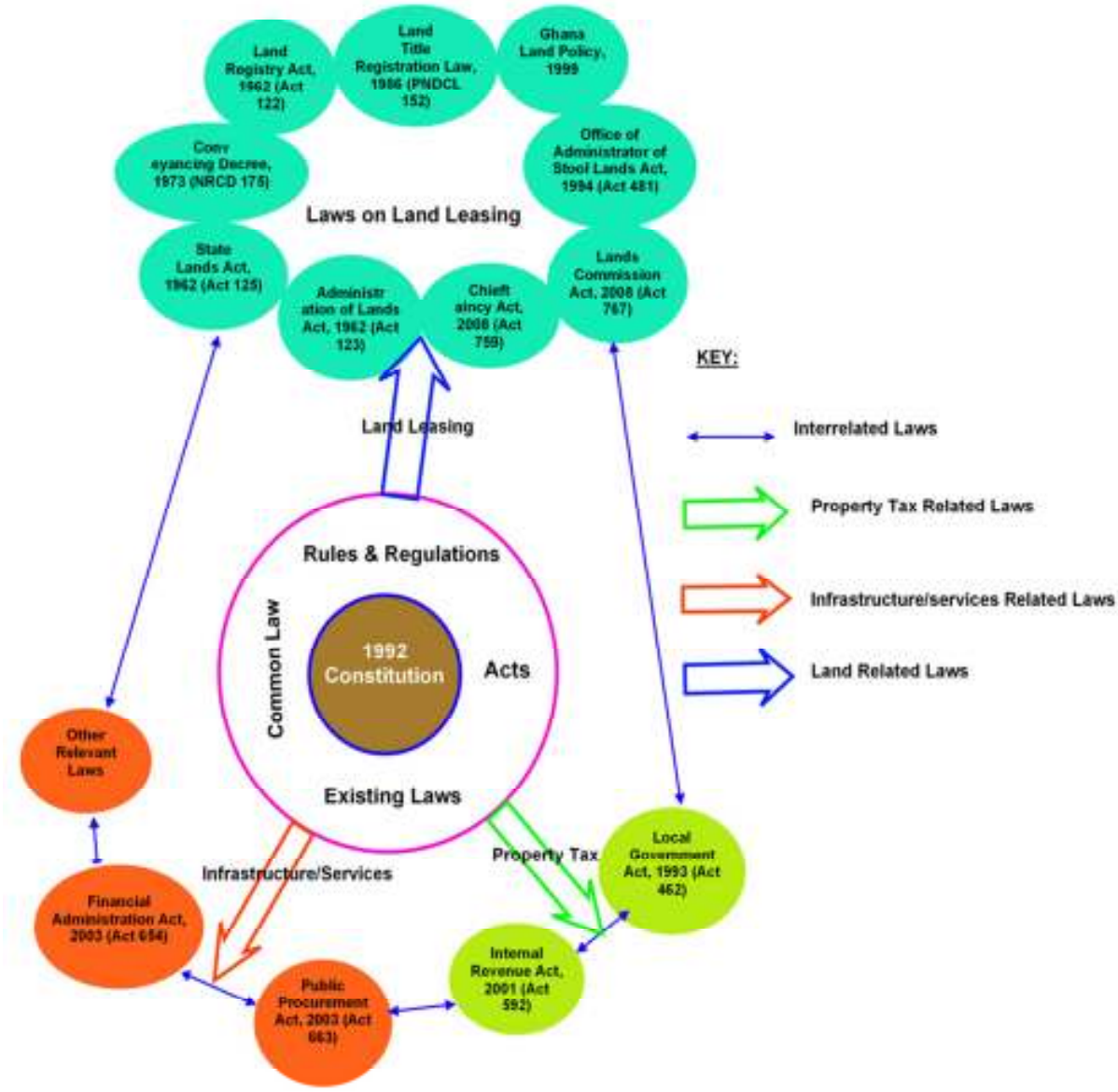



**Figure 3: Laws Relating to Property Tax and Land Leasing in Ghana (*Source: Field Data, 2013)***

### 4.1.1 Overview of Land Leasing System in Sekondi-Takoradi Metropolis

In line with the country's tenure systems explained in section 1.2.2, Sekondi-Takoradi Metropolitan Area has a mixture of four (4) land ownership systems comprising stool, family, state and vested lands. Currently however, due to the re-adjustment and re-demarcation of the metropolitan geographical boundaries, the vested lands located at Inchaban now falls under the Shama District which is outside STMA area.

The state lands and vested lands are managed by the Western Regional Lands Commission. The state lands were acquired during the pre-colonial era by the Gold Coast[16] but the current applicable law is State Lands Act, 1962, Act 125 while the vested lands were vested in the late 80s under the Administration of Lands Act, 1962, Act 123.

The Lands Officer indicated that state lands in STMA are managed differently from other state lands in the country due to a special agreement between the parties upon a court ruling. Unlike other state lands where revenues (premium and ground rent) from the lands are totally for the state, the revenues from state lands in STMA are shared equally between the state and the original owners (stools). According to the court ruling, one of the provisions read

> "*Government to pay the Stools of Takoradi, Amanful and Dutch Seccondee £10,000.00 to be divided among themselves ... as compensation for their joint and/or several interests in the acquired lands. Government to pay the said Stools every year in perpetuity 50% of all moneys accruing to Government from all Government leases or sales of any part or parts of the acquired lands to be divided amongst the said stools aforesaid".* (Sekondi High Court, 1963, Exhibit 6; pp.125).

This court ruling is the legal basis for sharing all the proceeds (both the premium and ground rent) from the state lands in STMA which the lands officer acknowledged that is complied with. The lands officer indicated that this arrangement is referred to as 'Compensation Rental' and confirmed that two-thirds of the revenues goes to Takoradi stool while one-third goes to Amanful stool because they jointly own the land whereas Poase, Awhodwin and Essikadu stools receive 50% of the revenues each. Expert interviews with some officials of the land sector agencies revealed that there are about 40 acres of vested lands at Inchaban, 1,920 acres, 174 acres, 135 acres, 100 acres and 135 acres state lands respectively located at Ghana Telecom area, Windy Ridge, Ekuase, Cocoa Product and Sekondi in the Sekondi-Takoradi Metropolis (see Table 8 and Figure 4 below).

The vested lands are also managed by the Lands Commission. These lands were acquired under the Administration of lands Act, 1962, Act 123 due to prolonged land dispute among some stools. Per the provisions of Act 123, if the dispute is not resolved, a special account must be created for such revenues to be paid into until the matter is settled. The lands officer indicated that the revenues accruing from the vested lands at Inchaban were not tampered with until further directives.

The stool and family lands are respectively managed by the chiefs and family heads in collaboration with their council of elders. These lands are managed in accordance with the provisions of Administration of Lands Act, 1962, Act 123; Chieftaincy Act, 2008, Act 759; customary laws and other relevant laws. Out of the total land size of STMA, stool lands occupy about 55.22% while family lands covers 24.10% as pointed out by an officer of OASL. The interview further showed that Fijai Stool has the largest land size. See figure 4 below and the map in Annex 5.

[16] Acquired under the Public Lands Ordinance, 1876 and Takoradi Harbour and Town (Acquisition of Land) Ordinance, 1921.

**Table 8: Summary of State and Vested Lands in STMA**

| Ownership Type | Location | Approximate Size | Percentage of Size to Total Land Size of STMA | Year of Acquisition |
|---|---|---|---|---|
| Vested Lands | Inchaban, Shama District | 20 hectares | 0.33% | 1989 |
| State Lands | Ghana Telecom, STMA | 777 hectares | 15.86% | 1921 |
| State Lands | Windy Ridge, STMA | 70 hectares | 1.44% | 1947 |
| State Lands | Ekuase, STMA | 55 hectares | 1.15% | 1921 |
| State Lands | Cocoa Product, STMA | 40 hectares | 0.83% | 1921 |
| State Lands | Sekondi, STMA | Over 55 hectares | 1.15% | 1921 |
| Total of State Lands | STMA | 997 hectares | 20.35% | |
| **Total Land size of STMA** | **STMA Area** | **4,900 hectares** | | |

***Source: Field Data, 2013***

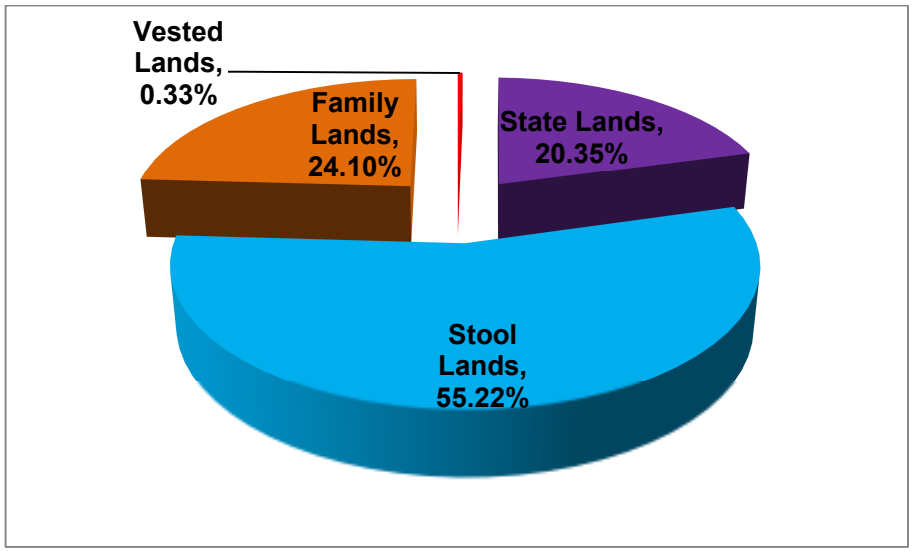



**Figure 4: Percentage of Land Ownership Type in Sekondi-Takoradi Metropolis (*Source: Field Data, 2013*)**

### 4.1.1.1 Procedures for Acquiring Land in STMA Area

It was found from the field that each category of land were leased and managed by the appropriate authority – Lands Commission, chiefs or family heads. This implies that a prospective lessee will have to identify the appropriate landowners before making any

acquisition. The process for acquiring land under any of the category varies slightly from among the landowners however, the general procedure are indicated in Table 9.

**Table 9: Land Acquisition Processes for Stool/Family and State/Vested Lands in STMA Area**

| State and Vested Lands | Stool or Family Lands |
|---|---|
| I. Identification of vacant parcel of land. | Identification of vacant parcel of land and the stool/family who owns it. |
| II. Apply to Regional Lands Officer with a site plan. | Approach the appropriate stool/family through the customary procedures for preliminary information on the land. |
| III. PVLMD of the Lands Commission (LC) checks its records for plot availability. | Customarily the prospective lessee is required to bring some bottles of drinks and money ('knocking fee) to the traditional leaders before getting any information on that parcel of land. If the land is not vacant, he forfeits the items but will be offered any vacant land provided he is interested in that parcel. |
| IV. LC does field inspection to know state of development on the land. | The chief/family head and their principal elders meet to discuss the prospective lessee's proposal. |
| V. If no lay out, then TCDP is required to give planning comments. If there is lay out, then there is no need for planning comments. | If the land is available, then he is invited to go to the site with his surveyor for land demarcation. |
| VI. If approved, Technical committee recommends to LC. | The prospective lessee is invited again to negotiate on the amount of the 'drink money' (premium) with the chief/family head or land management committee if available. |
| VII. LC vetting and approval. | After payment is made, an allocation note/letter is issued to the lessee pending lease documents. |
| VIII. Issuance of offer letters and negotiations if necessary. | A licensed surveyor is commissioned by the lessee to prepare a site plan. |
| IX. Acceptance of offer and payment of necessary amount. | Lease document is prepared |
| X. Preparation of lease document (indenture) with the agreed terms and conditions. | The lessee is directed to go to OASL to negotiation and payment of ground rent if the land is stool lands. If it is family lands then the parties agree on the ground rent themselves. |

| | |
|---|---|
| XI. Registration of deed | The lessee submits the lease document to Lands Commission for deed registration. |

***Source: Field Data, 2013***

The leases granted usually vary from 3 years minimum to 99 years maximum for Ghanaians while non-Ghanaians are granted 50 years maximum. The 50 year term falls in line with the provisions of article 266 (4) of the 1992 Constitution which stipulates "*No interest in or right over, any land in Ghana shall be created which vests in a person who is not a citizen of Ghana a leasehold of more than 50 years at any one time".* However, the 99 years term maximum seems to be applicable to only stool and state lands as the Constitution is not clear on the family lands. Article 267(5) of the Constitution states "*... no interest in, or right over any stool land in Ghana shall be created which vests in any person or body of persons a freehold interest howsoever described".* This provision categorically frown on stool lands being granted on freehold interest while family landowners have the discretion to either grant freehold interest or leasehold interest of 99 years. Interviewing some experts revealed that while some families granted freehold interests others did not. The Convenyancing Decree, 1973, NRCD 175 which regulates the transfer of interests in land requires that any interest in land of more than 3 years are documented and registered in the Land Registry. Specifically, section (2) states *"No contract for the transfer of an interest in land shall be enforceable unless—*

*(a) it is evidenced in a writing signed by the person against whom the contract is to be proved or by a person who was authorised to sign on behalf of such person; or*

*(b) it is relieved against the need for such a writing by the provisions of section 3."*

Section 3(1) stipulates "… *Sections 1 and 2 shall not apply to any transfer or contract for the transfer of an interest in land which takes effect by a lease taking effect in possession for a term not exceeding three years, whether or not the lessee is given power to extend the term;"*

According to the Lands Commission (2004), the following term of years are applicable to the various uses (see Annex 7). The researcher quizzed the rationale for the variations in the lease terms with different uses or purposes and was made to understand that such variations are founded on compatibility, economic value[17], extent of nuisance to others and the commercial uses of the land. The officer further explained that for instance land uses that may cause nuisance to others need to be reviewed frequently hence the need to have lesser term of years while land uses with high economic value or commercial use may have moderate term of years. For example filling station has lower term of years because of its incompatibility nature as well as high economic value. On the other hand, agricultural uses that has less than 10 years term are due to the tendency of the lessee converting the land to highest and best use if a longer period is granted.

[17] What the Lands Commission refers to as economic value is in fact current use value which is equivalent to commercial value as explained by Harvey and Jowsey (2004) under section 2.4.1.

#### 4.1.1.2 Assessment of Ground Rent and Premium

According to the Lands Commission (2004) ground rent[18] is "*a fee chargeable by the Lands Commission for the use/occupation of a particular parcel of land."* From the Lands Commission's perspective, it is based on value (current use value) of land. It is assessed based on the annual equivalent (AE) of the land value per unit of measure and taking account of any premiums as shown in Equation 1 below. One of the Lands Officer simply defined premium as "*a lump sum payment in order to reduce rent".* Similarly, the stool and family lands owners hold same point of view but do not have the technical capacity to assess their lands based on this principle. It was found out that different types of rent were being adopted by various land owners in their assessment. There are four (4) types of rent, namely; economic rent, rack rent, subsidised rent and peppercorn rent.

(a) Economic Rent[19]: This is the full rental value of the open market value of the land. It is the highest value that the current land use can command in the open market.
(b) Rack Rent: It refers to the full rental value of the land and building (developed site) usually at the commencement of the lease. This could be equivalent to the economic rent at the beginning but lower afterwards because the building will depreciate with time.
(c) Subsidised Rent: This refers to a rent taken as a percentage of the economic rent. It is lower than the economic rent but could be higher, equivalent or lower than the rack rent.
(d) Peppercorn Rent: This is very small percentage or a token payment as rent. It is very low compared to the other 3 hence does not reflect the open market value rent.

In assessing the rent under any of the above type, it was revealed that the basis was on either the undeveloped (vacant) land for fresh leases or developed land for renewal of leases. For instance PVLMD based its assessment for fresh leases on the vacant land value while renewal leases was based on the value of the land and the building. Varying methods of assessment were identified to be adopted by the various institutions and thus include;

i. Annual Equivalent (AE) of the site's capital value using the Years Purchase (YP) formula at appropriate rate.
ii. The Residual method.
iii. Rent as a percentage or proportion of the land value.
iv. Rent as percentage or proportion of rack rent.
v. Comparative method.

It was found out that the PVLMD adopted the annual equivalent method for residential land use, a percentage of rack rent (as defined above) approach for commercial land or a percentage of the land value for other land uses. On the other hand OASL adopted only the annual equivalent method while family land owners adopted something liken to rent as a percentage of the land value. Family land owners normally fixed their based on the current land values since they do not have the technical know-how on the application of the complex methods. Table 10 below gives a summary of the various institutions, the type of rent and the method of assessment.

[18] Equivalent to land rent.

[19] This in theory is actually commercial rent and not economic rent as explained by Harvey and Jowsey (2004) under section 2.4.1.

**Table 10: Summary of Rent Type and Methods of Assessment**

| Land Type | Responsible Institution | Type of Rent | Method of Assessment | Land Use Type | Applicable lessees |
|---|---|---|---|---|---|
| **Stool or Vested lands**<br>**State Lands** | OASL/Chiefs | Subsidised/Peppercorn | Annual Equivalent | All uses | All |
| | PVLMD | Subsidised/Economic | Annual Equivalent/Percentage of Rack Rent | Residential | Ghanaians |
| | PVLMD | Economic | Annual Equivalent/Percentage of Rack Rent | Residential | Non-Ghanaians |
| | PVLMD | Economic | Annual Equivalent/Percentage of Rack Rent | Commercial/Industrial | All |
| | PVLMD | Subsidized | Annual Equivalent, Percentage of Rack Rent/Land Value | Charitable/Religious Organisation | All |
| | PVLMD | Peppercorn | Annual Equivalent/Percentage of Rack Rent | Special Cases | Existing settlers, converted freehold to Non-Ghanaians |
| **Family Land** | Family Head | Subsidised/Economic/Peppercorn | Rent as percentage of land value | Residential and all others | All |

***Source: Field Data, 2013***

From the PVLMD and OASL perspective, the formula for arriving at the premium and ground rent is based on the Annual Equivalent principle given in Equation 1 below. For instance, PVLMD applied a range of 10% to 40% of the open market annual equivalent value (economic rent) as the rent for some lands while full economic rent was applied in other cases. Upon arriving at the rent payable per annum, the amount is capitalised at the appropriate discount rate to get the total capital value of the land. It is out of this capital value that 30% was assessed as premium while the current annual equivalent was used as the ground rent for the first 5 years after which it is revised.

Similarly, the OASL was found to be using the same principle but it applied a range of 3% to 6% of the economic rent while 10% of its capitalised value was used as the ground rent because

according to the officer the premium ('drink money') paid to the chiefs is almost equivalent to the economic value. The stool lands officer noted *"we (OASL) as an institution are not involved in the negotiation of premium ('drink money') but what we technically call the 'drink money' is in fact the economic value of the land."*

**Equation 1: Formula for Assessing Ground Rent**

Annual Equivalent (AE) of similar parcels of land = $\frac{\textbf{Open Market Capital Value (CV)}}{\textbf{Amount of \$1 p.a factor}}$

Annual Equivalent (AE) of similar parcels of land = $\frac{\textbf{Open Market Capital Value (CV)}}{\frac{(1+i)^n-1}{i}}$

Capital Value (CV) of subject land = $AE \times \left(\frac{(1+i)^n-1}{i}\right)$

Where $n$ is the term of years and $i$ is the discount rate.

#### 4.1.1.3 Legal Basis for the Distribution of Accrued Land Revenues

Constitutionally, all revenues namely premium and ground rent accruing from state lands are solely vested in the President of the Republic of Ghana as per article 257 of 1992 Constitution. The enabling acts viz. State Lands Act, 1962, Act 125; Lands Commission Act, 2008, Act 767 and Administration of Lands, 1962, Act 123 clearly outline the collection and distribution to be paid to the appropriate institution (Lands Commission).

For revenues accruing from vested and stool lands, article 267 (6) states "*Ten per cent of the revenue accruing from stool lands shall be paid to the office of Administrator of Stool Lands to cover administrative expenses; and the remaining revenue shall be disbursed in the following proportions –*

*(a) Twenty-five per cent (25%) to the stool through the traditional authority for the maintenance of the stool in keeping with its status;*
*(b) Twenty per cent (20%) to the traditional authority; and*
*(c) Fifty-five per cent (55%) to the District Assembly, within the area of authority of which the stool lands are situated."*

This provision implies that both premium and the ground rent revenue accruing from the stool or vested lands must be shared according to the formula spelt out. For avoidance of doubt, section 17 (2) of Administration of Lands Act, 1962, Act 123 defined revenues as "*Revenue for the purposes of this Act includes all rents, dues, fees, royalties, revenues, levies, tributes and other payments, whether in the nature of income or capital, from or in connection with lands subject to this Act."* In the above provisions, though both the Constitution and the Act are clear on the formula for distributing the revenues, it was found out from the field that only stool lands ground rent were shared according to the formula while the premium is entirely enjoyed by the stool without the District Assembly getting its share. This according to the interviewees, stem from the fact that the traditional authority does the grant of lease, negotiation and collection of premium to the exclusion of the OASL hence it is practically impossible for the OASL to demand the District Assembly's percentage share of the premium. With regards to the vested lands, the formula is applied to the letter because the Lands Commission grant the lease, negotiate and collect both premium and ground rent hence easy to access the revenues.

Revenues from family lands are mainly regulated by the customary laws (rules, customs and conventions) of that particular family. Generally however, there is no specific law that regulate who should benefit from the premium or ground rent hence by virtue of the customary law, the appropriate family gets both the premium and ground rent without sharing it with any other agency.

### 4.1.2 Overview of Property Rating[20] in Ghana

Article 245(b) of 1992 Constitution mandates District Assemblies to levy and collect taxes, rates, duties and fees while sections 94 to 119 of Act 462 clearly spells out the details of the rating system. According to Act 462, the District Assembly is the rating authority for its district hence STMA is the rating authority in this instance. The power conferred on the STMA is to enable it levy rates sufficient enough to cover its expenditure. The rate to be levied could be general or special rates. The Act defined general rate in section 96(2) as "*a rate made and levied over the whole district for the general purpose of the district"* while special rate means "*a rate made and levied over a specified area in the District for the purpose of a specified project approved by the District Assembly for that area".* The general rate could be a rate payable by the owner of premises within the District or the rate assessed on the possessions of persons who reside in the District (section 96[3]). On the other hand, the special rate could be a basic amount payable by all persons of 18 years and above residing in the area or owners of movable or immovable premises in the area (section 96[4]).

The rate to be levied must be based on the rateable value[21] of the premises to be assessed and determined by a valuer. In section 96(8) of Act 462, the District Assembly is expected to appoint such a valuer from among the authority responsible public lands and valuation – Lands Commission – in consultation with the Minister responsible for valuation. The Lands Commission Act, 2008, Act 767, clearly puts this function under the Land Valuation Division of the Lands Commission as section 22(d) of Act 767 stipulates "*The functions of the Land Valuation Division include preparation and maintenance of valuation list for rating purposes".*

According to Act 462, the basis for assessing the rateable value of the premises is the replacement cost of the buildings, structures and other developments less depreciation. The Act 462 in section 96(9) stipulates

> "*Subject to subsection (11) of this section, the rateable value of premises shall be the replacement cost of the buildings, structures and other development comprised in the premises after deducting the amount it would cost at the time of valuation to restore the premises to a condition in which they would be as serviceable as they were when new; except that the rateable value shall not be more than 50% of the replacement cost for the premises of an owner occupier and shall not be less than 75% of the replacement cost in all other cases".*

The term 'replacement cost' is defined in section 96(10) as "*... the amount it would cost to provide the buildings, structures and other developments as if they were new on an undeveloped site at the time the premises are being valued".* Whereas the term 'development' includes "*any kind of work or improvement carried out on or in any land and in particular foundations, excavations, drainage systems and pathways, aprons and other prepared surfaces".* The section

[20] Meaning property taxation.

[21] It is aassessed value and refers to the total value of the premises on which tax rate is applied.

further clarified that buildings and structures refer also to plant and machinery which are attached to and form an integral part of any building or structure.

It was revealed in an expert interview with some officers of the Rating Section of Land Valuation Division that most provisions of the Act 462 were strictly adhered to while a few were not. For instance, it was found out that the provision which stipulates "… *except that the rateable value shall not be more than 50% of the replacement cost for the premises of an owner occupier and shall not be less than 75% of the replacement cost in all other cases"* supra was not implemented hence the full replacement cost is taken as the rateable value irrespective of owner occupier premises or not, in other words the 50% threshold for owner occupier is not implemented. When the researcher drew their attention to the above provision, the officer replied that other people are abusing the law by making claims of owner occupier for shops, corporate institutions and offices. One of the officers of the Rating Office of Land Valuation Division put it "*To them [law makers], owner occupier is used to refer/apply to only residential properties but in a way most organisations such as GHACEM*[22]*, GHAPOHA and some commercial property owners have come out to say that such provision also applies to them because they are occupying their self-built premises. Even the almighty GHAPOHA is still fighting for that waiver".*

The basis for assessment of rateable value may only be varied by the Minister of Local Government by a legislative instrument which impliedly means replacement cost will not be applicable in such instance.

In order for a rate to be deemed made and levied, it has to be published and gazetted in a prescribed manner by the rating authority.

The Act 462 categorically spells out in section 99(1) the premises/tenements that are exempt from assessment and rating. It states

*"The following tenements are exempted from assessment and rating under this Act –*

*(a) all premises appropriated exclusively for the purpose of public worship and registered with the District Assembly;*
*(b) cemeteries and burial grounds registered by the District Assembly;*
*(c) charitable or public educational institutions registered with the District Assembly;*
*(d) premises used as public hospitals and clinics; and*
*(e) premises owned by diplomatic missions as may be approved by the Minister for Foreign Affairs."*

In the above provisions, all these tenements are exempted from assessment as well as rating but with a proviso that such use must have been registered with the District Assembly as such. Interviewing officials on the exemptions, the land valuation officers noted that all properties are assessed by them. According to the officers, there has been a circular that no property is exempt however the researcher's further probes showed that it was a statement made by one of the Finance Minister during a national budget statement. The budget officer of the STMA pointed out that tenements that are registered with the Assembly and fall under the exemption clause are duly exempted. For instance, he indicated that public schools, public health institutions and military bases are exempted though have been assessed.

[22] State owned enterprises, GHACEM meaning Ghana Cement, is a company producing cement in Ghana. GHAPOHA means Ghana Ports and Harbour Authority, is an organization responsible for managing the port activity in Ghana.

#### 4.1.2.1 Basis of Assessment and Procedure for Property Rating in STMA Area

The procedure for rating property in the Metropolis are categorized into seven (7) stages

**Stage I** – Declaration of valuation district[23] by the rating authority (STMA) through publication.

**Stage II** – Preliminary survey of the valuation district by the valuers (Rating Office of LVD)

1. Reconnaissance survey of the valuation district with the aid of master plan if available to identify the boundaries and nature of properties.
2. Demarcation and subdivision of the valuation district into divisional and block plans for easy referencing. The block plans helps to number and know the total number of immovable properties but each block should not contain more than 30 properties.

**Stage III** – Assessment of all rateable properties/premises by the valuers (Rating Office)

a. Referencing of the properties. This involves taking the external dimensions of each immovable property, the constructional details of the floors, walls, roofs, ceilings, windows and doors with a sketch of the property and recording them in a field notebook.
b. Area calculation of the property and transfer of data from field notebook to property record sheet[24]. Each property record sheet is assigned to only one property and captures information such as property owner, property number, dimensions and constructional details.
c. Start the preparation of the valuation list. The valuation list is a book/document containing the list of the properties assessed with key details extracted from the property record sheet. This gives the summary of all the properties assessed.

**Stage IV** – Cost rates and categories by the Quantity Surveying Section.

1. A survey is carried out by the Quantity Surveying Section of the LVD to ascertain the current cost of construction in the valuation district.
2. The survey is analysed and computations done to arrive at the cost per square metre.
3. The assessed properties in the valuation are categorized into seven (7) categories based on the use of the properties and their constructional details. See table 10.
4. Two (2) samples (1 uncompleted and 1 fully completed) of the properties are taken from each category, then the cost per square metre obtained from (2) above is applied to the area to arrive at its replacement cost.
5. Based on the values arrived at from the samples, a range of cost rate per square metre are fixed for each category. See the Table 11 below.

[23] This is the geographical jurisdiction (coverage) in which the property rate is going to be levied.

[24] A special sheet that captures the detail information of each property.

**Table 11: Categories of Cost Rate for Assessing Premises in STMA Area**

| Valuation Assessment Rate for STMA from 2006 to 2012 | | | | |
|---|---|---|---|---|
| **Category** | **Property type description** | **USE** | **Average basic rate (GH¢ per $m^2$)** | **Average basic rate (US$ per $m^2$)** |
| **A** | Wattle & Daub (Very poor industrial workshops/sheds) | Residential | 7.83 | 3.93 |
| **B** | Mud Swish (Also very poor industrial workshops/sheds) | Residential | 16.85 | 8.46 |
| **C** | Sandcrete Blocks (2 storeys house, assess upper storeys at 80% of the Ground Floor) | Residential | 29.38 | 14.75 |
| **D** | Bungalow Type with sandcrete blocks (2 or more buildings, assess upper floors @ 80% of Ground Floor) | Residential | 44.05 | 22.11 |
| **E** | Commercial Shops/Restaurants with Sandcrete Blocks ( Also poor Office) | Commercial | 36.12 | 18.13 |
| **F** | Office & Hotels | Commercial | 66.31 | 33.28 |
| **G** | Factories, Warehouses, Workshops & Stores | Industrial | 25.25 | 12.67 |

***Source: Lands Commission (LVD), 1999***

**Stage V** – Valuation and application of cost rates by the valuers

a. Using the cost rate for each category, the replacement cost of each property is calculated (Area X Cost Rate). See Equation 2 for the formula.
b. Adjustments are made for depreciation on each property using the guide in Table 12. According to one officer of the Rating Office of the LVD, *"depreciation is a reasonable amount set out for repair works"* hence depreciation is not applied based on the age of the property rather the physical state and condition of the property. Further, he pointed out that the age of the property only serves as a guide and not the basis for depreciation. Based on the guideline for applying depreciation on property for rating purposes, the maximum percentage for depreciation is 25% (see Table 12). This implied that premises that are new (recently constructed) but with poor outlook (poor maintenance condition) might be assessed higher than a very old premises but good outlook (good state of condition). The effect of this (if known to the tax payer) is likely to discourage property owners to maintain their properties in order to enjoy low property rate.
c. Complete the property record sheet and the valuation list by putting the depreciated replacement cost of each property in the appropriate columns.

**Table 12: Summary for the Application of Depreciation**

| Components of the Building | Depreciation (Maximum) |
|---|---|
| Floor | 2.00% |
| Walls | 8.00% |
| Roofs | 8.00% |
| Ceiling | 2.00% |
| Doors and windows | 3.00% |
| Painting and Decorations | 2.00% |
| **Total** | **25.00%** |

***Source: Lands Commission (LVD), 1999***

**Stage VI** – Publication of valuation list by the rating authority (STMA)

1. Upon receiving the valuation list from the Rating Office, it is published for a period of 21 days. This is to offer property owners to raise any concerns on the assessed value before it becomes operational.
2. If there are any concerns, the Rate Assessment Committee to be set up under section 103 of Act 462 addresses the issue.

**Stage VII** – Rate impost, billing and collection by the STMA.

Rate impost[25] is the percentage or fraction applied on the rateable value (assessed value) of the property within the valuation district by the rating authority (STMA).

1. The STMA estimates its annual revenue from other sources ( thus less the revenue from property rate) for the year in consideration.
2. STMA then estimates all its annual expenditure for that year.
3. The difference between the revenue and expenditure (Expenditure – Revenue = Total Revenue base of the Property Rate).
4. Based on the valuation list and land/building uses, the STMA grouped the properties to categories and applied a certain percentage (rate impost) to the rateable value of each category. The rate impost ranges from a minimum of 0.0016 to a maximum of 0.04 for the categories over the years (2006 – 2013). See Annex 9.
5. The bills are prepared by applying the appropriate rate impost on the rateable property under each category. The billing and distribution of the bills are contracted out to private consultants.
6. The Tax collectors established under section 111 of Act 462 go to the property owners to collect the rates or the property owner pays at the revenue office STMA with a receipt issued.

[25] Equivalent t to tax rate.

**Equation 2: Formula for Assessing Property Rate**

**Part A: Assessment**

Replacement Cost = $Area \times Unit\ Cost\ Rate$

Rateable Value = Depreciated Replacement Cost (DRC)

Rateable Value = $Replacement\ Cost - Depreciation$

**Part B: Rate Impost**

Total Property Rate Revenue Base = Total Expenditure – Other Sources of Revenue

Property Rate Payable = $Rateable\ Value \times Rate\ Impost$

According to experts, the duration for revaluation should be every 5 years or at worst not more than 10 years interval. It was found out from the field that the law did not set the time limit but did specify that revaluation must be carried out. The last valuation in Sekondi-Takoradi metropolis was carried out in 1999 hence the rate did not reflect the current situation. This according to STMA official was as a result of inadequate funds to carry out the exercise. Based on the assessment and rating procedures explained above, a revaluation exercised was recently carried out in 2012. The funding support of the revaluation came from CHF International Ghana. Currently the exercise has been completed and the new property rate has been applied in 2013. The total number of rateable properties as at 2012 were 30,000 while the billable properties were 17,324.

### 4.1.3 Administrative and Institutional Set up of Property Rate and Land Leasing in Ghana

The administrative and institutional set up of property rating and land leasing are based on the legal foundations espoused above. It was found out that the set up are interrelated with some of the institutions intertwined either at the local or regional level.

The main institutions responsible for property rating includes the District Assemblies (STMA) and Land Valuation Division of the Lands Commission with their relevant departments, units or sections. For instance, at the STMA there is Town and Country Planning Department (TCPD), Budget Office, Revenue Section and Accounts Department which perform various functions to ensure the rating process is complete. Similarly, the Rating Section of the Land Valuation Division which is independent of the STMA also performs its functions in conformity with the valuation profession.

Under land leasing, the relevant institutions includes the traditional authorities (chiefs/family heads), Lands Commission (Public & Vested Land Management Division, Land Valuation Division, Survey & Mapping Division and Land Registration Division), Town & Country Planning Department, Office of Administrator of Stool Lands and Ghana Revenue Authority (formerly Internal Revenue Service). The PVLMD of Lands Commission is responsible for the management of state and vested lands including disposing, leasing, negotiating, assessing, collecting and distribution of premium and rent on behalf of the state. The traditional authorities for stool lands are responsible for the disposition, leasing and negotiation of premium on their land except the assessment, collection and distribution of ground rent that is reserved for the OASL. Even with the disposition of the land, the stool needs the consent and concurrence of the

Lands Commission in order to be valid. According to section 10(3) the Lands Commission Act, 2008, Act 767, "*There shall be no disposition or development of any stool land unless the Regional Lands Commission of the Region in which the land is situated has certified that the disposition or development is consistent with the development plan drawn up or approved by the planning authority for the area concerned"*. For family lands, the traditional authorities are responsible for the management of their lands including disposing, leasing, negotiating, assessing, collecting and distribution of premium and rent. The Town & Country Planning Department, Ghana Revenue Authority, Land Registration Division, Survey & Mapping Division are only involved during the processing and registration of the land documents.

## 4.2 Budgetary and Financial Regulations in Ghana

The relevant laws that regulate budgeting, financing and accounting includes the Public Procurement Act, 2003, Act 663; Financial Administration Act, 2003, Act 654; Audit Service Act, 2000, Act 584; Financial Administration Regulations, 2004, LI 1802; Financial Memoranda for District Assemblies, 2004; Land Registry (Amendment) Regulation of 2001, LI 1682; The Lands (Miscellaneous Services) Fees, 2001, LI 1688 and Local Government Act, 1993, Act 462. These laws regulate either conjointly or separately how public authorities like the local government must budget, finance and account for any public funds in the provision of services, infrastructure and works under their remit. For instance, while section 92 of Local Government Act, Act 462 requires all District Assemblies to submit budget of all aggregate revenues and expenditure before the year ends, section 14 of Public Procurement Act, 2003, Act 663 obliges all public entities to apply the Act (Act 663) to the letter in procuring services, works or goods with the use of public funds.

### 4.2.1 Revenue Mobilization of STMA

The sources of revenue for the STMA as enshrined in section 86 of Act 462 include District Assembly Common Fund (DACF)[26], investment, rates, fees and fines as listed in schedule 6 of the Act (see Annex 9).

### 4.2.2 Expenditure and Accounting Systems

The Act 462 further requires the Assemblies to plan, budget and approve any expenditure before they are expended. The Public Procurement Act, 2003, Act 663 further support these requirements and insist that procurement cannot be made on any works, services or goods without planning, budgeting and approval unless otherwise stated. Both Act 462 and Financial Administration Act, 2003, Act 654 as well as Audit Service Act, 2000, Act 584 together with their relevant regulations outline the procedures for budgeting, accounting and reporting the revenues and expenditure of the District Assemblies. For instance, in section 90 of Act 462 the District Assemblies are mandated to keep proper accounts and records of its activities in accordance with the Audit Service Act.

[26] DACF is the main central government transfer set up by the Act and distributed according to a formula.

## 4.3 Revenue from Property Rate and Ground Rent

The researcher was able to get data on the revenue generated from property rate and ground rent for the period of 2006 to 2013[27]. This included revenue from vested lands, state lands and stool lands with the exception of family lands due to the unavailability of administrative set up to collect such rent, it was impossible to get the data. Also, each family collect the rent in their own way without any proper record keeping hence any data source from them will be highly unreliable. The data for stool lands was obtained from the STMA and OASL, while state and vested lands were gotten from the PVLMD. In addition, the revenue for property rate was also obtained from the STMA. All these sources proved to be reliable because they are the official institutions and keep records according to the regulations of the country. The details and analysis of the relevant data are presented in the preceding subheadings.

In order to appreciate the forthcoming details and analysis, it is important to present the summary of revenue generated for the period under consideration. The amount presented in this research have been adjusted[28] for inflation as at July 31, 2013 prices using the average yearly Consumer Price Index (CPI[29]) from Ghana Statistical Service and Bank of Ghana for each year (see Annex 6). Based on the exchange rate (US$1.00 = GH¢1.9925) as at that date, the amount were converted to the US dollar equivalent at current prices. (Bank of Ghana, 2013 and Ghana Statistical Service, 2013). Table 13 below gives an overview of the revenues from property rate and ground rent.

From the table, property rate revenue accounted for 27.49% while stool lands ground rent revenue accounted for 1.64% of the STMA IGF over the period. Though vested lands ground rent revenue was currently not part of STMA IGF, its revenue portion could have yielded 0.04% of the IGF. State lands ground rent revenue on the other hand could have accounted for 38.80% of the STMA IGF if it were part of the IGF revenue.

[27] This is the budget estimate for the year 2013 since the year has not ended.

[28] Based on the formula $\frac{Index\ for\ current\ year\ (x)}{Index\ for\ previous\ year\ (y)} \times Amount\ in\ previuos\ year(y)$, (Gavin, 2009)

[29] This was gotten from the Bank of Ghana.

**Table 13: Overview of Revenue Generated from Property Rate and Ground Rent in STMA Area**

| Year | Revenue (GH¢ or US$) | Property Rate [A] | Stool Ground Rent [B] | Vested Ground Rent [C] | Others [D] | Total Internally Generated Fund (IGF) [E] = A+B+D | State Ground Rent$^{\Delta}$ [F] |
|---|---|---|---|---|---|---|---|
| **2006** | GH¢ | 375,154 | 11,996 | 357 | 579,047 | 966,197 | 388,923 |
| | US$ | 188,280 | 6,021 | 179 | 290,633 | 484,934 | 195,200 |
| **2007** | GH¢ | 631,456 | 10,391 | 839 | 1,030,518 | 1,672,365 | 950,083 |
| | US$ | 316,928 | 5,215 | 421 | 517,217 | 839,360 | 476,847 |
| **2008** | GH¢ | 845,872 | 100,894 | 480 | 1,543,237 | 2,490,003 | 905,959 |
| | US$ | 424,543 | 50,639 | 241 | 774,550 | 1,249,732 | 454,701 |
| **2009** | GH¢ | 554,728 | 14,301 | 1,034 | 1,342,036 | 1,911,065 | 450,681 |
| | US$ | 278,418 | 7,178 | 519 | 673,568 | 959,164 | 226,197 |
| **2010** | GH¢ | 789,706 | 25,835 | 3,619 | 2,271,465 | 3,087,006 | 700,595 |
| | US$ | 396,353 | 12,967 | 1,816 | 1,140,048 | 1,549,368 | 351,628 |
| **2011** | GH¢ | 860,098 | 54,031 | 0 | 2,633,635 | 3,547,764 | 1,209,457 |
| | US$ | 431,683 | 27,118 | 0 | 1,321,822 | 1,780,623 | 607,026 |
| **2012** | GH¢ | 993,175 | 65,310 | 2,021 | 2,636,489 | 3,694,974 | 2,415,334 |
| | US$ | 498,475 | 32,779 | 1,014 | 1,323,253 | 1,854,507 | 1,212,256 |
| ***2013** | GH¢ | 710,000 | 62,000 | 650 | 2,814,800 | 3,586,800 | 1,109,726 |
| | US$ | 356,349 | 31,118 | 326 | 1,412,748 | 1,800,215 | 556,971 |
| **Total** | **GH¢** | **5,760,189** | **344,758** | **9,001** | **14,851,228** | **20,956,175** | **8,130,758** |
| | **US$** | **2,891,039** | **173,034** | **4,517** | **7,453,831** | **10,517,904** | **4,080,827** |
| **Percentage** | **%** | **27.49** | **1.64** | **0.04** | **70.87** | **100.00** | **38.80** |

***Source: Field Data, 2013 (Extracted from Annual Revenue and Budget Accounts of STMA and Western Regional PVLMD).***

***NB:*** *2013 – This is estimated budget and not real revenue. Rent$^{\Delta}$ – This is not part of STMA IGF Revenue but granted[30] that the revenue is given to STMA in the form of transfer.

[30] The researcher has assumed that the ground rent from state lands were given to the STMA in the form of transfer for clearer analysis of the ground rent system.

### 4.3.1 Revenue from Property Rate

The revenue accounts of the STMA for the period 2006 – 2013 revealed that revenue from property rate have not been stable. It was observed that, the revenue trend fluctuates generally but taking it year by year as shown in Figure 5, it was increasing from 2006 until 2008 but fell in 2009 afterwards increased at a reduced rate. The fluctuation could be attributed to the manner in which property rate were levied. As explained above under the assessment procedures, the property rate revenue was based and linked to the other sources of IGF revenue of the STMA. These other sources were not stable hence reflected in the property rate revenue. From Figure 5, year 2006 recorded revenue of US$ 188,300 then shot up in 2007 to US$ 316,900 but recorded a steady increase in 2008 to US$ 424,500. In 2009, the revenue from property rate fell to US$ 278,400 but afterwards increased steadily in 2010; 2011; 2012 to US$ 396,400; US$ 431,700 and US$ 498,500 respectively.

The sharp rise in revenue from 2006 to 2008 could be as a result of the oil discovery and the redenomination of the Ghanaian currency. Due to the redenomination of the Ghanaian cedi in 2007, many Ghanaians including property owners were pushed to spend their old currency before July 1, 2007 hence some property owners decided to pay their rate in order not to lose the value of their money. Also, following the announcement of oil find in Ghana especially Sekondi-Takoradi, property owners quickly rushed to pay their rates to brighten their investment opportunities. From STMA perspective, in 2007, the Assembly instituted measures to generate more revenue since their burden of responsibility had increased tremendously due to the oil activities. On the other hand, the drastic fall in 2009 was due to the national elections and the change of political system, the STMA was still organsing the administrative changes. Finally, in 2009, property owners were sceptical about the political system coupled with the fact that not much money was in circulation hence paying property rate was secondary. See figure 5 below.

In Figure 6 below, the property rate revenue have been compared with the internally generated funds (IGF) of STMA for the period. It was realised that the revenue generated from property rate compared with the IGF was falling over the years until 2012 when it started to rise again. The data revealed that 2006 recorded 38.8%, 2007 recorded 37.8%, 2008 recorded 34.0%, 2009 recorded 29.0%, 2010 recorded 25.6% while 2011 recorded 24.2% being the lowest. This implies that the higher the percentage, the greater the contribution of property rate to IGF. For instance, 2006 recorded the highest share of property rate to IGF while 2011 recorded the lowest share.

In absolute terms, a particular year might have high revenue but in comparative terms its contribution to the IGF might not have been significant. For instance in absolute terms, 2009 recorded the lowest revenue of US$ 278,400 with a 29.0% of IGF while 2012 recorded US$ 498,500 on with a 26.9% of IGF. This implies that comparatively (with IGF), 2009 contribution was higher than 2012 contribution though their absolute revenues differ. See figures 5 and 6.

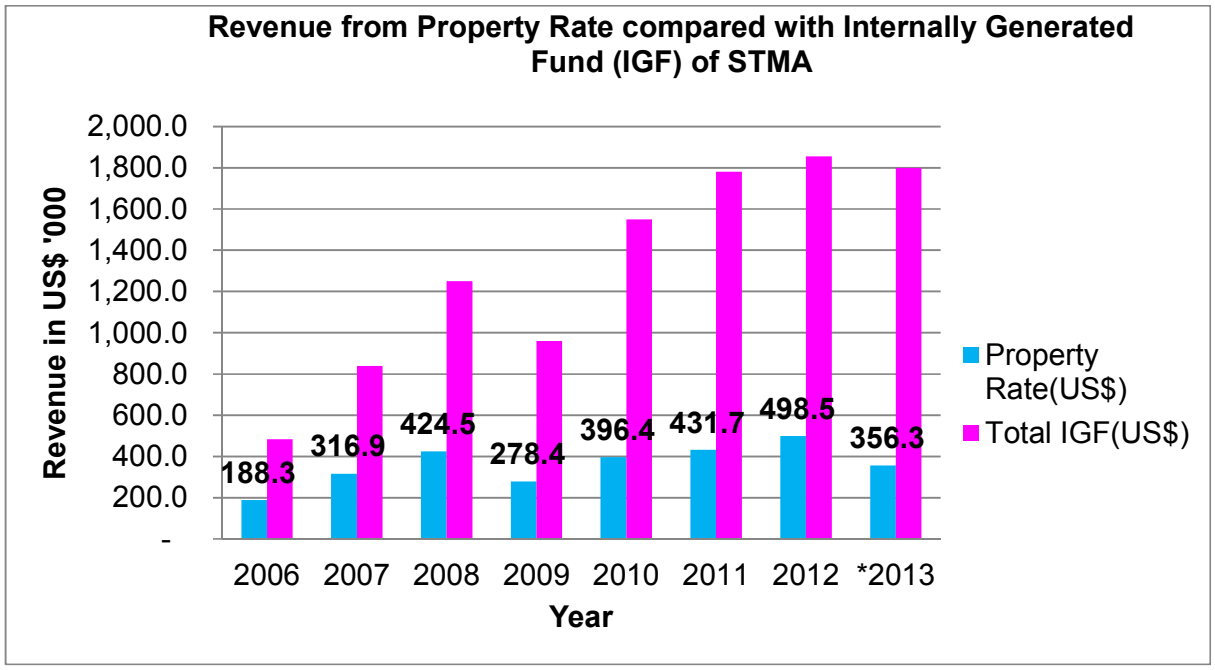
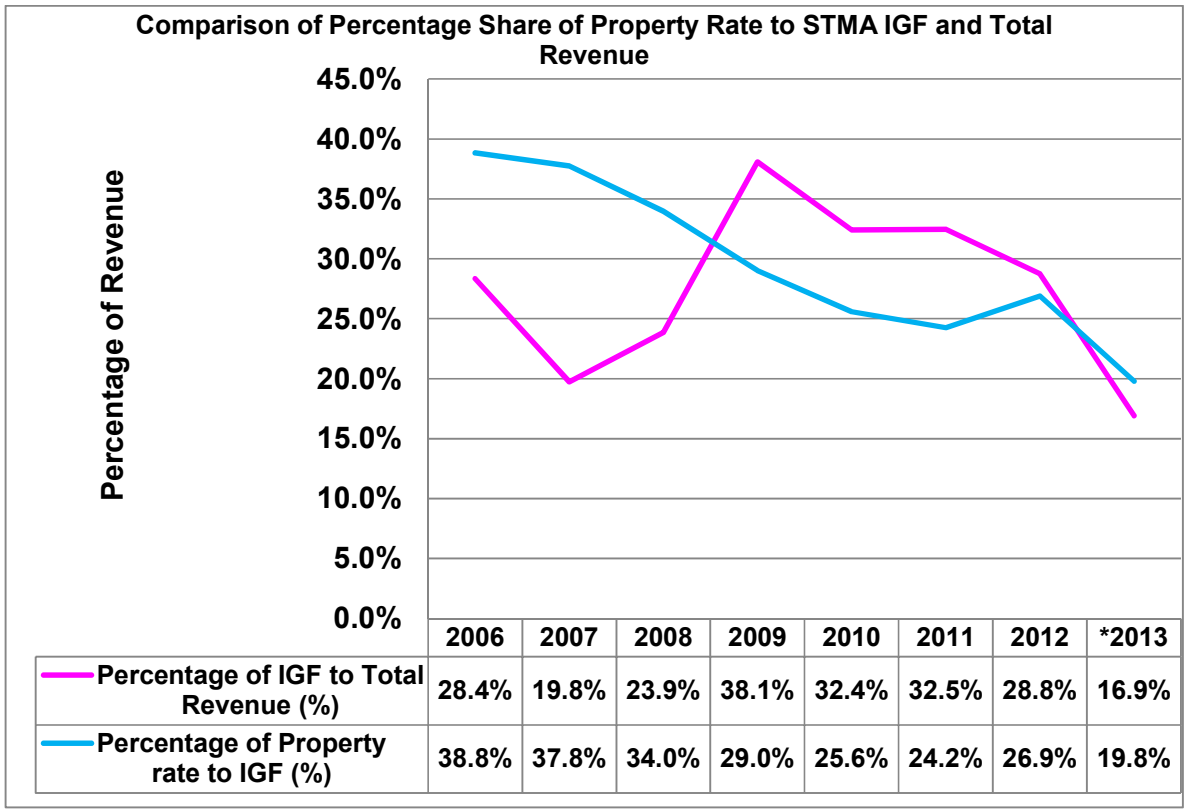



**Figure 5: Property Rate Revenue compared with Internally Generated Fund of STMA** ***(Source: Field Data, 2013)***




| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | *2013 |
|---|---|---|---|---|---|---|---|---|
| Percentage of IGF to Total Revenue (%) | 28.4% | 19.8% | 23.9% | 38.1% | 32.4% | 32.5% | 28.8% | 16.9% |
| Percentage of Property rate to IGF (%) | 38.8% | 37.8% | 34.0% | 29.0% | 25.6% | 24.2% | 26.9% | 19.8% |

**Figure 6: Comparison of Percentage Share of Property Rate with STMA IGF and Total Revenue** ***(Source: Field Data, 2013)***

### 4.3.2 Revenue from Ground Rent

Revenues from ground rent were grouped into three (3) categories comprising stool lands, vested lands and state lands revenue. It was unfolded from the field that STMA had received its share of the stool lands ground rent revenue while the vested lands ground rent revenue was not shared due to unresolved dispute. It was also found out that state lands ground rent revenue was shared exclusively between the central government and the original landowners (stool or family) per the legal agreement. For the purposes clarity and easy appreciation of the contribution of ground rent in land value capture, the central government's share of ground rent revenue has been assumed to be given to the local government (STMA) in the form of transfer hence has been analysed as part of the STMA internally generated fund (IGF) revenue. The following paragraphs provide details of each category.

Figure 7 below is a bar chart showing the STMA share of ground rent revenue generated from stool lands. It was found out that stool lands revenue to STMA was generally small nonetheless it has significantly improved. This could be as a result of the percentage share coupled with the fact that STMA did not put much efforts and measures in the collection. Also, since STMA do not control this revenue directly, it only waits to receive whatever comes to its account. From OASL perspective, the main reason for the small revenue was as a result of the ground rent assessed as either subsidized or peppercorn rent which is highly below the economic rent. This was stressed by the OASL officer "*the ground rent that we (OASL) collect is highly subsidized, in fact I cannot even call it peppercorn rent but what I can tell you for a fact is, it is highly below economic rent."*

It can be observed from figure 7 that the revenue trend has been fairly stable apart from the unexpected that happened due to the oil find. The data showed that 2006 recorded US$ 6,000; 2007 recorded US$ 5,200 indicating a slight fall, 2008 recorded US$ 50,600 with a sharp rise while 2009 recorded US$ 7,200 thus falling back to the normal trend after which successive years have recorded steady increment. The fall in 2009 is the cooling effect of the oil find after the high expectation from investors. Also, the national elections and the political switch over effect for that year also accounted for the fall.

Revenue from the 40 acre vested lands yielded paltry amount below US$ 2,000 for each year. From figure 8, 2006, 2007, 2008 and 2009 respectively recorded US$ 200, US$ 400, US 200 and US$ 500 with the exception of 2010 which recorded US$ 1,800. It can be observed from the chart that the revenue trend for the vested lands differ from the stool lands and the state lands. For instance, while ground rent revenues for stool and state lands fell in 2009, it rather increased in that year and further shot up in 2010. The small contribution of vested lands ground rent revenue was primarily due to its small size compared with the other two (state and stool). The reason for the anomaly from the others could stem from the fact that the land currently falls outside the Sekondi-Takoradi metropolis which is the hub of the offshore oil activities coupled with the dispute, it is less attractive. Unlike other municipalities such as Koforidua and Sunyani where vested lands covers a significant (more than 50% of their land size), the contribution of ground rent revenue could be similar to what state land has generated.

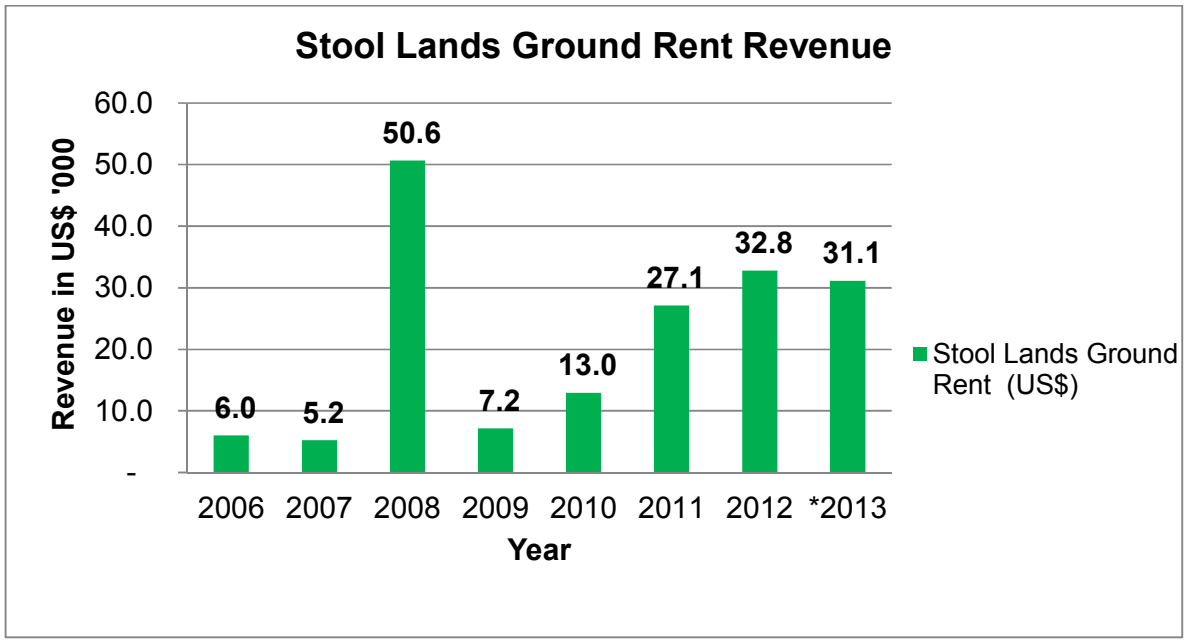



**Figure 7: Revenue from Stool Lands Ground Rent** ***(Source: Field Data, 2013)***

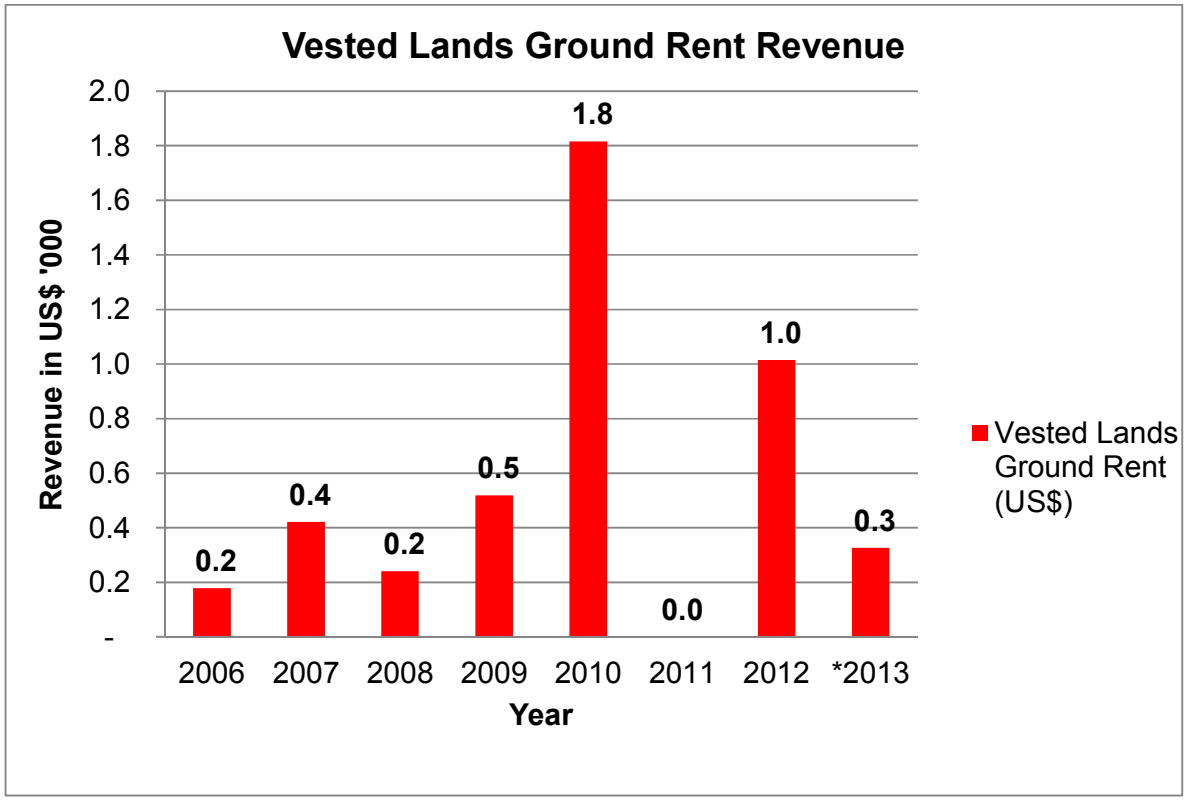



**Figure 8: Revenue from Vested Lands Ground Rent** ***(Source: Field Data, 2013)***

On the side of state land ground rent revenue, a similar trend recorded for the stool lands was observed. In figure 9 below, it can be seen that the revenue generated from the state lands was very significant compared with the others especially the stool lands. For instance, the lowest revenue from state lands recorded as US$ 195,200 was far more than the highest revenue from stool lands which stood at US$ 50,600. The reasons for this significant performance could be ascribed to the strategic location of the state lands and the assessment of rent based on economic rent[31], subsidized rent or a percentage of rack rent. The state lands were found to be located in prime areas such as central business district, harbour area, airport residential area, Chapel Hill and Windy Ridge of the metropolis.

In terms of the trend of the revenue generated over the years, similar pattern to that of the stool lands was recorded albeit few variations. In 2006, US$ 195,200 was recorded while 2007 and 2008 recorded close amount of US$ 476,800 and US$ 454,700 respectively. Again, in 2009 the figure dropped to US$ 226,200 after which it started rising throughout the successive years with the highest amount of US$ 1.2 million in 2012. The fall in 2009 could be linked to the cooling effect of the oil find. Also, the national elections and the political switch over effect for that year also accounted for the fall. On the other hand, the sharp rise in revenue for 2012 was as a result of lease renewal and upward revision of ground rent.

Cumulatively, the combined effects of the three (3) ground rent revenues have summarily been presented in figure 10. From the chart, the lowest revenue was recorded in 2006 with US$ 201,400 while the highest amount of US$ 1.3 million was recorded in 2012. This result reflects the outcome of the state lands ground rent revenue. The trend for the revenue generation also look like that for the state lands because of the huge figures emanating from there. From the figure, the revenue for the first three years (2006, 2007, 2008) were rising but fell in 2009 after which it started rising and got to the peak in 2012.

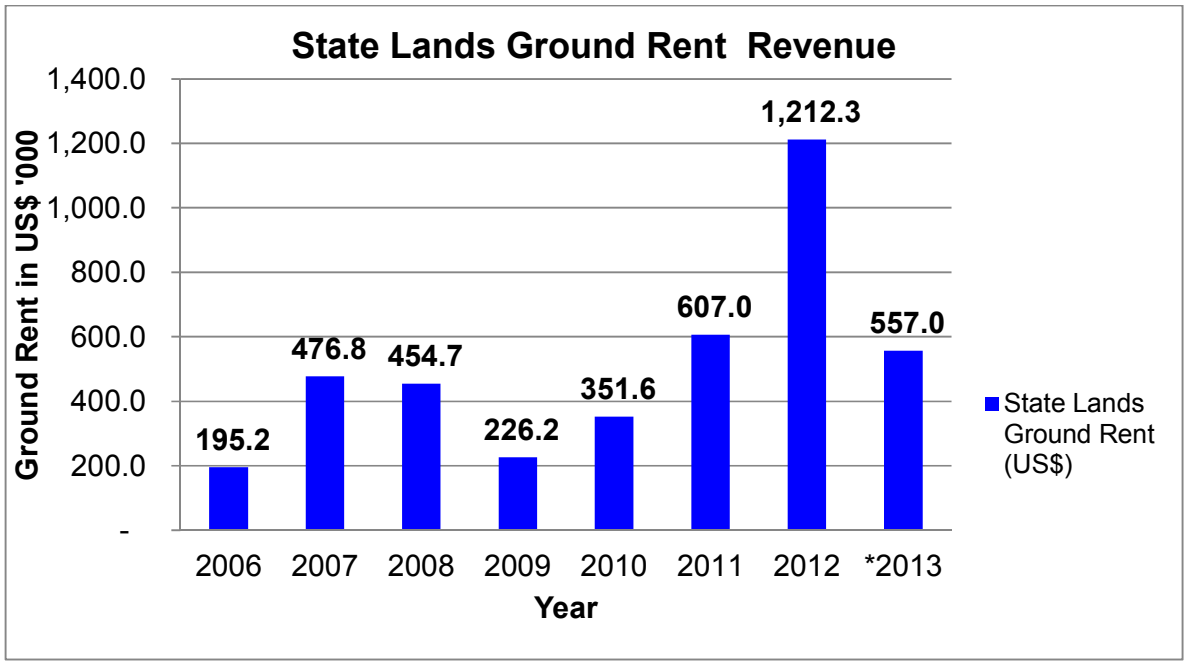



**Figure 9: Revenue from State Lands Ground Rent** ***(Source: Field Data, 2013)***

[31] Commercial rent

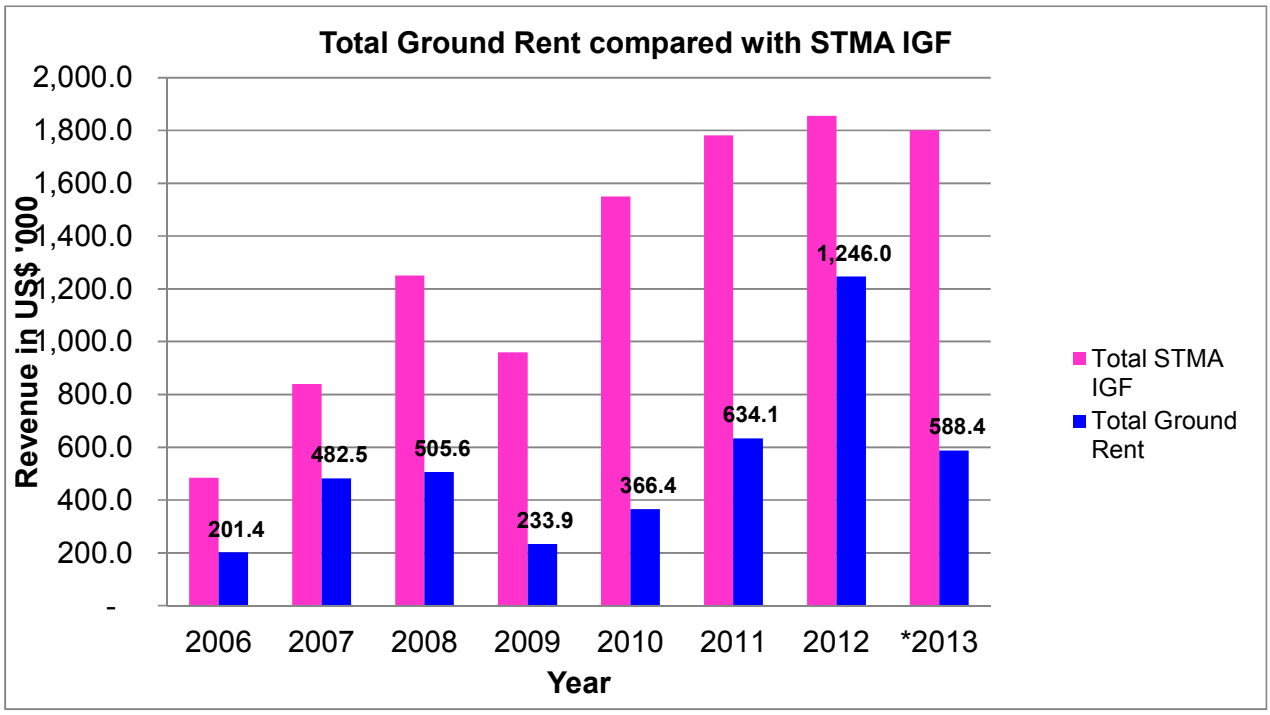



**Figure 10: Total Ground Rent Revenue compared with the STMA internally generated funds** ***(Source: Field Data, 2013)***

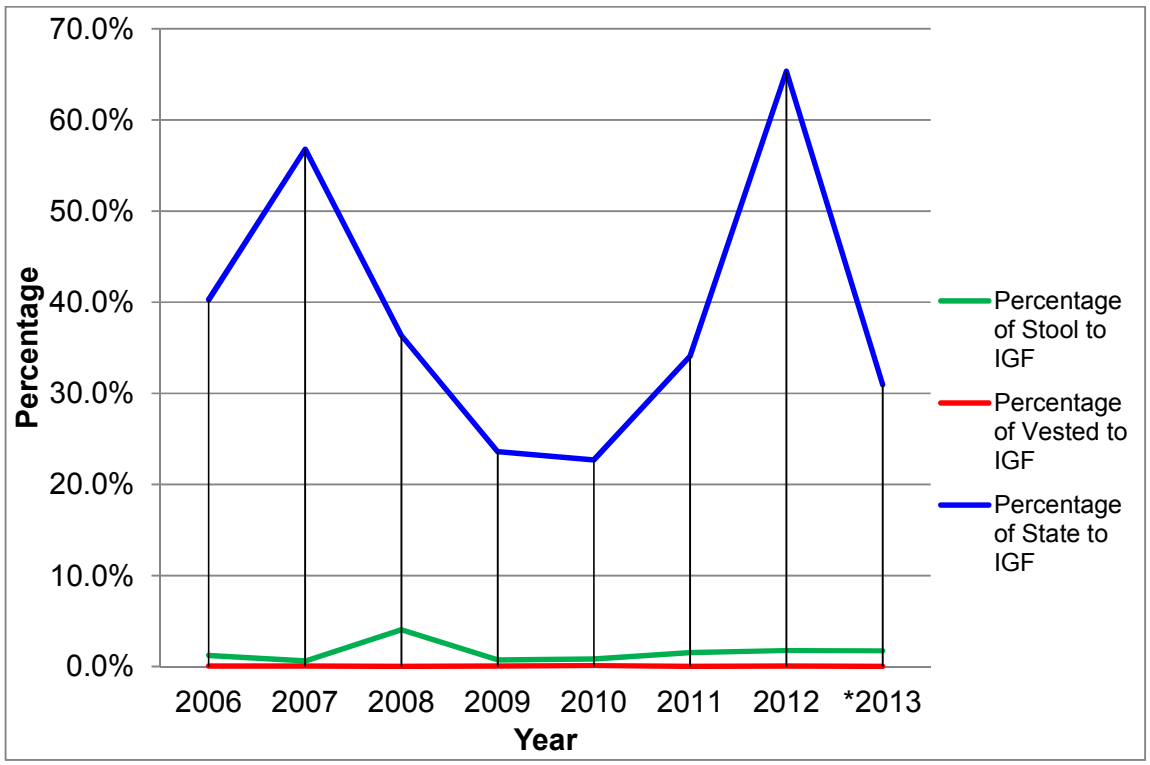


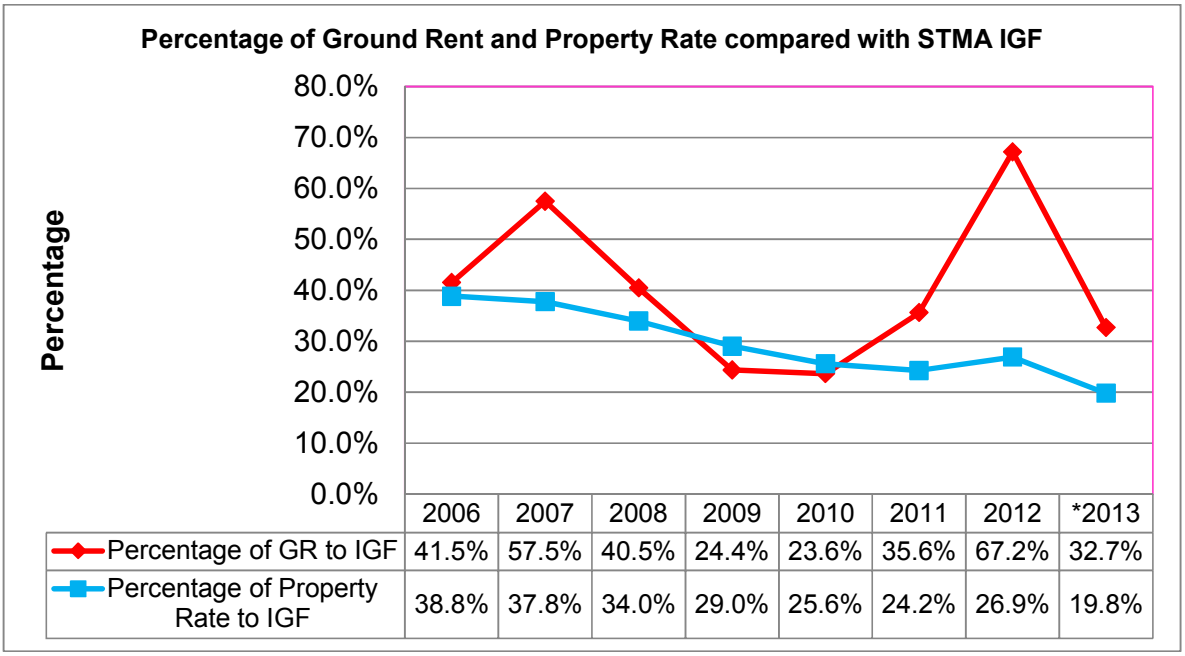

**Figure 11: Percentage of Different Ground Rent Revenue compared with STMA IGF** ***(Source: Field Data, 2013)***

In figure 11 above, the percentage share of each of the ground rent revenue from stool, vested and state lands have been compared with the STMA IGF revenue for the period under review. From the graph above, it can be observed that the percentage share of the stool lands revenue was below 5% of the STMA IGF with the highest of 4.1% in 2008 which also coincided with the highest revenue for the period. Similarly for state lands, the year with the highest revenue thus 2012 also recorded the highest percentage share of 65.4% of STMA IGF revenue. This implies that state lands ground rent revenue represent a significant proportion of STMA IGF revenue. For vested lands, the percentage share was insignificant with figures below 1% of STMA IGF revenue.

### 4.3.3 Revenue from Ground Rent and Property Rate

Comparatively, the percentage share of the property rate revenue to STMA IGF was decreasing while the percentage share of the ground rent revenue was swinging (rise – fall – rise). This implied that revenue from property rate was increasing at a decreasing rate until 2012 when it started to rise again. This trend started with the highest percentage slightly below 40% (thus 38.8% in 2006) of the STMA IGF. However, the percentage share of ground rent revenue to STMA IGF trend followed similar pattern of rise –fall – rise of the revenue generated. In figure 12 below, the highest recorded percentage was 67.2% in 2012 while the lowest percentage share of 23.6% in 2010. Interestingly, ground rent percentage share recorded both the highest and lowest percentage share when compared with the property rate. The difference in trend was as a result of property rate revenue dependent on other sources of revenues of STMA IGF while ground rent was independent. This means that if the other sources of revenue for STMA increased then less would be required/budgeted as property rate and vice versa. It was observed increased ground rent would reflect increased IGF irrespective of other sources. See figure 12 below.

Cumulatively, both property rate and ground rent revenues together represented a significant share of the STMA IGF revenue. In figure 14, it could be observed that both of them accounted for 88.1% of the STMA IGF in 2012 as the highest and 49.2% in 2010 as the lowest. Also most of the years (2006, 2006, 2008, 2009, 2011, 2012 and 2013) have accounted for more than 50% of the STMA IGF revenue.




| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | *2013 |
|---|---|---|---|---|---|---|---|---|
| Percentage of GR to IGF | 41.5% | 57.5% | 40.5% | 24.4% | 23.6% | 35.6% | 67.2% | 32.7% |
| Percentage of Property Rate to IGF | 38.8% | 37.8% | 34.0% | 29.0% | 25.6% | 24.2% | 26.9% | 19.8% |

**Figure 12: Percentage of Ground Rent and Property Rate compared with STMA IGF** ***(Source: Field Data, 2013)***

#### 4.3.3.1 Comparative Distribution of Revenues from Property Rate, Premium and Ground Rent Revenue Amongst Stakeholders

In consonance with the legal set up and the existing situation of property rate and land leasing in the STMA area, the revenues from them was compared with the various stakeholders especially central government, local government (STMA), stool authority and family authority. Table 14 below presents the summary of the percentage of the revenue kept by each stakeholder under the four (4) landownership systems. From the table it can be observed that STMA got 100% each of the property rate revenue while it received 49.5% each from both stool and vested lands. However, it did not benefit anything in terms of ground rent from the state and family lands. On the part of the central government, it benefited 50% from its own land as premium, 10% from vested lands but nothing from stool and family lands. However, if the state was involved in the collection of the stool lands premium, then it would have benefited 10% from it.

Also, from the stool lands perspective, 50% of the ground rent as well as premium was received under state lands but benefited 40.5% each from vested and stool lands as ground rent. With regards to family lands, both premium and ground rent were totally (100%) kept by the family authority except state benefited 10% of ground rent in the event that such rent was collected by the OASL. See Table 14 below.

**Table 14: The Distribution of Property Rate, Premium and Ground Rent Revenues Amongst Stakeholders**

| | Premium | Ground Rent | Property Rate | Transaction Fees | Development Cost | Total |
|---|---|---|---|---|---|---|
| **STATE LANDS** | | | | | | |
| State/Central Gov't | 50.0% | 50.0% | 0.0% | 99.0% | 10.0% | **209.0%** |
| Local Gov't/STMA | 0.0% | 0.0% | 100.0% | 1.0% | 10.0% | **111.0%** |
| Stool/Chiefs | 50.0% | 50.0% | 0.0% | 0.0% | 0.0% | **100.0%** |
| Family Head | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | **0.0%** |
| Others | 0.0% | 0.0% | 0.0% | 0.0% | 80.0% | **80.0%** |
| Total | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | **500.0%** |
| **VESTED LANDS** | | | | | | |
| State/Central Gov't | 10.0% | 10.0% | 0.0% | 99.0% | 10.0% | **129.0%** |
| Local Gov't/STMA | 49.5% | 49.5% | 100.0% | 1.0% | 10.0% | **210.0%** |
| Stool/Chiefs | 40.5% | 40.5% | 0.0% | 0.0% | 0.0% | **81.0%** |
| Family Head | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | **0.0%** |
| Others | 0.0% | 0.0% | 0.0% | 0.0% | 80.0% | **80.0%** |
| Total | **100.0%** | **100.0%** | **100.0%** | **100.0%** | **100.0%** | **500.0%** |
| **STOOL LANDS** | | | | | | |
| State/Central Gov't | 0.0% or *10.0% | 10.0% | 0.0% | 99.0% | 10.0% | **119.0% or *129.0%** |
| Local Gov't/STMA | 0.0% or *49.5% | 49.5% | 100.0% | 1.0% | 10.0% | **160.5% or *210.0%** |
| Stool/Chiefs | 100.0% or *40.5% | 40.5% | 0.0% | 0.0% | 0.0% | **140.5% or *81.0%** |
| Family Head | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | **0.0%** |
| Others | 0.0% | 0.0% | 0.0% | 0.0% | 80.0% | **80.0%** |
| Total | **100.0%** | **100.0%** | **100.0%** | **100.0%** | **100.0%** | **500.0%** |
| **FAMILY LANDS** | | | | | | |
| State/Central Gov't | 0.0% | 0.0% | 0.0% | 99.0% | 10.0% | **109.0%** |

| | | | | | | |
|---|---|---|---|---|---|---|
| **Local Gov't/STMA** | 0.0% | 0.0% or *10.0% | 100.0% | 1.0% | 10.0% | **111.0% or *121.0%** |
| **Stool/Chiefs** | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | **0.0%** |
| **Family Head** | 100.0% | 100.0% or *90.0% | 0.0% | 0.0% | 0.0% | **200.0% or *190.0%** |
| **Others** | 0.0% | 0.0% | 0.0% | 0.0% | 80.0% | **80.0%** |
| **Total** | **100.0%** | **100.0%** | **100.0%** | **100.0%** | **100.0%** | **500.0%** |
| **Grand Total** | **400.0%** | **400.0%** | **400.0%** | **400.0%** | **400.0%** | **2000.0%** |

***Source: Field Data, 2013***

## 4.4 Relationship amongst Property Rate, Ground Rent Revenues and Infrastructure with Land Values in Sekondi-Takoradi Metropolis

Prior to discussing the relationships amongst land values, property rate and ground rent, the researcher first analysed the relationship between land values and infrastructure/services. The justification for land value capture in this particular research was founded on infrastructure/services provision in the metropolis hence its influence on land values was verified. The verification resulted in an affirmative outcome as presented in the next subsection. It further laid a solid foundation to analyse the relationship between the land values and ground rent as well as property revenues.

### 4.4.1 Relationship between Land Values and Infrastructure/Services in Sekondi-Takoradi Metropolis

Land values data were gathered from among valuers, estate developers, landowners, PVLMD, OASL and estate agents in Sekondi-Takoradi metropolis. It was revealed that land values have increased over the years (2006 – 2013). 100% of the landowners surveyed confirmed this and offered reasons including availability infrastructure or services, oil activities in the metropolis, general inflation, population and high demand to be accountable for such increases. It was revealed that 66.7% of the respondents said the oil boom had greatly increased the land values. In terms of services/infrastructure, 66.7%, 54.2%, 41.7%, 25.0%, 20.8% and 12.5% indicated that electricity, road, water, health, education and waste respectively had greatly influenced land values. However it was revealed that 29.5% indicated that waste services did not increase land values in the metropolis. Also, a private valuer interviewed answered in the affirmative but added "*the rate of increase in land values rose in 2008 due to the oil find because of high expectation and speculation. For instance the rate of increase from 2008 to 2009 was 62.5% but it has declined after 2009 to the normal".*

A range of land values were compiled for different locations and uses in the metropolis. Based on some similarities in the range of values, infrastructure/services and location, categories were created. These included high class residential, medium class residential, low class residential, mixed class, commercial/industrial and outskirts/new areas. The minimum land values per square

metre was found in locations with poor/no infrastructure or services while the neighbourhoods with or close to good infrastructure or services had maximum land values as shown in Table 15 below.

**Table 15: Current Land Values in Sekondi-Takoradi Metropolis and Extent Value Captured**

| Category | High Class Residential | Medium Class Residential | Low Class Residential | Outskirt/New areas | Commercial/Industrial | Mixed Class |
|---|---|---|---|---|---|---|
| **Location** | Chapel Hill, Beach Road | Windy Ridge, Airport Ridge | Anaji, Tanokrom, Kansawrodo, Asakae, Sekondi, Ntankroful, B.U | Whindo, Mpintsim, Anoe, Adientem, Mampong | Market Circle, Dixcove Hill and Axim Road | Tanokrom West, Last Hour Beach, Cape Coast Road |
| **[Poor Infrastructure] /$m^2$** | $98.80 | $49.40 | $6.18 | $1.23 | $123.50 | $9.88 |
| **[Good Infrastructure] / $m^2$** | $494.00 | $86.45 | $37.05 | $5.43 | $247.00 | $61.75 |
| **Average/$m^2$** | $296.40 | $67.93 | $21.61 | $3.33 | $185.25 | $35.82 |
| **Stool Rate/ $m^2$** | $0.06 | $0.06 | $0.03 | $0.02 | $0.07 | $0.05 |
| **State Rate/ $m^2$** | $0.17 | $0.10 | $0.06 | $0.04 | $0.37 | $0.21 |
| **Stool Lands Capital Value/ $m^2$** | $1.22 | $0.74 | $0.59 | $0.39 | $1.35 | $1.08 |
| **State/Vested Lands Capital Value/ $m^2$** | $3.43 | $1.96 | $1.27 | $0.73 | $6.76 | $4.26 |
| **Percentage captured by Stool lands** | 0.41% | 1.08% | 2.72% | 11.76% | 0.73% | 3.01% |
| **Percentage captured by state/vested lands** | 1.16% | 2.89% | 5.90% | 22.04% | 3.65% | 11.90% |

***Source: Field Data, 2013***

### 4.4.2 Extent of Land Values captured under Ground Rent

Table 15 above presents a summary of these land values with their neighbourhood. In order to compare current land values captured through ground rent, the rent per square metre ($m^2$) for stool as well as state/vested lands were capitalised at a discount rate of 5% for 99 years and 50 years for residential and commercial uses respectively. The discount rate was arrived at based on

the current monetary policy rate (MPR) or base rate of 16% and inflation rate of 11% as at July 2013 (Bank of Ghana, 2013). Based on the Years Purchase formula, the figures were computed and presented in Table 15 above. In order not to complicate matters and for the purposes of this research, certain assumptions were made. It was assumed that (i) the rent paid was the same throughout the period, (ii) the capital value computed here did not include the premium because the premium have already been paid, (iii) Tax liability was ignored and (iv) 30% of land value has already been paid as premium.

In table 17 above, it can be observed that the values captured under both scenarios varied drastically according to location. Under the stool lands, the value captured per an acre was 0.41%, 1.08%, 2.72%, 11.76%, 0.73% and 3.01% for high class, medium class, low class, outskirts/new areas, commercial/industrial and mixed class respectively. The lowest percentage recorded was under the high class residential area while the outskirts/new areas recorded the highest percentage meaning more (11.76%) value was captured in the outskirts but less (0.41%) was captured in the high class by the under stool lands. This outcome was as a result of the fact that the stool lands covered more of the outskirt/new areas but surrounded by high class or medium class hence had greater influence on the values. It can also be seen from the table that in the mixed class more (3.01%) was captured than in low class (2.72%).

Under the state or vested lands, the percentage of value captured was higher than recorded in the stool lands. This was as a reflection of the assessment criteria (PVLMD used economic rent while OASL used highly subsidised rent). From table 15, value captured under state/vested lands was similar to the trend observed under the stool lands. The highest value captured was 22.04% in the outskirts/new areas while the lowest was 1.16% which fell under the high class residential areas. The explanation for this could be likened to the fact that the land was granted at the current use value while the rent assessment was calculated based on the potential use value. It was found out that outskirts/new areas were not put to their potential use while the high class, mixed class or commercial/industrial uses were put somewhat to their potential use (closer to highest and best use than the outskirts/new areas or low class). The medium class recorded 2.89%, low class recorded 5.90%, commercial/industrial recorded 3.65% while mixed class accounted for 11.90% of the value captured.

This result means that areas put to their full potential use, less land value was captured as compared with areas whose current use were below the potential use. It also implies that the percentage not captured by the ground rent system under both cases, was kept by other stakeholders (as shown above in Table 14) especially land owners and speculators.

### 4.4.3 Extent of Land Values captured under Property Rate

Property rate was found not to be capturing land values in STMA Area. This was because the assessment was based on improvements only, replacement cost was applied and depreciation was adjusted for based on physical state and not age. All these factors had no direct correlation with location which was the main determinant of land values. However, the amount of property rate paid had a direct effect on the land values. It was found out that land users acquired land for development hence increased property rate, would (all things being equal) affect the amount offered for the land.

## 4.5 Financing Urban Infrastructure/Services from Property Rate and Ground Rent Revenues in Sekondi-Takoradi Metropolis

Financing urban infrastructure/services in the metropolis was analysed based on the STMA annual budget for the year under review. In order to appreciate the analysis and understand the discussions, an overview of the expenditure on infrastructure/services of the STMA financed from the internally generated fund has been presented in Table 16. All the expenditure presented here were actual expenditure but for the 2013 which was approved budget. It is important to clarify that the expenditure of STMA were categorised into IGF and District Assembly Common Fund (transfers) in both capital and recurrent expenditure. For the purposes of this research, it is only expenditure from the IGF that was considered.

**Table 16: Overview of Expenditure on Infrastructure/services financed from the Internally Generated Fund**

| Year | Expenditure (GH¢ or US$) | IGF Infrastructure Expenditure | | Total Expenditure from IGF | Grand Total Expenditure of STMA |
|---|---|---|---|---|---|
| | | Capital | Recurrent | | |
| **2006** | GH¢ | 14,263.68 | 63,342.00 | 77,890.49 | 1,917,146.95 |
| | US$ | 7,158.94 | 31,791.35 | 39,093.23 | 962,216.05 |
| **2007** | GH¢ | 455,015.22 | 102,394.64 | 710,007.03 | 7,441,883.23 |
| | US$ | 228,372.14 | 51,391.87 | 356,352.53 | 3,735,081.19 |
| **2008** | GH¢ | 34,466.91 | 62,918.56 | 113,699.07 | 10,929,182.92 |
| | US$ | 17,298.94 | 31,578.83 | 57,065.56 | 5,485,356.91 |
| **2009** | GH¢ | 61,726.93 | 69,540.11 | 131,924.89 | 4,775,544.33 |
| | US$ | 30,980.75 | 34,902.18 | 66,213.10 | 2,396,845.70 |
| **2010** | GH¢ | 429,378.65 | 237,345.05 | 838,775.38 | 9,707,172.22 |
| | US$ | 215,505.14 | 119,123.48 | 420,981.36 | 4,872,029.74 |
| **2011** | GH¢ | 372,724.03 | 217,665.11 | 1,429,849.99 | 10,200,437.39 |
| | US$ | 187,070.19 | 109,246.12 | 717,641.71 | 5,119,599.53 |
| **2012** | GH¢ | 349,047.38 | 298,737.53 | 2,526,843.49 | 13,382,436.71 |
| | US$ | 175,186.88 | 149,936.37 | 1,268,222.75 | 6,716,644.99 |
| ***2013** | GH¢ | 700,000.00 | 268,000.00 | 968,000.00 | 21,181,222.00 |
| | US$ | 351,330.00 | 134,509.20 | 485,839.20 | 10,630,855.32 |
| **Total** | **GH¢** | **2,416,622.80** | **1,319,943.01** | **6,796,990.33** | **79,535,025.76** |
| | **US$** | **1,212,902.99** | **662,479.40** | **3,411,409.45** | **39,918,629.43** |

***Source: STMA Annual Budget 2006 – 2013***

The infrastructure and services financed with IGF included the health facilities, social services, urban roads, street lights, waste management and educational facilities. The actual revenue expended on infrastructure varied from sector to sector over the years. Figure 13 below is a bar graph comparing the services/infrastructure financed over the years. It was found out that revenue from property rate and ground rent were expended more on waste than any other facility. Social service also benefited much from the revenue while education, health facilities and road/street lights followed in succession.

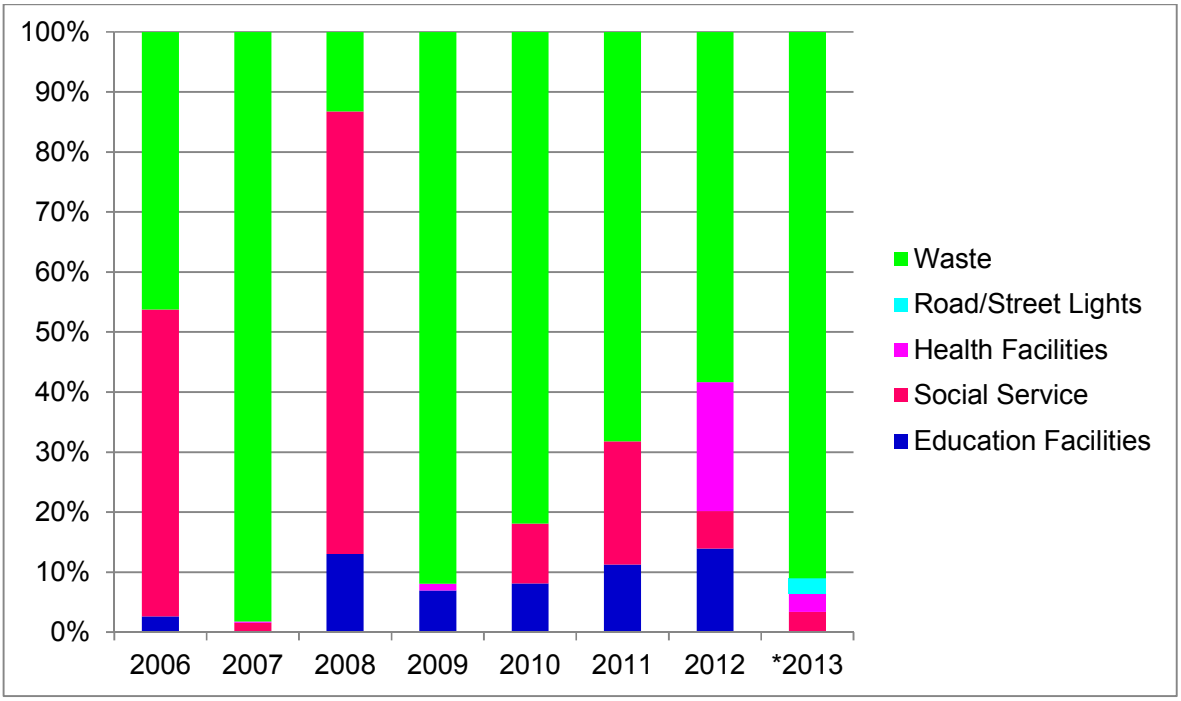



**Figure 13: Infrastructure/services financed with STMA IGF *(Source: Field Data, 2013)***

To test the veracity of these revelations on the ground, landowners and the CHF International Ghana were asked to express their opinion on the extent to which revenue from property rate and ground rent destined to STMA were used to provide certain infrastructure/services. Table 16 below shows the response provided and from the table it can be observed that respondents' opinion did not match what was found from the budget. For instance waste scored 0% under 'extremely' but 50% under 'not at all' which means that no respondent believed that the whole revenue was expended on waste while 50% opined that no revenue was expended on waste. This was directly opposite to what was recorded in the budget because citizens expected more from the STMA. Also, the waste services provided perhaps was not enough to register its presence in the eyes of the citizens while it provision was not widely publicised. Comparatively, education and electricity were adjudged the highest above 'moderately' among the list. On the other hand, market facilities scored the lowest (57.5% under not at all) not to have been financed with both revenue.

On the part of CHF International Ghana, it indicated that STMA did not provide infrastructure/services as were expected by the citizens. The officer pointed out that STMA used those revenue to cover their recurrent expenditure rather than finance urban infrastructure. It was further explained that the revenue for STMA in general was not enough to meet its numerous needs in the metropolis.

**Table 17: Opinion of Respondents on what Revenues from Property rate and Ground rent were used for**

| | Water supply | Road | Education | Health | Electricity | Street lights | Market | Waste |
|---|---|---|---|---|---|---|---|---|
| Extremely | 10.0% | 5.0% | 10.0% | 7.5% | 17.5% | 5.0% | 0% | 0% |
| Greatly | 2.5% | 5.0% | 27.5% | 5.0% | 27.5% | 25.0% | 10.0% | 17.5% |
| Moderately | 32.% | 15.0% | 17.5% | 17.5% | 25.0% | 12.5% | 12.5% | 10.0% |
| Minimally | 15.0% | 40.0% | 20.0% | 20.0% | 15.0% | 27.5% | 20.0% | 22.5% |
| Not at All | 40.0% | 35.0% | 25.0% | 50.0% | 15.0% | 30.0% | 57.5% | 50.0% |
| Total % | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| Total Frequency | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |

***Source: Field Data, 2013***

### 4.5.1 Financing Urban Infrastructure/Services from Property Rate Revenues

Comparing revenues from property rate with the infrastructure/services expenditure or finance, the bar graph in figure 14 below was generated. From figure 14, it can be observed that property rate revenue was able to meet infrastructure expenditure over the years. For instance, it was able to finance both capital and recurrent expenditure on infrastructure in 2006, 2007, 2008, 2009, 2010, 2011 and 2012. This respectively represented a coverage ratio of 483.4%, 113.3%, 868.6%, 422.6%, 118.4%, 145.7% and 153.3%. However, the 2013 budget estimates revealed that it could only meet 73.3% of the infrastructure not withstanding that it could cover the recurrent expenditure.

This implies that property rate was able to cover over and above the urban infrastructure/services expenditure under the IGF of the STMA in the years under consideration.

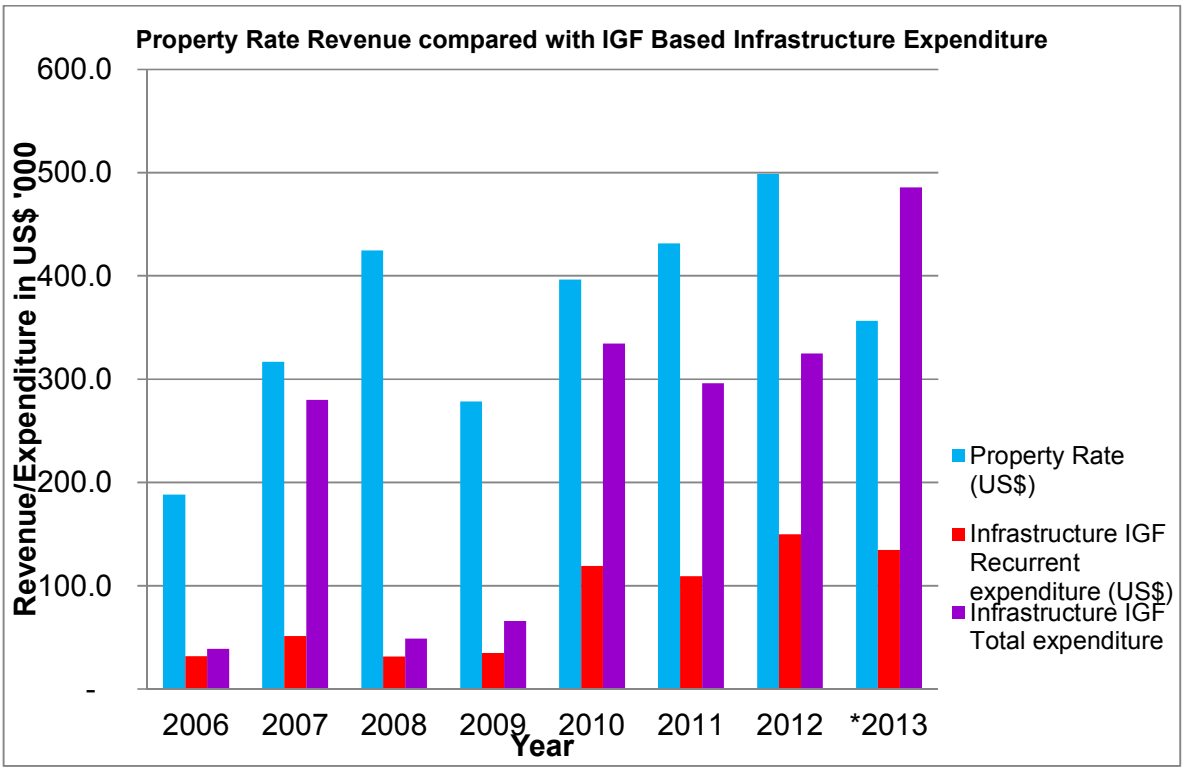



**Figure 14: Property Rate Revenue compared with IGF Based Infrastructure Expenditure of STMA *(Source: Field Data, 2013)***

### 4.5.2 Financing Urban Infrastructure/Services from Ground Rent Revenues

Stool lands revenue was compared with infrastructure expenditure over the years and the results are shown in figure 15 below. This was vital in order to appreciate the current situation of the STMA. From the graph, it can be seen that the stool lands ground rent revenue could not cover even the recurrent expenditure over the years except for 2008 where it covered about 160.13%. This year coincided with the highest revenue recorded under the stool lands. It was also found out that just a small percentage of the total infrastructure expenditure could be finance by stool lands revenue. However, if ground rent revenue from state and vested lands were added to the stool lands, different results were found as shown in figure 16 below.

From figure 16, it can be observed that total ground rent revenue could significantly finance infrastructure/services expenditure over and above the expended. It was shown that it could cover 517.07%, 172.46%, 1034.38%, 355.01%, 109.50%, 214.01%, 383.25% and 121.11% in 2006, 2007, 2008, 2009, 2010, 2011, 2012 and 2013 respectively. This enormous gain emanated from the state lands ground rent revenue as it represented a substantial portion of the STMA internally generated fund.

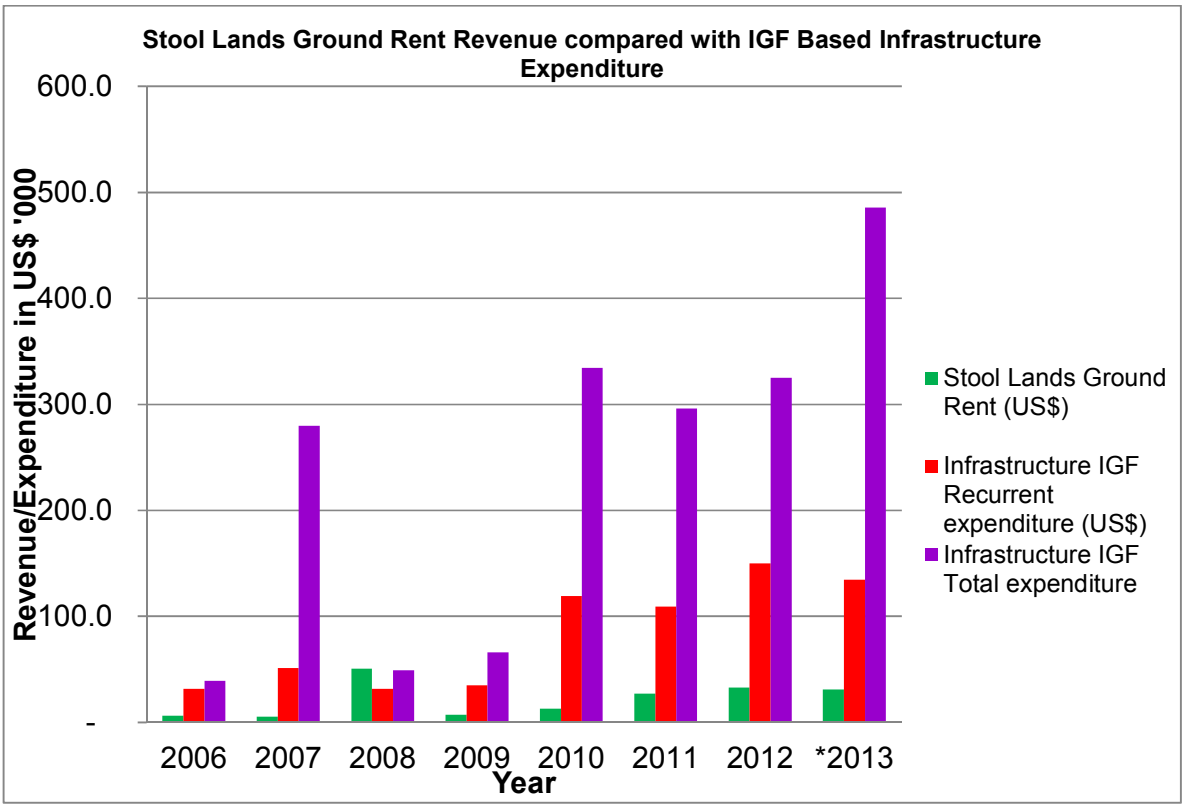



**Figure 15: Stool Lands Ground Rent compared with IGF Based Infrastructure Expenditure of STMA** ***(Source: Field Data, 2013)***

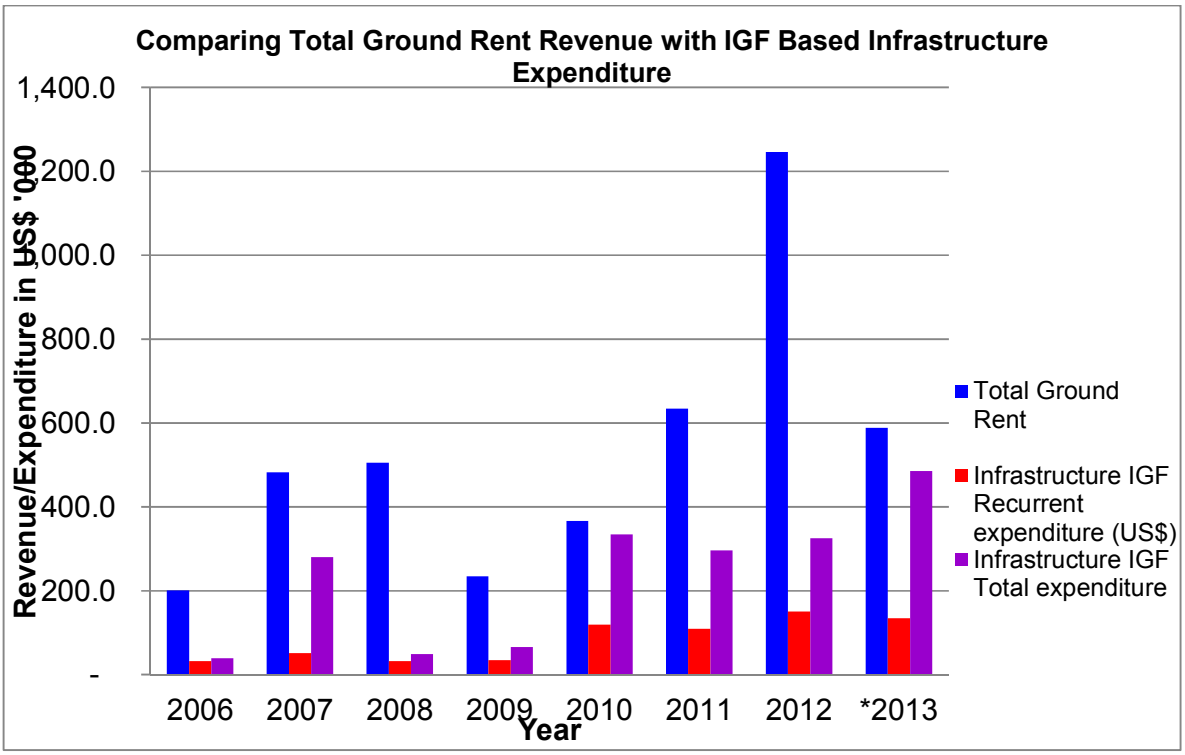



**Figure 16: Total Ground Rent Revenue compared with IGF Based Infrastructure Expenditure of STMA** ***(Source: Field Data, 2013)***

# Chapter 5:

# Summary of Research Findings, Conclusion and Recommendation

## 5.0 Introduction

This section of the research presents the summary of key findings from the field and relating them to the theoretical concepts discussed from the previous chapters. It also provides the conclusions drawn as well as suggests some recommendations for the academia and policy makers.

## 5.1 Summary of Key Research Findings

It was unravelled from the field that there were several laws regulating land leasing in Ghana. The four (4) land tenure systems including state, vested, stool and family lands were managed in accordance with the laws and customary practices of the locality. It was found out that only few laws regulated property rate in Ghana though closely linked to the land leasing laws. Several institutions were found to be managing land leasing while a few dealt with property rate.

In Sekondi-Takoradi metropolis, it was revealed that stool lands covered 55.22%, state lands occupied 20.35%, family lands accounted for 24.10% while vested lands occupied 0.33% of its land size. The land leasing system was found to be both ground rent and premium based on negotiation. The basis of assessment was below economic value especially under stool lands. It was shown that the central government and STMA did not benefit from ground rent revenue under family lands. Unlike other district assemblies (local government areas) where central government benefited amount of state lands revenue, in STMA area it enjoyed only 50%. However, STMA enjoyed 49.5% of stool lands ground rent and 100% of all property rate revenue. Property rate was found to be assessed based on improvements only with the depreciated replacement cost approach. A maximum depreciation of 25% was found to be applied based physical state of the premises but not on age.

It was also revealed that land values were greatly positively influenced by infrastructure or services. Locations with poor or no infrastructure/services had lowest land values under each category while the highest was recorded in neighbourhoods with good infrastructure/services. In terms land value capture, ground rent could capture a little (0.41% - 22.04% per $m^2$) of the land values. The value captured was shared among the four stakeholders while the value not captured was largely kept by land owners especially the stool and family as well as speculators. The central government and the local government benefited a little of the value captured. Out of this value captured, more (highest 22.04% per $m^2$) was being captured under state and vested lands than under stool lands (highest 11.76% per $m^2$). Finally, it was revealed that property rate alone did not capture land values.

The research revealed that property rate was one of the main sources (between 19.79% - 38.83%) of IGF revenue for STMA. Property rate revenue was found to be increasing at a decreased rate over the years with the STMA IGF while ground rent was steadily increasing over the last 3 years after a sharp fall in 2009. Stool lands ground rent revenue could not meet urban infrastructure/services expenditure nonetheless property rate revenue covered over and above the infrastructure expenditure. It was realized that if revenue from state and vested lands ground rent were added to the stool lands revenue, it could finance far more infrastructure expenditure than the property rate.

## 5.2 Research Conclusions

Based on the data obtained from the field, the analysis and discussions presented in the previous chapter, certain conclusions were reached on the main research question "To what extent does property tax and land leasing capture land values to finance urban infrastructure/services?" For clarity and easy understanding, the conclusions were structured according to the research objectives and questions.

### 5.2.1 How Property Tax and Land Leasing Works in Sekondi-Takoradi Metropolis

It was concluded from the legal perspective that land leasing system practiced in the research area was predominantly founded on the national constitution and enactments made parliament well as the customary practices of that particular area. The land leasing system was administered based on the legal and institutional set up. In Sekondi-Takoradi metropolis and for that matter Ghana had a complex land tenure system. This followed Payne's (2000) view and what Hong and Bourassa (2003) described as 'intractable'. The four (4) tenure systems thus state, vested, stool and family lands identified fell in line the categories portrayed by Payne (2000). Stool and family lands fitted the customary regime while state lands suited the public regime. The basis of assessment of ground rent could be interpreted to be below the economic value generally because it was based on the current use value (commercial value). This fell in line Harvey and Jowsey's (2004) view on land rent types, that commercial rent is the current use rent commanded in the open market. The stool lands ground rent was far below this commercial value while the state and vested lands were somewhat high. All the land tenure systems mode of leasing comprised both premium and ground rent systems based on arms-length negotiation as portrayed by Needham (2003), Harvey and Jowsey (2004) and Hong and Bourassa (2003).

On property rate, it was realised that the national constitution and a few acts were the legal basis for its operation hence it was concluded that its administration was in conformity with the general practice albeit technical and administrative variations. The property tax system was administered based on the legal and institutional set up. Walters (2011) similarly agreed with this view. The outcome of this research on the basis of assessment of property tax coincided with what Bourassa (2009), Franzsen and McCluskey (2013) referred to as tax on improvements only based on the replacement cost and capital improved value.

### 5.2.2 Extent of Land Value Captured under Property Rate and Ground Rent

Infrastructure/services had increased land values in Sekondi-Takoradi metropolis as literature from Mandieta et al (2007), Maciel (2009), Jaeger (2012) and McDonald and Osuji (1995) supported.

Comparatively, property rate did not generate enough revenue for STMA as all the ground rent revenue from stool, state and vested lands. However, property rate alone generated more revenue than stool lands ground rent revenue. This means that property rate is a good source of revenue for local government (Walters, 2011; Walters, 2012; Andelson, 2000; Mogues and Benin, 2012 and Ingram and Hong, 2010). Also, property rate alone did not capture land value (Walters, 2012) but could not be completely ignored in that regard because of the latent land value (Franzsen and McCluskey, 2013).

On the other hand ground rent did capture some land values but the values captured were shared among the central government, stool, STMA and family. The value captured through ground rent was not much (highest 22.04% per $m^2$) with a total of 19.71% captured by the stool lands (Needham, 2003) and a total of 47.54% by the state or vested lands (Hong and Bourassa). No revenue was generated from family lands neither was any value captured because there was no supportive legal and institutional measures in place. Conclusively, ground rent alone captured land values while property rate did not. It was so because land leasing is a value capture instruments while property tax is not as portrayed by Hong and Bourassa (2003) and Walters (2011).

Cumulatively, property rate complemented ground rent to generate more revenue for the STMA as both provided about 88.07% of IGF revenue in 2012. Also, both property rate and ground rent to capture more land values than only ground rent in that property rate exhibited a latent value capture component as portrayed by (Hong and Bourassa, 2009 and Franzsen and McCluskey, 2013).

Inferring from the above, it can be stated that both property tax and ground rent coexisted without much problems unlike argued by Hong (2013) and Walters (2011, 2012). Also, both of them generated more revenue for the metropolis and captured land values. Ultimately, property tax complemented land leasing (ground rent) in revenue generation to a large extent and land value capture to a lesser extent.

### 5.2.3 Financing Urban Infrastructure/services with Revenues from Property Rate and Ground Rent

In absolute terms, property rate revenue could finance urban infrastructure and services more than the budgeted expenditure however, its percentage contribution per annum to the STMA IGF over the years have decreased.

Ground rent revenue from stool lands alone could not meet STMA infrastructure budget expenditure but granted that state lands ground rent revenue was transferred to STMA, the total ground rent could finance more infrastructure and services than property rate. The value or revenue kept by the stool or other land owners was used to a large extent for personal expenditure while to a small extent destined to community development. (Peterson, 2006; 2008; 2009; and Ingram and Hong, 2010).

Revenues from both were able to cover over and above the infrastructure expenditure which implied surplus revenue was available to cater for other expenditure. In conclusion, the current situation in STMA implied that not all the revenue from both property rate and ground rent was used to finance urban infrastructure but used for other expenditure.

### 5.2.4 Potentiality of Property Rate and Ground Rent

Based on the foregoing outcomes, it can safely be concluded that ground rent has a higher potential to capture land values for urban infrastructure finance than property rate (Peterson, 2006). It can also be inferred from the above that local governments (STMA) stand the chance to benefit more of the value captured under ground rent from vested lands than stool lands in the current legal set up. Finally, it is important for local government authorities to gear their efforts towards improving the current arrangement on the ground rent from stool and vested lands.

## 5.3 Recommendations

### 5.3.1 Area of Further Study

In view of the findings and experience from the field, it is recommended that further research could be undertaken in the following areas;

a. To extend this particular research to other MMDAs in Ghana to project the country's land value capture potential.
b. To find out why ground rent from family lands are not shared with the local government.
c. To assess the extent to which premiums are considered in the assessment of ground rent during rent revision.
d. To explore more into premiums and infrastructure finance.
e. To explore more on the calculation criteria for property tax.

### 5.3.2 Policy and Administrative Recommendation

The following recommendations were suggested for the various stakeholders to consider in order improving the current situation.

1. The central government should consider critically the use of land value capture instrument in municipal urban infrastructure finance. The local government should lobby and take up the concept at the national so that it can be incorporated into the legislative framework so as to empower them clearly capture land values to finance urban infrastructure.
2. It is recommended that the central government takes pragmatic measures to amend the constitution and the relevant acts to bring family lands under such new law to be regulated. This will ensure that the government gets some revenue from family lands for the development of the area. Also, such amendment will pave the way and empower OASL to officially collect rent from family lands.
3. Central government through the Ministry of Local Government together with Ministry of Lands and Natural Resources ensure that a regulation is passed on the frequency of revaluation of properties, sources of funding and require the local authorities to link property rate revenue to some range of development activities. It is also suggested that property rate revenue are earmarked with indicators to amend them when necessary.
4. Government institutions such as OASL, PVLMD and the local government are equipped with the necessary logistics to keep proper records of data preferably in a digitized but easily accessible form. This could be done through the various ministries.
5. The traditional leaders should also be trained on proper record keeping especially those that deal with land transactions.

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# Annexes

## Annex 1: Administrative Map of Sekondi-Takoradi


***Source: STMA, 2011***

## Annex 2: Topic List for Expect Interviews in Sekondi-Takoradi Metropolis

**Part 1: Land Leasing and Land Values – PVLMD, OASL, Landowners, Estate Developers, Valuers and Estate Agents**

- ∇ Operation of land leasing system (state, vested, stool, family and private lands) – PVLMD, OASL and Land owners.
- ∇ Criteria and basis for premium and ground rent assessment (technical and administrative requirements) – PVLMD and OASL.
- ∇ Land values in Sekondi-Takoradi (Market value versus administrative value) – PVLMD, OASL, Land owners, Estate Developers, Valuers and Estate Agents.

**Part II: Property Tax and Land Values – LVD, Rating Officers, Estate Developers, Valuers and Estate Agents**

- ∇ Operation of property rate (tax base) – LVD and Rating Officers
- ∇ Criteria and basis for rating properties (technical or administrative requirements and procedures) – LVD and Rating Officers.
- ∇ Property values in Sekondi-Takoradi (Market value versus administrative value) – Estate Developers, Valuers and Estate Agents.

**Part III: Revenues of STMA and Expenditure on Urban Infrastructure/Services – Budget Office, Accounts Department, RCC, Metro Director, OASL, PVLMD, CLS and Rating Office**

- ∇ Revenues from property rate – Accounts Department and Rating Office.
- ∇ Revenues from ground rent and premiums – OASL, PVLMD and CLS.
- ∇ Revenues from other sources – Accounts Department.
- ∇ Annual budget of cost of infrastructure/services provided by STMA – Budget Office, Metro Director, RCC and Accounts Department.
    - ✓ Capital investment cost of the infrastructure/services .
    - ✓ Operating and maintenance cost of the infrastructure/services.

## Annex 3: Expect Interview Guide

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**A. Interview Guide for PVLMD**

**Research Topic:** ***"Financing Urban Infrastructure/Services through Property Tax and Land Leasing; A Case Study of Sekondi-Takoradi City, Ghana".***

This Interview Guide is to aid the researcher analyze the topic for academic purposes only and all information given would be treated as confidential. The researcher therefore appeals to you to answer the following questions as candidly as possible. Thank you in advance for your time and cooperation.

**General information:**

Name:……..……

Age: …….. Gender: ☐ Male ☐ Female

Name of Institution/Organisation:……..……..

Designation/Position:……...

How long have you worked in this organisation?.....

**Part 1: Land Leasing and Land Values**

1. What are the legal foundations of land leasing in Ghana?
2. What is the total size of (stool, state, vested, family and private lands) in STMA?
3. Mention the localities which are (stool, state, vested, family and private lands).
4. What are the boundaries?
5. What percentage of (stool, state, vested, family and private lands) is found in STMA?
6. What is the process for acquiring land (stool lands, family lands, state lands, vested lands and private lands)?
7. How many years are the lands granted (minimum and maximum)?
    a. Is there any variation in the years for different uses? What are they?
8. What is the criteria for assessing the premium and ground rent?
9. What is the basis for calculating the premium and ground rent? (legal, economic, social and political).
10. How is the calculation done?
11. What are the factors you consider in fixing the land price or lease amount?
12. Who collects the premiums and ground rent?
    a. What is the mode of collection used?
13. How often do you revise the ground rent?
14. Why do you revise it?
15. How do you revise the ground rent?
16. Give the land values of the following neighbourhood from 2006 to 2013.
    a. Takoradi b. Sekondi c. Essikado d. Kwesimintsim

17. How has the land values changed over the period of 2006 to 2013 in STMA?
18. What are the reasons for such changes?

**Part II: Revenues of STMA and Urban Infrastructure/Services Finance (Accounts)**

19. Please, provide information on the templates from 2006 to 2013 (see excel sheet).

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**B. Interview Guide for OASL**

**Research Topic:** ***"Financing Urban Infrastructure/Services through Property Tax and Land Leasing; A Case Study of Sekondi-Takoradi City, Ghana".***

This Interview Guide is to aid the researcher analyze the topic for academic purposes only and all information given would be treated as confidential. The researcher therefore appeals to you to answer the following questions as candidly as possible. Thank you in advance for your time and cooperation.

**General information:**

Name:……..……

Age: …….. Gender: ☐ Male ☐ Female

Name of Institution/Organisation:……..……..

Designation/Position:…….....

How long have you worked in this organisation?.....

**Part 1: Land Leasing and Land Values**

1. What are the legal foundations of land leasing in Ghana?
2. What is the total size of (stool, state, vested, family and private lands) in STMA?
3. Mention the localities which are (stool, state, vested, family and private lands).
4. What are the boundaries?
5. What percentage of (stool, state, vested, family and private lands) is found in STMA?
6. What is the process for acquiring land (stool lands, family lands, state lands, vested lands and private lands)?
7. How many years are the lands granted (minimum and maximum)?
    a. Is there any variation in the years for different uses? What are they?
8. What is the criteria for assessing the premium and ground rent?
9. What is the basis for calculating the premium and ground rent? (legal, economic, social and political).
10. How is the calculation done?
11. What are the factors you consider in fixing the land price or lease amount?
12. Who collects the premiums and ground rent?
    a. What is the mode of collection used?

13. How often do you revise the ground rent?
14. Why do you revise it?
15. How do you revise the ground rent?
16. How much does the stool charge as ground rent per plot (100ft X100ft)?
    Residential: GH¢…… Commercial: GH¢……
    Agricultural: GH¢…… Industrial: GH¢……
17. What is the basis for the price above?.....
18. At which use value does the stool grant the lease? ☐ Current Use ☐ Future Use
19. How do you determine the current/future use value?.....
20. Who collects the rent? ☐ Chief ☐ OASL ☐ Lands Commission ☐ Family Head ☐ Estate Developer ☐ Other…….
21. How often do you take the ground rent? ☐ Annually ☐ Every 2 years ☐ Every 5 years ☐ Any time…….
22. With whom does the stool share revenue from the ground rent?.....
23. How much does each get/receive?.....
24. How often do you pay the revenues to the beneficiaries?
25. What formula/criteria does OASL use to distribute the revenues to the beneficiaries?
26. How often is the ground rent revised? …….
27. How is the revision done between the parties? ……
28. Have the value of your land increased since 2001? ☐ Yes ☐ No
29. If yes, what do you think makes the values increased? ……..
30. Give the land values of the following neighbourhood from 2006 to 2013.
    a. Takoradi b. Sekondi c. Essikado d. Kwesimintsim
31. How has the land values changed over the period of 2006 to 2013 in STMA?
32. What are the reasons for such changes?

**Part II: Revenues of STMA and Urban Infrastructure/Services Finance (Accounts)**

33. Please, provide information on the templates from 2006 to 2013 (see excel sheet).

**ERASMUS UNIVERSITY, ROTTERDAM, THE NETHERLANDS**

**INSTITUTE FOR HOUSING AND DEVELOPMENT STUDIES (IHS)**

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**C. Interview Guide for Estate Developers and Agents**

**Research Topic:** ***"Financing Urban Infrastructure/Services through Property Tax and Land Leasing; A Case Study of Sekondi-Takoradi City, Ghana".***

This Interview Guide is to aid the researcher analyze the topic for academic purposes only and all information given would be treated as confidential. The researcher therefore appeals to you to answer the following questions as candidly as possible. Thank you in advance for your time and cooperation.

**General information:**

Name:……..……

Age: …….. Gender: ☐ Male ☐ Female

Name of Institution/Organisation:…….……..

Designation/Position:…….……...

How long have you worked in this organisation?.....

1. What is the price of land per plot (100ft X100ft) for? Residential: GH¢…… Commercial: GH¢…… Agricultural: GH¢…… Industrial: GH¢……
2. What is the basis for the price above?.....
3. At which use value does the stool grant the lease? ☐ Current Use ☐ Future Use
4. How do you determine the current/future use value?.....
5. For how many years does it lease/grant the land?.....
6. How much do you charge/collect as premium? GH¢…….....
7. What do you use the premium for?.....
8. With whom do you share revenues from the premium? And what is the proportion each beneficiary received?.....
9. How much does the stool charge as ground rent per plot (100ft X100ft)? Residential: GH¢…… Commercial: GH¢…… Agricultural: GH¢…… Industrial: GH¢……
10. Have the value of the land increased since 2006? ☐ Yes ☐ No
11. If yes, what do you think makes the values increased? Please list them.
    a. ……..
    b. ……..
    c. …….
    d. …….
    e. …….

12. Mention the localities/neighbourhood with the following land values (from 1 = lowest to 5 = highest values).
    1) Lowest Land Values……..
    2) Low Land Values……..……..
    3) Medium Land Values……..
    4) High Land Values……..……..
    5) Highest Land Values……..
13. What factors do you consider in determining the value of land?
    a. ……..
    b. ……..
    c. …….
    d. …….
    e. …….
14. Which of them is most influential on a scale of 1 (less) to 5 (most).
    a. ……..

b. ……..
c. …….
d. …….
e. …….

15. Indicate below how each of these have increased land values in STMA.

| | | | | |
|---|---|---|---|---|
| Water supply: | □ Greatly | □ Moderately | □ Minimally | □Not all |
| Roads: | □ Greatly | □ Moderately | □ Minimally | □Not all |
| Educational Facilities: | □ Greatly | □ Moderately | □ Minimally | □Not all |
| Health Facilities: | □ Greatly | □ Moderately | □ Minimally | □Not all |
| Electricity: | □ Greatly | □ Moderately | □ Minimally | □Not all |
| Market: | □ Greatly | □ Moderately | □ Minimally | □Not all |
| Street Lights: | □ Greatly | □ Moderately | □ Minimally | □Not all |
| Waste systems: | □ Greatly | □ Moderately | □ Minimally | □Not all |
| Oil Boom: | □ Greatly | □ Moderately | □ Minimally | □Not all |
| Airport: | □ Greatly | □ Moderately | □ Minimally | □Not all |
| Port: | □ Greatly | □ Moderately | □ Minimally | □Not all |
| Other……. | □ Greatly | □ Moderately | □ Minimally | □Not all |

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## D. Interview Guide for Rating Office and LVD

**Research Topic:** ***"Financing Urban Infrastructure/Services through Property Tax and Land Leasing; A Case Study of Sekondi-Takoradi City, Ghana".***

This Interview Guide is to aid the researcher analyze the topic for academic purposes only and all information given would be treated as confidential. The researcher therefore appeals to you to answer the following questions as candidly as possible. Thank you in advance for your time and cooperation.

**General information:**

Name:……..……

Age: …….. Gender: ☐ Male ☐ Female

Name of Institution/Organisation:…….……..

Designation/Position:…….……...

How long have you worked in this organisation?.....

**Part I: Property Tax and Land Values**

1. What is the legal foundation of property rate in Ghana?
2. How does the property tax work? (legal, administrative – assessment, billing and collection and political).
3. What is the procedure for assessing property rates in STMA?

4. What is the basis of assessment? (legal, economic and social).
5. What is the tax base?
6. What is the total number of rateable properties?
7. Which/what categories of properties are exempt? Why?
8. What percentage of the rateable properties are assessed?
9. What percentage of the assessed properties are collected?
10. What are the criteria for rating properties?
11. What are the technical requirements for rating properties?
12. How do you assess the properties?
13. What methods of valuation are used?
14. What is included in the valuation?
15. How do you arrive at the rateable value?
16. How do you arrive at the tax rate?
17. How often do you adjust the tax rate? Why?
18. Who collects the property rates?
    a. What is the mode of collection used?
19. What percentage of the property rate is collected in each year?
20. How often do you do revaluation?
21. Why do you do revaluation?
22. What are the property values in the following neighbourhood from 2006 to 2013?
    a. Takoradi b. Sekondi c. Essikado d. Kwesimintsim
23. How has the property values changed over the period of 2006 to 2013 in STMA?
24. What are the reasons for such changes?

**Part II: Revenues of STMA and Urban Infrastructure/Services Finance (Accounts)**

25. Please, provide information on the templates from 2006 to 2013 (see excel sheet).

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**E. Interview Guide for Private Valuers/Valuation firms**

**Research Topic:** ***"Financing Urban Infrastructure/Services through Property Tax and Land Leasing; A Case Study of Sekondi-Takoradi City, Ghana".***

This Interview Guide is to aid the researcher analyze the topic for academic purposes only and all information given would be treated as confidential. The researcher therefore appeals to you to answer the following questions as candidly as possible. Thank you in advance for your time and cooperation.

**General information:**

Name:……..……

Age: …….. Gender: ☐ Male ☐ Female

Name of Institution/Organisation:……..……..

Designation/Position:……...

How long have you worked in this organisation?.....

1. What is the price of land per plot (100ft X100ft) for? Residential: GH¢…… Commercial: GH¢…… Agricultural: GH¢…… Industrial: GH¢……
2. What is the basis for the price above?.....
3. At which use value does the stool grant the lease? ☐ Current Use ☐ Future Use
4. How do you determine the current/future use value?.....
5. For how many years does it lease/grant the land?.....
6. How much do you charge/collect as premium? GH¢…….....
7. What do you use the premium for?.....
8. With whom do you share revenues from the premium? And what is the proportion each beneficiary received?.....
9. How much does the stool charge as ground rent per plot (100ft X100ft)? Residential: GH¢…… Commercial: GH¢…… Agricultural: GH¢…… Industrial: GH¢……
10. Have the value of the land increased since 2001? ☐ Yes ☐ No
11. If yes, what do you think makes the values increased? Please list them.
    a. ……..
    b. ……..
    c. …….
    d. …….
    e. …….

12. Mention the localities/neighbourhood with the following land values (from 1 = lowest to 5 = highest values).
    6) Lowest Land Values……..
    7) Low Land Values……..……..
    8) Medium Land Values……..
    9) High Land Values……..……..
    10) Highest Land Values……..
13. What factors do you consider in determining the value of land?
    a. ……..
    b. ……..
    c. …….
    d. …….
    e. …….
14. Which of them is most influential on a scale of 1 (less) to 5 (most).
    a. ……..
    b. ……..
    c. …….

d. …….

e. …….

15. Indicate below how each of these have increased land values in STMA.

| | | | | |
|---|---|---|---|---|
| Water supply: | □ Greatly | □ Moderately | □ Minimally | □Not all |
| Roads: | □ Greatly | □ Moderately | □ Minimally | □Not all |
| Educational Facilities: | □ Greatly | □ Moderately | □ Minimally | □Not all |
| Health Facilities: | □ Greatly | □ Moderately | □ Minimally | □Not all |
| Electricity: | □ Greatly | □ Moderately | □ Minimally | □Not all |
| Market: | □ Greatly | □ Moderately | □ Minimally | □Not all |
| Street Lights: | □ Greatly | □ Moderately | □ Minimally | □Not all |
| Waste systems: | □ Greatly | □ Moderately | □ Minimally | □Not all |
| Oil Boom: | □ Greatly | □ Moderately | □ Minimally | □Not all |
| Airport: | □ Greatly | □ Moderately | □ Minimally | □Not all |
| Port: | □ Greatly | □ Moderately | □ Minimally | □Not all |
| Other……. | □ Greatly | □ Moderately | □ Minimally | □Not all |

16. How do assess the market value of land?.....
17. What methods of valuation do you use and why?.....
18. Have you ever been commissioned to do valuation for property rating purposes?
    □Yes □No
19. If yes, what features of the property did you consider in such valuation?
20. Did you make any adjustments to the differences in the properties? □Yes □No
21. If yes, what was your guiding principles or guide?.....

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**F. Interview Guide for CHF International**

**Research Topic:** ***"Financing Urban Infrastructure/Services through Property Tax and Land Leasing; A Case Study of Sekondi-Takoradi City, Ghana".***

This Interview Guide is to aid the researcher analyze the topic for academic purposes only and all information given would be treated as confidential. The researcher therefore appeals to you to answer the following questions as candidly as possible. Thank you in advance for your time and cooperation.

**General information:**

Name:……

Age: …….. Gender: ☐ Male ☐ Female

Name of Institution/Organisation:……..

Designation/Position:……...

How long have you worked in this organisation?.....

1. What do you think the revenues from the property rate to STMA is used for? Please list them.
    a. ……..
    b. ……..
    c. …….
    d. …….
    e. …….
2. What do you think the revenues from the property rate should be used for? Please list them.
3. What do you think the revenues from the stool lands to STMA is used for? Please list them.
4. What do you think the revenues from the stool lands should be used for? Please list them.

5. Please rank (from **Not at all** [1] to **greatly** [5]) which of the following services is finance by revenues from property rates?

| **Services/Infrastructure** | Rank on a scale of (1, 2, 3, 4, 5). 1 means **not at all,** 5 means **greatly** financed by property rate or ground rent | |
|---|---|---|
| | Property rate | Ground rent |
| Water Supply: | | |
| Roads: | | |
| Schools (Primary & JHS): | | |
| Health Facilities (Clinic): | | |
| Electricity: | | |
| Street Lights: | | |
| Market: | | |
| Sewage systems: | | |
| Solid Waste Systems: | | |

6. Have the value of the land increased since 2006? ☐ Yes ☐ No
7. If yes, what do you think makes the values increased? Please list them.

8. Please rank on the scale of 1 (lowest) to 5 (highest) the extent to which revenues from property rate and stool lands are used to provide the following infrastructure/services in STMA.
    Water supply: ……..
    Roads: ……..
    Educational Facilities: ……..

Health Facilities: .....
Electricity: .....
Market: .....
Street Lights: .....
Waste systems: .....
Other (specify.....):.....

9. What factors do you consider in determining the value of land?
   a. ……..
   b. ……..
   c. …….
   d. …….
   e. …….
10. Which of them is most influential on a scale of 1 (less) to 5 (most).
   a. ……..
   b. ……..
   c. …….
   d. …….
   e. …….
11. Indicate below how each of these have increased land values in STMA.

| | | | | |
|---|---|---|---|---|
| Water supply: | □ Greatly | □ Moderately | □ Minimally | □Not all |
| Roads: | □ Greatly | □ Moderately | □ Minimally | □Not all |
| Educational Facilities: | □ Greatly | □ Moderately | □ Minimally | □Not all |
| Health Facilities: | □ Greatly | □ Moderately | □ Minimally | □Not all |
| Electricity: | □ Greatly | □ Moderately | □ Minimally | □Not all |
| Market: | □ Greatly | □ Moderately | □ Minimally | □Not all |
| Street Lights: | □ Greatly | □ Moderately | □ Minimally | □Not all |
| Waste systems: | □ Greatly | □ Moderately | □ Minimally | □Not all |
| Oil Boom: | □ Greatly | □ Moderately | □ Minimally | □Not all |
| Airport: | □ Greatly | □ Moderately | □ Minimally | □Not all |
| Port: | □ Greatly | □ Moderately | □ Minimally | □Not all |
| Other……. | □ Greatly | □ Moderately | □ Minimally | □Not all |

12. What was your motivation for funding and supporting STMA in the property rate revenue base?.....
13. When did you start the revaluation exercise?.....
14. When did you complete it?.....
15. When was the valuation list published?.....
16. What measures have CHF International put in place to ensure that this exercise is sustained?.....

## Annex 4: Questionnaire for Landowners

**ERASMUS UNIVERSITY, ROTTERDAM, THE NETHERLANDS**

**INSTITUTE FOR HOUSING AND DEVELOPMENT STUDIES (IHS)**

**MSc. URBAN MANAGEMENT AND DEVELOPMENT (UMD 9), June/July 2013**

**Questionnaire for Landowners**

**Research Topic:** ***"Financing Urban Infrastructural Services through Property Tax and Land Leasing; A Case Study of Sekondi-Takoradi City, Ghana".***

This questionnaire is to aid the researcher analyze the topic for academic purposes only and all information given would be treated as confidential. The researcher therefore appeals to you to answer the following questions as candidly as possible. Thank you in advance for your time and cooperation.

**Instructions:**

(i) Please tick the option(s) that apply to you where alternatives are provided.
(ii) Where options are not provided, provide your answers in the spaces provided.

**General information:**

Age: …….. Gender: ☐ Male ☐ Female

Name of Stool/Family/Agency:……..

Position:…….How long have you held this?.....

Community/Locality:……..

**Part 1: Land Leasing and Land Values**

16. Does your stool/family own a piece of land? ☐ Yes ☐ No If yes then,
17. What is the total size? ……$m^2$.
18. Where is it located?.....
19. How did the stool acquire it? ☐ Conquest ☐ 1st Discovery ☐ Gift ☐ Inheritance ☐ Purchase ☐ Other……
20. For how many years has the stool owned this land?.....
21. How does the stool grant/lease land?.....
22. What are rights that transferred to the grantee/lessee/purchaser? Right to……

    ☐ Build ☐ Develop ☐ Occupy ☐ Farm ☐ Transfer ☐ Sell Other (specify).....

23. How much does the stool lease the land per plot (100ft X100ft) for? Residential: GH¢…… Commercial: GH¢…… Agricultural: GH¢…… Industrial: GH¢……
24. What is the basis for the price above?.....

25. At which use value does the stool grant the lease? ☐ Current Use ☐ Future Use
26. How do you determine the current/future use value?.....
27. For how many years does it lease/grant the land?.....
28. How much do you charge/collect as premium? GH¢…….....
29. What do you use the premium for?.....
30. With whom do you share revenues from the premium? And what is the proportion each beneficiary received?.....
31. How much does the stool charge as ground rent per plot (100ft X100ft)?
    Residential: GH¢…… Commercial: GH¢……
    Agricultural: GH¢…… Industrial: GH¢……
32. Who collects the rent? ☐ Chief ☐ OASL ☐ Lands Commission ☐ Family Head ☐ Estate Developer ☐ Other…….
33. How often do you take the ground rent? ☐ Annually ☐ Every 2 years ☐ Every 5 years ☐ Any time…….
34. With whom does the stool share revenue from the ground rent?.....
35. How much does each get/receive?.....
36. What is the revenue apportioned to the District Assembly (metropolitan) used for?.....
37. Have the value of your land increased since 2006? ☐ Yes ☐ No
38. If yes, what do you think makes the values increased? ……..
39. Indicate below how each of these have increased land values in STMA.

| | | | | |
|---|---|---|---|---|
| Water supply: | □ Greatly | □ Moderately | □ Minimally | □Not all |
| Roads: | □ Greatly | □ Moderately | □ Minimally | □Not all |
| Educational Facilities: | □ Greatly | □ Moderately | □ Minimally | □Not all |
| Health Facilities: | □ Greatly | □ Moderately | □ Minimally | □Not all |
| Electricity: | □ Greatly | □ Moderately | □ Minimally | □Not all |
| Market: | □ Greatly | □ Moderately | □ Minimally | □Not all |
| Street Lights: | □ Greatly | □ Moderately | □ Minimally | □Not all |
| Waste systems: | □ Greatly | □ Moderately | □ Minimally | □Not all |
| Oil Boom: | □ Greatly | □ Moderately | □ Minimally | □Not all |
| Airport: | □ Greatly | □ Moderately | □ Minimally | □Not all |
| Port: | □ Greatly | □ Moderately | □ Minimally | □Not all |
| Other……. | □ Greatly | □ Moderately | □ Minimally | □Not all |

**Part II: Property Tax and Land Values**

40. Who pays property rate? ☐ Owner ☐ Tenant ☐ Occupier without paying rent
41. What is the use of the property? ☐ Residential ☐ Commercial ☐ Industrial ☐ Religious ☐ Educational ☐ Agricultural ☐ Other……
42. Does the stool pay property rate? ☐ Yes ☐ No

43. What do you think the revenues from the property rate is used for? Please list them.
    a. ……..
    b. ……..
    c. …….
    d. …….
    e. …….
44. What do you think the revenues from the property rate should be used for? Please list them.
    a. ……..
    b. ……..
    c. …….
    d. …….
    e. …….

45. Please rank (from **Not at all** [1] to **greatly** [5]) which of the following services is finance by revenues from property rates?

| **Services/Infrastructure** | Rank on a scale of (1, 2, 3, 4, 5). 1 means **not at all,** 5 means **greatly** financed by property rate or ground rent | |
|---|---|---|
| | Property rate | Ground rent |
| Water Supply: | | |
| Roads: | | |
| Schools (Primary & JHS): | | |
| Health Facilities (Clinic): | | |
| Electricity: | | |
| Street Lights: | | |
| Market: | | |
| Sewage systems: | | |
| Solid Waste Systems: | | |

## Annex 5: Map of STMA Area showing the Distribution of the 4 Land Tenure


***Source: STMA, 2011 and Field Data, 2013***

## Annex 6: Consumer Price Indices and Inflation Rate of Ghana (2006 – July 2013)

| Year | Average Index | Average Inflation Rate | Inflation Factor |
|---|---|---|---|
| **2006** | 457.85 | 10.90 | 0.94933 |
| **2007** | 218.73 | 10.73 | 1.98715 |
| **2008** | 254.87 | 16.46 | 1.70538 |
| **2009** | 303.93 | 19.29 | 1.43010 |
| **2010** | 336.48 | 10.79 | 1.29176 |
| **2011** | 365.84 | 8.73 | 1.18809 |
| **2012** | 399.40 | 9.20 | 1.08826 |
| **July 2013** | 434.65 | 10.32 | 1.00000 |

***Source: Bank of Ghana, 2013 and Ghana Statistical Service, 2013***

## Annex 7: Maximum Term of Years for Land Acquired for Various Uses

| Type of Land Use | Maximum Term of Years |
|---|---|
| **Residential** | 99 years |
| **Commercial** | 50 years |
| **Civic/Cultural/Educational** | 50 years |
| **Filling Station** | 21 years |
| **Mixed used with Residential as a part** | 99 years |
| **Agric – Permanent Trees** | 50 years |
| **Agric – Ranching** | 50 years |
| **Agric – Annual Cropping** | 10 years |
| **Agric – Poultry** | 10 years |
| **Agric – Livestock** | 21 years |
| **Agric – Mixed Farming** | 50 years |

***Source: Lands Commission, 2004***

## Annex 8: List of Interviewees interviewed during the Research Data Collection

| Name of Interviewee | Designation/Position | Organisation |
|---|---|---|
| **Abdul-Salam Mohammed** | Program Coordinator | CHF International Ghana, Takoradi |
| **Anthony Moses** | Budget Officer | STMA, Sekondi |
| **Atsu Norgbedzi** | Deputy Stool Lands Officer | OASL, Sekondi |
| **Cecilia Arkoh** | Acting Vice Manager | Elite Kingdom Investment & Consulting Ltd, Takoradi |
| **Christopher Akanga** | Lands Officer | PVLMD, Sekondi |
| **David Aryee** | Accountant | STMA, Sekondi |
| **E. K. Agyapong** | Budget Officer | Regional Coordinating Council (Budget Office), Sekondi |
| **Eco** | Estate Agent | Estate Agent, Takoradi |
| **Esther Afonaa-Mensah** | Valuer | Assenta Property Group, Takoradi |
| **Felicia** | Desk Officer | Strategic Properties & Investment Ltd, Takoradi |
| **Kwame Marfo** | Deputy District Officer (Valuer) | Rating Office, Land Valuation Division, Sekondi |
| **Nana Kumi** | Chief Executive Officer | Nana Kumi and Associates, Takoradi |
| **R. O. Asamoah** | District Officer (Valuer) | Rating Office, Land Valuation Division, Sekondi |

## Annex 9: Overview of Rate Impost applied on properties from 2006 to 2013 in STMA Area

| Rate Impost for STMA | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Property Type** | **Category** | **2006** | **2007** | **2008** | **2009** | **2010** | **2011** | **2012** | **2013** |
| **Residential** | **1st Class** | 0.00200 | 0.00200 | 0.00200 | 0.00200 | 0.00260 | 0.00260 | 0.00320 | 0.00160 |
| **Residential** | **2nd Class** | 0.00144 | 0.00144 | 0.00144 | 0.00144 | 0.00190 | 0.00190 | 0.00230 | 0.00115 |
| **Residential** | **3rd Class** | 0.00086 | 0.00086 | 0.00086 | 0.00086 | 0.00112 | 0.00112 | 0.00140 | 0.00140 |
| **Residential** | **4th Class** | 0.00044 | 0.00044 | 0.00044 | 0.00044 | 0.00057 | 0.00057 | 0.00000 | 0.00000 |
| **Industrial** | **1st Class** | 0.01600 | 0.01600 | 0.01600 | 0.01600 | 0.02100 | 0.02100 | 0.02600 | 0.02600 |
| **Industrial** | **2nd Class** | 0.00000 | 0.00000 | 0.00000 | 0.01000 | 0.01300 | 0.01300 | 0.01600 | 0.01600 |
| **Commercial** | **1st Class** | 0.00736 | 0.01104 | 0.01104 | 0.01104 | 0.01440 | 0.01440 | 0.01800 | 0.01800 |
| **Commercial** | **2nd Class** | 0.00000 | 0.00920 | 0.00920 | 0.00920 | 0.01200 | 0.01200 | 0.01500 | 0.01500 |
| **Commercial** | **3rd Class** | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.01000 |
| **Para statal/Corporate** | **Corporate** | 0.04000 | 0.04000 | 0.04000 | 0.04000 | 0.04000 | 0.04000 | 0.04000 | 0.02500 |
| **Mixed Development** | **Mixed 1** | 0.00660 | 0.00660 | 0.00660 | 0.00660 | 0.00870 | 0.00870 | 0.01300 | 0.01300 |
| **Mixed Development** | **Mixed 2** | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00870 |

***Source: STMA, 2013***

## Annex 10: Sources of Revenue for District Assembly

Local Government Act, 1993 **ACT 462**

SIXTH SCHEDULE
[Section 86]

*Revenue of Local Government Bodies*

1. Entertainments duty under the Entertainments Duty Act, 1962 (Act 150).
2. Casino revenue under the Casino Revenue Tax Act, 1973, (NRCD 200)
3. Betting tax under the Betting Tax Act, 1965 (Act 268).
4. Income Tax (Registration of Trade, Business, Profession or Vocation) Law, 1986, (PNDCL 156)
5. Gambling tax under the Gambling Machines Act, 1973 (NRCD 174)
6. Rates and levies:

Levies on crops other than cocoa, coffee, cotton and sheanuts.

7. Fees:
   - (i)Cattle pounds;
   - (ii) Conservancy;
   - (iii) Slaughter houses;
   - (iv) Market dues;
   - (v) Market stalls/stores;
   - (vi) Lorry park dues;
   - (vii) Advertisements;
   - (viii) Trading;
   - (ix) Kiosks;
   - (x) Restoration of conservancy service;
   - (xi) Graveyard receipts;
   - (xii) Bread bakers;
   - (xiii) Chop bars;
   - (xiv) Corn mills;
   - (xv) Dressing stations.
8. Licences:
   - (i) Dog licences;
   - (ii) Hawkers;
   - (iii) Extension of hours;
   - (iv) Hotels and restaurants;
   - (v) Beer and wine sellers;
   - (vi) Petroleum installations;
   - (vii) Palm-wine sellers;
   - (viii) Akpeteshie distillers/sellers;
   - (ix) Herbalists;
   - (x) Taxi cabs;
   - (xi) Lorry parts overseers;
   - (xi!) Taxi drivers (driving licence);
   - (xiii) Self-employed artisans;
   - (xiv) Fishing tolls;
   - (xv) Births and deaths.
9. Taxes chargeable on the income of the following categories of self-employed persons:
   - *(a)* Spare parts dealers;

*(b)* Chemical sellers;
*(c)* Tailors and dressmakers;
(d) Sandcrete blocks manufacturers;
*(e)* Musical spinners;
(j) Radio and television repairers;
*(g)* Gold and silver smiths;
*(h)* Drinking bar operators;
(i) Professional photographers;
(j) Chopbar keepers and cooked food sellers;
*(k)* Butchers;
*(l)* Refrigeration and air conditioning workshop owners;
*(m)* Hairdressers;
*(n)* Garage owners;
*(o)* Video operators;
(p) Cornmill owners;
*(q)* Co-operative distillers;
*(r)* Scrap dealers;
*(s)* Livestock breeders and traders;
*(t)* Traders;
*(u)* Liquor sellers.

10. Miscellaneous:
    (i) Town hall/community centre receipts;
    (ii) District hearse hiring;
    (iii) Dislodging of latrines;
    (iv) Hire of bulldozers/grader;
    (v) Collection of sand/gravel/stone;
    (vi) Slot machines;
    (vii) Stool land revenue;
    (viii) Toilet Receipts