

Designing Land Value Capture Tools in the Context of Complex Tenurial and Deficient Land Use Regulatory Regimes in Accra, Ghana

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Abstract

Rapid urbanization has increased the demand for urban infrastructure services. Municipalities have attempted to finance infrastructure services with value capture instruments. The paper highlights how value capture instruments are designed and implemented in Ghana. The study used the case study strategy of inquiry and multiple case study design to locate the research within the contexts of fiscal decentralization policies, urban planning and land tenure frameworks. The paper concludes that the tax or fee-based land value capture instruments have more chances of success if teething implementation challenges are addressed. The current passive approach to urban development and the inability of metropolitan, municipal and District Assemblies to enforce land use regulation does not promote the implementation of the development-based land value capture instruments. Besides, the concept of land value capture is not clearly understood in general among key stakeholders. The paper proposes a mutual gains approach to resolving the teething implementation challenges for tax or fee-based tools.

Highlights of Findings

- Development charges and in-kind contribution have more potential for implementation in GAMA
- There is a lack of awareness and initiative to implement tax or fee-based value capture tools.
- Passive governance approach to urban land development promotes project-related value capture through land and property sales by land developers.
- Complex land tenure system is affecting land use planning and enforcement of land use regulations
- Parastatal and private land developers' activities provide critical urban management and development lessons for MMDAs for the implementation of land value capture instruments in general.

Keywords: Land value capture, land-based financing, urban infrastructure, urban planning, land tenure, land development approach, legal and institutional frameworks.

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Designing Land Value Capture Tools in the Context of Complex Tenurial and Deficient Land Use Regulatory Regimes in Accra, Ghana

Introduction

Ghana has experienced rapid population growth, urbanization and economic development over the past three decades. These developments have influenced the development of Ghanaian cities and affected land uses, land values and urban forms. The combined effect of these factors has led to unplanned and uncoordinated spatial expansion leading to increased demand for urban infrastructure. Yet, the necessary financial resources and competencies for local infrastructure expansion simply do not exist to meet this challenge (Paulais 2012; World Bank 2015b). The financing gap for urban infrastructure and services in most cities is widening. The World Bank (2015) reports that Ghana's urban infrastructure and services are expensive and the current level of existing revenues are woefully inadequate. Already, there has been chronic underinvestment in general infrastructure including transportation, water and power grids in countries around the world over the years resulting in huge deficits especially in urban areas (Mckinsey Global Institute 2013). Urban infrastructure is usually funded from traditional sources like central or local government grants, donations, loans or taxes. This revenue base is already overstretched (McIntosh 2014).

Nonetheless, land value capture tools have been used by local governments in most developed and some developing countries as a revenue source to fund urban infrastructure (Ingram and Hong 2012; Paulais 2012; Smolka 2013; Suzuki et al. 2015). Scholars and practitioners (Paulais 2012; Peterson 2009; Smolka 2013; Suzuki et al. 2015) have advanced arguments that land value capture tools could be used to fund urban infrastructure through opportunities created by urbanization. Smolka (2013) argues that urbanization paves the way for active urban land markets and increased public investments in urban areas. Increased public investment in urban infrastructure and services lead to high densities of urban areas, which creates significant land value increases. Paulais (2012) echoed that urban extension generates increases in land value. Thus, land with easy accessibility by road, utilities, or even public transportation service has a greater increase in value.

Besides, Peterson (2009) asserts that land is a significant source of revenue for infrastructure finance as the magnitude of revenue raised from land sales and other land-based financing instrument is substantial. He posits that land-based financing thrives well where there is rapid urban growth since land prices tend to rise rapidly in response to this growth. He echoes that this creates an opportunity to generate sufficient revenue to finance the increasing infrastructure needs that go with rapid urban growth.

Thus, land value capture instruments are increasingly perceived as a complementary source of financing urban infrastructure financing gaps of rapidly urban cities in developing countries. This perception is rooted in the argument that urban infrastructure provision impacts positively on land values to a greater extent. Therefore, it is only fair to capture the monetized land values to complement the financing of urban infrastructure. Given that most cities in sub-Saharan Africa

are characterized by complex land tenure regimes, deficient land use regulatory systems and urban informality (Napier et al. 2013), the challenge of implementing LVC as a form of financing urban investments is significant.

In this paper, I provide a contextual analysis of how land value capture instruments are conceived and implemented by local governments in Accra, Ghana. I used multiple case studies of three urban sites of intermediate scale located in three municipal assemblies within Greater Accra Metropolitan Area (GAMA) to explore the use of land value capture instruments in the context of complex land tenure, and deficient land uses regulatory regimes. I focused on three land development projects cases involving changing land uses in three local government areas within GAMA. I used two propositions to guide the study. These are: (1) sound land use regulatory framework enhances the process of land value capture; and (2) partnerships with land development agencies create opportunities for land value capture.

The following section is divided into seven sections: (1) Overview of land value capture instruments and typologies; (2) Urban development context of Ghana; (3) Methodology; (4) Legal and institutional framework for land-based financing; (5) Overview of case studies and findings, followed by a section on lessons learnt from land development cases on the implementation of LVC; and finally, (6) Strategies for design and effective implementation of land value capture tools in Accra.

Overview of Land Value Capture Instruments and Typologies

Land value capture is defined by Smolka (2013) as the recovery by the public of the land value uplift (unearned income) generated by actions other than the landowner's own investment. A more elaborated definition is provided by Suzuki et al. (2015). They define land value capture as:

A public financing method by which governments (a) trigger an increase in land values via regulatory decisions (e.g., change in land use or FAR) and/or infrastructure investments (e.g., transit); (b) institute a process to share this land value increment by capturing part or all of the change; and (c) use LVC proceeds to finance infrastructure investments (e.g., investments in transit and TOD), any other improvements required to offset impacts related to the changes (e.g., densification), and/or implement public policies to promote equity (e.g., provision of affordable housing to alleviate shortages and offset potential gentrification). (Suzuki et al. 2015, xxii)

However, land value capture (LVC) has been contrasted with land-based financing in that the latter is a broader term that is used to describe how land revenues are used to finance infrastructure projects. According to the African Centre of Cities (2015), land-based financing is more encompassing than LVC in four different ways: (1) arrangements that result in infrastructure being provided or financed by a developer; (2) special assessments that reflect the cost of improvement that serves a property, regardless of whether these results in real increments in the property's value, such as development charges ; (3) land and property taxes or rates; and (4) transfer taxes imposed when land is bought and sold.

In this paper, I adopt both land value capture and land-based financing definitions because of the crosscutting issues that have to do with not only recovery of the unearned income from landowners but also the objective of using the captured values for funding urban infrastructure by local governments. Besides, because of the implicit intention of some deliberate action by the capturing authority to promote equity and inclusion as the case may be in LVC instruments, I examined LVC in the context of Ghana to ascertain the relevance of this implicit intention. Also, these definitions become relevant because of the increasing awareness of the potential of land value capture finance created by the combination of factors that needed to be contextualized within geographical peculiarities of cities and regions. For example, Smolka (2013) notes that the concept of land value capture is gaining popularity in developing countries. According to Smolka (2013), the growing popularity of the concept is conditioned by economic stabilization and fiscal decentralization; improvement in urban planning and management; improvement in political democratization, increasing social and civic awareness with regard to demands for equity in public policy responses to growing societal needs; mutable assertiveness to privatization and public-private partnerships in urban services delivery; the influence of multilateral agencies like the UN-Habitat Global Land Tool Network (GLTN); and growing freedom of local government to mobilize internally generated funds for local development. The trends of urban development and the factors highlighted by Smolka (2013) put Ghana in this perspective, and it is important to bring the discussion of land value capture finance in the context of recent developments in the country.

Types of Land Value Capture Instruments

Various instruments have been used to capture unearned land and property value increment. According to Suzuki et al. (2015), these instruments can be classified broadly into two categories - Tax or Fee-based and Development-Based. Tax or Fee-Based Instruments include; property and land tax, betterment charges/levies, and tax increment financing (TIF). The Development-Based Instruments, on the other hand, include land sales or leasing, joint development, development rights or air rights sale, land readjustment, impact fees or development exaction and urban redevelopment schemes, amongst others. Smolka (2013) on the other hand, classifies these instruments as either direct or indirect. Smolka's classification clearly differs from Suzuki et al. (2015) in terms of their constituents. The direct instruments according to Smolka are: betterment contribution, land readjustment, public land leasing, land value tax, land value increment tax, impact and development charges among others. The indirect instruments include: property tax, special districts (BIDs), expropriation, exactions, land banking, tax increment financing (TIF) among others.

The extent of use of these instruments depends largely on the progressive evolution of cities in terms of the nature of land markets, type of infrastructure (basic or advanced), logistics and technical capacities, and the level of financial sophistication (Africa Centre for Cities 2015; Feinstein 2012; Mathur and Smith 2012; Roberts 2011; Rybeck 2004).

Among these myriad of tools for land value capture, Paulais (2012) is of the view that only three of these are likely to have potential application in African cities. These include: a) direct land transfers; b) direct contribution from owners or developers; and c) land added – value taxation. According to Paulais (2012), direct land transfers are possible when the public owns the land

where it sells or leases the land to finance public infrastructure in and around major infrastructure projects like airports and seaports. Direct contribution in-kind is where developers or landowners give part of their lands for public use in return for the capital investment. The land added value taxation comes in the form of betterment contribution where property owners that gain or will gain from public works are made to contribute to the financing of the public works. This betterment levy is largely successful in Columbia where the calculation is based on three parameters: a) the cost to build the project; b) the value added to the property attributed to the project; and c) the affordability of the project (Coleman and Grimes 2010; Paulais 2012; Smolka and Amborski 2001; Smolka 2013)

According to the African Centre of Cities (2015), development charges are seen as having likely potential application and success in African cities. Thus, the tools that have been utilized in the advanced countries cannot be of universal application in the context of developing countries with context-specific peculiarities. What is apparent in the views of pundits on the type of land value capture tools workable in Sub-Saharan Africa is that the development-based tool has a high degree of success because of the current political economy of land development in these countries.

Critical Success Factors for Implementation

In reviewing case studies of cities that have implemented the Development-based LVC, Suzuki et al. (2015), come to a conclusion that certain critical factors deserve careful attention for successful implementation. One such factor is inclusive value creation. Suzuki et al. (2015) share the view that land value creation is multifaceted and involves multiple stakeholders. Therefore, capturing the value created by multiple stakeholders' decisions requires extensive consultation, inclusion, and participation. Unlike the Tax-based instruments where the government can take a unilateral decision on imposing taxes, Development-based LVC requires consultation and negotiations with multiple stakeholders. Thus, incentives and motivation of multiple stakeholders in the urban land development process facilitate the design and implementation of the Development-based LVC. These stakeholders should agree on the land value uplift upfront based on market trends and decide on how the land value uplift is captured and shared among the various principal stakeholders. The sharing of value increment entails negotiations among stakeholders based on their relative contribution to the process of the land value uplift (Suzuki et al. 2015)

Besides, the development-based LVC is a value creation tool and not a simple sale of public land and leasing of land use rights (Suzuki et al. 2015). It requires strategic public land use planning and orientation, especially in cities where the state owns the land, and a strategic choice on whether to separate raw land production from land development and servicing (Paulais 2012). The choice of separating raw land production from development and servicing is an implementation model where the local government can decide to create land values by transforming rural land to urban land use either through a land operator or land developer. The raw land production process involves land readjustment strategies that seek to organize periurban or rural land and plan it adequately for urban uses. Therefore, the extent to which local government has a proprietary interest in public land determines the viability of the option to implement the development-based LVC. However, Suzuki et al. (2015) add that public ownership of land, though important, is not a necessary precondition. Where the state does not own land, local government can expropriate private land through various innovative ways such as land readjustment and land banking. However, what is important is that there must be a strategic public land use aimed at ring-fencing the proceeds of public land sales and leasing for funding some urban infrastructure.

Furthermore, sound operation systems that engage land development agents and act as a liaison between local governments and private landowners facilitates the implementation success of development-based LVC. Paulais (2012) analyzed the experiences of other continents and concluded that there are two operation options in the implementation of the development-based LVC. These operation options require a land operator, who acts as an intermediary between local government and land developers and investors. It can sometimes take the place of local government to negotiate with private landowners for land development and servicing (Paulais 2012). Thus, the choice of an operation option will depend on the role the land developer is required to play. It also depends on whether local governments separate raw land production from land development and servicing so that the two functions are played by different entities in the land value creation process.

According to Paulais (2012), the aim of the land operator is twofold. First, make urban land available by transforming raw, rural land or restructuring existing parcels and manage the entire process. Second, create reserves of land for the local government. In addition, there are certain advantages that inure to local government when they cooperate with the land developer in the implementation of development-based LVC. First, the local government is able to outsource the cost of project implementation to the developer. Second, it will have the benefit of working with professionals of specialized land operations to ensure the effective implementation of the project (Paulais 2012). Therefore, the role of the land developer is paramount in the implementation of the development-based LVC.

In addition, the land operator functions as both an operator and a land developer. According to Paulais (2012), as an operator, it holds and manages acquired assets before it retrocedes them to the local government or land developers. Its source of revenue is through commission and fees from transferred land to local government or developers. When the operator functions as a land developer, it services and develops land for sales. Its source of revenue is through sales of serviced and developed lands. Paulais (2012), highlights the need to separate these functions. This separation is important concerning the issues of who finances the operator and how the operator is paid in the implementation of the development-based LVC. The separation of the functions of the land operator is justified by the nature of activity and expertise they possess. Thus, the nature of the function of the land operator depends on country-specific conditions and varies by configuration and by the scope of the intervention (Paulais 2012). Country-specific conditions may include the legal and institutional frameworks of land ownership and land use management. Based on these, land operators and developers may develop as offshoots of the central government or local government. They may be a public or parastatal organization or even private organizations depending on the local laws of the country. In addition, depending on the scope of the intervention, the land operator and land developer functions may be combined in one entity such as land development corporations (Paulais 2012).

Pre-Requisite Conditions for the Implementation of Development-Based LVC

Scholars have demonstrated that land-based financing in general has great potential in developing countries where there are active land and property markets and good urban governance (Palmer and Berrisford 2015; Paulais 2012; Peterson 2009; Roberts 2011). Suzuki et al (2015) work on financing transit-oriented development with land values highlights the potential application of the development-based LVC in developing countries. Drawing on experiences and lessons from case studies of some developed countries, Suzuki et al. (2015) echoed that the development-based LVC is suitable for developing countries. They argue that adapting and implementing the development-based LVC requires certain enabling factors. These include sound demographic and macroeconomic fundamentals, visionary master plans and sound and flexible planning, intergovernmental collaboration, entrepreneurship, and clear, transparent regulatory and institutional factors. These factors are encapsulated into "active land and property markets and good urban governance."

Sound demographic and macroeconomic fundamentals entail rapid urbanization and strong economic growth that creates high demand for land and property. It creates a spatial configuration that requires significant investment in urban infrastructure. In addition, it leads to the emergence of middle-class households with effective demand for urban housing. This propels large-scale land development activities with the necessary housing infrastructure (Suzuki et al. 2015). The activities emanating from this demographic and strong macroeconomic growth lead to increases in land values in urban areas. In Sub-Saharan Africa, these conditions are becoming more favorable in recent years and hence the advocacy for development-based LVC (Berrisford, Cirolia, and Palmer 2018; Paulais 2012).

Visionary master plans and sound, flexible land use planning also facilitate the implementation of the development-based LVC. According to Suzuki et al. (2015), long-term strategic vision of the country incorporated in a master plan guides both economic and spatial development, and channels resources into more focused development oriented interventions. Suzuki et al. (2015) posit that global good practice cities implementing decades of master plans have identified major transit investments as backbones to urban development. Therefore, Sub-Saharan Africa cities with visionary master plans that identify major infrastructure corridors' investments can draw on the synergies between the impacts of these investments and land values. This will facilitate the implementation of land use planning instruments that incorporate raising additional funds from development-based LVC.

Furthermore, effective intergovernmental collaboration enhances the chances for successful implementation of development-based LVC. Land value creation results from multiple actors, actions and strategies most often facilitated by more than one governmental agency. Therefore, the strategies to capture land values requires effective collaborative relationships and actions (Suzuki et al. 2015). Cities, where there is a history of effective intergovernmental collaboration in projects design and implementation enhances the opportunities for them to deliver innovative projects, especially in large-scale land development projects. Thus, the design and implementation of development-based LVC needs expertise and effective intergovernmental collaboration that is able to manage the conflicting of interests of project actors.

Intergovernmental collaboration ensures that there are effective stakeholder engagements, consultation and consensus-building around urban infrastructure investment and implementation.

Again, the ability of city governments to imbue creative and innovative entrepreneurial mindset in the midst of limited local government revenues is critical to the success of the developmentbased LVC (Paulais 2012; Roberts 2011; Suzuki et al. 2015). According to Suzuki et al. (2015), the development-based LVC originated from an entrepreneurial undertaking by city governments in the United Kingdom and the United States of America in the mid-19th century. Thus, local government authorities in developing countries need to become entrepreneurial in the implementation of development-based LVC. They should develop long-term strategies and models for generating additional revenues from land value increments.

Urban Development Context of Ghana

Ghana has experienced rapid urban population growth over the last three decades. The total population of the country more than doubled between 1984 and 2013 (World Bank 2015). According to the World Bank (2015), the urban population more than tripled, rising from 4 million to 14 million people over the same period (Figure 1). The urban population growth has been phenomenal in the total number of growing urban areas since 2000. The total number of urban areas with a population between 50,000 and 100,000 increased from nine towns in 2000 to 36 in 2010. This urban growth has been concentrated in smaller cities rather than in the larger ones (World Bank 2015). Thus, the rate of urbanization rose from 31% to 51% between 1984 and 2013 making the country more urban compared with West Africa and the global averages (World Bank, 2015). According to the CAHF (2018), Ghana's urban population is projected to grow by 3.4% a year due to both natural growth and internal migration. Fortunately, this rapid population growth and urbanization have coincided with stable economic growth in Ghana. Over a period of three decades, the country has witnessed steady growth in the Gross Domestic Product (GDP). For instance, the average GDP growth rate between 1984 and 2005 was 5.7% annually; between 2005 to 2013 GDP averaged 7.8%, and between 2013 to 2017 it averaged 5.0% (Ghana Statistical Service 2018; World Bank 2015). Thus, according to the World Bank (2015), the GDP growth rate has never fallen below 3.3% since 1984 (Figure 2).

Figure 1: Urban Population Growth (Pop. Millions)

Figure 2: Sustained Economic and Urbanization Growth Rates Since 1984



Source: World Bank (2015)

Source: World Bank (2015)

Besides, Ghana was ranked as the fastest growing economy in Sub-Saharan Africa and one of the fastest in the world in 2011 when it recorded a GDP growth rate of 14.4%. However, since then the economy plummeted due to world economic shocks and falling commodity prices. In 2014, GDP was 4% and rose marginally to 4.1% in 2015, but even then, it was higher than the Sub-Saharan Africa average GDP growth rate of 3.8% (Figure 3).

This impressive performance of the economy in the midst of volatility in the global economy has precipitated the current spatial patterns of development in the country. For example, the Ghana Investment Promotion Centre estimates that about 85,000 transactions are recorded per year in luxury residential real estate with an estimated value of US\$1.7 billion (CAHF 2018b; Mega Africa Capital 2013). The residential real estate market segment is the largest, and it is estimated to be the fastest growing sector within Ghana's real estate market (Mega Africa Capital, 2013). This market segment is made up of high-end, middle-income, and low-income brackets. There is an increasing local demand for residential estate as urban population increases. These dynamics in the real estate sector have influenced the current pace of urban expansion in many cities in Ghana (CAHF, 2018).

The services sector is the largest contributor to GDP. It accounted for 54.6% of GDP in 2015, 56.8% in 2016 and 55.9% in 2017. Industry and Agriculture contributed 25.6% and 18.9% respectively to GDP in 2017 (GHL 2016; GoG 2018). Real estate, which comprises land, residential, commercial, industrial, and hospitality, contributed approximately 5% of GDP in 2013 and is the 4th largest contributor to the services sector (Mega Africa Capital 2013). However, the real estate subsector growth performance also plummeted in 2015 from 7.7% to 3.8% in 2016 and rose marginally to 4.2% in 2017 (GoG 2018).



Figure 3: Ghana, Sub-Saharan Africa and World GDP Growth Rates

Source: International Monetary Fund, World Economic Outlook 2016.

In addition, the relatively stable economic growth and urbanization rates over the years have also created urban economic opportunities that have influenced rural-urban migration, thereby making these urban areas attractive to migrants. These opportunities led to an influx of migrants to Ghana's urban areas. This influx did not necessary create unemployment in these areas (World Bank 2015). It is worth noting that urban unemployment rather fell by 1.5% between 2000 and 2010. The World Bank indicates that the major cities in Ghana witnessed a decline in urban unemployment rates despite increased migration. Besides, urban migration has also changed the structure of Ghana's economy from its dependence on subsistence agriculture for employment to industrial and services sectors. Thus, employment in industry and services sector increased from 38% to 59% between 1992 and 2010 (World Bank 2015).

Furthermore, improved economic growth and urbanization have decreased urban poverty levels and increased access to basic infrastructure services. According to the World Bank (2015), the total poverty incidence dropped below 25% in 2013 and below 11% for urban areas. Access to basic urban services including electricity, water, and waste management services improved from 30% in 2000 to 70% in 2010 for electricity connectivity for small towns. Peri-urban Accra has witnessed increased access to electricity from 60-75% in 2000 to 86-92% in 2010. These improvements resulted from rapid economic growth and urbanization, which led to job creation, especially non-farm enterprises in urban areas.

However, rapid urbanization in Ghana has also resulted in many challenges. The GoG/MLGRD (2012) list a myriad of challenges confronting urbanization and management of urban centers in Ghana. These challenges are encapsulated into three main themes consisting of productivity, inclusion and institutions (World Bank 2015). The first theme, productivity, includes overconcentration of growth and development in a few cities, weak urban economy, land use disorders and unplanned urban expansion, weak rural-urban linkages, inadequate urban investment and financing, and weak urban transportation planning and traffic management. The second, urban inclusion relates to increasing urban insecurity, urban poverty, slums and squatter settlements, increasing environment deterioration, and inadequate urban infrastructure and institutions related. This consists of weak urban governance and institutional coordination, weak information, education and communication strategy, limited data

and information on urban centers, delimitation of urban areas of jurisdiction, and lack of integrated planning across jurisdictional boundaries.

Decentralization in Ghana

As a response to the emerging socio-economic development of the country, the Government of Ghana has been pursuing decentralization policies in line with democratic governance principles since 1988. The aim of these policies is to enhance political participation and improve social and infrastructure services at the local levels. Decentralization has been pursued from three levels: (1) political; (2) administrative; and (3) fiscal. However, over the years, government attempts to meet the needs of the growing population and rapid urbanization, have led to the proliferation and fragmentation of Metropolitan, Municipal and District Assemblies (MMDAs) (Owusu 2015). For example, the last decade has witnessed considerable increases in the number of MMDAs. The number of MMDAs more than doubled from 110 in 1988 to 254 in 2018 (Table 1).

	Number of Local Governments				
Year	Metropolitan	Municipal	District	Total	Increase
1988	3	-	107	110	-
2004	4	10	124	138	+28
2008	6	40	124	170	+32
2012	6	49	161	216	+46
2018	6	81	167	254	+38

Table 1: Proliferation of Local Governments

Source: updated from Owusu (2015).

The significance of this proliferation and fragmentation is that it weakens the financial resource base, especially internally generated funds (IGF), of MMDAs. This has negatively impacted urban infrastructure service delivery as many of the newly created MMDAs lack an adequate IGF revenue based for service provision (Cities Alliances 2017). The proliferation has also led to the over dependence of these MMDAs on central government transfers. The central government transfers have been fluctuating in recent times, further affecting the infrastructure development of newly created MMDAs. The Greater Accra Metropolitan Area has witnessed continuous fragmentation and proliferation of MMDAs out of the already existing ones in a bid to ensure that basic service delivery reaches the population and local governance at the grassroots level.

Urban Planning System

The urban planning system in Ghana is rooted in colonial legacies, typified by the old British model of town planning. The initial focus of urban planning was more of development planning where the concentration was on natural resource exploitation. Plans focused on the development of infrastructure and social services were clearly targeted at the development of hydroelectricity projects, delivery of public services, and town improvement through housing development schemes (Acheampong 2019). Planning was concentrated in the resource-rich southern sector of Ghana where geographic areas were mapped for major infrastructure projects in order to achieve

specific development objectives (Acheampong 2019; Fuseini 2016). However, because these plans were focused on physical infrastructure development, which had an expression in spatial terms, Acheampong (2019) describes it as the beginning of spatial planning or urban planning in Ghana.

Formal urban planning was introduced in Ghana by the promulgation of the Town and Country Planning Act (CAP 84), 1945. This Act introduced the urban planning instruments that sought to guide the orderly and progressive development of land, towns and other areas with the aim of preserving and improving neighborhood amenities and related matters. The Act established the symbiotic relationship between physical developments in relation to land. The Act used planning schemes or layout plans and development permitting to regulate physical developments. In addition, Cap 84 established the institutional framework for spatial planning by establishing the Town and Country Planning Department (TCPD) as the spatial planning unit in the country. The 1945 Act and its subsequent amendments further introduced procedures for urban planning. One of such procedures was that an area had to be declared a 'Designated Planning Area' before a land use plan could be prepared for that area.

The Minister in charge of town planning was given the power to consult with local authorities and declare the local authority jurisdiction as a planning area by executive instrument. This gave the Minister responsible for town planning discretionary powers to decide which town, village, or neighborhood had to benefit from land use planning (Acheampong 2019). This situation had a profound impact on the physical development of town and cities in Ghana in the sense that areas that did not receive the minister's attention and approval continued with physical developments without a land use plan. This situation persists in in most parts of Ghana today. It marked the beginning of deficient urban planning in Ghana, where many physical developments precede urban planning.

The 1945 Act introduced a highly centralized planning system where decisions regarding planning at any local government authority had to be approved by the minister responsible for town planning. Though this type of system favored strategic infrastructure development throughout the country (Fuseini 2016; Fuseini and Kemp 2015), in the case of residential neighborhood development, it created bureaucracies and denied many the benefits of land use planning. Moreover, Cap 84 introduced a piecemeal urban planning approach as the practice of declaring planning areas meant not all areas that qualified for land use planning had access to it (Acheampong 2019).

Having practiced centralized urban planning for decades, the dispensation of decentralization in the African continent and in Ghana, in particular, paved the way for decentralized planning. In 1988, the decentralization program was initiated to introduce reforms in local governance structure and to encourage and increase local-level participation in the development process. The local government law (PNDC Law 107) which was subsequently replaced by the Local Government Act (Act 462), 1993 granted administrative powers to local authorities and mandated them to take charge of local development overall, including planning. In 1994, the National Development Planning System Act, Act 480 was enacted to provide the legal basis for planning at all levels of government. According to Acheampong (2019), these two laws set up

the new institutional framework for planning (Figure 4) and defined the nature and scope of planning in Ghana.

The National Development Planning Commission (NDPC) was established in 1994 to perform the functions of socio-economic, environmental and physical planning as a single task. However, the NDPC concentrated on addressing economic planning at the national and regional levels with little attention given to spatial planning. According to Acheampong (2019) the introduction of development planning by Act 480 led to the neglect of spatial planning at the national and regional levels of political administration.



Figure 4: Governance Structure and Institutional Framework Under Act 480

Source: Adapted from Acheampong (2019, 46).

Thus, Act 480 and 462 introduced two types of planning systems in the country. The first is development planning that emphasized economic planning at the national level and monitored the activities of Regional Coordinating Councils. Second, is land use planning at the district levels with a narrow focus on the preparation of planning schemes or layout for neighborhoods in town and cities and development controls (Acheampong and Ibrahim 2016). This created a situation where there were no coordinated efforts to synchronize crosscutting issues between development planning and spatial planning. Therefore, the preparation of land use plans at the local levels was reduced to assisting landowners to sell their lands as plans virtually had no bearing on the socio-economic realities of MMDAs (Acheampong 2019). These lapses and other factors led to the promulgation of the Land Use and Spatial Planning and Local Governance Acts in 2016.

The deficiencies identified with the spatial planning system in the country led to several reform processes. The Land Administration Project (LAP), which started in 2003, incorporated a component on Land Use Planning and Management Project (LUPMP). This led to the promulgation of the Land Use and Spatial Planning Act, Act 925 in 2016. The act addresses most of the deficiencies in the earlier planning instruments. This new planning law has declared the entire country as a potential planning area in contrast with Cap 84. The law further embraced the

use of land use and spatial planning to inculcate in its scope a new tradition of integrated and multi-scale planning (Acheampong 2019). The law has also introduced an institutional framework to recognize spatial planning at the various levels of political administration while maintaining the three-tier institutional set-up under Act 480.

The new planning law has also broadened the scope of the three-tier institutional framework to include national, regional and district spatial development frameworks (figure 5). The effect of this law is that, a three-tier hierarchical system of spatial planning instruments has been introduced.





Source: Acheampong (2019, 52)

This three-tier spatial planning framework synchronizes district level plans with national development objectives. Thus, the new spatial planning law has provided the legal requirements for the preparation of spatial planning frameworks at all levels of political administration and prescribed the required standards for each framework as well as the synergies between the different levels of planning. What is important to note is that structure, and local plans are the main planning instruments recognized and emphasized in the new law. Each MMDA is expected to develop a District Spatial Development Framework in line with the national and regional Spatial Development Frameworks. MMDAs are required by law to review this framework every five years.

From the District Spatial Development Framework, the MMDA will then develop structure and local plans. The main tool employed in the structure plan is zoning. The Ministry of Environment, Science and Technology (MEST) and the Town and Country Planning Department (TCPD) have created the Zoning and Planning Standards Guidelines to ensure that both Structure and Local Plans conform to these standards. These standards prescribe acceptable and permissible use and form in which development may occur in a planned area. The zoning and planning standards by the TCPD has identified 25 land use development zones and has also introduced a color coding system for various land use zones (MEST/TCPD 2011).

Land Tenure and Administration System

Land tenure and land administration in Ghana is peculiar and complex. The land tenure system reflects the unique traditional political institutions and socio-cultural differences of tribes, clans and families that acquired various interests in land through wars, conquest and assimilation and first settlements (Ministry of Lands and Forestry 2003). Within the traditional context, land ownership is inter-generational and transcends the living to include the dead and those yet unborn. It has spiritual and religious connotations and therefore, dealings in land must reflect these peculiarities. These peculiarities also informed the various land tenure systems in the country. Thus, there are different types of land tenure systems and land holdings, acquisition, use and disposal, which vary from one geographical area to another (Ministry of Lands and Forestry, 2003). These translate into different interests in land that are either derived from Ghanaian customs or assimilated from English common law and equity.

The prevailing land tenure system in Ghana can be divided into two broad categories based on land ownership, control and management. These are public land and customary land. Within the public land tenure system, there are two variants. The first is state land, where the ownership, control and management are vested in the President and held in trust for the people of Ghana. The mechanism through which land becomes public under this variant is the State exercises its constitutional or statutory power of eminent domain to acquire lands compulsorily from customary landowners for the general public interest. The constitutional and statutory laws governing the compulsory acquisition of land are article 20 of the 1992 Republican Constitution of Ghana, State Lands Act, 1962, Act 125, and the Land Statutory Wayleaves Act, 1963, Act 186. The Public and Vested Land Management Division (PVLMD) of the Lands Commission manages this type of public lands on behalf of the President. It is estimated that this type of public land constitutes 18% of the total land in the country. The second variant of public land is vested land. In this type, the landowner retains the customary ownership, but the State takes control over the management of the land under special statutory intervention. The management responsibilities of the state on this type of land include legal, financial and physical planning. The mechanism by which land become vested in the state is by statutory law, the Lands Administration Act, 1962, Act 123. It is estimated that this type of lands constitutes 2% of the total land mass. The PVLMD manages this on behalf of the customary landowners. Thus, both state and vested lands constitute about 20% of the total land mass of Ghana (Kasanga and Kotey 2001; Kasanga et al. 1996; Kasanga 2002).

Customary land constitutes about 80% of the total landholdings in the country. It comprises of stool, skin, clan, family and individual lands. The stool and skin symbolize traditional political

institutions headships and socio-cultural orientations. It has the trait of communal ownership with tenets of inter-generational ownership, and the *allodial*¹ title or freehold resides in the community, clan or family. This allodial title is non-transferable (Ministry of Lands and Forestry 2003) and the community, clan or family head holds the land in trust for the entire community, clan or family. Thus, land ownership, control and management in Ghana are in the hands of stools, skin, clan or family heads who hold the land in trust and therefore manage it as a fiduciary duty. This trusteeship role is recognized by the state through a constitutional provision. Article 38(8) of the 1992 Republican Constitution of Ghana states:

The state shall recognize that ownership and possession of land carry a social obligation to serve the larger community and, in particular, the state shall recognize that the managers of public, stool, skin and family lands are fiduciaries charged with the obligation to discharge their functions for the benefit respectively of the people of Ghana of the stool, skin or family concerned, and are accountable as fiduciaries in this regard. (Republic of Ghana 1992, 33)

Stool and skin lands have been subjected to constitutional and legal restrictions in attempt to limit trustees' control especially over the disposition of land and revenues accruing thereof. Article 267 of the Constitution stipulates that any grant of stool or skin land to non-member must receive the concurrence of the Lands Commission. Also, concerning revenues accruing on such lands, the constitutions mandates the Office of the Administrator of Stool Lands (OASL) to collect all revenues, royalties, dues, fees for and on behalf of the stool or skin. However, there are no restrictions on family, and individual lands as these lands are implicitly referred to in the constitution as private properties. Family and individual lands constitute about 35% of the customary land holdings (Ministry of Lands and Forestry 2003).

In conclusion, land administration and management are governed by customary practices and enacted legislation in Ghana. Thus, the state, indigenous land governance institutions, communities, families and individuals all have vested interest in land (Acheampong 2019; Biitir and Nara 2016). The customary land sector is made of complex layers of ownership rights vested in different stakeholders. In most instances, these complex layers are found in one geographical location making it difficult to identify the rightful owners to deal in land transactions.

Methodology

The research sought to examine how land value capture instruments could be designed to raise additional financial resources for MMDAs to augment the financing of public infrastructure within GAMA. It examined the legal and institutional infrastructure for land value capture. It further assessed the impact of urban infrastructure provision on land values in three purposely selected urban sites in three municipalities. Lastly, the study analyzed how land value capture

¹ Allodial title is the highest proprietary interest known to Ghanaian customary law, beyond which there is no superior title. It is sometimes referred to as the paramount or absolute title. It can be likened to the freehold interest in English common law system. Other lesser titles to or interest in or right over land are derived from the allodial interest (Ministry of Lands and Forestry, 2003)

tools can be tailored to the context specificities of GAMA to raise additional financial resources for MMDAs.

The study adopted the qualitative epistemological paradigm that recognizes the importance of locating the research within a particular context. This context could include national, socioeconomic and historical. In Ghana, political, fiscal and administrative decentralization, urban planning and land markets have occurred within the historical, national and socio-economic contexts. The case study strategy of inquiry was used, and the multiple case study design was employed. The case studies were selected based on a blend of projects that are implemented with both intended and unintended objectives of capturing land value increment, in different sites comprising different tenurial regimes (customary & statutory) and under different local government administrative areas within the GAMA.

The study adopted a three-stage process in selecting and analyzing land value capture practices. The first stage involved the selecting of local government authorities within GAMA. This stage involved the contextual analysis of the current legal and institutional frameworks of local governance and land use management, land development and infrastructure provision. This formed the baseline analysis of the current situation. Data from secondary sources on trends of spatial development, availability of peri-urban land, inner-city redevelopment opportunities in GAMA, and the presence of real estate developers or land developers undertaking various housing development activities were analyzed. The information led to the selection of suitable local government authority. Besides, based on the baseline analysis, the land developers functioned as land developers or real estate developers (Paulais 2012) and therefore, for the purpose of this paper land developers or real estate developers are used instead.

The second stage involved the selection of land developers. Both public and private developers were purposely selected based on: (1) history and scale of operation; (2) the context of land developer establishment; and (3) location of land developer operations. Thus, one estate developer was selected in each municipality (Table 2).

		Nature of	Name of Urban	Local
	Land Development Agency	Organization	Site	Government
				Area
1.	Tema Development Company	Parastatal	Community 25	Kpone-Katamanso
				Municipal
				Assembly
2.	Ghana Airport Company	Parastatal	Airport City	La Dade-Kotopon
			Redevelopment	Municipal
				Assembly
3.	Oak Villa Estate Company	Private	Abokobi	Ga East Municipal
		Developer		Assembly

Table 2: Case Study Organizations and Local Government Administrative Areas

Moreover, land developers implementing the selected land development projects were profiled. This entailed describing the project schemes, land values before and after the completion of the projects, type and cost of urban infrastructure provided, and financing arrangements. It further described in detail the implementation of land use scheme, its impact on land values and how the estate developers capture potential or actual increases in land values, the availability and ownership structure of the land, partnership models between land developers with original landowners and the municipal government that has the official mandate for land use planning were described.

The third stage involved the interpretative analysis of the first and second stages. This stage entailed two levels of analysis. The first was the expert interpretation of the output of the contextual and profile analyses of land developers. The practice of value capturing was analyzed from two levels. The first level of analysis examined how local government in a selected development scheme generally captures the land value increment. It examined the types of land-based revenues currently available to local governments, the assessment and collection of these revenues, and the capacities of the local government to assess and collect these revenues. It analyzed the tools that local governments use to capture potential or actual land value increments resulting from urban infrastructure provision. The second level of analysis within the expert interpretative analysis was on how the land developers access land and finance land development projects, what their strategies are for capturing land value uplift, and the lessons that can be learnt from these land developers.

In addition, there was stakeholder interpretation of the findings. This involved a presentation of the findings to the key stakeholders in a stakeholder dissemination workshop held at the Institute of Local Government Studies, Accra on 8th November 2018. In all, 20 participants from the three selected Municipalities and the three estate developers, representatives from Lands Commission, Ministry of Local Government and Rural Development (MLGRD) and land development projects beneficiaries attended the stakeholder dissemination workshop. The stakeholders' dissemination workshop was used to triangulate the findings. The workshop had two sections. The first section included a presentation of the findings of the expert interpretation. The second section included guided focus group discussion.

Profile of the Greater Accra Metropolitan Area (GAMA)

The Greater Accra Metropolitan Area refers to a broad administrative region, which originally consisted of three MMDAs—Ga, Accra and Tema Districts (Grant 2009). However, due to the proliferation of MMDAs, this area was fragmented from these three MMDAs in 2003 to 12 in 2012 (Cities Alliance 2017) and further to 22 in 2018 (Figure 6). GAMA in recent years has undergone significant urban and economic transformation processes. This economic transformation resulted from the globalization processes as well as deliberate efforts by City authorities to reposition the city as a global city, or at least as a "world-class city-region" (Grant 2009; Otiso & Owusu 2008; World Bank 2015). The city authorities designed and implemented the GAMA Strategic Plan. The design and implementation of the strategic plan was ambitious, yet tangible outcomes are beginning to come to fruition. This is evidenced by improvements in infrastructure, and significant investments in commercial, industrial, and residential real estate in mainly the city center (Town and Country Planning Department 2017).

Over the years, the city has expanded in physical size. For instance, GAMA population grew from 1,307,783 in 1991 to 2,513, 025 in 2000 and 4,429,649 in 2014 respectively (Angel et al. 2016). According to Angel et al. (2016), the corresponding growth in urban built-up area was 9,052 hectares in 1991, 29,165 hectares in 2000 and 52,847 hectares in 2014. Thus, during the period between 1991 and 2000, the built-up area grew by more than three times and almost double between 2000 and 2014. Therefore, the percentage annual change of total built-up area in hectares was 4.6% between 2000 and 2014 (Angel et al. 2016). Meanwhile, the Town and Country Planning Department estimates that the urban area increased approximately by 590km² from 447km² in 1991 to 1,036km² in 2017 representing a 132% increase (Town and Country Planning Department 2017). The bulk of this increase comes from residential areas and residential support services.

However, the management of the GAMA has not been coordinated and urban sprawl continues unabated without limits being set to the physical size of the area. This has resulted in poor urban connectivity and poorly planned transport infrastructure. According to the Town and Country Planning Department (2017), an assessment of the implementation of the 1991 GAMA strategic land use proposal indicates among other things the green belt system and open space areas in many instances have been overtaken by urban development. The few green belts and open spaces that are left are threaten by the continuing sprawl of the city. Besides, the Town and Country Planning Department (2017) also notes that road development proposals contained in the strategic plan were not implemented.



Figure 6: The Greater Accra Metropolitan Area (GAMA)

The inability of the city authority to implement land use proposals and effectively carry out road development proposals within the GAMA region have resulted in poor local linkages. The result of this is that, traffic volumes exceed the capacity and design standards of roads. Moreover, regional connectors within the area lose their functionality in the urban core as local traffic spills onto the regional connectors. The net effect is that there is bad land use and transport integration in GAMA. Therefore, the positive relationship mostly associated with transportation infrastructure and land values uplift cannot be realized in the midst of poor functionality of current GAMA.

Land use and transport integration theories suggest that, to increase the functionality of the city in general, individual elements of the city must support each other (Suzuki et al. 2013). Further, the theories suggest that, on the one hand, land use development must respond to transportation systems. The transportation system includes road infrastructure, access and visibility. On the other hand, the transportation system must respond to changing land uses by increasing the capacity of the system to meet land use requirements. These two must operate in equilibrium to ensure good functionality of the city. However, current land use developments in GAMA have outpaced the provision of effective transport systems and infrastructure. In addition, the monocentric urban structure of GAMA has also contributed to the worsening traffic situation. This has created a dysfunctional metropolitan area where there is an imbalance between land use

Source: Ghanadistricts.com

and transportation because the road infrastructure has not kept pace with land use changes resulting in heavy vehicular and human traffic. The combined effects are that it is difficult, if not impossible to assess the effects of transport infrastructure or the transport system on land values, as travel time is affected by heavy traffic, which also affects the entire economy.

The government of Ghana attempted to address urban transport system and infrastructure challenges. In 2007, the government initiated the Bus Rapid Transit (BRT) project under the Ghana Urban Transport Project (GUTP). This project was jointly funded by the World Bank, the Agence Francaise de Development (AFD), the government of Ghana and the Global Environment Facility Trust Fund at the cost of \$95 million (Appiah 2015). The Ministry of Local Government and Rural Development, Ministry of Roads and Highways and the Department of Urban Roads (DUR) are implementing the project. The project originally had five components to address the objectives—first, the development and operation of a pilot BRT system. Second, regulation of passenger transport in the participating MMDAs. Third, traffic engineering, management and safety including the development of an Area-Wide Traffic Signal Control Systems in Accra and Kumasi. Fourth, institutional development through support to all the stakeholders in the project, and fifth, integration of urban development and transport planning (Ghanaian Times 2018). The sixth component was later added on monitory and evaluation and emergency works (Teko 2017).

However, the BRT infrastructure could not be completed due to the escalation of cost, which surpassed the initial budget. Thus, the dedicated bus lanes have not been constructed, and therefore, the BRT buses have had to use the existing infrastructure that is highly prone to heavy vehicular traffic. Therefore, the government of Ghana restructured the project and opted for a Quality Bus Service (QBS). This is because the infrastructure developed under the project did not meet the full complement of proper BRT infrastructure. Hence, it could not be said to be a BRT system. The QBS operation is currently grounded due to financial challenges. It is important to state that the inability to design and implement a standard BRT system has affected mobility within the GAMA. Nonetheless, no assessment was made to ascertain the impact of this investment on land values along the corridors of the OBS infrastructure in the city. Therefore, it is difficult to establish whether land values were impacted positively or negatively. The city authority's focus was on getting the system to work to improve urban transportation. The other benefits including the potential of the project to affect land values positively so that, the authorities can capture the values through LVC instruments to complement the financing of urban transport infrastructure was not on their agenda. This has denied the city the opportunity to assess and capture any positive land value uplift that is often associated with the BRT system and the improved accessibility, and mobility of urban residents. Other countries like South Korea, Columbia, Brazil and Australia have used the BRT system as a medium for designing land value capture tools. These tools have been designed to capture the accessibility benefits of BRT systems in these countries.

The Legal and Institutional Arrangements for Land-Based Revenue Generation

Land-Based Revenues Generated at the National Level

The state recognized that land is an important source of revenue. Therefore, the state has enacted several laws that seek to raise revenue from land. From the national government level, the following landed property related taxes are imposed under separate legal instruments and institutions responsible for collection: (1) Gift tax; (2) Estate Duty and Inheritance Tax; (3) Rent Tax; and (4) Capital Gains Tax.

Gift Tax

The Gift tax is governed by the Internal Revenue Act, 2000, Act 592 section 105. It is imposed on the building of a permanent or temporary nature, land, shares, bonds, and other securities, money, including foreign currency, business and business asset, any means of transportation (land, air or sea), and goods and chattels. It is taxed at a rate of 5% under section 105 amended where the value of the gift exceeds GHS50. The Ghana Revenue Authority (GRA) assesses and collects the gift tax. This tax is payable by the donee on the total value of taxable gifts received by that person as gifts within a year of assessment.

Estate Duty and Inheritance Tax

The Estate Duty Act, 1965, governs the estate duty tax. It is imposed on property that passes on death. However, in 2015 this was replaced with the inheritance tax under the Income Tax Act, 2015, Act 896. Under this act, the person who inherits money or property or a levy on the estate (money and property) of a person who has died pays the tax. Section 44 of the Act indicates the tax is levied on the market value of the property at the time of realization. The act is silent on the tax rate and any exemption. It must be stated that this tax is hard to implement because of the nature of inheritance and how it is bequeathed. Most inherited landed properties do not go through the formal processes of transfer, therefore, the GRA is unable to track it. These make it difficult to estimate the magnitude of this type of tax. The GRA is responsible for the assessment and collection of this tax.

Stamp Duty

Stamp Duty Act, 2005, Act 689 empowers the state to collect revenue through transfer taxes on land that is sold and bought. Section 14 provides that an instrument or document of title shall not be registered or entered in the registry of instruments that affects land or in the land title register unless the instrument or document containing particulars of the title is stamped. The Act also provides for *ad valorem* duty on mortgages and conveyances that require periodic payments of money. Thus, the tax is imposed on the conveyance of land, transfers or assignment of land, the gift of any landed property, leases and mortgages, debenture, guarantee, lien and covenant. In the case of conveyance, transfer, assignment, or gift of landed property, the stamp duty rates include 0.25% where the amount for the value of sale does not exceed GHS10,000, 0.5% where the amount exceeds GHS10,000 but less than GHS50,000, and 1% if the amount exceeds GHS50,000.

The current institutional arrangement for collecting the stamp duty is a collaboration between the Land Valuation Division (LVD) of the Lands Commission and the Ghana Revenue Authority (GRA). The LVD assess stamp duty payable during the registration of land documents, collects and pays same to the GRA, which is constitutional mandated to collect the stamp duty. Revenues from stamp duty are paid into the consolidated fund of government for general purpose usage.

Capital Gains Tax

The Internal Revenue Act, 2000, Act 592, governs capital gains tax. It is a tax payable on disposal of all forms of chargeable assets including freehold and leasehold property. The chargeable assets are (1) buildings of permanent or temporary nature, and (2) business and business assets including goodwill, land, shares in company and part of, or any right or interest in land. The tax rate is 5% on the amount of gain accruing to a person in excess of the consideration received over the cost base at the time of realization. The Ghana Revenue Authority collects this tax on behalf of the government.

Rent Tax

Rent is considered as income arising from investment in landed property, and it is taxed under the Internal Revenue Act, 2000, Act 592, other amendments such as Act 622, and Act 700, and regulations LI 1675 and LI 1698, 2001. It is taxed at a rate of 8% on the gross rental income in the year of assessment. The GRA valuation department staff assess the rent tax based on market evidence and self-declaration. However, this tax is of limited application and mostly enforced on institutional landlords like hostel owners or corporate bodies that pay rent for their staff. The Ghana Revenue Authority collects this tax.

It is important to note that, these taxes are aimed at raising revenues from land and that they accrue to the national government directly. These taxes do not directly result in arrangements where urban infrastructure is funded directly by these revenues sources. Therefore, by the technical definition of land-based financing, these taxes can be regarded as instruments for raising land-based revenues. However, one cannot specifically say that these land taxes are earmarked for urban infrastructure development and that these taxes are levied based on increased land values resulting from investment in general infrastructure. Nonetheless, it suffices to note that national government is responsible for the provision of major infrastructure development be it road transport infrastructure, energy or water. But financing these major infrastructures is still dependent on external financial support from bilateral and multilateral development agencies.

Besides, the government established an Infrastructure Investment Fund in 2014 to mobilize resources for infrastructure development. Section 5 of the Infrastructure Investment Act, Act 877 lists all the possible source of funds for the fund but no mention is made of land-based finance or land value capture as a potential source. This presupposes that the land taxes are treated as general revenues, and not tied to infrastructure provision.

Fiscal Decentralization and Land-Based Revenues

At the sub-national level, the 1992 Constitution provides the legal framework for governmental fiscal transfer mechanism for financing the activities and functions of local authorities. Thus, within the general principles of fiscal federalism, the Constitution of Ghana has established the intergovernmental fiscal frameworks. The fiscal framework defines the assignment of revenues, expenditures, financial autonomy and fiscal authority for local government administration in Ghana (Fjeldstad 2015).

The legal framework for fiscal decentralization in Ghana is based on a number of acts and regulations. These include the Local Government Act (Act 362) amended as Local Governance Act (Act 936), District Assembly Common Fund Act (Act 455), and the National Decentralization Policy and Action Plan. This legal framework is to ensure that local authorities have a sound financial base with adequate revenue to carry out their functions. However, according to Cities Alliance (2017), the ability of local governments to finance urban infrastructure depends on (1) adequate Internally Generated Funds (IGF) or Own Source Revenue (OSR) generation; (2) a well-structured and reliable intergovernmental fiscal transfer framework; (3) financial autonomy and creditworthiness; and (4) ability to access financial resources from the open market to raise additional funds for urban infrastructure investment. Therefore, relative to land-based revenues at the sub-national level, the Constitution, the Local Governance Act, (Act 936), and the Land Use and Spatial Planning Act (925) have made specific provisions for land value capture instruments.

Stool Land Revenues

Article 267 of the Constitution recognizes the existence of stool land revenues from customary land holdings as a major form of land-based revenue. Therefore, article 267 (2) sets up a constitutional body, the Office of the Administrator of Stool Lands (OASL) to collect and distribute stool land revenues in accordance with the constitutional formula. This institution is responsible for the collection of land rents, dues, royalties, revenues or other payments whether in the nature of income or capital for and on behalf of stool landowners². Part of their mandate is to set up accounts for every stool and pay all revenues into such accounts in accordance with the formula set out in clause (6) of article 267 of the constitution. According to the formula, 10 per cent of the revenue accruing from stool lands shall be paid to OASL as administrative charges. Twenty-five per cent of the remaining revenue is paid to the stool through the traditional authority for the maintenance of the stool in keeping with its status. Another 20 per cent of the remaining revenue is paid to the traditional authority, and the other 55 per cent is paid to the District Assembly where the stool land is situated.

Therefore, District Assemblies are also entitled to a share of the revenues accruing to stool lands. This also constitutes land-based revenue for District Assemblies especially in jurisdictions where there are stool lands. In the repealed Local Government Act, Act 462, stool revenue was captured under miscellaneous revenues under schedule six of the Act. But the new Local Governance Act,

² In large parts of southern Ghana, customary land is referred to as stool land in reference to the carved wooden stool which is a traditional symbol of chieftainship and is believed to contain the souls of the ancestors.

Act 936, this is not mentioned as part of the revenues of District Assemblies. Though the Act 936 provides for fees and miscellaneous charges, there is no specific mention of stool land revenue as part of the revenues of the District Assemblies. But it stands to reason that since this provision is captured under article 267 of the Constitution, the local authorities still have the right to receive stool land revenues from the OASL. Nonetheless, it is important to note that stool land revenues fall under the general category of land-based financing for local government in Ghana.

It is important to note that while the Constitution specifies the uses for such revenue in respect of the OASL and the Stool, it is silent on how the revenues paid to the traditional authority and the District Assembly are to be used. However, implicit in this constitutional formula is that the portion given to the MMDAs is to be used for infrastructure development that enhances the value of land within stool land areas. Nevertheless, the usage of the revenue over the years has been left to the discretion of the MMDAs. This has raised serious issues, especially the portion of the revenue paid to District Assemblies. Many authors have criticized beneficiary District Assemblies for not utilizing these revenues for infrastructure development (Asiama 2006; Kasanga and Kotey 2001; Mahama and Baffour 2009).

Development Charge

The Local Governance Act (Act 936), 2016 gives the local government authority to raise landbased revenues from development charges as part of its IGF. Sections 92 and 209 of Act 936 are specific on how development charges can be levied by MMDAs. Section 92 of Act 936 provides that, District Planning Authority may levy development charges in respect of a permit to carry out a physical development. This provision ties the levying of development charge with granting the development permit. Again, sub-section (2) of section 92 states that development charges shall be used for the provision of infrastructure and services. In addition, the provision draws a distinction between levying development charges on infrastructure and services provided by the District Assembly and that of other bodies charged with the responsibility for providing infrastructure and services. sub-section (3) of section 92 of Act 936 specifically states that the District Assembly shall rate and collect development charges to the exclusion of any other body except that in a case where other specific bodies take responsibility for providing infrastructure and services (Republic of Ghana 2016).

Implicit in section 92 of Act 936 is the recognition that the primary reason for levying development charges is to recover the cost of providing infrastructure and services. Therefore, the body or institution providing the infrastructure and services is entitled to levy and collect development charges. The section further recognizes that there might be other bodies tasked with the responsibilities of providing infrastructure and services within local authorities. Perhaps, the entire section 92 is limited to the provision of off-site infrastructure and services that directly affect physical development for which the permit is required. It also gives credence to the fact, private real estate developers, parastatal land development agencies and national government institution could provide infrastructure and services and therefore would be entitled to levy development charges besides the local authority. This creates a window of opportunity for some collaboration between the local authority and the body that is providing the infrastructure within the authority's jurisdiction.

Another level where MMDAs can levy development charges is where the local authority undertakes land development activities. Section 208 of Act 936 gives local governments the power to acquire and own immovable properties. Sub-section (2) of this section provides that District Assemblies may acquire land, service the land, and re-allocate the land to a public or private developer for development. In instances where the District Assembly acquires and services land, section 209 of the Act enjoins the assembly to levy development charges on the service land. It provides that, a District Assembly shall impose reasonable development charge on a prospective developer when it allocates land that has been acquired and serviced by the District Assembly. However, the section mandates the District Assembly to establish a separate fund where such development charges shall be paid into for the purpose of further acquisition and servicing of acquired land (Republic of Ghana 2016). In this case, the collection of development charges is linked to the sales of serviced land. It is used to recover the cost of servicing the acquired land. This means the establishment of the separate fund is like a special purpose vehicle that ring-fences the development charges collected to recover and further extend the acquisition and servicing of land by the District Assembly.

This section 209 of Act 936 recognizes the role of local government in land development and the requisite instrument for financing such land development activities and related urban infrastructure. It places restrictions on how developments charge levies on land development schemes undertaken by the district assembly are utilized. Furthermore, this section encourages local government to re-channel such levies towards further acquisition and servicing of land for public and private development.

Sections 208 and 209 also clearly outline three purposes of development charges. These are (1) to recover the cost of bulk and connector infrastructure associated with a development; (2) to contribute to financing new or additional infrastructure; and (3) to offset the impact of development on the respective district's infrastructure network. These provisions are consistent with international literature on development charges as a one-off fee instrument (Berrisford, Cirolia, and Palmer 2018; Connally and Wall 2016; Peterson 2009). The provisions have covered broad areas levying development charges, and if effectively implemented, they could be a great source of monetized land value finance for MMDAs. African Centre for Cities (2015) has indicated that development charges have great potential for success in most sub-Saharan African cities bearing in mind the realities of these cities. Berrisford, Cirolia and Palmer (2018), however, echoed that the implementation of development charges requires a consistent and transparent formula for calculating the impact of development on the infrastructure network of MMDAs. However, the legislative provisions on development charges in Ghana has not prescribed the formula on how to calculate the impact of such development. The Ministry of Local Government and Rural Development has issued guidelines for charging fees and granting licenses and permits for MMDA. But these guidelines fall short of providing a formula for calculating development charges.

Development or Building Permit Fees

Act 936 has also provided for charging of development and building permits on all land development related activities. This is another avenue for district assemblies to raise revenues from land-related activities. Sections 93 and 106 of Act 936 enjoin local government authorities

to grant development and building permits to prospective developers. Local government authority charges a fee for granting these permits according to section 141 of Act 936. Development permits constitute a significant portion of local government own source revenues in Ghana. However, the development permitting system under Act 936 is aimed at controlling development. A development permit is a way of enforcing zoning regulations and ensuring compliance with the standards set out in the National Building Regulations L.I 1630. It falls short of being a tool of land value capture through the sale of development rights. A typical sale of development rights as a tool of land value capture grants developers the right to build at greater densities than would normally be allowed by the zoning and building regulations (Peterson 2009 and Smolka 2013). Therefore, unlike a typical sale of development rights where the local authority sells construction permits to developers in certain growing areas of the city, the current development permitting system does not have area targets. Nonetheless, development or building permit as recognized by the statutes in Ghana falls under the general land-based financing instruments.

Betterment Levies

Section 102 sub-sections 1 to 4 of Local Governance Act, Act 936 and section 111 of the Land Use and Spatial Planning Act, (2016), Act 925 have made provisions for the recovery of betterment by local authorities. The principle of extracting betterment is traceable to the colonial period when Ghana was under British rule (Agemang and Morrison 2017). The British enacted the Town and Country Planning Act, CAP 84, 1945. This Act made provision for the recovery of betterment. Subsequent legislation on local government has repeated this provision with very little modifications. Thus, section 102 of Act 936 provides that:

A District Planning Authority shall recover from a person whose land is increased in value, a determinable percentage of the amount of the increase where that person sells or otherwise disposes of the land; The determinable percentage shall be payable where the provision of a plan or the execution of public works or a decision or action of a District Planning Authority increases the value of land within the district; The District Planning Authority shall act on the advice of the Valuation Division of the Lands Commission; A financial gain on urban land transaction shall be liable to betterment charges. (Republic of Ghana 2016, 57)

The provision for betterment levies in Act 936 covers various aspect of land value increment. First, value increment resulting from the implementation of a plan. Second, value increment resulting from the execution of public works in urban infrastructure development. Third, value increment due to changes in land use regulation and; fourth, value increment resulting from general economy and population growth (Ingram and Hong, 2012; Paulais, 2012; Smolka, 2013). These various aspect of betterment can be classified into two types: (1) development-rights based betterment where the land value rises due to land use regulation decision that applies directly to the specific land parcel and raises its value; and (2) infrastructure-based betterment where land value rise is attributed to the positive externality from a local authority decision to executive public infrastructure works such as roads, parks and other services (Alterman 2012). Nonetheless, Alterman (2012) warns that it is difficult to implement both types of betterment because of the practical difficulties associated with attribution effects, difficulty in determining the geographic range, and estimating the time frame to levy the charge. However, the Land Use and Spatial Planning Act, Act 925 indicates that the Land Use and Spatial Planning Authority shall make regulations prescribing the compliance of charges for betterment. Section 111 of the land use and spatial planning Act 925 enjoins the District Planning Authority to act in accordance with the regulations by publishing the applicable settlement charges for such an area in a daily newspaper of national circulation. Although, these regulations have not been made yet, the importance of publishing the betterment charges is to ensure transparency and public awareness of the need for MMDAs to recover betterment.

Moreover, the land use and spatial planning Act 925 makes provision for charging betterment on the financial gain resulting from an urban land transaction. The Act provides that the District Planning Authority shall consult the Valuation Division of the Lands Commission for advice on any increase in the value of the land. The Valuation Division of the Lands Commission is also well-equipped with the expertise to be able to determine financial gain on the urban land transaction. Therefore, charging betterment on financial gain on urban transaction component has high potential for success given the active nature of land markets development within GAMA. However, the success rate will depend on the nature of collaboration between MMDAs and the land sector agencies.

Property Rates

Another legal provision that empowers District Assemblies to raise revenue through property rating is enshrined in sections 145-169 of the Local Governance Act. Section 145 makes the District Assemblies the rating authorities in their respective jurisdictions. According to section 146 of Act 936, District Assemblies may levy sufficient rates to cover that part of expenditure for which the rate is levied. The Act specifies the rating method to be used and distinguished between general and special rates that can be levied on both immovable and movable properties. The general rate applies to the whole district while the special rate is applicable to a specified area in the district. The general rate may be a property rate on landed property payable by the owner of the property, or it may be levied on personal possession. Section 146 of Act 936 further clarifies that rateable premises shall be limited to buildings,

Section 146 of Act 936 further clarifies that rateable premises shall be limited to buildings, structures, and other structural developments. It states that the rateable values of buildings and structures shall be the replacement cost. This implies that the rateable value applies to buildings and structures. It does not include the land. This method of estimating property rating excludes any land value increases attributed to public works or other infrastructure development. It considers instead property values or buildings and structures value appreciation that is attributed to the execution of public works by the District Assembly or the benefits that accrue to landed properties because of the District Assemblies development activities. In essence, the benefit principle of taxation is applied in the estimation of the rateable values.

The institution that is responsible for the valuation and determination of the rateable values for property rating purpose is the Land Valuation Division (LVD) of the Lands Commission. Section 146 clause 8 of Act 936 gives this power to the Lands Commission through its Land Valuation Division to either determine the rateable values of all rateable properties or appoint a valuer to determine the rateable values for District Assemblies. In addition, section 22 (d) of the Lands Commission Act, 2008, Act 767 gives the Land Valuation Division function of preparing and

maintaining valuation list for rating purposes. Rating valuation is further guided by the Immovable Property Rate Regulation 1975, LI 1049. These legal provisions imply that District Assemblies cannot choose an independent valuer or engage valuation services consultant to undertake property-rating valuation without the approval of the Lands Commissions. Technically, the MMDAs must apply to the LVD for the valuation of properties for rating purposes. Then, the LVD will evaluate its staff strength and either undertake the valuation themselves or appoint a private valuation consultant to undertaking the valuation.

In-Kind Contribution

There has been limited application of In-Kind Contributions where developers provide some infrastructure as a condition for approval of their development schemes by the District Assembly. For example, La Dade Kotopon Municipal Assembly indicates that they have used Inkind Contribution as a tool on a very limited scale. The Assembly requested Gold Key Developers to construct about 0.5 km road from Morningstar Junction to link the Ghana Fire Service Road, which fronts the developer's properties. This was a condition for the developer to be granted development permit. In addition, Kpone-Katamanso District Assembly also indicated that they had once asked a developer to construct a link road in front of his development before the permit was granted. Ga East Municipal Assembly also requested the Oak Company to tar the portion of the road that fronts their gated community before development permit was granted. Though, there is no legal provision supporting In-Kind Contribution, but MMDAs are beginning to use this tool to improve infrastructure provision within their jurisdictions. The current application of In-Kind Contribution involves negotiations and trade-offs between the MMDAs and private developers. The limited cases of In-Kind Contribution involved MMDAs forgoing some revenue from development permits in exchange for some type of infrastructure to be provided by the private developer.

The Contribution of Land-Based Revenues to Total IGF

The land is an important source of revenue to MMDAs. Land-based revenues sources that have contributed significantly to the internally generated funds (IGF) of the selected MMDAs include; property rates, building permit fees, rents from municipal land and properties, and ground rents from stool lands. Ground rents from stool lands are, however, limited to MMDAs that have traditional landholdings vested in stools. Thus, La De Kotopon and Kpone Katamanso Municipalities have some areas where the land is held by stool in trust for the people of that particular area. Therefore, they receive ground rents from the Office of the Administrator of Stool Lands (OASL) annually as additional revenue. For example, Kpone Katamanso received GHS100,000 (US\$20,000) and GHS150,000 (US\$30,000) as stool land ground rents in 2016 and 2017 respectively. Thus, municipalities that have a large area of stool land benefit from this type of revenue. The good thing about this type of revenue is that the Municipalities do not incur any transaction cost in collecting the ground rents. By the constitutional arrangement, OASL collects the ground rents and distribute it in line with the constitutional formula.

Thus, as can be observed from Table 3, land-based revenues have contributed significantly to the total IGF of the study municipalities. Between 2014 and 2017, the average contribution of land-based revenues for Ga East Municipality was 32%. It is doing well in land-based revenue

generation relative to the other two municipalities even though it does not benefit from ground rent on stool lands. For the three municipalities, the land-based revenue does not include sources such as development charges and betterment levies. Perhaps, if these municipalities had the ability to implement these additional revenue sources, the average percentage could go up beyond current levels.

Municipality	MMDAs Land Revenue* as a Percentage of Total IGF				Average per cent	
	2014	2015	2016	2017		
La Dade	30%	20%	33%	31%	28.5	
Kotopon**						
Kpone	20%	25%	23%	30%	24.5	
Katamanso**						
Ga East	25%	24%	40%	39%	32.0	

Table 3: Land Base Revenue to Total IGF

* Land Revenue include property rates, building permit fees, and rents

**Land Revenue include property rates, building permit fees, rents and ground rents from stool lands

Implementation Challenges of Land Value Capture Instruments

From the discussion in section 5.2, it clear that development charges, betterment levies, property rates and In-kind contributions are the land value capture instruments that MMDAs currently implement. These are consistent with extant literature, however, the implementation of these instruments in the selected MMDAs are faced with local institutional and socio-cultural challenges. Stool land revenue and development permit fall under the general land-based financing instruments. Therefore, the discussion on the implementation challenges of land value capture instruments is limited to the development charges, betterment levies, property rates and In-kind contributions.

Technical and Administrative Challenges for Assessment and Collection

There are practical and administrative challenges in the assessment and collection of the monetized values of the value capture instruments. The challenge of assessment is inextricably linked to the conceptualization of each instrument. For example, the legislative provision on betterment levy requires MMDAs to charge betterment on land value appreciation attributed to the provision of a plan or execution of public works or a decision or action of a District Planning Authority. The difficulty arises on how to determine the value appreciation that is solely attributed to the preparation or implementation of land use plan, or the execution of public works. Therefore, the assessment for betterment levy requires a scientific approach that can demonstrate that value appreciation is directly linked to the actions or decisions of the respective MMDA. However, over the years, MMDAs have not been able develop an assessment framework to assess the monetized values from betterment, because of the practical challenges of the betterment assessment. It must be noted that this challenge is not peculiar to local authorities in Ghana. Alterman (2012) reports of a study conducted in 2010 in 14 countries within the OECD region on the international experiences with the implementation of betterment capture.

The reports indicate that only four countries have had experience with direct betterment capture instruments. Alterman (2012) concludes that the betterment capture instrument is of limited application because of the practical difficulties associated with attribution effects, difficulty in determining the geographic range, and estimating the time frame to levy the charge. Other writers like Walters (2012), and Bird (2000) have reiterated the point that betterment levies are not widely used because these implementation challenges. However, extant literature often cites Columbia as an example of the implementation of a technically designed and functioning betterment capture tool (Smolka and Amborski 2000; Smolka and Furtado 2002). Nonetheless, in the context of Ghana, certain aspect of the provision on betterment especially the charge of betterment on financial gain resulting from urban land transactions is feasible to implement. This will be discussed under the section on strategies for implementation.

Implementation of development charges has been constrained by the inability of MMDAs to determine a formula that is consistent and transparent for calculating the impact of developments on infrastructure network. The determination of a formula that is consistent and transparent requires clear policies on district infrastructure planning. The local authority should be able to estimate the capital costs of additional infrastructure based on their infrastructure plans. From the infrastructure plans, the respective MMDA can estimate a levy rate for each prospective developer seeking a development or building permit. Thus, the calculation of the development charge levy is quite simple and can easily be done. However, the MMDAs have not been able to come out with formula to enable them to levy development charges. One of the reasons is that the municipalities have not been able to provide the requisite infrastructure and services over the years, and therefore, it is difficult to convince property developers and individual property owners or even prospective property developers that the levying of development charge will improve the huge infrastructure deficits in their respective jurisdictions. Even with property rates, MMDAs are already struggling to convince property owners to pay. Over the years, they have not been able to provide the needed infrastructure in their respective areas. Residents continue to confront officers of the municipalities on why they are collecting property rates when their roads and other basic services continue to be in deplorable states.

Property rates and In-kind contribution have also had technical and administrative challenges with implementation. The problem with property rates is not necessary assessment but the financial resources to employ technology to digitize cadastres and pay for the cost of valuation services. There are clear guidelines in the law on the method of assessment. However, billing and collection have proven to be difficult. This difficulty arises from an inadequate and poor street address system. The poorly designed street address system makes is difficult to locate properties and deliver the bills to the owners. In-Kind contribution application is very limited. There are currently no clear-cut administrative guidelines on where it is applied. Application and enforcement are done on a case-by-case basis, usually at the discretion of the district engineers and physical planners. African Centre for Cities (2015) and Berrisford, Cirolia and Palmer (2018) have made similar observation about In-kind contribution in Sub-Saharan African cities.

Knowledge Gap and Lack of Awareness

There is a knowledge gap and lack of awareness about the concept of land value capture in general among the principal revenue mobilization staff interviewed in the selected MMDAs.
These staff include physical planners, budget officers, and municipal engineers. Most of them have not had prior knowledge of the concepts, principles, and purposes for land value capture either through their education, training, or professional practice. Some of the staff have only had an encounter with instruments of land value capture when they were employed at the MMDAs and do not really understand the rudiments of key concepts and tools. Thus, the principal revenue mobilization staff have a narrow understanding of land value capture and its instruments. For example, most understanding of the concept is limited to recovering the cost of providing infrastructure such as roads and other social services. Physical planners, municipal engineers and budget analysts of the three MMDAs showed inadequate knowledge of the tools and the implementation strategies including the purpose of these instruments and methods of assessment, especially with development charges and betterment levies. Therefore, over the years the MMDAs have focused their attention on property rates and building permits. Although, the local governance law ties the levying of development charges to the granting of a development permit, the MMDAs grant development and building permits on a regular basis but they are unable to levy development charges.

The apparent inadequate knowledge about the other tools for land value capture has led to a widely held perception that the only way to recover infrastructure cost is through property rates and building permit fees. The revenue mobilization staff are of the general opinion that property rates and building permit fees can also capture property value appreciation due to infrastructure developments. Municipal engineers and physical planning officers of the MMDAs understand the relationship between infrastructure provision and its impact on land values quite well. They indicated that providing infrastructure and services enhances property values and entices prospective developers to build in the areas that have this infrastructure. They are therefore convinced that property rates and building permit fees are the ways to recovering the cost of providing these services. Moreover, the inadequate knowledge of land value capture tools has also contributed to their lack of awareness and appreciation of various approaches to recover cost and capture land value increment. Clearly, development charges are intended to recover cost and offset the impact on public infrastructure while betterment charges are aimed at capturing parts of the unearned increment in land values. However, it is important to also state the MMDAs over reliance on property rates and permit fees stems from the fact that these instruments, especially the permits, are relatively easy to assess and collect, and quite accepted by the public.

Notwithstanding the above, it is important to note that under the current property rating regime in the country, property rates can neither achieve the objective of capturing the unearned increment in land and property values nor be used as an instrument for recovering cost of public infrastructure. For example, the method of valuation of properties for rating purposes is not based on market factors. It is based on the building area, and the building attributes such as quality of materials used and the nature of finishing. Therefore, the value of the improvement does not include the component of public infrastructure and does not reflect changes in property values due to the impact of infrastructure services. Walters (2012) alluded to this by echoing that the use of property taxes or rates to capture value is impaired because the assessment and valuation are not based on market factors. Smolka and Furtado (2002) have also highlighted the notion that urban property is perceived not to be sufficiently taxed through the property taxation or rating. This probably explains why Act 936 has made provision for betterment levies and

development charges that are more direct in exacting land and property values uplift due to infrastructure service provision.

The knowledge gap and lack of awareness of land value capture instruments is a general problem that affects many municipalities beyond the selected MMDAs. The Ministry of Local Government and Rural Development (MLGRD) is the supervising ministry for MMDAs. An interviewee from the Infrastructure and Projects Department of the Ministry highlighted the dearth of knowledge on land value capture mechanisms. The interviewee indicated that the Ministry sought to create awareness of the concepts of LVC in August 2015 by organizing an Urban Forum on the subject. According to the interviewee, the ministry was motivated by research findings of the African Centre for Cities (2015) report on "land-based financing for urban infrastructure in Sub-Saharan African Cities." Several stakeholders including the TDC, Airport Company, Land Valuation Division were invited and the made presentation on their respective experiences on land value capture. However, since then, little has been done by the MLGRD to create more awareness and promote the implementation of existing land value capture tools. Besides, another interviewee from the Fee-Fixing Department of the MLGRD indicated that the Ministry has provided adequate guidelines for charging fees and granting of permits. However, concerning specific guidelines for the implementation of land value capture instruments, the Ministry only specifies that of property rates and building permits.

Lack of Initiative and Social Entrepreneurial Mind-Set

The implementation of development charges has also been a challenge especially those associated with the acquisition and servicing of land by MMDAs. Section 208 of Act 936 provides that District Assemblies can acquire land in the district or outside of the district as long, as it considers it necessary. However, MMDAs have not utilized this provision because the MMDAs do not own public lands and therefore have to purchase land from customary landowners. Purchasing and servicing land require substantial amount of money and the MMDAs are unable to raise the needed funds to undertake such land development projects. While this is true to some extent, the other reason is that Assemblies have not averted themselves to the opportunities for raising more revenues through the acquisition and servicing of land. They do not appear to be willing to venture into new areas of raising additional funds. The fact is that MMDAs do not have the entrepreneurial mindset in line with the emerging discourse on urban governance, where entrepreneurialism is now seen as a critical component in developing innovative solutions to urban problems (Fuseini 2016; Obeng-odoom 2017). Private real estate developers do the acquisition and servicing of urban land in the study Municipalities without the Municipalities coordinating their activities. This is a missed opportunity where municipalities could partner with private developers to acquire and service urban lands so as to be able to levy development charges. Such partnerships could be seen as MMDAs social entrepreneurial projects.

Inadequate Staff and Expertise

Assessing land and property value appreciation requires the understanding of critical components of land value creation. It requires an appreciation of the concepts of capturing land values, institutional drive and desire for using land values as an alternative or additional revenue

sources. In addition, the quality of the assessment process also depends on organizational or institutional orientation of the processes and requirement for assessing land value before and after of any provision of infrastructure service. These require human, technical and financial resources. Human capacity refers to the number of staff with requisite skills and competencies to perform dedicated tasks. It requires continuous training and development.

The municipalities under study have the requisite staff and expertise in terms of mobilizing IGF. The Works Department of the municipalities play a critical role in raising IGF. This department consists of the Engineers, Quantity Surveyors, and Building Inspectors. Building Inspectors enforce development controls. The three municipalities had highly qualified staff with requisite expertise in general revenue generation. The only problem was that the number of building inspectors in each case was not adequate.

However, it has to be noted that value capture instruments such as betterment levies and property rates require specialist knowledge. That is why the local government law has given this function to the LVD of the Lands Commission. Nonetheless, it was revealed that the Valuation Division did not have adequate staff. The Rating Department of the Valuation Division had an estimated number of 30 Rating Valuers for the whole country. This number is supposed to provide rating valuation services the 254 MMDAs. Though, the LVD can appoint a private valuation consultant for MMDAs, they assert that very few private valuation firms that have the capacity in terms of human and logistics to undertake rating valuation successfully. Besides, the Valuation Division especially the Rating Department is supposed to be decentralized with at least every district having a Rating Officer. This has not been achieved. Over the years the focus of the LVD has been to ensure that every Metropolitan and Municipal Assembly has a Rating Office with at least one Rating Officer. However, due to inadequate staffing, most municipal Assemblies do not have functional Municipal Rating Offices. For example, La Dade Kotopon Municipal Assembly had one Rating Officer, Ga East and Kpone Katamanso Municipalities do not have Rating Officers. The rationale for engaging Rating Officers at the MMDAs level is to ensure that these officers will be responsible for supplementary rating valuation for new properties so as to update the valuation list on annual basis. These officers cannot undertake major rating valuation assignment. Thus, even where there is a Rating Office in the Municipality, major rating assignment is handled by the National Rating Department of the Land Valuation Division at the Head Office in Accra.

Inadequate Collaboration Among Inter-Governmental Agencies

One of the challenges with the implementation of a betterment levy is the institutional arrangement for its assessment. For example, to determine betterment, there must be a baseline valuation before the decision to provide the infrastructure is even announced to the public. The government agency vested with the powers to provide this infrastructure must communicate to the Land Valuation Division of the Lands Commission to conduct this baseline valuation. Also, when the proposed infrastructure is completed, MMDAs or that government agency must inform the LVD so that, they can determine the land value appreciation and advise the local authority appropriately. However, there is inadequate collaboration among governmental agencies providing infrastructure at various levels, the MMDAs and Land Valuation Division. For example, most urban road projects are awarded and executed by the Ministry of Roads and

Highways through the Department of Urban Roads sometimes without the knowledge of the respective MMDAs. The LVD is only contacted where there is the need to assess compensation payable to affected property owners in the project. Even in instances where the MMDAs plans and executes social infrastructure projects, the LVD is not informed unless there is the need for compensation. The inadequate inter-governmental agencies collaboration is also inextricably linked to the knowledge gap on land value instruments. This is because if the LVD can undertake compensation valuation for main urban roads or large infrastructure projects, then this creates opportunities for the LVD to equally undertake baseline valuation of properties for betterment purposes. But due to the inadequate knowledge and lack of awareness of land value capture concept, this opportunity is not tapped.

Furthermore, the provision of recovery of betterment indicates that any financial gain from any urban land transaction must be levied to extract the gain. Thus, the determination of financial gain on urban transaction requires good and accurate land registration database. However, within the institutional arrangement of land administration, municipalities are not in the purview. Urban land transaction concerning land purchase, registration and assignments are the preserve of the Lands Commission and MMDAs can only collaborate with the Commission to access such data. There is no consultation with municipalities in land registration matters, and therefore it is difficult for these municipalities to track any financial gain in urban land transactions. There is generally lack of collaboration between the MMDAs and the Lands Commission concerning land registration data access. Also, MMDAs fail to collaborate with the Commission to understand the nature of urban land markets within MMDAs jurisdictions. For example, an official of the Lands Commission bemoaned the ineptitude of MMDAs to consult the Commission on general land matters during the stakeholders' dissemination workshop. In the case of recovery of betterment on financial gain of urban land transaction, the Lands Commission is in a better position to collect such levies for and on behalf of Municipalities. The Lands Commission handles the registration of deeds on land assignment, and during the process, they are able to assess the market value of the land if they have reason to believe that the amount stated in the deeds is under-declared.

Property rate administration is entirely the preserve of local authorities. However, in terms of assessment and revision of rateable values of properties, the Rating Unit of the Land Valuation Division of the Lands Commission is responsible. But MMDAs must pay the full cost of the valuation services. Inadequate collaboration, engagement, and lack of trust between MMDAs and LVD have led to a situation where the LVD insists on the full payment for the valuation services before they release the valuation list. This legal and institutional arrangement for property rate assessment is making it difficult for MMDAs to have a free hand to operate in the assessment of rateable values. This has resulted in a situation where MMDAs do not assess and reassess their properties as required by law. MMDAs have complained about the cost implications of valuation services and those of them that do not have the wherewithal to engage the LVD have resorted to a flat rating system. For example, Kpone Katamaso Municipal Assembly relies on a flat rate system of levying property rates because they do not have rateable values. Effective collaboration between the MMDAs and LVD can result in valuation cost to be spread over a period of time and recovered through rates collection.

However, it is quite strange that the MMDAs have not been able to collaborate effectively with the LVD, Lands Commission and other government agencies providing urban infrastructure in their revenue mobilization attempts relative land value capture instruments.

There is enough evidence to suggest that, some of the study MMDAs have collaborated effectively and partnered with private agencies in property rate billing and collection, and other services such as waste management. For example, Ga East and La Dade Kotopon Municipalities collaborated and partnered with Subah Ghana Company for financial support for valuation services under an arrangement where the financial support will be recovered through property rates collected. Subah Ghana supported Ga East and La Dade Kotopon Municipalities with US\$57,400 and US\$43,300 respectively. The valuation captured 82,923 and 15,906 properties for Ga East and La Dade Kotopon Municipalities respectively. Ga East Municipality is also collaborating with Atomz Ghana Limited for property rate collection. Perhaps, the apparent ineffective collaboration between the MMDAs and other government agencies might be due to bureaucracy and unnecessary power struggles and lack of incentive.

Inability to Enforce Land Use Regulations

The MMDAs have been severely criticized for their inability to effectively implement land use regulations. These reasons are summarized as inadequate staff capacity and expertise, general ineptitude, political interference, and cumbersome bureaucratic administrative processes (Acheampong 2016; 2019; Arku et al. 2016; Cities Alliance 2017). However, the complex land tenure system especially within the GAMA has also frustrated the efforts of MMDAs in effectively implementing land use regulation. The Greater Accra Metropolitan Area has a complex land tenure comprising of public, stool, family and individual lands. This tenure arrangement raises a number of implications for land use planning and the ability of MMDAs to implement land value capture instruments. First, there is a clear separation between land ownership and the power of determining or allocating land uses through land use planning within the area. The MMDAs and TCPD have statutory powers to determine the uses of public, stool, family, and individual lands. For public lands where ownership and management are preserved through the Lands Commission or through parastatal institutions, land use planning is usually the first step to preparing bare land for development. A case in point is the Tema Acquisition Area where the TDC manages the land. It was observed that land use planning often preceded physical development.

However, under the customary land tenure arrangement, MMDAs and TCPD cannot make planning decisions on customary lands without extensive consultation and collaboration with the landowners. The level of consultation and collaboration is weakened in the face of rapid urbanization where there has been an upsurge in demand for peri-urban lands within GAMA. Landowners motivated by this demand often allocate their lands without recourse by MMDAs and statutory planning authorities. A physical planning officer from one of the MMDAs noted that some landowners have engaged private surveyors and planners to subdivide their lands into residential plots in some new developing areas of the municipality. According to the respondent, some landowners use bulldozers and other earth machines to clear identifiable supposed streets and start selling the land without recourse by the assembly. This assertion implies that the MMDAs have limited control over the planning of customary land areas. However, this is not peculiar to GAMA only, but the nature of the complexity of land ownership within the area makes this distinction difficult for coordinated land use planning. Similar findings from Yeboah and Obeng-Odoom (2010), Yeboah and Oppong (2015), Akaateba et al. (2018), and Acheampong (2019) highlight the powerlessness of MMDAs concerning land use planning in Kumasi, Tamale and other urban areas.

In addition, where landowners have prepared land use schemes and are given approval by the MMDAs, the implementation and enforcement of those plans have been compromised because landowners and developers are left to implement the plans. Landowners sell building plots and purchasers are required to apply to the MMDAs for permit to develop. Therefore, if the purchaser does not apply to the MMDAs for permit, the Assembly cannot regulate or control that development. One physical planner noted that landowners illegally rezoned areas that are marked for public infrastructure provisions into residential plots. This compromises the spaces available for the installation of urban infrastructure. But Akaateba et al. (2018) and Acheampong (2019) found that some MMDAs planning officers connive with landowners to rezone public amenity spaces and make an illegal modification to existing local land use plans for their own parochial interest. Therefore, the nature of the land tenure dynamics and the ineptitude of MMDAs have affected the implementation land use schemes.

Moreover, the development control regulation requires that an applicant for development permit must have land title. It is the first hurdle for prospective developers to ascertain their proof of ownership of the land. This is contributing to delays in granting building permits. The process of registering land title itself is cumbersome often involving many steps such that prospective applicant must visit the registration office regularly. Added to this is that within GAMA, there are only two office locations where the land title can be registered, the Lands Commission in Accra and its branch office in Tema. Therefore, a prospective developer must travel to one of these locations to be able to register their land. This increases cost, time, and even stress (Acheampong 2019). Thus, the processes involved in land registration and institutional inefficiencies have created a perception in the minds of prospective developers that 'it is "more convenient" and 'less costly' to develop without a permit than to follow these official processes (Arku et al. 2016). This situation leads to high transaction cost in building application and approval processes and has contributed to the high incidence of non-compliance to development regulations. A participant in a focus group discussion indicated that the nature of the permitting procedures had compelled many individual developers to construct their houses in the night especially in some peri-urban areas of GAMA. These concerns are reflected in the World Bank reports on doing business, Ghana's performance on construction permitting and land title registration has been fluctuating over the period of five years (Table 4).

Item	2014	2015	2016	2017	2018
Dealing with construction permit	159	106	132	117	131
(rank)					
DTF score for dealing construction		69.4	62.32	65.34	61.90
permit (0-100)					
Number of procedures	15	13	15	14	15
Time (days)	246.5	201	216	170	170
Cost (% income per capita/warehouse value)	259	2.0	1.8	2.9	5.4
Building quality control index (1-15)			8.0	8.0	9.0
Registering property (rank)			77	77	119
DTF score for registering property (0-			62.12	65.99	55.50
100)					
Number of procedures			5	5	6
Time (days)			46	46	47
Cost (% of property value)			1.1	1.2	6.2
Quality of land administration (0-30)			8	8	8

 Table 4: Construction and Property Registration Performance

Source: (World Bank 2017, 2015a, 2016, 2018, 2014)

Tema Development Company (TDC), Community 24 Case Study

Overview

TDC is a real estate development and management company currently operating in 25 communities in the Tema Acquisition Area (TAA) (Figure 7). It is a parastatal land development organization that was established in 1952 as Tema Development Corporation under the Tema Development Corporation Ordinance 1952 (No. 35). TDC operated on the mandate provided by Tema Development Corporation (Amendments) Instrument, 1989 (LI. 1468) which set out the Corporation's functions.





However, the 1952 Ordinance establishing the TDC has gone through a series of amendments. In January 2017, the Government of Ghana granted approval for the conversion of TDC to Public Limited Liability Company. TDC was converted to a Public Limited Liability Company with an enhanced mandate. This mandate expanded the operational and geographical scope beyond the TAA. Its new objectives are:

- a) to carry on the objectives of Tema Development Corporation as per the Tema Development Corporation Instrument 1965 (L.I. 469) as amended by the Tema Development Corporation (Amendment Instrument), 1989 (L.I. 1468);
- b) to acquire land both in and outside Ghana for real estate development and management;
- c) planning, development and construction of towns and cities in and outside Ghana;
- d) development and management of commercial and industrial areas;
- e) consultancy services
- f) to partner and or collaborate with other real estate developers (both local and international) and agencies for the provision of the above services;
- g) investment in real estate concerns; and
- h) any other activities incidental to the attainment of the above-stated objectives.

TDC operates under the State Enterprises Commission. This Commission provides the rules and regulations as well as sets out the operational targets for the Company. The Ministry of Works

and Housing supervises the activities of TDC directly. Four municipalities fall within the TAA, namely Tema Metropolitan Assembly, Ashaiman Municipal, Kpone-Katamanso Municipal, and Tema West Municipal. The entire TAA is currently subdivided into 25 residential communities.

Community 24 is the 7th of TDC's Site and Services Project. It lies 2.5km north of the Accra-Tema Motorway. Under the Site and Services Scheme, TDC develops raw lands by providing networks of tarred roads, drains and gutters, electricity and water supply. The first phase of this project started in November 2010 to December 2013. This covered the construction of connector roads that traverse the encroached parts of Community 23 and the principal boundaries of community 24. It also included the construction of access roads and drains. The second phase started in January 2014 to 2017. The second phase covered the tarring and covering of concrete culverts. The project encompasses a vast area of 460 acres of land. As is typical of TDC serviced lands, the area is well planned to include schools, churches, commercial and other institutional sites including a police station. The community is 10 minutes and 5 minutes' drive away from Accra and Tema respectively via the motorway.

Land Value Capture Via Project-Related Land Sales

Land Ownership and Local Land Use Planning

The State acquired 63 square miles (40,320 acres) from three traditional authorities under a compensation rental agreement. Under this agreement, compensation for the land was not paid outright, but payment is made annually through ground rents. TDC was given a 125-year lease term to manage land area which is generally referred to as Tema Acquisition Area (TAA). TDC as a lessee plans and services the land for development. Initially, the Company used to handle the whole process of planning, servicing, and building and then selling the completed housing units under a 60-year lease arrangement for residential properties. However, subsequently, TDC is now leasing the land through its site and services schemes. As the head lessee, the Company collects ground rents from sub-lessees and pays the state annual ground rents in accordance with the terms of the lease arrangement with the state. The State receives these rents and pays a certain proportion to the three traditional landowners under the compensation rental agreement. The compensation rental agreement ensures that traditional landowners continue to benefit from the land through annual ground rents.

TDC is responsible for the physical planning of sites within the TAA. They initiate land development projects and plan sites into residential communities. Thus, the entire TAA area is divided into residential communities that are well planned and serviced with critical infrastructure services. The Company has a Physical Planning Department that is responsible for land use planning. The Site and Services project begins with land use planning of the area. Because the company has a 125-year lease, it is much easier to engage in land use planning to determine the relevant users to the land. Thus, a land use plan was prepared for the entire area of community 24 (Figure 8). However, in order, to maximize resources, the adjoining area of the land that has been encroached by squatters was also incorporated in the land use planning.

The area has 1,133 residential plots with maximum plot sizes of 0.16 acre per plot. The remaining area is reserved for commercial, institutional and recreational uses. The planning

department determines the standard plot size and sets the criteria for plot allocation. One criterion is that once a plot is fully paid for and allocated to the sub-lessee, it has to be developed within two years from the date an offer is made. The criteria allow limited extension of this maximum period. However, application for extension of the period of development must be made to the Managing Director stating the reasons why the plot cannot be developed within the two years period.



Figure 8: Community 24 Land Use Scheme

Funding Arrangement

TDC financed the preparation of the land use scheme with internally generated funds. The internally generated funds comprise ground rents, rents from rental properties, land sales, and sale of completed houses and apartment blocks from their operations. By the nature of its

incorporation, it is allowed to make a profit from its operations. After the land use scheme was prepared for the project, the company advertised the project and solicited offers from prospective tenants to finance infrastructure. Prospective lessees made 40% down payment. Thus, the entire project was financed wholly with internally generated funds and 40% down payment from prospective purchasers. The company's strength in financing such projects with internally generated funds lies, in fact, in its ability to leverage funds from other projects undertaken within the value chain of land development. This value chain includes land use planning, servicing with requisite infrastructure, building and letting out completed houses to the general public. The company is able to do this because per the mandate, they handle the entire chain of the land development process and are able to generate substantial amounts out of their operations. They also have reputable credibility both in-country and outside the country, especially among Ghanaians resident abroad who prefer to deal with the company because of the long-standing reputation built over the years. Plots of land at the project site were 95% sold at the time of data collection.

The main infrastructure services provided on site are road network, drainage and culverts, electricity and water supply. The details of infrastructure and services is presented in Table 4.

Type of Infrastructure	Distribution	The cost in Ghana Cedis (GHS*)
Road Network	Peripheral and access road (double seal) 10.3km Internal roads (single seal) 29.1km	27,064,280.00
Drainage and Culverts	Internal drains 58km Drainage along main access road 21km Concrete lining of main watercourse 1.15km Total drainage network 80.15km Total No. of Culverts 12	13,007,272.00
Electricity supply and distribution	About 60km network and a number of transformer stations	5,880,000.00
Water supply and distribution	53km distribution line	2,840,646.00
Total cost (approximate)	•	48,792, 198

 Table 5: Estimated Coverage Areas and Approximated Cost of Infrastructure

*Exchange rate as of 2014 when the project works were undertaken US\$1= GHS4.333

At the time of data collection, road network for the project was completed with all concrete drains provided (Figure 9). Electricity supply and distribution are yet to be provided on site, but 95% of the plot was leased out to tenants. Lessees are constructing few residential properties at various stages of completion (Figure 10).

Figure 9: Sections of the Road Network



Figure 10: Sections of Buildings Under Construction



Collaboration and Partnership with Public Sector Institutions

TDC collaborates with the Kpone Katamanso Municipal Assembly for the approval of local land use plans. The two institutions have set up a joint District Spatial Planning Committee where TDC takes an active part in the approval of land use plans. In addition, both TDC and the Assembly have agreed to share building permit fees accruing from the project on 50:50 basis. However, this agreement is currently facing challenges because the Kpone Katamanso Municipal Assembly is raising issues with such agreement based on the statutory mandate of the Assembly as the Planning Authority of the area. The Assembly is of the opinion that they have the right to grant building permits on any development irrespective of the location of such building within the district.

Evidence of Land Value Uplift

At the beginning of phase 1 of the project in 2010, land values in surrounding sites and precisely at community 23 where the land was encroached by private developers, the price per acre of land was GHS30,000, the equivalent of US\$20,182³. Thus, the price per 0.16-acre plot of land before the project was US\$3,229. However, after the provision of infrastructure services for phase 1 of the project, the price per acre of serviced land went up to US\$140,400 translating to US\$22,464 per 0.16-acre plot. Phase 1 of the project affected land values of surrounding communities positively so that at the commencement of Phase 2 in January 2014, land values of comparable sites more than doubled. The land price per acre at Santa Village near community 24 was around GHS61,000 (US\$16,138⁴). Thus, the price of standard plot size of 0.16-acre was US\$2,582. Nevertheless, at the completion of phase 2 of the project after providing critical infrastructure services, the price per acre went up to US\$187,500 in 2017 with the price per 0.16-acre plot going for US\$30,000.

Strategy for Recovering Infrastructure Cost

TDC is able to determine the selling price of plots before the actual execution of critical infrastructure work using the pro rata method. This method distributes the cost of infrastructure proportionately. Thus, the total number of plots covered in the land use scheme is divided the total cost of infrastructure. Therefore, each plot is assigned an amount of the cost of critical infrastructure proportional to its share of the whole. After the proportional allocation of the cost of infrastructure to each plot, TDC adds overheads and profit margin to arrive at the final sale price of the plot. Land prices are in US dollars. This is meant to safeguard the potential loss in value due to depreciation of the Ghana Cedi with time. Therefore, a resident Ghanaian purchasing such plots will have to pay the Cedi equivalent of the dollar price of the land at the time of purchase. At the point of purchase, the current exchange rate prevailing on the market is used. Therefore, the value capture instrument used is the development charge or infrastructure levy (Berrisford, Cirolia, and Palmer 2018; Peterson 2009).

Administrative Arrangement and Support Services

The company has a good administrative arrangement that features all aspects of the land development chain and incorporates a business model that enhances credibility and timely delivery of projects. The company has an organogram that mirrors the major specialized operations of each department. It has a Real Estate Department that handles all types of land and building rents, valuation, and provides property management services to the company. This department also has a regularization section that deals directly with the original traditional landowners to regularize land areas that have been encroached by squatters. Besides, the internal administration unit offers administrative support services such as recruiting skilled professionals and general human resource management, accounting and finance support in evaluating and recommending corporate funding and recovery strategies, logistics and real estate management services, procurement and marketing services. These administrative requirements and support services have ensured that there is a steady growth in the company's business in the housing and

³ US\$ 1 = GHS 1.4865 as of December, 2010

⁴ US\$ 1= GHS 3.78 as of January 2014

serviced plots portfolios. It has also ensured that there are high standards of service delivery to the Company's clients.

Human Resources and Technical Expertise

The company has highly skilled and seasoned professionals working in the various departments. These professionals range from valuation and estate surveyors, quantity surveyors, corporate lawyers, urban planners to financial and information technology experts, procurement specialist and corporate planning and communications specialists. TDC has developed its human resource base over several years of land development and has managed to retain experienced real estate professionals. Some of the professionals have been working with the company since 1985. This has enabled the company to retain some institutional memory and focus on their core mandate. A blend of old and newly recruited seasoned staff ensures that there is creativity and innovation based on experiential knowledge. The caliber of staff with technical expertise in land development, real estate marketing and financial engineering have created a niche for TDC as a leading parastatal estate development company in Ghana.

Target Beneficiaries

The target beneficiaries for the TDCs Site and Services projects are mostly non-residents Ghanaians and real estate developments firms. The non-resident Ghanaians are able to acquire residential plots to build houses of their desired architectural designs, which they are unable to find from real estate developers. Other beneficiaries are real estate developers. Besides, the price range of US\$20,000 to US\$30,000 of residential plots is certainly unaffordable to most low-income households with an average monthly household income of US\$ 125 especially for salaried employee (CAHF 2018a).

Ghana Airport Company's Airport City I Project Case Study

Overview

The Ghana Airport Company was established in 2006 as a limited liability company because of the decoupling of the existing Ghana Civil Aviation Authority (GCAA) in order to keep pace with current development in the aviation industry. The Company is responsible for planning, developing, managing and maintaining all airports and aerodromes in Ghana. In addition, it had the objective of generating non-aeronautical revenue from the development of commercial land in and around the airports. It operates under the State Enterprises Commission as a parastatal company. The Ministry of Transport and Aviation has direct supervision over the operations of the company. One of the main strategies for enhancing non-aeronautical revenue are Airport City Projects I and II.

The Accra Airport City project I was conceived in 1994 as part of the Accra Urban Redevelopment project. The Accra Urban Redevelopment Project aimed to modernize the city center with improved infrastructure and create a modern commercial hub with commercial development comparable to world cities. The then GCAA, the Accra Metropolitan Assembly (AMA) and the Town and Country Planning Department collaborated to plan the area as a modern miniature city. The project is located within the vicinity of the Airport Residential area. It is bounded to the west by the liberation road, to the north by the Airport road, to the east by Airport bypass road and to the south by the liberation link road (Figure 11). The project area was originally part of the AMA area, but due to increasing demand for political decentralization, a new local government area, named La Dade Kotopon Municipal Assembly was carved out of AMA, and the area is under this local government jurisdiction.

The project covers a total area of 40.83 acres of land subdivided into 29 plots with plot sizes varying from 1.5 to 2 acres. It is developed as a miniature corporate and commercial hub with high-density, mixed-used development hosting office complexes, banks, hotels, restaurants, a shopping mall, recreational centers, car parks and fast-food centers. The notable edifices in the are SSNIT Emporiums, Holiday Inn and Marriot hotels, Silver Star Tower, NCA Tower, Marina Mall and Manet Towers.

Figure 11: Airport City I Land Use Plan



Land Value Capture Via Project-Related Land Sales

Land Ownership and Local Land Use Planning

The land is public land compulsorily acquired by the State, held, and managed by the Lands Commission for and on behalf of the State. In 1994, the Lands Commission, granted the Ghana Civil Aviation Authority a 50-year lease term because of the intent to convert the land use to commercial purposes. Under, the Lands Commission practices and conventions, state lands can only be leased for 50-year term for commercial development. However, the decoupling of the GACL from the GCAA in 2006 to handle airport development and commercial activities and its new orientation, led to the renegotiation of the lease term, extending to 99 years. The reason being that, the original 50-year term could allow GACL to undertake such a venture and because the Lands Commission had a key stake in the development, it circumvented its conventions to grant the 99-year lease term. A respondent from the Public and Vested Land Management Division of the Lands Commission indicated that the renegotiated 99-year lease term is for the entire land covering the Airport and that the negotiation is complete, but the Commission is yet to finalize the lease agreement. Thus, Airport City I and II project areas are covered by the 99-year lease term. The GACL is able to grant a 45-year term subleases to investors with the option of 10-year lease renewal upon expiration. Thus, this tenure arrangement allows the GACL to go into commercial land developments and facilitate the site and services project for investors and commercial land developments.

The Accra Urban Renewal program influenced the land use planning of the Airport City I project. A respondent from Consortium Limited (the consultants that prepared the land use scheme) indicated that before the Airport City project was conceived, the area was vacant with bushes and partly occupied by squatters. As explained by the respondent: "His was a prime land located at the heart of the city, left vacant with bushes and a section partly occupied by squatters almost creating a slum in the area." This created a worrying situation for urban planners and the city authority because the area remained unused but strategically located. There was stiff competition for residential and commercial development in the Central Business District (CBD), creating sporadic traffic in the city. Many urban stakeholders started calling on the government and the city authority to make optimum use of this prime land (Arthur 2018). A private consultant from the Consortium started engaging the AMA, GCAA, Town and Country Planning Department and the Lands Commission to prepare a scheme. This engagement resulted in the decision by the stakeholders to plan the area as a model city in line with modern trends (Figure 12).

Figure 12: Commercial Development of Airport City I





After Development



After Development

Financing Arrangement

The infrastructure was funded by the GCAA internally generated funds on a cost recovery basis. Initially, the project explored different options for financing both site development and infrastructure. These options were: (1) Provide infrastructure on cost recovery basis; (2) Provide funding linked to the role of the contractor; (3) Providing funding for infrastructure linked to role as sole developer or anchor developer; (4) Sourcing for anchor developers/developers separate from funding of infrastructure; and (5) Linking developers to a single source of funding for their respective projects. Each of these options had implications on how to raise the initial funding for infrastructure and site development and how to recover the cost. Bearing in mind these implications, the GCAA finally settled on the first option.

Strategy for Recovering Infrastructure Cost

The infrastructure levy instrument is used to recover the cost of infrastructure. This levy is calculated on a pro-rata basis where each plot had a proportionate share of the total cost of infrastructure. GACL invited bids from private investors and the public to acquire the serviced

plots after providing the basic infrastructure services within the project area. The highest bidder through the land auction concept (Paulais 2009) determined the land sale price. In addition to the payment of the premium on the land through the bidding process, developers paid the infrastructure levy to the GACL.

Collaboration and Partnership with Public Sector Institutions

The project design and implementation was a collaborative effort of GCCA, Lands Commission, Town and Country Planning Department, Accra Metropolitan Assembly and the Department of Urban Roads. These key stakeholders played different roles including changing the land use, arranging the lease between the parastatal institutions and the Lands Commission, obtaining land use planning approval and providing road infrastructure. However, after the land was serviced, the GCCA partnered with developers to execute the planned city development. GACL developed guidelines for plot leasing and penalties for non-compliances to guide development. These guidelines required that the lessee commence development of the site within one year from the date the land is granted. Besides, each development had to conform to the design and planning guidelines of the project and the prior-approval process from development control institutions.

Evidence of Land Value Uplift

Evidence from private real estate brokers indicated that the land value per acre before the project implementation in 1998 was about US\$200,000 within the immediate neighborhood of Airport Residential Areas. However, at the end of planning and servicing the area with critical infrastructure, land price per acre went up to between US\$300,000 to 350,000. The change in land values was based on appraisals by estate brokers because the actual cost of infrastructure could not be ascertained as well as the baseline land values of the project site. The project implementers could not recall the details of the costs estimates and actuals. In addition to this, the lessee pays a one-time infrastructure levy, which is proportionate to the size of the plot.

Administrative Arrangement and Support Services

The decoupling of the GACL from GCAA gave the former specific roles in the development of Ghanaian airports and air transport. GACL's mandate spans beyond the physical development of airports to include creating a business-friendly environment that attracts developers and international business. It also provides support services to corporate entities in commercial real estate development in and around Ghana Airports. In order to fulfil this mandate, the Commercial Services Department was established to support the management and maintenance of corporate real estates within the Airport City. It also provides support in the management of car parks, enforcement of lease covenants and engaging stakeholders concerning the maintenance of security and common areas. This Unit encouraged the developers within the city to form the Airport City Association so that their concerns could be addressed through mutual beneficiary relationship and decision-making.

Human Resources and Technical Expertise

GACL operations are specialized with the primary focus on non-aeronautic services within the environs of Ghana Airports. Thus, the operational functions of the GACL are many and varied unlike a typical real estate developer. Because of this, the company engages different types of professionals to be able to discharge their functions effectively. In addition, even though GACL is a state-owned company, they do not receive any subvention from government and are required to raise adequate revenues to finance the company's operations. It is entirely a profit-making organization. Therefore, it recruits the right professionals with requisite expertise to ensure that the company generate adequate revenues to perform its functions. The departments that deal directly with the Airport City I project are the Airports Planning and Projects, Commercial Services and Facilities and Infrastructural Management. These departments have employed highly skilled labor that have technical expertise in the areas of planning, land development and facilities management. For example, Commercial Services Department is headed by a Valuation and Estate Surveying Professional. He has several years of valuation and estate surveying experience. Also, all the critical staff in the Commercial Services Department have valuation and estate surveying skills relative to land management, commercial property management, valuation and ground rent assessment, negotiation and contracting, and project planning and implementation.

Besides, the Airport City project is a novelty and the first of its kind in the country and was designed to meet the dynamics of international airports operations. Therefore, in keeping with the increasing international competition in non-aeronautic services, the Company employs the right caliber of professionals that can work to foster creativity and innovation in a competitive urbanizing world.

Target Beneficiaries

The Airport City project is designed for corporate private sector clients. According to Arthur (2018), the primary objective for the Airport City project was to create an integrated air transport and business hub that would leverage the synergies between international business and air transport services. Thus, the project was strategically developed to offer travelers, corporate executives, and visitors a variety of experiences and business opportunities including hotels, offices, shopping malls, conference and entertainment centers. This objective already defined the target client for the project. The corporate clients include the Social Security and National Insurance Trust (SSNIT), Silver Star Towers Limited, Manet Towers Limited, National Communication Authority, Holiday Inn, Marina Mall, among several others. A marketing officer of one of the corporate estates indicated that they were motivated by the proximity of the area to the airport as many international business travelers and investors find it comfortable to live and work near the airport.

However, during the implementation of the project, certain responsibilities of GACL have not been fulfilled leading to dissatisfaction with some of the infrastructure services provided and the maintenance of these services. For example, the car park has not been completed and the maintenance of some common areas such street lighting has been become problematic. According to an interviewee from the Airport City Association (ACA), they the corporate clients formed the Association to engage management on the effective management and maintenance of the city. The interviewee asserts that they (the corporate clients) initiated the formation of the ACA and when the management of GACL heard of it, they supported the idea. Apart from ACA's objective of managing and maintaining common areas of the city, they have also undertaken to market the project. ACA's vision is 'to be the most influential advocate for the airport city, building owners and clients as the best international business center in the country. This vision provides an added advantage to the project implementation because the project implementers may not have to do much on marketing as the association is already doing this part. The ACA role in partaking in the management of the area brings another facet of dynamism to the design and implementation of land development strategies aimed at capturing land values. The acceptability of ACA's role by the management of GACL creates mutually beneficial relationship and effective partnership between the corporate clients and the project managers.

Oak Villa Estate Case Study

Overview

New Oak Company is a real estate developer with a subsidiary company Oak Villa Estate. It was established in 2005. Its main objective is to build quality and affordable housing for young families, individuals and business. It is a full-service real estate company. It focuses on building and management of residential properties. Since its inception, it has developed five different sites in the Ga West and East Municipalities. It is currently building about 500 housing units at Teiman in the Ga East Municipality.

Oak Villa Estate is part of the general group of private real estate developers that are specialized in developing residential accommodation for households and individuals in gated communities. These real estate development companies are classified into three groups based on their developmental models (Ehwi 2018). The first class is the Master-planned Gated Communities. This comprises developers that design and build residential housing units that have no room for modification. The developer provides other added services such as security systems and management of the common areas. The second class is the Serviced-Plot Gate Communities. Real estate developers under this category buy large tracts of land usually at the peri-urban areas, plan the area, provide services such as road networks, drainage system and extend other basic utilities to the area. After installing basic infrastructure services, the developers subdivide the land into residential and commercial plots and sell it to the public. The third group of real estate developers is classified as hybrid gated communities. The developer buys large tracts of land, plans, services it with required basic infrastructure, and subdivide it into building plots. The developer master plans a section of the serviced land and builds prototype housing and reserves the remaining portion for purchasers to build their preferred houses. The rationale of this model is to demonstrate to purchasers of the serviced land the type and quality of housing that is expected within the estate and to give the public the opportunity to experience the gated community lifestyle.

Oak Villa Estate is master-plan gate community. It acts as a single owner of the estate and performs four main functions that are aimed at increasing the value of the land it owns (Brunetta

and Moroni 2012). First, it acquires a parcel of land, plan, and services and builds prototype housing units. It sells completed housing units to the public. The company handles the entire chain of the housing development process. Second, it sets the rules and regulations concerning leasehold tenancy agreements and covenants spelling out the duration of tenants' subleases. Third, the company advertises its gated houses to the public and selects suitable clients to purchase the houses. Fourth, the company undertakes routine maintenance of infrastructure services within the estate and manages common areas and maintains security for the tenants. It also ensures that tenants comply with sublease covenants.

Land Value Capture Via Project-Related Land Sales

Land Ownership and Local Land Use Planning

The company acquires a parcel of land from traditional landowners under a private treaty arrangement. Oak Villa Estate acquired 12 acres of land from a family in 2011. The company paid the full market value of the land and entered into a 99-year leasehold contract with the landowning family. The parcel of land is registered in the name of the Oak Villa Estate. The company, therefore, grants subleases of 50-years to purchasers of housing units within the estate out of its 99-year leasehold contract with the landowner.

The head lease arrangement between the company and the landowner, guarantees the security of tenure for tenants' subleases. Once the head lease is registered and the land title certificate is obtained from the state registry, all other subleases are subservient to it. This type of arrangement ensures the security of tenure for subleases since the sublease is contingent on the head lease. In addition, the arrangement further makes easier for sub-lessees to register their land documents at the Lands Commission as the commission simply relies on the head lease to create subleases out of it. According to Ehwi (2018), this type of arrangement by real estate developers assists in eliminating the inherent bureaucracies in the land registration process, reducing the costs involved in obtaining land title and protecting prospective purchasers of housing units from unnecessary land litigation that often arise from multiple sales of land.

As a master-planned gated community, the company engaged the services of an urban planning consultant to prepare a layout for the area. Though the layout was not made available, for the purposes of this research, careful observation of the built-up area indicates that there is only one principal street that traverses from the entrance of the estate to a T-Junction towards the end of the parcel of land. On either side of the street, houses are built in what appears to be row-development (see Figure 13). Each house has an average plot area of 0.06 acre. This is far lower than the statutory planning minimum lot size of 0.16 acre for residential development and contrary to the statutory land use regulations (Anokye et al. 2013). The entire layout is built up of residential houses of different typologies. There is no provision for commercial areas and other amenities.

A respondent from the Estate Department of the company indicated that the Ga East Municipality approved the land use scheme before they commenced development of the area. However, a respondent from the Land Use Planning and Spatial Authority of the Ga East Municipality suggests that the approval of the land use plan was politically motivated. According to the respondent, the Municipal Chief Executive (MCE) at that time had a special interest in the project and therefore used his influence to get the land use scheme approved without the necessary scrutiny from the Physical Planning Department. If this assertion is true, then it raises a critical issue of the use of political influence to circumvent urban planning rules and regulations. However, a close examination of the proximity of the Estate to the Ga East Municipal Assembly Office Complex gives an indication that the MCE's interest might not have been political but purely developmental. Moreover, when the respondent from the Land Use Planning and Spatial Authority was further asked why the Municipal Assembly should be interested in such projects, the respondent quipped that the Assembly should be interested because such projects have the potential to increase IGF through the property rates. The respondent adds that the project has brought development in the area, as the project site was formerly a swampy area laying vacant. Therefore, the respondent asserts that Physical Planning Offices of the Assembly tend to relax urban planning rules and regulation for gated communities because of the anticipated benefits such developments bring to Assembly.



Figure 13: Typical Housing Development at Oak villa Estate

Funding Arrangement

Oak Villa Estate finances the land purchase, infrastructure services, and housing development from internally generated funds. A respondent from the Projects Department of the company indicated that the company started a construction firm and mobilized funds from construction work profits. It then started its first project at Ashongman. As a construction firm, the company purchased and developed a quarry site for its work. Therefore, the company raises financial resources from the operations of its subsidiaries and then leverages the sales proceeds of houses from other housing projects to purchase lands for future development. Thus, the current 500 houses being built at the Oak Villa Estate site are financed largely from its internally generated funds. The company also finances housing development with clients' down payment, where prospective clients pay 40% of the price of the house before construction begins. The main infrastructure services provided at the site are access roads, electricity, and water extension. Besides, the Ga East Municipal Assembly requested the company to construct the section of the main connector from Oyarifa to Abokobi. This was among the conditions the company had to meet before the planning and development permit was granted. This is an In-Kind Contribution, a tool the Municipal Assembly used to ensure that the developer constructed the road at its expense.

Strategy for Recovering Infrastructure Cost

The entire process of transforming bare land into finished housing involves land value and property value creation and capture. Thus, the company adopts a composite cost-built method to determine the selling price of a completed house. Through this method, percentages are allocated to each components of the house. Land cost is 13% of the total cost, infrastructure 15%, material and labor 36%, finance 20%, and overheads and profit is 16%. Therefore, the infrastructure cost is recovered through an infrastructure levy of 15% on selling price of each house.

Collaboration and Partnership with Public Sector Institutions

The company does not necessarily collaborate with public sector institutions. However, by the nature of its operations, it regards public sector as service providers and regulators. Therefore, concerning land registration, the company goes through the process just like any other ordinary citizen or corporate body. In addition, it applies to the municipal assembly for land use planning approval.

Evidence of Land Value Uplift

The company leased the 12-acre bare land at US\$14,400 in the first phase of the project. This translates to a unit price of US\$1,200 per standard plot size of 0.16 acre. This was subdivided into 200 building plots of 0.06 acre. However, 3.18 acres was used as access roads, utility lines, and common areas. Currently, phase one of the project has 147 completed houses ranging from 3-bedroom semi-detached units to 4-bedroom single- and two-story units. The prices range from US\$58,000 to US\$124,000. Though the building plot size reduced to 0.06 acre, its developed value as a component of the total housing value went up to US\$7,540 on average. The company strategy for capturing land values is through property sales.

Administrative Arrangement and Support Services

Oak Villa Estate has an active Sales and Marketing department that engages in rigorous sales and promotion services. This department has developed strategic partnerships with banks such as Bank of Ghana, Stanbic, Barclays, Fidelity and GHL-Bank to supply housing to their staff. Besides, they have also developed partnerships with mortgage banks like Fidelity and GHL to provide mortgage financing to their prospective clients. In addition, an internal administration unit manages security services, land registration and estate management issues and acts a liaison between management and tenants within the estates. The company has engaged a full-time technical advisor, who advises management on constructions.

Human Resource and Technical Expertise

The company has a lean management team of six. These include the Executive Director and his Deputy, Head of Sales and Marketing, Head of Administration, Technical Advisor and Finance Manager. The Executive Director is a businessperson with vast experience in construction and project management. The core management staff are very experienced professionals with varied expertise in their respective areas. The company also depends on the services of other professionals such as engineers and planners. The blend of experienced core management team with outside experts' engagement when needed leads to effective execution of the company vision.

Target Beneficiaries

The company targets young families, individuals, and businesses, such as employees of corporate bodies like banks and national and multinational companies. In addition, mortgage banks such as GHL, Stanbic, and Fidelity banks also form part of their clients. The beneficiaries have formed an association of property owners where they engage management on the quality of services provisions including security and general maintenance of the estate.

The type target beneficiaries in the estate have purchasing power to be able to buy the houses outright through either through their own savings or mortgages. For example, the company offers 3- and 4-bedroom detached and semi-detached houses with prices ranging from US\$ 60,000 to US\$125,000. Clearly these types of houses are affordable to the target group but certainly unaffordable to the ordinary Ghanaian. Also, the company has tailored its housing pricing in line with most mortgage banks eligibility thresholds. GHL Bank, for example, has set up US\$60,000 as the minimum property price eligible for mortgage loan (CAHF 2018a). Young families constitute the emerging middle class in Ghana. They are mostly young people at their prime age, working and earning a good income. There is a growing demand for housing from this income group (CAHF 2018a). A respondent from the Marketing Department of the company indicated that this group does not have the time to look for land and supervise the construction of their own houses, hence, their desire for already completed houses. They also desire to live in a wellplanned neighborhood where there is security, adequate infrastructure, and amenities. Besides, they want to relieve themselves of the problems of land acquisition such as multiple sales of land, land litigation, and difficulty in identifying the rightful traditional landowner from which they can lease litigation-free land.

Observations on the Case Studies

One of the factors for the successful implementation of land value capture or land-based financing is demand. Demand for planned and serviced lands influences the supply. There are estimates that the emerging middle class is expanding with the growth of the economy (CAHF 2018a). This is creating 'big' demand for well-planned and serviced residential gated communities (Rendeavour 2018). As a result, there is proliferation of real estate developers especially in the GAMA (Akwensivie 2018). Professionals in the real estate industry asserts that, the growing demand has also influenced the development of new 'cities' within GAMA (Akwensivie 2018). For example, real estate developers like Rendeavour have developed a satellite city in the Kpone Katamanso Municipal Assembly. This satellite city is being built on 2,325 acres of peri-urban land. This creates opportunities for land value capture financing of urban development in Ghana. Suzuki et al. (2015) and African Centre for Cities (2015) confirm that effective demand for land and property is one of the pre-conditions for successful implementation of the development-based LVC.

From the analysis of the case studies, three observations can be made on the demand characteristics of beneficiaries of these projects. First, beneficiaries indicated that living in gated communities guarantees land tenure security. They explained that it is risky to deal with traditional landowners as individuals because one cannot be sure of who has the right to dispose of the land especially when the land belongs to families. Some of the beneficiaries recounted their experiences when they dealt with some traditional landowners. For example, one beneficiary from one the case estates indicated that he leased a building plot at some peri-urban area and later discovered that the same land had been sold to another individual. Some beneficiaries further indicated that even where the land belongs to chiefs, it is difficult for an individual to identify the right chief to deal with. However, they contended that when you buy land or house from the real estate developer in a gated community, you are assured that the developer has the right land documentation and no one will one day come inside the estate and evict you as an individual homeowner. They believe that before, the real estate developers will engage in such a massive development they would have acquired the land legitimately. Ehwi (2018) corroborates this finding by stating that respondents in gated communities generally agreed that lands sold by estate developers especially in gated communities are free of land litigation and multiples sales of land.

However, beneficiaries have different perceptions about the levels of tenure security between lands purchased by real estate developers from traditional landowners and public lands. They contended that they felt more secured buying public land from a parastatal organization than from real estate developers. They perceived that it is much more difficult for a traditional landowner to contend with the state on lands that have been compulsorily acquired and compensated by the state. Some beneficiaries indicated that they heard of instances were traditional landowners have litigated with some real estate developers on lands in some gated communities. Therefore, they felt that public lands guaranteed more tenure security than lands purchased by real estate developers under private treaty. The issue of tenure security and acquisition of litigation-free lands is paramount to beneficiaries of these projects. This is against the background of the problems that bedevil the customary land sector in Ghana. For instance, tenure insecurity is one of factors that inhibits housing investment and development (Abdulai and Ndekugri 2007; Baffour Awuah et al. 2014; Ubink 2006; Ubink et al. 2018).

Second, beneficiaries indicated they prefer to purchase land or houses from real estate developers because these lands are planned, and infrastructure services are provided on site. They argue that the cost of inconvenience associated with dealing with service providers and, getting basic services is huge, and the individual is unable to influence the system to get these services. A respondent indicated that "one doesn't have to waste time and energy to get these services because the estate developers undertake to provide these before selling the houses." Beneficiaries further indicated that they are willing to pay higher prices for serviced land because this reduces the cost involved in housing as compared to buying un-serviced peri-urban lands. Their argument is that the real estate developers are able to provide the bulk infrastructure before selling the housing. This reduces the unit cost of infrastructure per plot as compared to an individual developer who bears the full cost of providing these to and individual plot.

Third, beneficiaries, especially from the Airport City project, asserted that locational advantages motivated them more than the site infrastructure itself. The beneficiaries indicated that proximity to the Kotoka International Airport and accessibility to the CBD, Government Ministries, Department and Agencies and ancillary services influenced their choice for the Airport City Area. The premium the beneficiaries placed on locational advantage over the critical infrastructure on site can be explained by the fact, before the decision to change the land use of the Airport City enclave, the area was already bounded by good quality major roads, and basic services. Therefore, the centrality of the location relative to other important places within the city of Accra influenced the commercial nature of the development within this project more than the infrastructure on site.

It is important to put the perceptions of beneficiaries, especially of the residential land development projects, within a certain socio-economic context. These beneficiaries mostly fall within the high income and emerging middle-income classes. Their desire to live in well-planned and serviced neighborhoods is precipitated by their ability to afford the services and the asking land and property prices associated with the developments. Besides, most of beneficiaries are highly educated, busy business people and technocrats that have the affinity to living in serene residential neighborhoods. Thus, their preference to purchase properties in these neighborhoods.

The Community 24 and Oak Villa Estate cases show that the development sites are gated communities with clear attempts at targeting middle to high-income groups. This has led to seclusion and segregation with the consequences of having very rich neighborhood enclaves surrounded by unplanned poor neighboring communities. The real estate developers clearly do not attempt to address the issues of affordability of their projects to the low-income households. The projects are designed especially for the target group that have effective demand. This targeting is leading to the exclusion and segregation in both residential and commercial enclaves within GAMA. It is important to appreciate the nature of exclusion and targeting because private or parastatal organizations land developers fund their activities entirely from leveraged schemes without any support from the public sector. Thus, they must ensure that they resort to market mechanisms such us willingness and ability to pay in order to sell the serviced lands or houses. However, this obviates the principle of land value capture especially where one of the objectives

of value capture is to implement public policies to promote equity (e.g., provision of affordable housing to alleviate shortages and offset potential gentrification) (Suzuki et al. 2015).

Apart from the characteristics of demand, another observation from the case studies is the approach to value capture. In all the cases, the type of value capture approach used is the development-based (Suzuki et al. 2015). They are engaged in project-related land and property sales to generate revenues through granting subleases to purchasers after providing requisite infrastructure services. This approach establishes a link between value creation and value capture. It directly links those who benefit with those who contribute. The approach is market driven and is based on sharing the extra value created through the provision of new infrastructure. Thus, the project related land and property sales is influenced by the growing demand for well-planned residential and commercial enclaves with requisite urban infrastructure.

The strategies for capturing land value uplift differ slightly from one case to the other. The strategies are directly related to the pricing of the serviced land. TDC, for example, adopts the pro-rata method to distribute the infrastructure cost to all plots, and therefore, each plot has a share of the infrastructure cost, which is factored into the selling price of the land. Thus, the component of infrastructure cost is recouped through land sales. Oak Villa Estate also adopts the composite pricing of the entire component (land, infrastructure, materials and labor, finance, overheads and profits). Thus, the final sale price of a house reflects the various components. Airport City, however, separates the serviced land sale pricing from the infrastructure cost. Serviced land is auctioned through a competitive bidding and tendering process. When a developer wins a bid, a one-time infrastructure levy is paid in addition to the bid price. It is calculated as a per-cent of the land value. The levy is applied during the planning approval phase by the GCAA. Developers within the Airport City enclave must apply to the GCAA for building heights approval and to the La Dade Municipality for development permission. The infrastructure levy is used to finance infrastructure provisions on the site as corroborated by pundits such as Berrisford, Cirolia, and Palmer (2018), Palmer and Berrisford (2015), Peterson (2009) and, Suzuki et al. (2015).

Another observation is that both TDC and GACL are state-owned enterprises while Oak Villa Estate is purely private. As state-owned enterprises, the State Enterprises Commission regulates them and ensures performance standards. They pay dividends to the government when they make a profit in their operations. Thus, profit is shared between the company and the state, unlike the purely private company where surpluses might be retained and reinvested in the business. It appears that private land developers have an advantage in terms of ploughing back profits for further development of new sites as compared to the parastatal land developers.

Lessons from the Case Studies: Key Themes and Issues

Land Value Capture Through Project Related Land Sales

The cases show that land values that have been enhanced by infrastructure investment and changes in land use zoning are captured through project-related land sales. The project-related land sales fall under two categories reflecting the type of developer. The first category comprises

parastatal land developers such as the TDC and GACL. These developers have access to public lands that have been leased to them by the state under certain leaseholds arrangement. They prepare land use schemes and provide internal infrastructure and, in few cases, also provide connector infrastructure to increase accessibility to the sites on a project-by-project basis. They capture the associated land value appreciation through land leases or sales. The second category comprises of private estate developers, which purchase land from customary landowners, plan the area, provide internal infrastructure, and build residential accommodation in gated communities. Land value appreciation is captured through the sale of estate houses. Under this second category, external or connector infrastructure is sometimes provided through In-Kind Contribution.

What is worth noting in the project-related value capture strategy in the above case studies is the way the cost of infrastructure is factored into the final land sale or property sale price. The cost of infrastructure is built in the final sale price through the pro-rata basis and the component pricing model such that there is no distinction between the land or property sale price and infrastructure cost. Therefore, purchasers do not feel that there is an additional cost burden for infrastructure. This makes it much easier to recover the cost involved in installing infrastructure in such projects as compared to a separate charge for infrastructure recovery.

Value capture through project related land sales as exemplified by the case studies is not new in Sub-Saharan Africa. It has been utilized extensively in Addis Abba, Ethiopia. However, in the case of Addis Abba, the land is state-owned, and the state services the land in the city and leases it to developers (Berrisford, Cirolia, and Palmer 2018). The case of GAMA is different because the state and local authorities own very limited lands. The state can only own land through the use of its eminent domain. The few public lands available have been allocated to government institutions and parastatal organizations.

Nonetheless, capturing land value through the project related land sales by the case studies offer useful lessons to MMDAs that will avert their attention to land value capture tools for mobilizing additional revenues. MMDAs have the legal mandate to buy land from customary land owners, service such land and reallocated to private developers and also engage in land banking activities. However, over the years, MMDAs have not been able to fulfill this obligation. Therefore, MMDAs can form strategic partnerships with the land developers by facilitating access to peri-urban customary lands through land banking schemes and engage these developers to provide infrastructure services.

Local Land Use Planning and Enforcement of Planning Instruments

The case studies have demonstrated that the success of the project related sales value capture is dependent on micro level land use planning and enforcement of planning regulations. In all the cases, the preparation of local land use schemes preceded land developments. Land developers have also demonstrated that they are able to follow through the implementation of land use schemes quite effectively. Land developers build master planned communities in accordance with the local land use plans they have prepared. In essence, they ensure that the benefits of land use planning are realized by all residents. Besides, they ensure that laid down local land use plans are followed, and approval is given by the respective MMDA. They recognized and

appreciated the fact that it is important for the local land use plan implementation to be a shared responsibility. For example, the TDC collaborate with the Kpone Katmanso Municipality to approve land use plans and the granting of building permits. GACL through GCAA also ensures commercial buildings are consistent with building heights limits around the Airport. Unlike customary landowners whose land use plans are aimed at facilitating land sales, land developers follow through the implementation by monitoring each process of land development to ensure it is consistent with local land use plans. The contractual relationship between land developers and residents of planned communities also ensures effective enforcement of the local land use plans. This relationship requires land developers to provide an organized community and ensure that they deliver on each of the terms of the contract to their tenants.

Urban Management and Development Outcomes

The activities of the land developers suggest that they are able to organize and plan cities' extensions and initiate urban redevelopment schemes. The practices of these land developers shape the urban development outcomes of GAMA. The three case studies show three models of organizing urban development:

- 1. Micro-level planning of peri-urban land into gated communities has influenced the direction of future development of GAMA and also impacted the development of surrounding communities because of the off-site and on-site infrastructure services land developers provide.
- 2. The site and services schemes implemented by the TDC facilitates in organizing urban development and managing planned cities extension. Though the site and services scheme is an old concept in land development history, the success of its implementation within the TDC communities demonstrates the potential for management urban development. If the activities of these land developers are well coordinated by the MMDAs structure plans, MMDAs would be able to direct the growth of the city and ensure the orderly development of GAMA.
- 3. Guided urban redevelopment and implementation schemes is also an effective tool in urban management. The Airport City project has demonstrated that parastatal land developers can organize and led the process of urban redevelopment in partnership with the private sector.

However, the practices of land developers and how they facilitate in shaping urban development outcomes of GAMA must be discussed in the context of the governance approach to land development. Governance approach to land development refers to the rules and regulations that control public actions in land development and the use of property rights in land and building (Gielen et al. 2017). Two broad governance approaches to land development are established in the extant literature. One approach is the active or public approach. This approach requires public bodies or governmental institutions to prepare land use plans (structure and local plans), regulate the use of the land through development controls, purchase and assemble the land, install public infrastructure and finally dispose the land to private developers for them to construct the building and sell to private individuals. The other approach is the passive or private approach. This approach calls for public or governmental institutions to prepare land use plans (structure, develop the

land, or sell it to other individual developers to construct their houses (Gielen et al. 2017; Hartmann and Spit 2015; Van Der Krabben and Jacobs 2013). Both approaches have implications for value capture. When public institutions control the chain of planning, servicing, and building, they are able to manage the processes of value creation. As such, they will have capacity to institute and capture land values resulting from the public actions. On the other hand, if the process of planning, servicing, and building is undertaken by private institutions, then the value created will inure to them.

However, the realities are that MMDAs have not been able to pursue the active approach to urban land development over the years despite their legal mandate in this respect due to inadequate human, financial, technical capacities and sometimes sheer ineptitude. Thus, in Ghana, and particularly the GAMA, the governance approach to land development is more similar to the passive or private approach. The roles of the MMDAs have barely been reduced to approving or rectifying land use plans prepared by landowners and land developers. For example, a Physical Planner in one of the MMDAs studied noted that land use planning is supposed to be initiated by the Assembly, but the chief and other landowners have taken it up. According to the respondent, the landowners engage the services of private consultants to prepare local land use plans and apply to the Assembly for approval. When the Assembly gives approval, the chiefs go ahead and start the implementation. Therefore, customary land owners and real estate developers more or less control the entire process of planning, servicing, building and occupation. The MMDAs have also not been able to coordinate and harnessed the creative models that private developers have developed over the years to ensure that there is coordinated, urban land development and management within GAMA. Hence, customary landowners reap the windfalls of urbanization through land sales due to sprawling of the metropolis, and land developers capture both the windfall of urbanization and the value uplift that result from infrastructure provision.

The Airport City and Oak Villa Estate cases also highlight the collaborative management of planned communities where residents have formed property owners' associations in order to engage land developers on site-specific problems and proffer joint solutions. There is an increased level of engagement between property owners' associations and land developers in the management of these urban development sites. This enhances both parties' problem-solving skills to address urban development issues within these specific sites. Thus, it ensures that land developers are constantly in touch with residents to fix problems with security, maintenance of street lighting, and other related neighborhood issues. This model provides the impetus for urban managers to engage major stakeholders in urban management through joint management of urban land developments can ensure the sustainability of such projects and lead to continuous revenues flows from property rates. It can further enhance better negotiations and effective stakeholders' engagement in implementing both fee-based and development-based LVC tools.

Funding Strategies for Urban Infrastructure

The cases show that land developers finance infrastructure services with internally generated funds. They leverage the funding for these projects from their operations in other projects. For example, Oak Villa Estate finances infrastructure services through profits made from sale of

completed houses from other projects. This type of financing model helps the project developers to execute land developments and make profits without having to worry about paying any interest on loans they might have borrowed. However, it might also lead to project delays because the rate at which the funds are generated determines the rate at which projects are completed. Nonetheless, projects are scheduled in phases depending on the financial strength of the land developer. These leverage schemes are made possible where a land developer has other development sites with completed projects so that proceeds of sales from these development sites are reinvested in the further development of other projects. Thus, the leverage financing schemes are very robust with land developers that have been in the business for a long time like the TDC with multiple sites and landed properties from which, ground rents are paid annually. This enhances the financial position of the land developer. Besides, land developers with diversified businesses are able to leverage funds from profits from one business and invest it in land development activities. A clear example is the GACL, which was able to secure funding for the Airport City project from other non-aeronautical operations. The success of raising funds through land sales in the Airport City project enabled the GACL to embark on the Airport City II project. Plots in the City II project have already been sold, but infrastructure and amenities are yet to be provided. Besides, land developers could also leverage their assets to easily acquire loans/financing to fund these developments.

Another strategy the land developer use to raise additional revenues is through annual ground rent payment by sub-lessees. Sub-lessees of land developers must pay annual ground rents in accordance with the term of the sub-lease. Depending on the terms of the lease, annual ground rents are reviewed every three years. For example, GACL charged 15% of the land value as annual ground rents for the period 2017 to 2019. Thus, the annual ground rent generates continuous revenues for these land developers. However, it must be noted that these land development companies collect the majority of the leasing premiums on the land up-front. Subsequently, sub-lessees are required to pay annual ground rent or land rent through the term of the lease.

In addition, the track record of accomplishment of the land developer also helps in raising additional funds through the down payment schemes. In these schemes, the prospective purchaser pre-finance either serviced land or house purchase with an initial deposit before servicing of the land or actual construction of the house begins. For example, both TDC and Oak Villa developers have raised substantial funds from prospective purchaser pre-financing models.

Besides, partnership arrangements where some land developers and the respective municipal assembly share the development permit fees enhance the financial position of the land developer. The land developers' project related land and property sales enables them to already recover their cost and make some margin of profit. Thus, if the land developer is allowed to take part in sharing the permit fees, then is an additional revenue to the developers. The land developer can use their share of the fees to leverage the funding for further infrastructure provision at other sites. This type of strategy is helpful to both parties in the sense that it creates opportunities for further engagement between the parties for orderly urban land development.

The land developers have multiple sources of revenues. The project-related land sales are just of one of the revenues streams. Therefore, the developers are able to continue in business based on

diversified sources of funding such that the can ensure the provision of infrastructure on each project site. This finding is consistent with Suzuki et al. (2015) who provide that multiple sources of funding is an enabling factor for the design and implementation of the Development-Based LVC.

Security of Land Tenure

The land acquisition arrangement by land developers enhances land tenure security and builds confidence and trust among prospective purchasers. Parastatal land developers such as the TDC and GACL have long-term land lease arrangements on state lands. This type of arrangement eliminates multiple claims because the land ownership is not in dispute. Prospective purchasers are more comfortable buying land from these parastatal institutions because of the assurance that no one will counter-claim ownership of the land, as is more common with customary land. It is this through type of assurance and confidence in security of tenure that Suzuki et al. (2015) and Peterson (2009) demonstrate that public land ownership is important for project-related land sales value capture.

Guarantee for the security of land tenure is also true for private real estate developers like Oak Villa Estate. They acquired large tracts of land from traditional landowners under private treaty. However, the company has to do much due diligence to ensure that they bought the land from the right traditional landowner. Therefore, they engage the right professionals in undertaking the land acquisition process just to ensure that they buy litigation-free land. This type of land acquisition arrangement instills confidence in prospective purchasers because they would not have to deal with the original landowner directly, so the fear of not being able to identify the right customary landowner is eliminated. Also, prospective purchasers of land from the land developer have certain level of confidence that, they will not be evicted without recourse by the contractual arrangement they have with the developer. Therefore, many prospective purchasers of serviced plots and estate houses prefer acquiring land and houses from land developers. Thus, the Oak Villa Estate case also demonstrates that public landownership is important, but it is not absolutely necessary for the implementation of project-related land value instruments (Suzuki et al. 2015).

Collaboration and Partnerships with Key Stakeholders

The case studies also demonstrate a certain level of collaborative efforts between land developers and key stakeholders in the implementation of value capture through project related land and property sales. These collaborative arrangements fall into two categories: (1) Collaboration with public sector agencies and; (2) Collaboration with other private sector agencies. The land developers collaborate with public sector agencies in the areas of land use planning and approving building permits and in some instances, building permits fees sharing. However, concerning the approval of land use schemes and building permits, it is a statutory obligation that does not require any collaboration. Nonetheless, land developers such as the GACL and TDC have collaborated with public sector agencies beyond the statutory obligations. For example, GACL have collaborated with the Land Commission, Town and Country Planning, Department of Urban Roads, Accra Metropolitan and La Dade Kotopon Municipal Assemblies in the design, planning and implementation of the Airport City Project. Besides, land developers have also collaborated with some private sector agencies for successful implementation of land development projects. For example, Oak Villa Estate has a partnership with the main mortgage bank where it refers its clients for mortgage financing. This helps the land developers to sell their properties. Again, the company has strategic partnerships with recognized banks that provide it with prospective clients. These banks also provide special mortgages to their staff refer the staff to this land developer to acquire the houses. It is a win-win partnership arrangement. Banks are able to expand their mortgage portfolio, and the land developer is able to sell his properties and expand operations to other urban sites. Moreover, the Airport City project was successful partly because of the strategic partnerships it developed with commercial developers.

However, it must be noted that the collaboration between the parastatal land developers such TDC and GACL, and public sector agencies has not led to the sharing of land value increment through the project related land sales strategy of value capture. This is because, the nature of the collaboration has also always been geared towards promoting urban development and improving infrastructure services delivery. MMDAs and other government agencies perceive these types of collaboration as tool for promoting private sector participation in urban development. Thus, the opportunity of sharing in the value created by the collaborative efforts between the local authority and the developers is lost.

Revenue Streams for Municipalities

The activities of land developers have enhanced the revenue potentials of the respective municipalities. This revenue comes from property rates and development permit fees (Figure 14).

Figure 14: Revenue Streams from Land Developers



Land developers make the collection of these revenues easier because of the organized nature of the communities' structure. For example, where a private developer like Oak Villa Estate builds and sells the properties to individuals, it effectively transfers ownership of the properties to the individual purchasers. These individual purchasers are obliged by law to pay property rates on annual basis. Thus, billing of property rates is quite simple as properties can easily be identified

and owners easily traced. In addition, granting of development permit is more effective because property owners are able to acquire land title from the Lands Commission because the head lease is registered and all subleases can be registered with reference to the head lease. Therefore, by the organization of land developers and their respective developments, municipalities are able to generate more revenues with little transaction cost without having to formally partner with these developers.

In addition, the activities of the land developers create opportunity for MMDAs to raise additional revenues through development charges. Certainly, the development sites of these land developers have impacts on the overall infrastructure network of the respective MMDAs. Thus, land developers that have not made In-kind contribution to defray the cost of bulk and connector infrastructure, the respective MMDAs can levy a one-time off development charge. This charge will be used to cover the cost of providing bulk and connector infrastructure in order to minimize the impact of the development on the infrastructure network within the MMDA.

High-Quality Human Resource and Technical Expertise

Land development operation is a complex activity that requires professionals with the requisite expertise to be able to execute projects successfully. It entails a complex value chain which requires expertise at each section of the value chain. The land developers have requisite professionals including land and quantity surveyors, land administrators and valuers, urban planners, procurement specialists, sales and marketing, and entrepreneurs. In addition, land developers have adequate and well-resourced administrative support units that provide critical support services. These support services include security services, sales and marketing and procurement.

Strategies for Designing and Implementing Value Capture Instruments

From the analysis of the legal value capture instruments such as development charges, betterment levies and property rates and current implementation challenges, it is clear that MMDAs need some strategies to engage key stakeholders in the form of collaboration and partnerships in order to implement some of these tools effectively. In this section, I discuss the strategies for the design and implementation of value capture in relation to two broad classification of instruments. First, I discuss strategies for the implementation of the Tax or Fee-Based Instruments in general (development charges, aspect of betterment of levies and property rates). These instruments have already been designed and are backed by legislation and administrative process. Second, I discuss strategies for the design and implementation of the project related land sales instrument based on the lessons learned from the case studies.

Strategies for the Implementation of Tax or Fee-Based Instruments

It is clear that it is difficult to implement betterment levies in its entirety as provided by the legislative instrument due to technical difficulties of attribution, geographical coverage, and timing of the levy in relation to any value appreciation. But the legislative provision on betterment that seeks to charge betterment on financial transactions on urban land transaction is

feasible under the current land markets development and fiscal decentralization framework in GAMA. Therefore, to be able to implement some aspect of betterment levies, development charges, and property rates effectively, MMDAs should use the mutual gains strategy. Mutual gains strategy is a tool used to design and implement land use decisions and deal with land use disputes in the design and implementation process. This approach is a multi-faceted strategy that leads to productive stakeholder engagement and draws its principles from different fields such as negotiation, consensus building, collaborative problem solving, public participation, public administration deliberative democracy, and alternative dispute resolution. The approach was employed by Nolon, Ferguson, and Field (2013) in managing and resolving land use planning disputes in the USA.

The basic tenets of the mutual gains strategy are: (1) it based on stakeholders interest and requisite technical information; (2) it involves key stakeholders and municipal technical officers and elected decision makers; (3) it incorporates all stakeholder interests and generates the requisite technical information relevant to key stakeholders; (4) it works on building strong community and public stakeholder engagement and technical planning skills; and (5) it ensures that the engagement with the key stakeholders is above and beyond information sharing and views (Nolon, Ferguson and Field 2013). Thus, bearing in mind the realities in GAMA, this paper proposes a modest application of mutual gains strategy in the design and implementation of LVC. Therefore, following the basic tenets of the mutual gains strategy, the MMDAs should follow the five steps discussed below.

Build the Requisite Technical Information and Requirements for Each Capture Tool

The MMDA should start with building adequate and reliable technical information on each of the value capture instruments currently allowed by legislation. The MMDA should identify, document and build a database on all proposed urban infrastructure projects and the type of urban services and infrastructure that have impact on land and property values. This requires an inventory of existing and proposed infrastructure services that are provided directly or indirectly by the municipalities or other government agencies. The inventory taking should be led by Municipal Engineers, Development and Physical Planning Officers of the MMDA. The Municipal Chief Executive (MCE) must provide strategy leadership and vision that seeks to improve the MMDA's IGF through land-based instruments. There is the need for the MMDA to prepare infrastructure investment plans from which they can estimate the cost and schedules of implementing such plans. Information on infrastructure investment and services will help the MMDAs to make simple calculation on the impact of each land development on the existing and proposed infrastructure. This will serve as a guide for levying development charges in order to offset the cost and impacts on the district's infrastructure network. Also, such information will help the MMDA to determine development charges levy rate in a more transparent and consistent manner as echoed by Berrisford, Cirolia and Palmer (2018).

The MMDA must also build technical information on betterment levies. This information should include the nature of demand and supply of developable land within the jurisdiction of the district. Demand and supply influence urban land transactions. Thus, the information should include current and projected land markets development within the MMDA jurisdiction. The MMDAs will need to examine current and projected urban population and economic growth rate
and trends in both residential and commercial property development within the GAMA in order to understand the urban land transactions. This type of information will guide the MMDA in the implementation of betterment on financial gain on urban land transactions. Also, as foundation step to implement betterment levy in accordance to the legal provision, the MMDAs should include the coverage and 'benefits' zoning of infrastructure services. The coverage and benefit zoning requires municipalities to estimate the benefits that accrue to property owners and the extent in terms of distance that each property enjoys these benefits. Benefits should be categorized into tangible and non-tangible. This data will provide adequate justification for levying charges such as development charges and betterment levies in addition to the property rates.

Besides, another technical information required is information on property addresses and street names. This will facilitate the billing and collection of property rates and also enhance the opportunities for levying development charges. There is already an on-going project on property addressing and street naming in most of the MMDAs. Therefore, this information can be managed and stored in ways that are easily accessible.

However, building credible technical information on infrastructure services goes beyond the 'business as usual' mindset of the municipal officers. This mind-set focuses on following the required processes laid down by law without being creative to engage and understand key stakeholders and tax payers' issues and interests. Building technical information requires conscious effort, creativity and innovation, and ambition of municipal leadership with a genuine desire to use the statutory instruments to raise additional revenues. Thus, visionary and developmental oriented leadership at the municipal level is necessary for developing a good technical information aimed at implementing statutory value capture instruments for raising additional IGF.

Identify, Assess, and Understand Stakeholders Issues and Interests

The Physical Planning Officers and Municipal Engineers of each MMDA should identify the relevant stakeholders under each value capture tool and gather as much information about each stakeholder. In the process of identifying the stakeholders, the municipal officers should evaluate the perspective of stakeholders relative to each value capture tool. This will facilitate in understanding stakeholders concerns and interests. The primary focus of this identification and assessment of stakeholders should be to understand the various levies and charges each stakeholder is already burdened with vis-à-vis the benefits they enjoy from the MMDAs infrastructure service provision. There are stakeholders that will be affected by more than one instrument and therefore, there is the need to classify them. This will also help the MMDAs to better communicate and engage stakeholders effectively. Stakeholders could be classified into three main groups: investors, wind-fall beneficiaries, and city community in accordance to Jillella, Matan, and Newman (2015). The investor group of stakeholders are those who provide capital investment in infrastructure services within the MMDAs. This group include the MMDA itself and other state agencies that provide infrastructure services as the state social obligation. Thus, the investor group in the context of MMDAs in Ghana must consider cost recovery strategies in order to generate additional revenues for the MMDA to provide more infrastructure. The wind-fall beneficiary group of stakeholders include those who will benefit from the

implementation of urban infrastructure investment plans through proximity of such projects and improved accessibility such as land and property owners, and local businesses. The third group of stakeholders that the MMDA should consider is local community members that will have direct access to the proposed infrastructure such assembly members, traditional authorities, and community-based organizations.

Conducting assessment aimed at understanding stakeholders concern and interests does not need to be expensive. The MMDAs should consider doing background research using stakeholder interviews techniques. The Nation Builders Corps (NABCO) staff and National Service Persons who are already paid by the national government should be used to conduct this assessment. This will reduce the cost. Physical Planning Officers and other heads of the revenue mobilization departments should coordinate and supervise the assessment. This assessment should cover stakeholders' perceptions on key issues on the MMDAs levies and charges, provision of basic services, range of stakeholder interests, and willingness and ability to pay. In addition, the assessment should also include the willingness of stakeholders to collaborate and negotiate with MMDAs in the implementation of land value capture tools. The assessment team should produce a written report with practical recommendation on the way to proceed with these value capture instruments.

Design a Process of Collaboration with Key Stakeholders

Mobilizing revenues from monetized land values through various instruments require some level of collaboration with key stakeholders. Thus, the MMDAs must design a process that will guide collaboration with relevant stakeholders. In designing the process for collaboration, the MMDA should be clear on the type and level of collaboration it seeks to establish with key stakeholders. For example, instruments like development charges linked to granting development permit, the MMDA might wish to inform property developers and let them know how the levy is calculated and the intended utilization of such levies for transparency purposes. For other stakeholders, the MMDA might be interested in collaboration that seeks advice and recommendation for improved land-based revenue generation. For instance, the MMDA can ask the LVD to advise them on the financial gain on urban land transactions within their jurisdiction. Yet, other stakeholders the MMDA might want to involve them in actual decision-making process. For example, the MMDA might want to collaborate with the LVD to undertake baseline valuation on properties for betterment purposes during each revaluation period as specified in the law. So that, the differences in property values between the first valuation and the revaluation will represent the betterment based on which a levy rate is determined and applied. Thus, the level of collaboration will seek to ensure joint decision-making and synergies on various infrastructure projects in ways that will lead to levying development charges, property rates, and some aspect of betterment.

The next level in the collaboration process should entail defining the goal for collaboration. This goal should be defined to include the need for participatory implementation of the various tax or fee-based instruments. The revenue mobilization department of each MMDAs should lead the process of formulating a goal for collaboration to guide key stakeholders in the deliberation process. In addition, the MMDAs should create awareness and share information with the identified stakeholders to enhance effective deliberation on possible options for implementation

of the various instruments. The MMDA should use its established structures to create awareness of the implementation of LVC. These structures already exist but have not been tuned to mobilizing stakeholders for implementation of LVC. The structures include community development department that have records on localities, and their Assembly members, the budget fora for consultation on annual budgeting, assembly members and unit committees, trades associations, traditional rulers and property owners. Municipalities should be able to communicate both tangible and non-tangible benefits to existing and proposed infrastructure interventions.

In addition, the MMDAs should indicate to stakeholders, the total amount of money estimated to be raised from value capture instrument and how that money is going to be used. The MMDAs should also elicit stakeholder ideas on how to use the money raised. This is critical for the implementation of the development charge and betterment levy. However, according to Suzuki et al. (2015), tax or fee-based instruments do not necessarily require any stakeholder engagement, but the peculiarities of the emerging discontent of property owners on the service provision levels of municipalities, require some level of engagement and justification.

Design the Process of Deliberation for Building Trust Among Key Stakeholders

After designing the process of collaboration, the Municipal Engineers and Physical Planners who are key officers for revenue mobilization of the respective MMDAs should constitute a committee of interested stakeholders. This committee should be tasked with the responsibility of developing practical options for the implementation of each of the tax or fee-based instruments. The Physical Planner should play the role of a facilitator who will guide the committee on the key issues pertaining to each value capture instruments and develop a work plan for the committee. The committee members should consult their respective associations or groups they represent with technical information concerning the value capture instruments and solicit ideas for developing innovative implementation model for each of the instrument.

In addition, it is important for the Physical Planner who is facilitating the deliberation process to demonstrate expertise and listening skills to the committee's discussions and suggestions. The Planner should discuss frankly the implementation challenges of each instrument and also highlight the revenue potential for each tool. Besides, the planner should discuss the proposed infrastructure development within the district and demonstrate how the MMDA is addressing the infrastructure needs. This should include how much the MMDA expect to raise from the implementation of each of tool and how the proceeds from the implementation is going to be used to address stakeholder concerns. Open and dispassionate discussions with the interested stakeholder committee will ensure transparency and lead to trust building. It is also important that, the MMDA provide the committee with all logistical support including some form of remuneration for committee members since their work will lead to improving on revenue generation.

Building trust among stakeholders, especially MMDA and citizens, is difficult because of the negative perception community members have concerning the belief that MMDA do not use the levies, fees, and charges collected to improve on the local infrastructure. This perception can only improve when the MMDAs demonstrate their commitment during the deliberation process

and subsequently implement what the committee decides on. Also, the stakeholder committee and the MMDAs should end their deliberation with the possible option for implementation with community contracting arrangement that seeks to spell out what output is expected from stakeholders and the MMDA.

Design the Process of Building Long Lasting Partnerships

Proposals for any possible option for implementing each of the value capture instruments should lead the MMDAs to building an effective partnership relationship with key stakeholders. It should also include building synergies with other government agencies and programs. Thus, Municipalities and Land Valuation Division should have partnership relationship concerning valuation of properties for rating purposes and also for the pre- and post-valuations of properties in the case of betterment levies. The current situation is that; land valuation is seen as more of consultants to MMDAs for the assessment of property values for rating purposes. In this sense, MMDAs have to pay the full cost of the valuation services provided by the Land Valuation Division. Therefore, in cases where MMDAs do not have the wherewithal to engage the Valuation Division, properties are not assessed. Building effective partnership entails recognizing each party as a partner with some rights and benefits and not as a service provided for by an agency that has to be paid a fee (Peterson, 2009). It requires working together to achieve a common purpose where each partner is involved in the entire process of revenue mobilization. Thus, MMDAs should recognize the Land Valuation Division as a partner where the division provides valuation services and benefit from the revenues that accrue from these properties in the mutually agreed formula. If through the partnership, MMDAs are able to undertake regular revaluation of properties for rating purposes, then, it will be possible to track property prices changes between assessment period and this will be useful data for levying betterment.

Besides, the deliberation proposals should take advantage of already existing initiatives either from the central government or the private sector. For example, the central government has a policy agenda on digitizing land documentation through the Ghana Land Enterprise Project. Besides, the central government has an agenda of decentralizing and equipping the Land Valuation Division, and therefore has introduced direct technical support on property valuation to MMDAs, through the Electronic Property Mass Appraisal System for Rating Valuation project. This project seeks to digitize MMDAs maps and the entire process of valuation for rating. There are several examples of public private partnerships (PPP) between MMDAs, nongovernmental organizations (NGOs), and technology companies with respect to property rates valuation, billing and collection. An example of this partnership model was implemented at Ga East and La Dade Kotopon Municipalities where a technology company (Subah Ghana Ltd) provided the financial resources to the municipalities and supported the Land Valuation Division with mobile devices to undertake property rating valuation. Again, the PPP model still recognized the LVD as the main stakeholder and not a partner and they had to pay the full cost of their services.

The PPP model that has emerged in property rating should be enhanced to include development charge calculation and betterment valuation. Indeed, Subah Ghana Ltd has developed the Enhanced Revenue Management System (ERMS). This is an end-to-end web-based platform that

requires limited initial capital outlay. It delivers critical revenue streams by MMDAs including (1) tracking payment for municipal services; (2) property Rate Management; (3) development permitting; (4) business operating permitting; (5) rent revenues; (6) rate impost computation; and (7) call center support for all municipal services. Therefore, MMDAs need orientation and awareness of the potential of development and betterment levies to raise additional revenues. These could be included in their PPP with technology companies and other fee/rates collection companies.

Strategies for the Design and Implementation of Project Related Land Sales

From the analysis of the case study land developers, it is clear that the major tool used to capture land values is the project related land and property sales. Land developers benefit from land and property sales while MMDAs benefit from annual property rates, and development and building permits fees. Apart from the revenue streams available to MMDAs, the tool also creates opportunities for generating additional revenues through development charges and in-kind contribution for MMDAs. The project related land sales tool is precipitated by the passive approach to urban land development. Thus, land use planning and finance are critical to the success of the project related land sales. However, MMDAs have not been able to undertake project related land sales due to inadequate capital, and lack of initiative, entrepreneurial mindset and share ineptitude. Therefore, the value capture through project related land sales is driven largely by private sector. In this context, the MMDAs need to adopt strategies that aim at: (1) streamlining the operation of land developers through effective municipal-level land use planning and enforcement; and (2) collaborating and partnering with land developers to be able implement the project related land sales value capture tool in a broader scope that allows MMDAs to share part of the revenues of the project related land sales.

Strategies to Ensure Effective Municipal Level Land Use Planning and Enforcement

First, the MMDAs should undertake an inventory on the nature of land ownership, principal traditional landowners, and the extent of their land ownership. The Municipal Physical Planners should lead in the inventory assessment because of their knowledge and skills in land use planning. The Lands Commission can assist the MMDA on the land ownership structure and principal landowners within their jurisdiction. Land owners should be identified and classified in terms of the customary and public tenure. The customary landowners should be classified into stool, family, or individual owners with their relative land coverage areas. Besides, the inventory should also include communities with land use schemes, the status of implementation, and peri-urban communities without land use schemes for MMDAs that still have peri-urban developable lands.

After the inventory and identification of key landowners, the MMDA led by the Physical Planner should sensitize landowners on the benefits of land use planning and enforcement. The sensitization should include the need for landowners to ensure that prospective purchasers register their lands so they can continue to benefit from annual ground rents. The MMDA should begin low-level informal engagement with traditional landowners. This engagement should include building the capacities of landowners to document land transaction and share information on land transactions with the Assembly. In areas that have customary lands secretariats (CLSs),

the MMDA should engage with the heads of these CLSs to share information. This informal engagement should advance to formal collaborative decision-making through a Memorandum of Understanding (MOU) where landowners will be encouraged to share details of land transactions including the parties of every transaction with the Assembly. It should include terms that seek to encourage landowners to engage the Physical Planning Unit of the MMDA directly in the preparation of land use plans. The engagement with traditional landowners should embody a clear motive of the municipality as a statutory planning authority that seeks to facilitate and streamline land use planning. A clear desire of the municipality to collaborate with traditional landowners in land use planning for their mutual benefits must be clear. This engagement is very relevant for peri-urban municipalities that still have developable lands. In addition to engaging landowners in collaborative planning, municipalities could use land readjustment tools within traditional land holdings where ownership is fragmented to ensure the economies of scale in land use planning.

To ensure effective collaboration, the engagement process should include public land management institutions – Lands Commission, Land Use and Spatial Planning Authority and OASL. This will help organize land use planning and gradually give municipalities the opportunity to facilitate urban planning, and implementation of local land use plans. Besides, the MMDA should collaborate with the Lands Commission in a way that will lead to sharing of information on the details of land transactions that have been registered within the Assembly jurisdiction. This information will help the MMDAs to monitor physical development and enforce planning regulations.

Furthermore, land developers should be identified and their respective operation areas mapped. The Physical Planners of the respective municipalities should assist in identifying land developers and mapping of their operational areas. Land developers should be classified into small, medium, and large. This classification should be guided by land developers' existing estates and prospective estates where large tracts of land have already been acquired; existing local land use plans (both approved or pending approval); relative size and capacity of each developer; nature of their operation (master-plan, serviced plots or hybrid); and their coverage areas. This information will help municipalities to be able to identify and engage real estate developers on mainstreaming their operations and ensuring synergies in planned infrastructure provision.

There is room for MMDAs to promote coordinated development among land developers through municipal-level planning. That is, local authorities establish a spatial development framework (SDF) and municipal land use plans for regularizing activities of land developers, define minimum permissible lot sizes, and demarcate trunk roads. Besides, an area that is declared a planning area easily acquires an enhanced value. This could be a justification to levy betterment or other forms of LVC.

Develop Strategic Partnerships with Land Developers to Implement Project Related Land Sales

The municipalities that still have peri-urban developable lands should develop strategic partnerships with land developers to undertake land banking projects. The focus of this partnership arrangement should be to ensure that municipalities provide the enabling

environment for land developers to finance the land banking projects. The MMDAs, through their spatial development frameworks, should identify growth areas for future development, identify and engage landowners in these areas to make lands available for future development. In order to secure lands in the growth areas, the MMDA should partner with land developers to prefinance the acquisition of these lands. Besides, the MMDAs should facilitate the development of these growth areas by providing the requisite trunk infrastructure through partnership with other central government agencies responsible in providing such infrastructure. These land banks could be sold later as future development engulf such areas so that the MMDA and the land developer can devise a sharing formula based on their respective inputs in the project related land sales.

Furthermore, MMDAs can also engage and encourage landowners in projected future growth areas to form trustees' landholding companies. The Assembly can then facilitate the process of linking trustees' landholdings companies to recognized and credible land developers to develop private-private partnerships in land development. Under this arrangement, land developers might not need to pay for the full value of the land outright but allow the trustees' landholding companies to be partners in the land development process. The concept of trustees' landholding companies is not new in the GAMA. For example, the East Dadekotopon Development Trust has been in operation since 2002. It has proven to be an effective tool in management customary land disputes and promoting equitable land development for the benefits of landowners. These concepts should be promoted by the MMDAs in developing land banks for future development.

In addition, the MMDA should seek for partnerships that will ensure that other land value capture tools such as development charges and In-kind contribution are incorporated in the partnership arrangement. This partnership arrangement should be gradual, starting from very modest levels where municipalities would begin with the medium to large-scale developers whose developments have benefitted from public off-site infrastructure. Municipalities would engage these developers and their clients about the need to pay development and betterment charges. Besides, building effective partnership with land developers, will ensure that, MMDAs introduce a more formal approach that will require land developers to contribute to providing infrastructure in the municipalities through in-kind contribution. The current practices of In-Kind contribution is very limited and not formalized. Therefore, Physical Planners and Engineers use their discretion which can lead to abuse and corruption especially as the process is subject to negotiations with the developer.

Besides, municipalities should use incentives such as allowing land developers to take 70% share of development permit fees from within the estate's enclaves and business-operating permit free periods for developers that are willing to include affordable housing schemes for low-income earners within their estates. This will encourage land developers to develop all-inclusive communities. By so doing, municipalities can support and improve on the symbiotic relationships between gated communities and surrounding neighborhoods. In this PPP arrangement, the land developer will continue to secure private funding to develop their estates and the municipality will provide the incentives and enabling environment.

Thus, the municipalities should be the fulcrum for bringing all the stakeholders together and building collaborative partnerships with respective stakeholders at different levels. For example,

partnership arrangement with developers can enhance the opportunities for planned cities' extension for peri-urban municipalities within GAMA. Developers will have the opportunity of working with these municipalities to design and implement development-based value capture instruments in new areas.

Moreover, for inner-city redevelopment as in the case of the La Dade Kotopon Municipality, the municipality through these partnerships can identify sites for redevelopment and engage developers in undertaking the projects. In the process, the MMDA can introduce the sale development rights value capture tool that allows developers the right to build at greater densities than would normally be allowed by the zoning and building regulations. However, it is noted that inner-city redevelopment will require infrastructure retrofitting which could be very expensive, but the incentives provided by the municipalities can encourage developers to undertake this redevelopment. One strategy would be for the municipality to forgo the normal development permit fees and only charge for additional densities that the developer may desire to develop.

Conclusion

The study examined the design and implementation of value capture instruments within the context of complex land tenure and deficient land uses regulatory regimes in the Greater Accra Metropolitan Area in Ghana. It examined land value capture tools within the framework of fiscal decentralization and the ability of MMDAs to use these instruments to raise additional revenues to support urban infrastructure financing in local government areas. The study also examined how parastatal and private land developers capture values through project related land development activities. It established that the current legal and institutional framework mandates MMDAs to design and implement three land value capture instruments namely, development charges, betterment levies and property rates. In addition, in-kind contribution is another instrument being implemented by some MMDAs. This type of instrument is not backed directly by any legislation but is consistent with findings from the literature on land value capture and land-based financing. Parastatal and private land developers also capture value through projected related land sales or serviced land leasing strategies.

The governance approach to urban land development has led to inadequate comprehensive land use planning by MMDAs within GAMA. Landowners have led in the preparation of land use schemes that are not adequately coordinated by the MMDAs. Thus, the benefits of land value appreciation inure to customary landowners, parastatal and private land developers. This is precipitated by the complex tenure regimes where customary landowners hire consultants to prepare land use schemes to aid in land sales and sometimes peri-urban lands are sold without planning layout or schemes. Added to these is inadequate implementation of land use regulations and enforcement by the MMDAs to the extent that, even where land use schemes exist, the implementation is left in the hands of landowners and developers. Though, there are adequate legislations and structures for sound land use planning, MMDAs in GAMA have not been able to adequately plan and follow through with implementation. Thus, the proposition that sound land use planning is critical to the implementation of land value capture instrument is therefore affected by the current practices. However, parastatal and private land developers have been successful in the implementation of the project-related land sales because of their ability to

undertake micro-level land use planning and to enforce local land use regulations. This supports the proposition that sound land use planning is instrumental to the implementation of the development-based LVC as echoed by Suzuki et al. (2015).

The findings suggest the tax or fee-based instruments have more potential for implementation in GAMA as compared to the development-based LVC due to the current governance approach to urban land development. Development charges and in-kind contribution have the highest potential of implementation by MMDAs because these require little technical expertise and also do not require any special stakeholder engagement. Thus, the implementation of development charges and in-kind contribution is less complex. These instruments can be implemented either through the tax or fee-based or development-based instruments irrespective of whether the development is driven by parastatal and land developers or even private individuals. The African Centre of Cities (2015) has corroborated these findings by highlighting the potential development charges to be implemented as a foundation tool to effective land-based financing in Sub-Saharan African countries. The project-related land sales are only implemented by parastatal and land developers. The MMDAs have never implemented the provision that mandates them to go into project related land sales. Therefore, under the current state of land tenure complexity, lack of initiative and ineptitude of MMDAs, the fee or tax-based instruments is more feasible to implement in Ghana contrary to the findings of Suzuki et al. (2015) and Peterson (2009).

The findings also suggest that building effective partnerships with key stakeholders is critical to the effective implementation of betterment levies and property rates. Though Suzuki et al. (2015) argued to the contrary but the current implementation challenges of these instruments require some level of partnerships. Again, strategic partnership arrangement with land developers is essential to the implementation of the project related land sales instrument. MMDAs do not need to invest huge sums of money to undertake this by themselves, since parastatal and private land developers have demonstrated their capability to implement the project related lands sales successfully. Thus, MMDAs need to partner with the land developers to implement such instrument through land banking projects. The assertion gives credence to the proposition that partnership with land developers creates opportunities for the implementation of the development-based instruments (Suzuki et al. 2015). The current operations of the parastatal land developers are aimed at raising revenues for central government in the form of dividends because they are subsidiary organizations operating under the state enterprise commission. They do not operate as land developers that seek to promote MMDAs agenda to capture values by acting as liaison between MMDA and customary landowners and creating land reserves for future project related land sales as asserted by Paulais (2012).

The concept of land value capture in general is not clearly understood by MMDAs. There is a dearth of knowledge among principal revenue mobilization staff of the MMDAs on the concepts, applications, and revenue potentials of land value capture as complementary financing mechanisms for urban infrastructure financing. Even at the national level, the supervisory Ministry for MMDAs, the concept of land value capture is not understood and therefore, the ministry is not able provide the necessary guidelines on most of the value capture instruments for MMDAs.

There is the need for awareness creation on the concept of land value capture in GAMA. The Ministry of Local Government and Rural Development and the Local Government Service should engage the services of experts to create awareness and educate MMDAs revenue mobilization staff and Municipal Chief Executives of the potential of value capture as a complementary revenue tool for public infrastructure financing. The Ministry should collaborate with international organizations and research institutions advocating for land value capture financing to organize seminars, symposia and public fora for both MMDAs staff and tax payers.

In addition, there is the need for policy direction and incentives for the use of land value capture tools. The Ministry of Local Government and Rural Development should provide policy direction and guidelines on how to calculate and levy development charges and betterment levies as it has done for property rates. The Ministry could also work with the District Assemblies Common Fund (DACF) and District Development Facility (DDF) to include a criterion that requires MMDAs to raise a certain percentage of revenue from land-based financing tools in order to qualify for a certain quantum of additional transfers from these transfer grants. Already, the DACF has guiding principles such as the needs, equalizing, responsiveness (rewarding MMDAs that have done well in revenue collection) and service pressures factors for allocation funds to MMDAs. The responsiveness factor could further be enhanced to include a certain percentage of land value capture revenues.

The Ministry of Local Government and Rural Development should also advocate for a revision of the provision on the tax base relating to property rating in the local governance Act, (Act 936) to include land. In addition, the valuation method for rating should be revised to embrace market-based approaches, especially in valuing properties within urban areas in the MMDAs. This revision will ensure that the assessment of properties for rating purposes take into consideration the factors that influence property value appreciation, such that, the periodic assessment of these properties can provide the basis for assessing betterment. For example, the law requires MMDAs to revalue their properties for rating purposes every five years. Therefore, to be able to assess betterment, the first valuation could serve as baseline of property values and the next revaluation could be the post valuation so that any property value difference between the two valuation periods should be liable for some betterment levies.

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