Urban infrastructure in Sub-Saharan Africa – harnessing land values, housing and transport

Inception Phase

Document 1 of 3

Inception Report: Conceptual Framework Extract

Version 2

Preliminary report – for discussion purposes only

20 February 2015

This material has been funded by UK aid from the UK government; however the views expressed do not necessarily reflect the UK government's official policie

Table of Contents

1 Introduction

This inception report for this project includes the team's proposed conceptual framework, which will be tested in the implementation phase. This document is an extract from the Inception Report including only this Conceptual Framework. Currently it is being used for discussion purposes only.

2 The implementation phase: value capture conceptual framework

2.1 Purpose of this conceptual framework

In the review of the literature on land value capture it become evident that there are a range of views on what land value capture means and how it should be applied in different circumstances. This variation, to some extent, relates to the level of development of the country where value capture is being considered. There is also an obviously wide range of ways in which the finance which is raised can be used, from contributions to general revenue on the operating account of local authorities to direct financing of a capital investment in a specific piece of infrastructure. Given these variable circumstances, the need for a conceptual framework which could be used to assist countries in Sub-Saharan Africa became evident. The research team has, therefore, proposed the framework which is described in this section of the Inception Report. In doing this it is recognised that there are other concepts in other research reports dealt with in the land value capture and infrastructure finance literature review which have informed this framework.

In describing this framework below, certain sections in the literature review report are repeated so that this section can be read independently.

2.2 The nature of land value capture

Value capture is a public financing technique that captures a part or all of the increase in private land values that results from new public investment or from the exercise of public decision-making power, such as approving a land use change. The principle driving value capture is that a private landowner benefits from the increased land value that results from the public action and that a portion of that increased value should rightly be shared by the relevant public authority, especially where that money can then be used to finance infrastructure. Value capture is not a straightforward activity of government, even in the most developed countries where there remain ongoing debates (and disputes) as to the amounts of value that can be captured, the timing of the payment of these funds and the use of the funds by the relevant authorities.

2.3 Land value capture and the property market

Value creation is related to the existence of a property market where property can be bought and sold. The effectiveness of this property market is therefore, a key to success, as described in the literature review with success being a function of market conditions and the rules that characterise such markets. The 'the rules of the game' influence and determine the extent of market development activity, the level of transactions, and the ability of market players to create and extract value from economic activity. It is important that institutional arrangements reflect the specific needs of market players and the context in which they transact, while the responsiveness of the institutional environment to the needs

of a wide range of market players underpins the growth and maturity of property markets.

For value capture to be effective it is also necessary for policies and instruments to be used that promote capture of property market values to fund infrastructure. These should be based on an understanding of how value is created, the context in which markets function, and the appropriateness of value capture instruments. These factors are thus characterised by an institutional framework, where the institutional environment will tend to be framed by the political and policy environment, as illustrated in Figure 1.

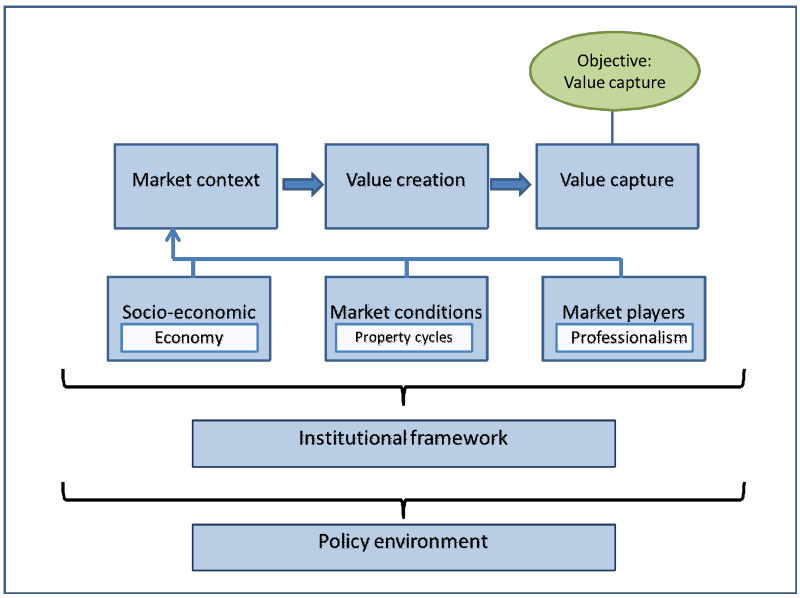


Figure 1: Property Value Capture related to market context

This diagram illustrates the need for the institutional framework to relate to market context which is associated with:

- The socio-economic circumstances in the city being considered: its level of economic development and the associated social circumstances of its citizens.
- Market conditions such as the extent to which there is growth in the local economy which drives property value, which may be cyclical.
- The extent to which market players – the local authority, developers, financiers and property owners - are established and function professionally.

2.4 Land value capture related to urban development

But the market conditions and the way value creation and value capture takes place is complex and depends substantially on the extent to which land is developed – which relates to the current stage of value creation - which is, in turn, related to the way cities evolve with the diagram from PwC (2013) shown as Figure 2.

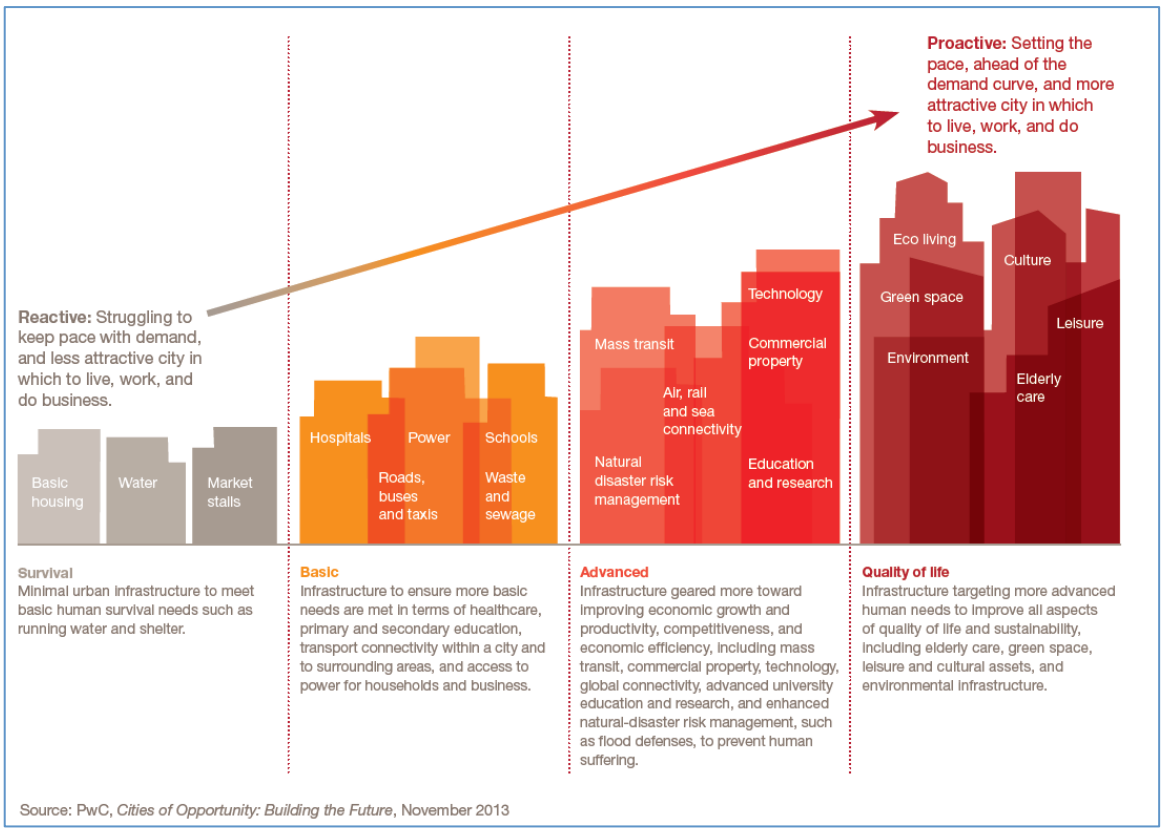


Figure 2: Stages of evolution of a city related to the nature of infrastructure

Different value capture instruments are suited to specific stages of urban development with a progression from instruments suited to value capture in newly developing cities or areas of a city ('survival' or 'basic' stage) to those which are more established. This is illustrated in Figure 3.

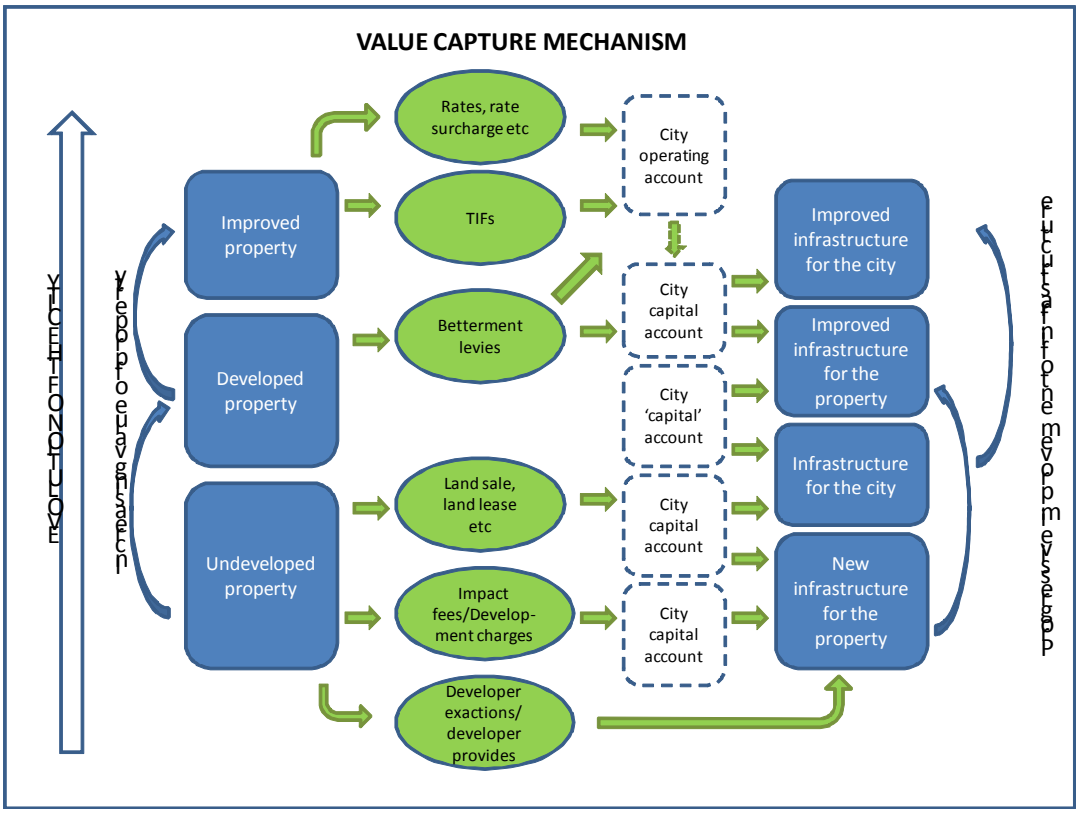


Figure 3: The value capture mechanism related to City evolution

The individual financial instruments for 'capturing' value are shown in Figure 3 and are discussed later in this report. In relation to this conceptual framework the detail of these mechanisms is not important but it is necessary to identify the difference between what are referred here to as capital account[1] transactions (at the bottom of the diagram) and operating account transactions[2] (at the top). In the early stage of evolution of a city it is typical that land is plentiful and cities have weak balance sheets and are seriously short of capital. The expansion of the city's built environment thus creates an opportunity for city authorities to raise capital, through rising land values, to finance the provision of infrastructure to individual properties and for the city as a whole. This, in turn, initiates the long-term virtuous process where properties increase in value and can be taxed in some form or another.

This 'taxation' of established properties as the city evolves leads to the second stage of value capture where property owners or property developers are not expected to provide the capital for infrastructure but continue to receive infrastructure improvements in return for their contribution to property rates or through other tax or levy instruments. These are referred to as 'operating account' transaction in the diagram.

[1] Capital account definition: A 'capital account' as used in this review refers to the account of a local authority which records the cost of providing new assets or renewing existing assets and the finance which is used to cover these costs. It is closely associated with the balance sheet of the organisation which, inter alia, reflects the net movement of capital on an annual basis.

[2] Operating account definition: The term 'operating account' as used in this review refers to the account of a local authority which records regular monthly expenditure and revenue that is associated with the day-to day administration of the organisation and the operation and maintenance of municipal services and associated infrastructure.

Finally, it is recognised that instruments for getting developers to pay for infrastructure themselves as part of property development, such as developer exactions and impact fees (development charges) are normally not considered under the 'value capture' concept as the transaction involves the direct payment by developers for the infrastructure. However, these instruments are included in this framework as they are part of the spectrum of property related infrastructure finance arrangements.

2.5 The Mechanics of property markets

Institutional framework

Property markets are characterised by the interaction that takes place between the various players, who often have different objectives. This includes the users of space (households and enterprises), financial players (banks and other financial intermediaries), as well as investors and developers. The role of markets is to ensure that these players interact and transact with each other efficiently and at the lowest possible cost, which includes the costs of acquiring market information and securing and protecting rights. As a result, an environment that reduces the ability of specific players to effectively interact with each other can severely disrupt market outcomes and constrain the creation of value.

These market players function within an institutional hierarchy where the property market comprises a three-tier institutional framework. First, the property market exists within an institutional framework defined by political, social, economic and legal rules and conventions that includes constitutional arrangements and the legislative environment. At the next level, the property market itself has an institutional form with a range of unique characteristics that describe its structure and determine its scope and function. Finally, the property market comprises organisations that operate within the field including property owning companies, professional service providers and property associations (Guy and Henneberry, 2002).

The institutional contexts in which markets function either promote or hinder the market's progress and maturity, where the evolution of institutional arrangements, as well as the objectives that are promoted, often tends to reflect the political power that different players are able to exert (Ebohon et al, 2002; Ramabodu et al, 2007; Mooya, 2011).

Market structure

The property market can be depicted as an interaction between the space market, development market and financial/investment market (see Figure 4). It is important to understand that each of these markets is defined by unique set of institutional arrangements and financial transactions. These, in turn, are influenced by specific rules and regulations that impact the performance of both the formal and informal property markets.

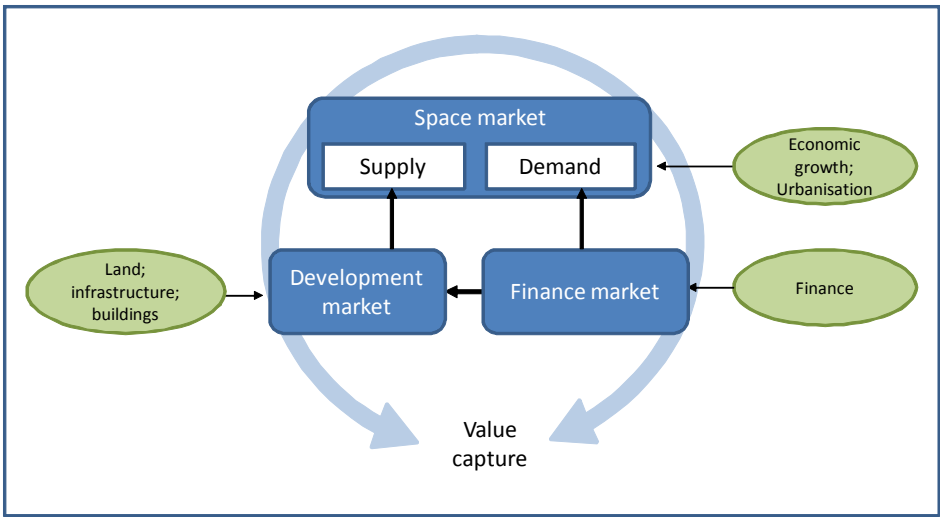


Figure 4: A schematic analysis of the property market

Income from the space market - resulting from an interaction between demand and supply for space - flows into the financial market and may be converted into capital value. If this value is greater than the cost and risk to develop the new buildings, the construction is initiated in the development market, resulting in changes in supply in the space market.

On demand

In the case of the residential sector, demand is primarily driven by population (endogenous increase and urbanisation) and economic growth trends; while commercial demand cycles are influenced by interest rates, GDP levels, inflation (including building cost escalation), business confidence and sentiment, political stability and the scale of construction/building plans approved and completed by municipalities. Demand for space and locational considerations are often influenced by information about land availability and price from friends and family members, implying that the decision about where to live is often influenced by community contacts (UN Habitat & Urban Landmark, 2010; Napier, 2013, Royston, 2013).

On supply

The supply of 'space' is influenced by land availability and cost, access to finance, accessibility of developers - including property owners who develop their own property – and capability of an administration which can plan, register and facilitate the development process.

Fekade (2000: 141) suggests that urban development progresses in stages, and that at each stage the developers, users, and building types change.

"Incremental" development (Fekade, 2000: 141) describes how low-income households begin to lay claim on land by building one room, adding incrementally as finances permit. In this regard it is notable that around 70% of housing development in developing countries falls under informal or incremental property development arrangements (Shaaban, 2004).

The next stage is "entrepreneurial" or "formal like" development (Fekade, 2000: 141), which describes the development of land by developers or real estate entrepreneurs. Here, seed capital is sourced from down payments from would be middle-income tenants who get contracts in return. Often these developments do not comply with formal building regulations, but do allow for higher vertical density than incremental development, usually in the form of multi-storey buildings.

The last stage of evolution of property markets is the formalisation of the market, which is governed by institutional arrangements that are recognised and protected by the law. Development supply will be a function of the institutional environment and the degree to which it enables private investment (Viruly & Watson, 2014). This will include factors such as market transparency, information availability, political stability, economic and business rankings, construction trends and planned public infrastructure spend. In the residential sector, the ability of supply to meet demand will also depend on the availability of mortgage and/or microfinance for households.

The process from incremental to entrepreneurial development describes the commodification of land in informal settlements: as land becomes scarcer with higher rates of urbanisation, prices rise. Low-income households may choose to sell their land and are slowly displaced. As such, tenure tends to change from communal to be driven by market logic (Kironde, 2000). In this process the ability to capture the value of property to provide for infrastructure increases progressively (See Figure 3).

The development market

The development market relates to transactions between those who have the right to occupy property (or wish to gain the right) and want to improve it and the individual or organisation undertaking the property development: acquiring rights, providing infrastructure and, often, buildings on the individual properties. The term 'developer' is used here for any organisation engaged in these transactions which includes community-based organisations, customary authorities, regional and national government bodies, parastatals, individuals, private businesses and the City itself. It is notable that concept includes the situation where the owner of the property is the developer. The nature of the developer is related to the land market context (See Table 1) with the ability of the City to capture value being highly dependent on the type of developer. This is illustrated in Figure 5.

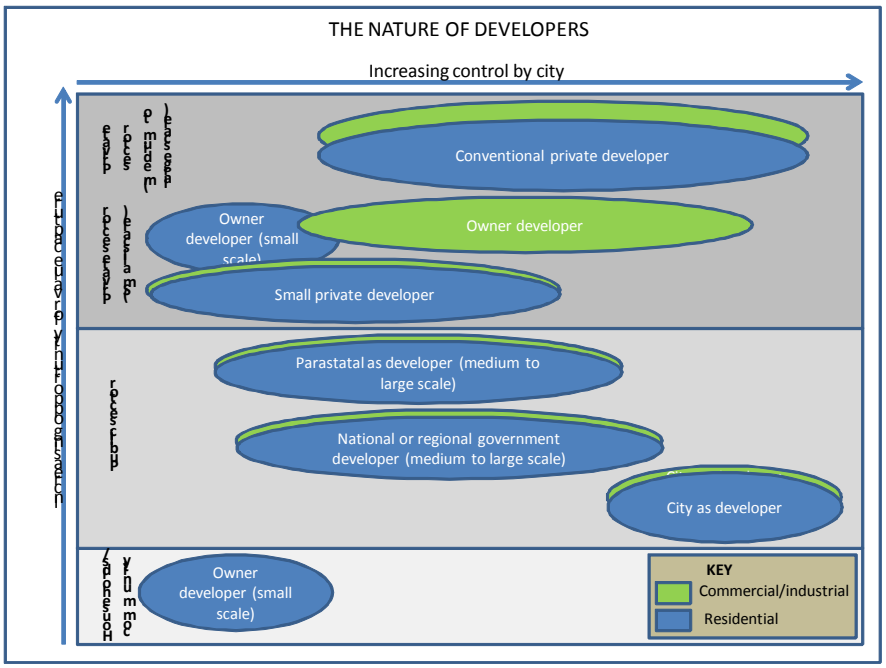


Figure 5: Nature of developers related to value capture and City control

While the diagram above is intended to organise developer types in an order which relates to the increase in opportunity for value capture this should not be

seen as a normative position but rather represents what can be seen as 'typical'. The arguments for this ordering can be made as follows:

- Small scale 'owner developer' property development projects are typically too small and often to informal to allow for value to be captured by local government.
- Where the government (local, regional or national) is the property developer there is no partner which can bring in additional finance associated with the value capture process. It is true that the government entity could raise debt finance to cover the cost of the property development but their ability to do this will be based on their credit rating as an organisation and cannot properly be referred to as land value capture.
- Having a public entity or parastatal (typically a government owned housing agency) as a developer is similar to that of a government body unless the parastatal can raise its own finance on the market in which case it can pay the City to provide infrastructure and this represents additional finance which is related to value capture, with the parastatal effectively acting in the same way as a private developer.
- Private developers are most able to be agents of land value capture providing they are able to access their own finance through equity or debt finance which can be used to pay for infrastructure through one or other value capture instrument.

The horizontal ordering of developers in Figure 5 is intended to show the degree to which the local authority – with a city as the most likely to apply these mechanisms – can 'control' the property developer through a contractual relationship and hence use this control to get paid to cover the cost of infrastructure or ensure that the developer provides the infrastructure themselves, as the City requires it, in the form of a developer exaction. The factors which influence the control which developers have are related to the size of the developer, and hence the size of the property development, and the extent to which the developer is formally established. In the case or regional or national government as property developers, the City may have quite limited control with much depending on the extent of inter-governmental cooperation.

The finance market

Within this conceptual framework the first key features of the financial market is that it serves both those who purchase or improve property and those who develop property. The finance instruments in this context include the full range from bond finance, unsecured loans from formal finance institutions and informal transactions with lenders. In the case of developers the finance is often short term 'bridging finance' taken out to cover the cost of planning and registering land and then designing and building the infrastructure and, in many cases, the residential or non-residential buildings on the properties.

The finance market includes transactions with the public sector both as owners of property but, more importantly from the point of view of this conceptual framework, as providers of finance through grants, and as the recipients of money from property owners to be used for infrastructure and the operation and maintenance of services.

2.6 Land markets related to land ownership and tenure

Land markets consist of basic arrangements that allow people to transact to achieve mutually beneficial (but not necessarily equal) outcomes. These transactions require a process of finding parties to transact with; negotiating and

calculating utility, values and prices; as well as contracting and executing the transaction. These steps occur within a socially-defined institutional framework that is regulated to varying degrees. Further, these transactions are related to the location and existing ownership and control of land. In the SSA context, this often results in a hybrid of socially-driven, often informal, customary markets and legally constructed, more formal, price-driven markets.

For the purpose of analysis for this review it is proposed that the land market in SSA cities be segmented as shown in the following table.

Table 1: Proposed land market segments

Key features	**Undeveloped land (for greenfields development)**		**Developed land (for re-development / upgrading)**	
	Peri-urban expansion areas	**Within urban boundary**	**Informally developed**	**Formally developed**
Existing ownership and tenure	Typically state or customary ownership. Private ownership in some 'settler' countries. Seldom does City have ownership.	Wide range of ownership, often national or regional government and parastatals. May be private; Some customary. City has more control than for peri-urban.	As for 'undeveloped property' with a range of 'legal' owners. Ownership can be in flux from informal to formal.	Owned by multitude of individual property owners, mostly private but some public. Occupation can be on long term government leases.
Existing settlement and nature of prior investment	Unsettled or sparse rural settlement, with space largely used for residential purposes with integration with farming activity.	Unsettled or sparsely settled. Some small scale farming. Possibility of squatting exists with unplanned transition to 'Informally developed' situation (next column).	Mainly informal dwellings with some small-scale business premises and few public buildings. It may include site and services sites.	Full spectrum of housing, business premises and public buildings. Includes vacant land but with the assumption that this is 'registered' and has development rights. Properties held for investment purposes.
Existing infra-structure	Little, but with some limited access to urban infrastructure	As this land is within urban boundary there is likely access to bulk infrastructure, but probably inadequate.	Limited to some basic services with a mix of public and private – small – scale providers.	Typically fully serviced but in SSA context with lack of public places and public transport infrastructure. The possibility of delivery of infrastructure through PPP's.
Type of developers	Development of properties for "own household use". But mostly	Typically developers as for 'Formally developed'	Small scale developers and private individuals or	'Formal': full spectrum of private developers,

Key features	Undeveloped land (for greenfields development)		Developed land (for re-development / upgrading)	
	Peri-urban expansion areas	**Within urban boundary**	**Informally developed**	**Formally developed**
	'Formal': private developers, parastatals and City (assuming that informal and unplanned arrangements covered in next column).	situation (last column).	customary leaders who gain some form of 'right' over the property. Shifts to City or parastatal as upgrading takes place.	private owners, parastatals and City. Developers include companies, pension funds and other financial intermediaries.
Finance available to owners	Informal arrangements; may include small unsecured loans and household savings.	Typically as for 'Formally developed' (last column).	Informal financial arrangements , with limited exposure to the banking sector.	Full range including mortgage bonds, and corporate finance.
Finance available to developers	Debt finance raised from formally established finance organisations, equity, some public funding or donor funding in the case of low income housing developments.	As for peri-urban context.	Typically informal with, a possibility for community financing. Government grants.	Full range of formal project finance.
Finance available for providing services (O&M)	Not applicable.	Not applicable.	Some payments made to private providers and utilities (parastatals). Little if any payments made to City. Little or no rates base to work with.	Property rates and tariffs paid to water, sanitation, electricity and solid waste service providers (City or utilities). Ability to raise local government bonds.
Suitability of value capture instruments for funding infra-structure	Primary target for land sale, land lease, sale of development rights, developer exactions and impact fees.	As for peri-urban.	Little opportunity for value capture by City. But value is captured by private individuals or organisations which gain some form of 'right' to develop the land.	Depending on the strength of the rates base, an opportunity to introduce value capture instruments such as betterment levies.

The segmentation includes a separation into 'informal' and 'formal' markets, defined by the degree to which the market processes are formally regulated. In making this differentiation it is important to recognise that 'informal' markets are

not *ad hoc* and unstructured but are rather governed by more socially-determined customs, rules and norms.

From a policy perspective, the challenge lies in developing an environment which not only permits markets to thrive and create value, across all the market segments defined above, but which also includes mechanisms that result in an acceptable distribution of value between different market players, including the City. This requires an in-depth understanding of the market players as well as the context in which they transact.

It is evident that tenure arrangements have a major impact on the way the market functions, as markets function best when there is certainty of rights to property.

Table 2, adapted from UN Habitat (2004), identifies different tenure systems and their characteristics with respect to value capture.

Table 2: Different types of Tenure Systems

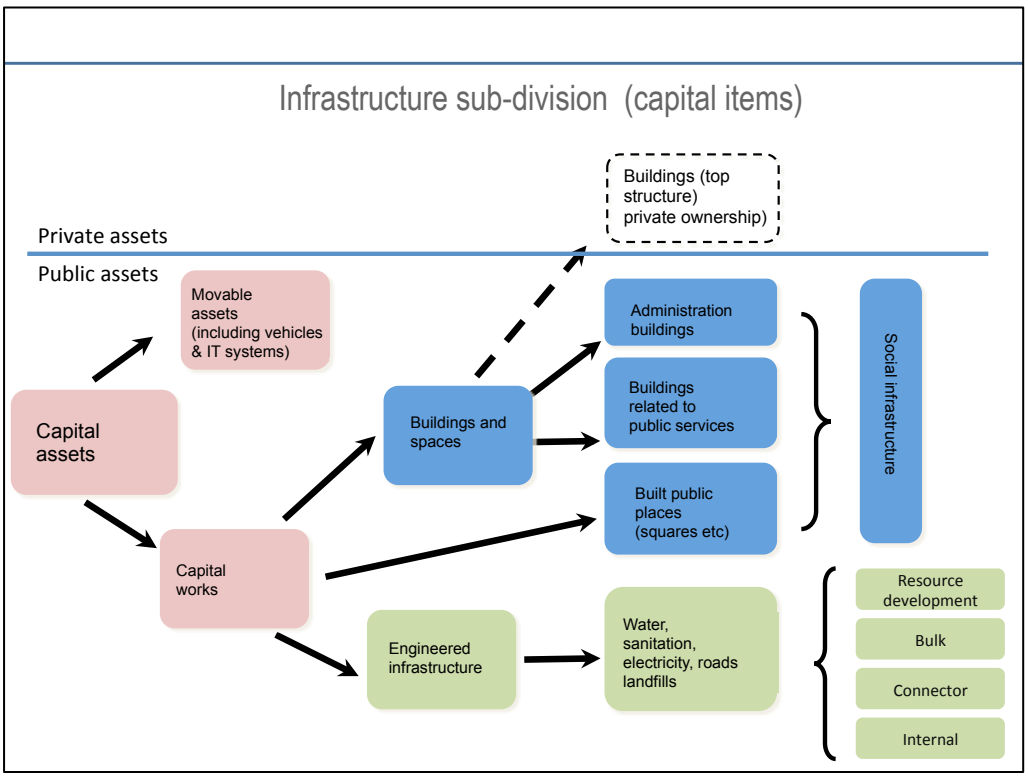
Tenure Type	Tenure characteristics	Value capture opportunity
Freehold	Ownership in perpetuity; High degree of security can be used as collateral for loans	Best opportunities for value capture both through capital and operating account instruments.
Delayed freehold	Ownership granted on condition – when payments or developments are complete; security as for freehold.	As this is a transitional tenure option it is mainly suited to 'up front' capital type value capture instruments.
Registered leasehold	Ownership for specified period (a few months – 999 years); As secure as freehold, but only for the period specified in the lease	Largely the same as for freehold.
Public rental	Rental of publicly owned land or property; Provides a high degree of security providing conditions of occupation are met; but terms often restrictive	As public sector owns the land the opportunities for value capture are limited.
Private rental	Rental of privately owned land or property.	Land is assumed to be developed. With private ownership value capture may be possible through mechanisms such as betterment levies.
Shared equity	Combination of delayed freehold and rental.	Difficult to administer tenure arrangements and likely to be difficult to administer value capture.
Co-operative tenure	Ownership is vested in the co-operative or group of which residents are co-owners	Probably limited to informal instruments with value capture going to community not, not City.
Customary ownership	Ownership is vested in the tribe, group community or family. Land is allocated by customary authorities such as chiefs.	Tenure arrangements unlikely to be suited to urban circumstances and value capture opportunities for City are poor. But customary authorities may capture value.
Non-formal tenure systems	Wide range of categories with varying degrees of legality or illegality. They include regularised and un- regularised squatting, unauthorised subdivisions on legally owned land	Difficult for City to capture value but private or community-based organisations may achieve this and it may lead to limited scale infrastructure provision.

What is clear by this continuum is that lack of formal property rights does not mean tenure insecurity. The informal sector has developed a set of rules for recognition of land tenure which provides social if not legal contracts, such as agreements and certificates witnessed by community leaders. In this way, many agents act as *de facto* regulators, including state officials, local government councillors, traditional leaders, community leaders, and family or community networks (UN Habitat & Urban Landmark, 2010:22).

2.7 The nature of infrastructure

There are many ways to classify infrastructure. The first one relates to the way the infrastructure aligns to a function or service. These are grouped in the diagram below into 'engineered' infrastructure (mostly networked systems) and 'social' infrastructure which is mostly buildings but includes 'built' public spaces such as squares and parks. It is assumed here that private buildings – residential dwellings, commercial and industrial buildings – are excluded from the term infrastructure. This categorisation is consistent with the concept of the physical 'built environment' feature of a city, with the city government responsible for providing the necessary public assets for a city to function effectively.

Another convention is used to divide infrastructure between 'economic' and 'social' infrastructure (DBSA, 2012). However, these terms are applied quite ambiguously. If they are to be of use in this study of land value capture and infrastructure finance the terms will be used to separate infrastructure for the poor which implies providing for basic needs (social infrastructure) and infrastructure for businesses and middle to high income households (economic infrastructure).



Source: Adapted from DBSA, 2009

Figure 6: Classification of infrastructure

In the case of 'engineered' infrastructure, which is typically in the form of complex networks, there is a further convention for sub-dividing this infrastructure into bulk, connector and internal infrastructure, noting that there are some differences in convention across the world. What is important here is the convention that with formal property developments the internal infrastructure is internal to a development, and can include water reticulation infrastructure, sanitation infrastructure, electricity infrastructure and internal road infrastructure (Kihato, 2012).

Finally, it is necessary to recognise that infrastructure on its own, in the sense that it physically exists, does not mean that citizens and businesses actually get a functioning service. Infrastructure represents only physical assets and these need to be managed (operated and maintained) through an effective institution or group of institutions, with the City having a central role.

2.8 Overview of infrastructure finance instruments

For the purpose of this review infrastructure financing is grouped into categories which align with the concept of value capture described in Figure 3:

- Instruments to raise capital which are associated with property development and property value.
- Capital finance instruments which are not property related.
- Instruments to raise recurrent revenue (into operating accounts whether actual or notional) which are property related.
- Recurrent revenue related instruments not related to property - tariffs most notably.

Primary attention is focused on category a) as these instruments are central to the land value capture approach which is the theme of this research. Mention is made of individual instruments under categories b) and c) as these are complementary to those in category a). Category d) is not discussed further.

Property related capital financing instruments

Following the introduction to value capture in the Framework and Concepts document, it is useful to refer to the 'Shoup Anomaly', attributed to Carl S. Shoup which states the following: 'Why is it so difficult to finance urban public infrastructure, when land value increases more than the investment costs?' (Shoup C., Cited in Peterson, 2009). This is a problem which is often faced by urban practitioners when faced with the complex issue of financing infrastructure. However, there is no 'one size fits all' solution to closing the ever-present infrastructure funding gap.

2.9 Capital finance instruments which are not property related

As noted above these instruments are addressed briefly here as they cover the more conventional instruments used in SSA countries and will always remain important to complement property related instruments.

Transfers from national fiscus to local authority

The use of transfers from the state to fund urban infrastructure occurs worldwide, particularly in developing countries (TCG International, 2011; Irving & Manroth, 2009). This has traditionally been the funding model most commonly utilised in Africa. It is limited by the financial strength of the national government, however, which must raise funds predominately through the collection of tax revenue but with the possibility debt finance raised from the international market. Resource rich countries also have the option of selling rights to extract resources which

may be used as source of funding for infrastructure - some of which may and should be transferred to local government. Oil is the most notable case.

Donor funding

Donor funding is available broadly from two sources. The first source would be from a government source, either based in the country of origin or from a foreign development branch of another country's government. The second is a non-governmental based source. The common sources for non-governmental based funding are the private sector, non-profit sector and private benefactors.

The scale of donor funding available is fairly significant, especially with the increase in donors from non-OECD based countries, particularly China. In Zambia, 90% of their water infrastructure has been funded by donors, while in Tanzania, 15% of the total state budget is derived from international donors, highlighting the potential of this funding source for aiding development in these regions. Often this funding comes with mineral rights or preferential import tax rates (Kihato, 2012).

Debt Finance

With the exception of South Africa, and acknowledging that some other countries are seeing rapid growth in this area, local financial markets in SSA remain largely underdeveloped and small, with a particular lack of financing with the medium- to long-term maturity horizons required of infrastructure projects (Irving & Manroth, 2009). As these markets develop though, there is a growing awareness of the potential financial resources which could be accessed in order to fund infrastructure for service delivery.

There are different sources that cities or the relevant authority can access in order to attain debt finance. The largest and most common of these are banks, both commercial and development banks. There are three types of debt financing available (Callahan, 2010): general obligation debt, revenue debt finance and special assessment debt. Debt finance may be raised through loans or bonds which can be backed by another entity, such as national government or national government sector departments which backs municipal bonds that are issues (TCG International, 2011)

Use of surplus operating revenue

A city may raise surpluses on its operating account and use these directly to fund capital works or accumulate them in a capital reserve fund for use at a later date once sufficient funds have accumulated. However, this requires a strong operating account which is seldom the case in SSA cities other than South Africa.

Parastatal funding

Parastatals play a central role in the provision of infrastructure in SSA cities and, at national scale, the majority of public spending in SSA is performed by parastatals. They finance their infrastructure through market debt, transfers from national government and donors, as well as internally generated revenue where this occurs (Foster & Briceño-Garmendia, 2010).

Private sector involvement

In considering partnerships with the private sector (PPPs) there are various levels of private sector involvement in the provision of infrastructure. Concessions and build-operate-transfer (BOT) type contracts are most relevant from the point of this review as they are associated with the provision of capital by the private sector partner (Mundhe, 2008). Such partnerships and their variants revolve around revenue-generating infrastructure and facilities such as telecommunications, electricity, airports, railways, tollways etc. Under the

majority of these partnership agreements, a private sector operator finances all or part of the investment, earns money from the revenue it generates, and eventually cedes ownership to the local government (Paulais, 2012). However, on the African continent, there are relatively few PPPs which operate in urban environments with these concentrated in relatively few areas, predominately Morocco and South Africa (Paulais, 2012).

2.10 Instruments to raise recurrent revenue which are property related

As shown on the value capture concept diagram in Figure 3, this set of instruments raise a recurrent stream of finance which, conceptually, strengthen the City operating account and hence allows the City to raise capital to fund infrastructure. But they have limited applicability in SSA as they are premised on the City being able to raise capital finance on the strength of its financial viability. These instruments, as an indirect means of raising capital, are more commonly found in middle income and developed countries, but the potential for extending their use to SSA countries should be explored.

Betterment levies and taxes

Betterment levies, or betterment taxes, can either refer to value capture taxes in general, or a specific type of value capture tax. For the purposes of this document, it refers to the suite of betterment taxes, defined as 'any tax or charge on an increase in value resulting from some public action, such as the issuing of development rights or the provision of infrastructure' (Urban Landmark, 2012).

Typically the levy is imposed at 30 to 60 percent of the estimated value gain (Peterson, 2009). This allows governments to recover part of the capital cost incurred in making infrastructure improvements, and therefore betterment taxes are an example of a "cost recovery" value capture instrument.

In the case of infrastructure investment, 'betterment' describes the increase in accessibility, or reduced congestion or pollution, and the consequent increase in land values of which landowners will be beneficiaries. It is therefore a mechanism to 'internalise the windfall surpluses of land value' (Medda, 2012).

Historically betterment taxes were used in Britain and Spain and carried over to several commonwealth countries and to Latin America (Peterson, 2009). Today various forms of betterment taxes are funding infrastructure in Hong Kong and Singapore, Bogota, and various cities in Brazil, Argentina, and India (Viguié & Hallegatte, 2014).

But in practice there are a number of difficulties in the design and implementation of these levies with the difficulty in accurately measuring the increase in value attributable to the infrastructure project being the most obvious.

Other property related instruments to raise recurrent revenue

Property taxation is clearly the most important property related instrument for raising City revenue. However, from the point of view of this review this is seen primarily as a means of raising operating revenue for cities and not as a means of infrastructure finance.

There are a range of other instruments for the purpose of completeness but which are not considered to have merit in an SSA context other than South Africa where the property market is well developed:

- Tax Incremental Financing (widespread across the USA and is being adopted the UK).
- Social Cost Tariffs (Canada)

- Community Infrastructure Levy (UK)
- Land Value Tax, evolved from property tax (Australia and Denmark).
- Business/Community Improvement Districts (UK, Canada, the USA and South Africa).

3 References

Callahan P. (2010). Municipal Debt Financing and Capital Improvements Planning. Snyder & Associates, USA.

Development Bank of Southern Africa (DBSA). (2009). Infrastructure Investment Planning – Training Modules. Unpublished training course materials prepared by Palmer Development Group, including guideline, slide presentation, DVD and financial model.

Development Bank of South Africa (DBSA). (2012). State of South Africa's Economic Infrastructure. Development Planning Division Publications. Halfway House, South Africa.

Ebohon, O., Field, B. & Mbuga, R. (2002). A conceptual analysis of the problems associated with real property developments in Sub-Saharan Africa. *Property Management.* 20 (1):7-22.

Fekade, W. (2000). Deficits of formal urban land management and informal responses under rapid urban growth, an international perspective. Habitat International 24. 127-150.

Foster V. & Briceño-Garmendia C. (2010). Africa's Infrastructure, A Time for Transformation. The World Bank, Washington DC, USA.

Guy, S., & Hennerberry J. (2002). Development and Developers; Perspectives on Property, Oxford, Blackwell.

Irving J., & Manroth A. (2009). Local Sources of Financing for Infrastructure in Africa. The World Bank, Washington DC, USA.

Kihato M. (2012). Infrastructure and housing finance: exploring the issues in Africa. Centre for Affordable Housing Finance in Africa. A division of the Finmark Trust, Parkview, South Africa.

Kihato, C. W. and Royston L. (2013). Rethinking Emerging Land Markets in Rapidly Growing Southern African Cities. *In* Urban Forum Pp. 1–9.

Kironde, J. M. L. (2000). Understanding land markets in African urban areas: the case of Dar es Salaam, Tanzania. Habitat International, 24(2), 151–166.

Medda F. (2012*).* Land value capture finance for transport accessibility*: a review, Journal of Transport Geography*. 25: 154-161.

Mooya, M.M. (2011). Making urban real estate markets work for the poor: Theory, policy and practice. *Cities.* 28(3): 238-244.

Mundhe R. (2008). Infrastructure Concession Contracts: An introduction. Centre for Competition, Investment & Economic Regulation, Jaipur, India.

Napier, M. (2013). Land Markets in African Cities: time for a new lens? In Trading Places: Accessing land in African Cities. Pp 1-20.

Paulais T. (2012). Financing Africa's Cities, The Imperative of Local Investment. The World Bank, Washington DC, USA.

Peterson G. E. (2009). Unlocking land values to finance urban infrastructure. Trends and policy options; Number 7, The World Bank, Washington DC, USA.

PwC. (2013). Cities of Opportunity: Building the Future. http://www.pwc.com/gx/en/capital-projects-infrastructure/publications/assets/pwc-cities-of-opportunity-building-the-future.pdf . Web. 10 Dec. 2014.

Ramabodu, M., Kotze, B. & Verster, J. (2007). Diversity and value in Africa's real estate: Challenges facing property development in South Africa. *Journal of Property Investment & Finance*. 25(1): 7-22.

Royston, L. (2013). In the meantime… moving towards secure tenure by recognizing local government. In Trading Places: Accessing land in African Cities. Pp 47-72.

Shaaban, S. (2004). Housing Transformations and Urban Livelihoods in Informal Settlements. The Case of Dar es Salaam, Tanzania, SPRING Research Series No 45.

TCG International. (2011). Developing Sustainable and Inclusive Urban Infrastructure Services, Silver Spring, MD, USA.

UN Habitat. (2004). Urban Land for All. Nairobi.

UN Habitat & Urban Land Mark. (2010). Urban Land Markets: Economic concepts and tools for engaging in Africa.

Urban LandMark. (2012). Improving access to the city through value capture. Pretoria, South Africa.

Viguié V. & Hallegatte S. (2014). Urban Infrastructure Investment and Rent-Capture Potentials. Policy Research Working Paper. The World Bank, Washington DC, USA.

Viruly, F. & Hopkins, N. (2014). Unleashing Sub Saharan Africa Property Markets. Report for RICS.