



Developing a Contextual Framework for Land Value Capture in Lagos, Nigeria

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Abstract

This study aims at developing a framework to guide the use of Land Value Capture (LVC) as a financing mechanism for infrastructure development in Lagos State, Nigeria. This is geared towards facilitating sustainable economic development in the region. Being desk research, the methodology adopted was a literature survey. This was in order to identify the baseline conditions necessary for the efficient application of LVC. The conditions identified were then analysed in terms of their workability within the context of the study area. Data was drawn from research articles, case studies, policy papers, and publications from relevant intergovernmental organizations. In addition to developing a framework that guides the use of LVC in the study area, the study found that there is potential for the use of LVC in Lagos. Areas requiring minimal intervention include the existence of a vibrant property market and a lead implementing institution. The region's current inability to fully capitalize on LVC hinges on not having a strategic national vision on LVC, clear policy framework, sound structure for institutional development finance, nor an effective land title documentation system. This is the first study that develops a framework for the use of LVC specifically for Lagos. Further, the paper contextualizes the baseline conditions for LVC in Lagos, presenting an alternate finance mechanism for infrastructure development revenue.

Keywords: framework, infrastructure, Lagos, land value capture, sustainable urban development

1. Background

Urban infrastructure investments are widely acknowledged as essential for sustainable economic growth and development. Further, they are needed to restructure inequitable and unsustainable cities (McGaffin, Viruly and Boyle, 2019). Unfortunately, regions across Sub-Saharan Africa are still

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grappling with the delivery of as little as basic public amenities. In countries like Nigeria, the infrastructure sector is generally underinvested, resulting in visible deficits in areas like housing, climate resilience - and public services generally. Soyaju (2013) affirms that visible infrastructure investment deficits abound, with Abass (2017) similarly noting that Nigeria is underinvested in overall infrastructure.

Central to the issue of poor infrastructure delivery is finance. These public investments generally require substantial spending. Romanik (2017) writes that there is a daunting challenge in accessing the financing needed to build infrastructure for the growing populations of developing countries. Experience indicates that inappropriate financing mechanisms account significantly for infrastructure financing gaps. Fox and Edminston (2000) note that most African countries have not done a good job due to inadequate funding mechanisms. If sub-Saharan Africa is to gain any traction, effective mechanisms must be applied in closing the funding gaps.

Recent studies (Tyson, 2018; World Bank, 2017) have strongly advocated for private sector participation in funding infrastructure. Scholars like Walters (2012), Blanco *et al.* (2016), Connolly and Wall (2017) have advocated particularly for the use of Land Value Capture (LVC) financing. LVCs use private sector finance to cover the initial costs of infrastructure provision and then 'capture' - through taxes or fees - the costs of infrastructure, from enhanced property values. With land constituting highly valuable assets in many cities in sub-Saharan Africa, the LVC is particularly endearing. Tomori (2003) asserts that the potential wealth inherent in land in Nigeria is more than enough to develop and sustain the country if well managed and administered. Further, the massive population, high growth rate, and dire need for public investments in infrastructure in Lagos create tremendous potential for the utilization of LVC.

2. Research Problem

Most cities in developing countries are not harnessing the benefits of LVCs broadly - due in part - to lack of conceptual clarity. The African Centre for Cities (2015) explains that there is a lack of conceptual clarity on the application of LVC in Sub-Saharan Africa. Generally, financing urban investments using LVC still attracts little interest in Africa. There is also minimal research on its use and applicability (Ijjasz-Vasquez and Guislain, 2015; Oualalou, 2012). In Nigeria, it remains sparsely featured in literature - being limited to studies such as Famuyiwa (2017), Ibrahim and Fosudo (2017); Agboola *et al.* (2018); Famuyiwa (2020), OECD/Lincoln Institute of Land Policy (2022). Regardless, Africa will not be able to cope without this type of financing, taking into account its enormous needs (Oualalou, 2012).

If this financing mechanism is to be adapted for use in Lagos, a framework to guide its use must be developed. The African Centre for Cities (2015) points out that work is needed to develop a framework in the Sub-Saharan context on LVC. Yang, Alterman and Li (2020) similarly assert that the goal is to reach developing countries and tailor the knowledge about LVC tools to their needs and capacities. This paper thus proposes a framework for the use and application of LVC in Lagos, Nigeria, through the following objectives:

- (i) To identify the baseline conditions for the effective use of LVC.
- (ii) To ascertain the workability of LVC within the context of Lagos through the analyses of the baseline conditions required for the effective use of LVC.
- (iii) To develop an LVC framework for Lagos, Nigeria.

The second section of this paper discusses the concept of LVC whilst also highlighting its essential operational features and requirements. The third section tackles the second objective of the research,

on the operationalization of LVC - in Lagos. In the fifth section, an LVC framework is developed, and in the final section, conclusions and recommendations are made.

3. Literature

2.1 Land Value Capture: An Overview

LVC generally refers to financing techniques that recover costs through taxes and fees from the additional values (windfall gains) conferred on real estate from public investments and infrastructure. These charges are then invested/re-invested in infrastructure projects or used for debt servicing. Santos (2017) writes that infrastructure raises the value of nearby land, automatically feeding through into revenues – which helps to pay for the improvements. The attractiveness of LVC in infrastructure financing is based significantly on the responsiveness of land and real estate values to the level and quality of public interventions or infrastructure provided.

LVCs combine the best resources of the public sector (policy, government, social issues, institutions) and the private sector (innovation, efficiency, funds). It is financially self-sustaining for infrastructure (Famuyiwa, 2020) and allows for investment borrowing against future cost recovery. The World Bank (2021) explains that LVC techniques support *all forms* where infrastructure costs or other investments are expected to be incurred from land value enhancements. Figure 1 depicts the process of LVC.

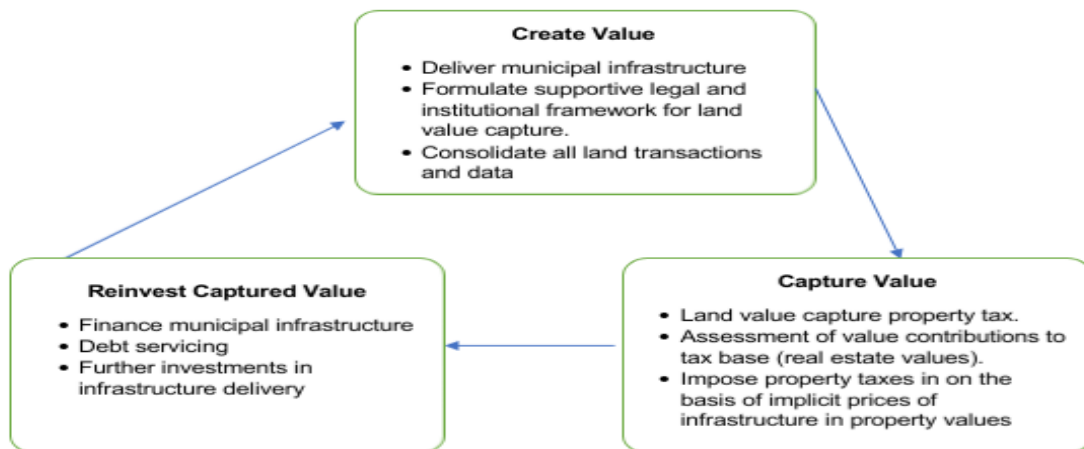


Figure 1: The Land Value Capture Process

Source: Famuyiwa 2020

Cost recovery could be in form of charges imposed on developers (development-based LVCs) or property users (tax-based LVCs) - depending on the specific financing strategy. With development-based LVCs, land value increments are captured by selling or leasing lands, development rights or air rights. Tax-based LVCs, on the other hand, include betterment charges, special assessments, tax increment financing (TIF) and real estate taxes (Suzuki *et al.*, 2015).

Though commonly associated with transportation infrastructure and enhancements, LVCs also support other infrastructure types. According to the World Bank's City Resilience Program (n.d.),

despite being largely associated with transportation upgrades, LVCs open financing opportunities for many more infrastructure items such as water supply, flood mitigation, sanitation and sewage.

In cities like Lagos, there is good potential for LVC due to rising real incomes, increased motorization, rapid population increase, strong economic growth, and high congestion levels - all of which cause land values to appreciate (Obadoba *et al.*, 2019). These factors trigger the demand for infrastructure, which positively influence the viability of infrastructure projects. Besides from the impact on infrastructure development and economic growth, Smolka (2013) identifies regional economic stabilization; fiscal decentralization; urban planning & management strategy, and equitable public policy responses, as other reasons for the growing popularity of LVC.

2.2 LVC Baseline Conditions

Successful implementation of LVC requires a thorough recognition of the baseline factors that form its foundation. The African Centre for Cities (2015) states that the challenge is to identify the minimum requirements that will be needed in city contexts. The various LVC implementation criteria from the literature are highlighted in Table 1.

Table 1: Literature Survey of Baseline Conditions for LVC

Source Document	Baseline Conditions for the use of LVC
Mennetrier and Romanowicz (2010)	Strong political support; adaptation of policies to local conditions; technical expertise/capacity.
Smolka (2013)	Good urban planning and management; political democratization; increasing social and civic awareness with regard to demands for equity in public policy; PPPs in urban services delivery; influence of multilateral agencies like the UN-Habitat Global Land Tool Network (GLTN); fiscal stabilization and decentralization; autonomy of local authorities to mobilize internally generated funds for local development.
Walters (2013)	Political vision; good property tax policy; decentralized authority; effective land use management system; training for policy makers, administrators and developers; timely land valuations; land and property rights titling, maturity of real estate markets; administrative capacity of public agencies implementing the LVC.
Committee on Local Finance for Development (2014)	Development of a local land taxation base; efficient public land titling registration machinery.
African Centre for Cities (2015)	Property market demand and supply; supportive policy; national government commitment; public accountability; effective land-use management & planning; technical capacity across multi-sectoral responsibilities.
Suzuki et al. (2015)	An active real estate market; urban governance

	founded on sound demographic and macroeconomic fundamentals; visionary master plan; flexible land use planning; intergovernmental collaboration; entrepreneurship; regulatory & institutional factors.
McGaffin <i>et al.</i> (2016)	Conduciveness of land market to value creation; land use regulation; investment policy; legal framework; fiscal and governance structure; local circumstances and rooted traditions regarding land rights.
Agboola <i>et al.</i> (2018)	Functional urban land market with well-developed and documented market indices; established land use planning system; active finance market accessible to institutional and private developers; efficient land rights. (though, with a specific focus on TIF as an LVC mechanism, the study is one of the extremely few that have featured LVC in Nigeria.)
German and Bernstein (2018)	Enabling authority; political will; fiscal framework; capacity of public officials.
The International Bank for Reconstruction and Development (2019)	Management skills (to deal with diverse stakeholders); proper understanding of land market conditions; comprehensive property monitoring systems; coordination among fiscal planning, and judicial entities; political resolve of municipal leaders.
Mahendra <i>et al.</i> (2020)	Political vision; intragovernmental coordination & process integration; national regulatory & policy enablement; accurate land cadasters; reliable financial markets/plans; harmonized objectives between public and private players; learning & capacity building.
World Bank (2021)	Robust real estate market; conducive legal and regulatory framework; strong property tax collection system to include clear land tenure systems; strict enforcement; adequate training of relevant stakeholders.
The World Bank's City resilience program (n.d.)	Land assessment measures; a robust land cadaster; effective tax administration capacity; fiscal decentralization; strong local real estate market that naturally differentiates values of land in their unimproved condition.

Broadly put, the factors which influence the demand and supply of property (real estate market dynamics), as well as supportive institutional parameters, form the significant elements in the implementation of LVC (African Centre for Cities, 2015). Table 1 is essentially geared towards the development of the contextualized framework. The various criteria identified are broadly clustered into key thematic areas, as presented in the following section.

2.2.1 Summary of Baseline Conditions Pertinent to LVC

This section presents the elements required for the operationalization of LVC - as drawn from the literature survey in section 2.2.

2.2.1.1. Real Estate and Broader Financial Market Factors

This refers to market and associated financing strategies that could trigger or impair investment decisions in real estate.

2.2.1.1.1 A Vibrant and Mature Real Estate Market

This encapsulates those factors that trigger property market investments and participation (demand and supply generally). ‘Demand’ is triggered by a growing population, tenure security and access to finance. ‘Supply’ is supported by access to land, tenure security, and the availability of development/mortgage funding from capital markets. In addition, is the city’s role in infrastructure delivery, through the sale of development rights, and or improved infrastructure to developers and property owners (African Centre for Cities, 2015). Mahendra et al (2020) present the example of São Paulo, where a robust real estate market triggered an appetite for LVC, making implementation easier. This LVC element is clearly intertwined with other factors as discussed below.

2.2.1.1.2 Supportive Finance System

Due to the capital-intensive nature of property market products, equity sources remain largely inadequate. Thus, the need to turn to capital markets for long-term debt maturities. The capital market connects the monetary sector with real estate investors, promoting growth in the market. A supportive financial system is characterized by low transaction costs of finance, liquidity provision, stability in the value of securities, informational efficiency, and productive capital allocation. The lack of capital and an ill-developed finance system will result in limited activity in real estate markets (Adlington *et al.*, 2000; Eni *et al.*, 2016).

2.2.1.2 Broad Institutional Framework

The institutional framework consists of formal and effective public structures that facilitate, enable, legitimize, and make workable, primary LVC factors (i.e. real estate markets and financial factors).

2.2.1.2.1 National Vision and Political Support

Areas backed by a supportive national vision have high potential for success in LVC. Buensuceso and Purisima (2018) affirm that cities that have met the most success with LVC have particularly given countenance to long-term visionary plans. Where political commitment is merely tentative, an LVC mechanism may start movement in the right direction but will hinder the full realization of the inherent benefits (Mahendra *et al.*, 2020).

2.2.1.2.2 Policy / Legislative Framework

There is the need for a robust legislation on LVC. Firstly, it is required to provide the roles and responsibilities of all key players. The African Centre for Cities (2015) explains that policy is essential to provide a framework on issues like the functions of various players in the system,

financing approach from private partners and repayment methods. Secondly, it translates into creating a dedicated public authority that is concentrated on managing, implementing, and monitoring particular urban development projects. It also helps secure participants' rights, lays out the appropriate technique(s), identifies specific role(s) of public service provider(s), and establishes revenue collection method(s) and debt repayment structure(s).

Finally, a sound policy highlights concerns on social equity and prevention of gentrification/displacements (African Centre for Cities, 2015; Biitir, 2019). In India, for example, Tirumala and Tamuse (2021) write that a reflection on policies brings to the fore the conflicts between incorporating private sector motivation of profit maximisation and public sector responsibilities. Legislations essentially legitimize this financing mechanism (UNESCAP, 2019).

2.2.1.2.3 Security of Tenure and Land Rights, through Effective Land Administration and Title Documentation

This condition encourages sustainability and efficiency of land use and incentivizes economic activity in property markets. Wehrmann and Lange (2019) explain that increased tenure security provides certainty and incentives to invest in long-term land and real estate improvements. In Lima, for example, a large-scale land titling programme increased the rate of housing investments by over 60% (Field, 2007). Weak and insecure property rights limit the effectiveness of land markets to transfer property efficiently and thus reduce incentives to invest in land (Boudreaux and Sacks, 2009). Effective land administration provides information to support land-use policies and offers effective guarantees and protections for land users and operators against forcible displacements, intrusion, interferences etc. The use of comprehensive digital land cadasters has become indispensable to achieving efficiency in this area.

2.2.1.2.4 Land Use / Regional Planning

With clear agendas for area planning, infrastructure investments and supporting systems can be developed. The African Centre for Cities (2015) points out that planning allows better understanding of possible levels of service, as well as the extent to which infrastructure can be provided at adequate service levels to all. Such planning considers the role of service providers, economic objectives of the city, identification of service provision programmes, opportunities for infrastructure finance, and selection of appropriate LVCs.

Secondly, planning facilitates a balance between revenue optimization and social equity - especially for lower-income cities. Mahendra *et al.* (2020) note that with urban planning, qualifying cities of relatively lower incomes can ensure a better balance between revenue maximization goals whilst avoiding the potential outcomes of uncontrolled gentrification e.g displacements. Finally, without a functional plan, it is difficult to charge for additional development rights or ascertain where future land value increases will be (Berrisford *et al.*, 2018).

2.2.1.2.5 Lead Implementing Institution

There must be a lead implementing institution, overseeing and ensuring seamless coordination of all key ministries, agencies, departments and stakeholders involved in the LVC process. The Asian Development Bank (2021) reiterates that achieving the benefits of value capture in infrastructure

financing will require the identification and appointment of a lead implementing institution. Buensuceso and Purisima (2018) submit that the lead implementing institution - also in charge of establishing and enforcing straightforward LVC process flows - would be saddled with the responsibilities of exploring value capture opportunities, identifying the optimal schemes for projects of significance, and coming up with a corresponding implementation plan. Further would be providing or facilitating advisory services on how to carry out LVCs, measuring the land value uplift attributable to infrastructure for projects, and developing the mechanisms for profit and risk-sharing among the various government and private entities involved.

2.2.1.2.6 *Strategic Intragovernmental Synergy and Integration*

Between key government departments, there must be cohesion in terms of administrative and implementation processes. According to Mahendra *et al* (2020), various agencies must coordinate to ensure that LVC works, such as those responsible for land use planning, economic development, and various other key actors. This is especially important to ensure that actions at different government levels and across different agencies are mutually reinforcing, and not working against each other.

2.2.1.2.7 *Technical Expertise*

LVC requires skill and experience in various key roles. The World Bank (2019) asserts that the successful implementation of LVC demands skills to deal with many complex factors and diverse stakeholders. For example, the proper understanding of land market conditions, expertise in valorization/ value determinants, and a fluid dialogue among fiscal, urban planning, and judicial entities are some technical skills required. It is also crucial for personnel to recognize the potential and significance of dealing with property affected by infrastructure developments. In Mahendra *et al.* (2020); Smolka and Amborski (2000), building the technical, political, and administrative capacities is crucial to sustaining process efficiency.

2.2.1.2.8 *Sound Alliance and Trust Between Public and Private Sector Stakeholders*

This becomes crucial due to the fee imposition element of LVCs. The International Association of Public Transport (2019) points out that because LVCs depend on the ability to pay a new tax or fee to further fund infrastructure, stakeholder engagement becomes crucial. A mechanism that consists of imposing a fee on a previously free service such as public transport is likely to encounter public hostility. McGaffin *et al.* (2016) thus point out that the objectives and non-negotiables of both the public and private players must be clear, unambiguous and understood by all parties from the outset. Trust in government is also key to the workability of LVC. LVCs should be embedded in a participative process that infuses a climate of trust (International Association of Public Transport, 2019). Smolka and Iracheta (1999) reiterate that community engagement also provides the government with a rich source of ideas.

From this highlight, it is quite clear that these various LVC conditions are somewhat intertwined. For example, social equity highlighted in area planning is also an objective with land use planning.

2.3 Operational Process - LVC

As with projects generally, the LVC process advances in stages. Jillella *et al.* (2015) point out that many cities have implemented LVC-based infrastructure financing, using a stage-wise process from initiation to implementation. As seen in Table 2, the entire LVC process can be categorised into six stages: initiation, planning, design, strategizing, execution, and operation. From this, the various operational elements feature accordingly and in context. Suzuki *et al.* (2015) and Jillella *et al.* (2015), provide meaningful and comprehensive insights on the LVC operational process, which is adapted for Table 2.

Table 2: LVC Operational Process

	LVC Life Cycle Stages	LVC Processed	Baseline Conditions/ Key Inputs
1.	Initiation	<ul style="list-style-type: none"> • Need and problem definition • Project objectives • Network feasibility • Legislations and regulations. 	<ul style="list-style-type: none"> • National Vision. • Policy • Favourable real Estate Market conditions.
2.	Planning	<ul style="list-style-type: none"> • LVC Catchment identification • Infrastructure beneficiary analysis • Property value impact analysis • Stakeholder category identification. 	<ul style="list-style-type: none"> • Lead implementing institution. • Area planning. • Favorable Real estate market conditions. • Technical expertise. • Sound Alliance and trust between public and private sector stakeholders.
3.	Design	<ul style="list-style-type: none"> • LVC Funding assessments • LVC Mechanisms identified. • Sustainable development focus. • Infrastructure and land use integration. 	<ul style="list-style-type: none"> • Lead implementing institution • Policy/ Legislative Framework • Area planning.
4.	Strategizing	<ul style="list-style-type: none"> • LVC value proposition defined • LVC fund structure established • LVC stakeholder gain share model • Value redistribution focus 	<ul style="list-style-type: none"> • Lead Implementing Institution • Policy/ Legislative Framework
5.	Execution	<ul style="list-style-type: none"> • LVC Implementation tools. • LVC Fund management. • LVC Organizational focus. • LVC accountability. 	<ul style="list-style-type: none"> • Lead Implementing Institution. • Policy/ Legislative Framework. • Supportive finance system. • Strategic Intragovernmental Synergy and Integration. • Sound Alliance and trust between public and private sector stakeholders.
6.	Operationalization	<ul style="list-style-type: none"> • LVC debt repayment. • LVC redistribution to 	<ul style="list-style-type: none"> • Lead Implementing Institution • Supportive finance system

	community. <ul style="list-style-type: none"> • Monitoring and evaluation. • Periodic review of LVC model. 	<ul style="list-style-type: none"> • Area planning. • Sound Alliance and trust between public and private sector stakeholders
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Source: Adapted from Jillella *et al.* (2015); Suzuki *et al.* (2015)

4. Research Process

As mentioned earlier, this study is desk research, utilizing secondary data. The research process used was based on the framework adapted from Ke *et al.* (2009). (See Figure 2). McIntosh *et al.* (2017); and Agboola *et al.* (2018) used similar research design.

Based on the study objectives outlined in the first section of this paper, a literature survey (Section 2.2) has helped tackle the first objective, which is “to identify the baseline conditions for the effective use of LVC”. In this regard, the documents selected were based on their specific content on LVC operationalization factors - particularly in low and middle-income regions. Literature was drawn from academia/research articles, case studies, policy papers and publications from relevant intergovernmental organisations. Articles were sourced from online databases and search engines.

The operationalization factors identified in the literature (in Section 2.2.1) were then analyzed within the context of their workability in Lagos (Section 4). This then led to the development of a framework to guide the use and application of LVC in Lagos. Collins and Stockton (2018) submit that such a framework best functions as a map of how all of the literature works together in a particular study.

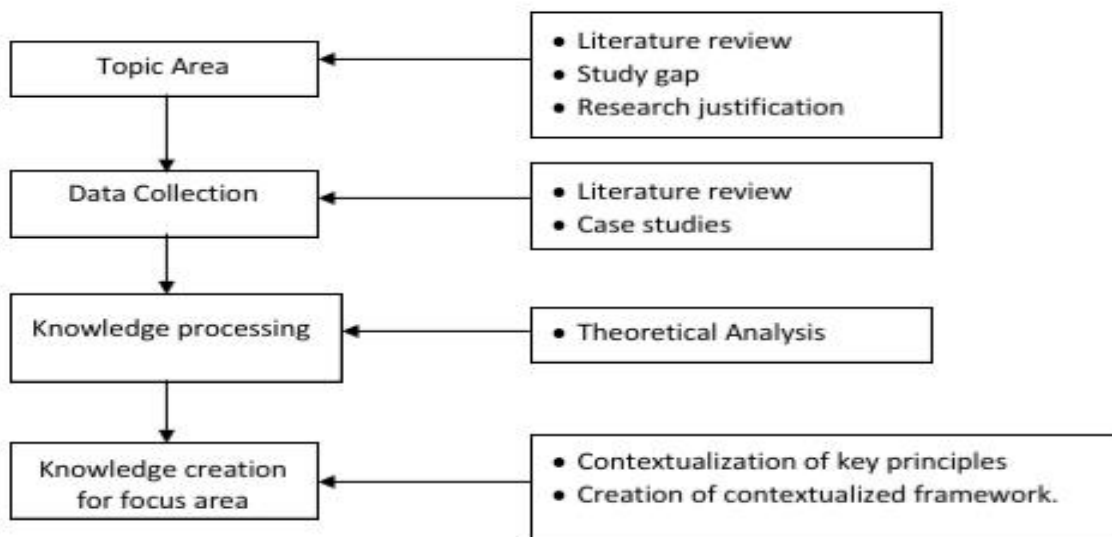


Figure 2: Research process. Adapted from Ke *et al* (2009)

5. Contextual Analyses for the Implementation of LVC in Lagos

This section presents analytical discussions on the workability of LVC in Lagos.

5.1 Vibrant and Mature Real Estate Market

The Lagos property market is highly active in terms of transactions and developments. According to Babawale and Koloeoso (2006), Lagos has the most active property market in Nigeria, with the highest average property value and stock of investments. For these reasons, Lagos ranks highest in potentials to generate revenues from real estate charges (Famuyiwa, 2019). Odunfa *et al.* (2021) similarly point out that this market is a viable option for investors. Further, Lagos has been the focus of several international organizations like the World Bank and the International Monetary Fund, who have placed it under particular scrutiny - for possible donor, lending and grant opportunities (Lee and Anas, 1992; Babawale and Nubi, 2011). The macroeconomic fundamentals (steadily increasing population, economic growth and industrialization) in the Lagos property market also contribute to its LVC viability characteristics.

Regarding market maturity, Abere *et al.* (2018) submit that Lagos has emerged to the point of attracting specific foreign investment in finance. However, a persisting problem with the market's maturity is the lack of data banks on property transactions (Abere *et al.*, 2019). As with other real estate markets, there is still some degree of imperfection. Recommendations proposed for pushing the market to full maturity are ease of title registration; availability of published data on property transactions; and enhancement of mortgage finance structures. Further, relevant stakeholders to address these recommendations include the state government (title registration), real estate regulatory authorities (data on property characteristics) and the Federal Mortgage Bank of Nigeria (finance) (Abere *et al.*, 2018).

5.2 Supportive Finance System

Real estate demand is high in Lagos, triggered by an ever-increasing population. However, effective demand is fraught with viable long-term lending arrangement constraints. Thontteh *et al.* (2020) report that development finance ranks 3rd amongst the challenges faced by real estate developers in Lagos. The International Finance Corporation (2017) similarly observes that in several emerging markets like Lagos, the use of capital markets for investment financing still has a long way to go in enhancing the availability of long-term funding - due to the absence of clear property rights; the requirement to obtain Governor's consent to each transaction; inefficient land management systems and high costs of property transactions (Boleat and Walley, 2008). Nevertheless, development activities and transactions are still high in spite of the finance challenge. The World Bank (2016) reports that the Nigerian construction industry has experienced steady growth, with its contribution rising from about 1% to 3% of GDP. The lack of finance has led to the use of equity. In Kesinro *et al.* (2018), more than 90% of new homes are built with funds from personal savings. The IFC (2017) submits that essential conditions for a well-functioning financial system is the existence of sound macroeconomic/policy frameworks, downward review of interest rates, loan maturity extensions and indexation of mortgages (World Bank, 2016). Also, is land registration efficiency - as discussed in section 4.5.

5.3 National Vision and Political Support

In Nigeria, there doesn't appear to be a specific visionary agenda, and political commitment towards LVC - especially at the national level. The African Centre for Cities (2015) similarly asserts that there is relatively little happening in Sub-Saharan Africa, creating room for far more efforts. There should be an advocacy aimed at cities to assist them in preparing infrastructure investment plans of this nature. The situation in Nigeria may be due to the lack of a national infrastructure plan that significantly considers the role of land and real estate in infrastructure financing. The National Integrated Infrastructure Master Plan (2015) makes no provision for exploring the use of LVCs. It, however, identifies PPPs as a sustainable financing option. This creates a good starting point for promoting the use of LVC.

Governments at national and subnational levels in Nigeria, should create visionary agendas on monetizing land through LVC financing instruments. This, through first understanding the potentials of LVC and the inherent benefits for the long haul. Though there have been tracts in the interest in LVC by the Ministry of Works and Housing (the Highway Development Management Initiative - HDMI) – it remains loose in infrastructure development initiatives.

At the national level, the Ministry of Works and Housing, responsible for formulating and implementing land policies and projects for the federal government of Nigeria, is well positioned to develop visionary LVC agendas. The ministry (through its lands and housing development department) is also statutorily charged with providing leadership in policy, administration, and land management for other government tiers. To push the LVC agenda, the ministry will have to synergize with the Infrastructure Concession Regulatory Commission (ICRC) of Nigeria, whose key objective is accelerating investment in national infrastructure through private sector funding. The ICRC enables the Federal government, its ministries, departments, and agencies to establish and implement PPPs. The World Bank (2020) asserts that the ICRC was established to aid collaboration and promote an orderly and harmonized framework for developing Nigeria's infrastructure and accelerating the development of a market for PPP projects. Thus, the ministry can facilitate a long-term visionary agenda across states in the country. The notion of LVC should be targeted at regions with high growth and market potential.

In Lagos, while there are PPP initiatives, the government is not to relent in its efforts. LVCs need to be also identified and touted as a key and viable tool, for infrastructure development by the state. The Lagos State Development Plan for 2012-2025 points out that the existing PPP programmes in the state must be carefully restructured. This shows a drive for the inclusion of innovation, which can provide an avenue for introducing and promoting the use of LVCs.

5.4 Policy and Legal Strategy

There is no LVC policy for Lagos. According to Famuyiwa (2020); OECD/Lincoln Institute of Land Policy (2022), LVC is not expressly provided for in any existing legislation for infrastructure delivery. However, land-based financing policies such as the Land Use Charge Law (the annual property tax) exist. The closest - in terms of providing a framework for infrastructure financing arrangements with strategic private sector participation - is the Lagos state 'PPP Law of 2011'. Key features of the PPP law centre on establishing the PPP office and procuring private sector partners for

infrastructure development. PPP procurement in Lagos is also governed by 'The Lagos State Public Procurement Act 2011' and regulations issued by the State Executive Council governing the PPP process (Nigeria Infrastructure Advisory Facility, 2012).

Nevertheless, this constraint can be surmounted if the existing PPP law is leveraged on. Existing allied policies can be broadly aligned with the principles of LVC. McIntosh *et al.* (2015) reiterate that altered legislation can be proposed if there is a regulatory or legislative deficiency. This can be carried out through the support of international development agencies. The African Centre for Cities (2015) submits that in advocating for LVC, international development agencies can provide support in preparing policies - through the Department for International Development (DfID).

5.5 Secure Property Rights through Land Administration and Title Registration

The onerous and cumbersome process of securing title through land registration in Nigeria has been a long-standing phenomenon. Land administration in the region is characterized by a complex system of administrative bottlenecks and high costs. Famuyiwa (2020) writes that while recent reforms on land title registration in Lagos, such as the enactment of the 'Land Registration Law of 2015' and automation of the registration process, are applauded, very rigorous and challenging title processing and documentation subsist. Also is the lack of a complete and dynamic digitized cadastral system. Thontteh *et al.* (2020) found that property developers indicated that the rigours of processing title documentation were the most pressing problem bedevilling land activities and housing supply to the market. Thus, the reform in this area has been ineffective. Challenges that work against effective land titling and registration are prohibitive costs, corruption, time lags at the various stages (caused by the involvement of a multiplicity of government agencies), records mismanagement, information gaps, arduous processes compounded by a lack of supporting technology and digitization (Van der Molen, 2002; Kuntu-Mensah, 2006; Thontteh and Omirin, 2006; Adekola *et al.*, 2020).

If the land administration process is to be eased and fully effective, there must be a holistic reform targeted at these problem areas identified. Firstly, rates must be reviewed downwards drastically. Secondly, operational processes must be further digitized, by including online submission of applications. Thirdly, the roles of the various agencies, such as the lands survey, town planning, and lands commission, must be synchronized in liaison offices within the same location with the Lands registry office of the Lagos State Secretariat. In addition, Thontteh and Omirin, (2020) posit that decision-makers must engage in focus group discussions to better understand how land titling challenges can be significantly eased. Also, there must be the actualization of penalties against erring and corrupt officials.

5.6 Land Use/Regional Planning

Based on the main planning drivers (in subsection 2.2.1.2.4), this subsection reviews the urban planning framework in Lagos - within the context of the policy and operations of the Lagos State Ministry of Planning and Urban Development. The ministry regulates all physical planning, development and urban regeneration in the state. Its foremost responsibilities are the "initiation, formulation and implementation of physical planning, urban development, urban renewal policies and programmes".

Firstly, in terms of developing infrastructure, the ministry's activities on site selection are laid out in policy. In Section 51 of the Lagos State Urban and Regional Planning and Development Law 2010 (LSURPD) — through the Urban Renewal Agency of the ministry — infrastructure planning

functions include monitoring and identifying catchments qualified for upgrading and advising the government on redevelopment or renewal programmes. Further, is the preparation and implementation of approved urban redevelopment projects.

Secondly, regarding social equity, social considerations surrounding urban development projects in Lagos appear to be undermined and neglected. Ismaila and Lawanson (2018) submit that development policies and projects in Lagos are primarily determined by neoliberal market forces rather than by the consideration of social issues - thereby leading to gentrification. In preventing the negative consequences of social exclusion, policies and practice guidelines must feature a balance between strong economic outcomes and social inclusivity. This can be actualized through the LSURPD, which provides for the offering of advice on state development projects with socio-economic and environmental impacts.

Finally, the LSURPD has a hierarchical plan at various levels and implementation strategies. While Olajide *et al.* (2021) affirm that the Lagos government understands the whole essence of urban planning and development - at least in theory, Agunbiade and Ewedairo (2014) note that there is no strong platform through which the enactment of the law can be effectively implemented. Resolution strategies must thus highlight the objectives and work responsibilities of the implementing agencies in the law.

5.7 Lead Implementing Institution

Literature provides little guidance on the selection of a lead implementing institution. Few studies like Buensuceso and Purisima (2018); Medda (2009) identify leading PPP agencies as most suitable to perform the functions of a lead implementing institution. Reasons are due to flexibility in adapting the structure of incentives and risk-sharing. The ADB (2021) elucidates that the lead implementing institution could be structured as a single powerful agency or a joint coordination committee comprising various government stakeholders. From the foregoing, the Lagos state PPP office would be most suitable in terms of coordination and lead positioning.

5.8 Technical Expertise and Capacity Building

The Lagos state PPP office is equipped with a structure whose governing board is statutorily composed of members with requisite expertise in finance, banking, engineering, law, with at least ten years of cognate experience. However, in terms of expertise in real estate market conditions and the estimation of valorisation and distributional impacts of infrastructure, primarily through techniques such as hedonic analyses, there is a gap. In seeking to fill such a role, it must be noted that such expertise is more prevalent in real estate academia than in practice. Abidoeye and Chan (2017) found that the main contributors in this area in Lagos were academic scholars affiliated with universities, with real estate professionals not contributing. Thus, academics who are conversant with the property market, highly technical environmental valuation techniques, and econometric aspects are ideally suited for this role.

Other aspects requiring strong skill sets (fiscal, urban development and legal planning) appear to be fairly covered by the establishment of the PPP office. Further, because LVC is a new concept, training should be conducted to reinforce the existing skill set and conversance with this financing mechanism. Capacity can be enhanced by seeking support from international development agencies, such as the Public-Private Infrastructure Advisory Facility (PPIAF) and the DfID. The PPIAF is a

multi-donor technical assistance facility aimed at helping developing countries improve the quality of their infrastructure through private sector involvement.

5.9 Sound Alliance and Trust between Public and Private Sector Stakeholders

In attaining public trust in LVC, the government will need to embark on efficient measures towards it. Public confidence in governance has been one of scepticism and distrust in Nigeria. This has featured in research studies - with below satisfactory outcomes. Famuyiwa (2019) found a negative perception by the public - with land-based taxation. The OECD/Lincoln Institute of Land Policy (2022) similarly identified the issue of resistance from landowners in Nigeria. For public trust to thrive, there must be transparency and accountability in the LVC process. In Famuyiwa (2020), effective connections between revenue and services enhances trust in government. Haas (2019) submits that one clear way to achieve transparency and trust is to hold public consultations. Also, the government's ability to deliver on its commitments is ultimately the best way to build trust and accountability over time. Periodic town hall meetings and grassroots engagements are needed to address public concerns.

In terms of attaining a sound alliance with other stakeholders, the Nigeria Infrastructure Advisory Facility (2012) stipulates in the official PPP manual for Lagos state, that the government has certain initial roles and responsibilities to ensure that PPPs can be implemented successfully with the acceptance of all stakeholders and to the satisfaction of all beneficiaries. It further identifies project users, developers/operators, community participants, citizens, financiers, and relevant government authorities as major stakeholders. It is thus necessary that these guidelines are strictly enforced.

It can be seen that there are still some challenges confronting the use of LVC. Nevertheless, and according to Hart (2020), developing cities can still benefit from generating significant public revenue by understanding the local, political and financial contexts. This study thus presents corresponding mitigation approaches.

6. Framework for LVC in Lagos

The framework developed here aims to provide a broad-level strategy and overall guidance for LVC initiatives in Lagos. The main elements under scrutiny are the baseline conditions for the effective use of LVC. The conceptual elements for using LVC and the operational process are incorporated below in a diagrammatic representation (Figure 3).

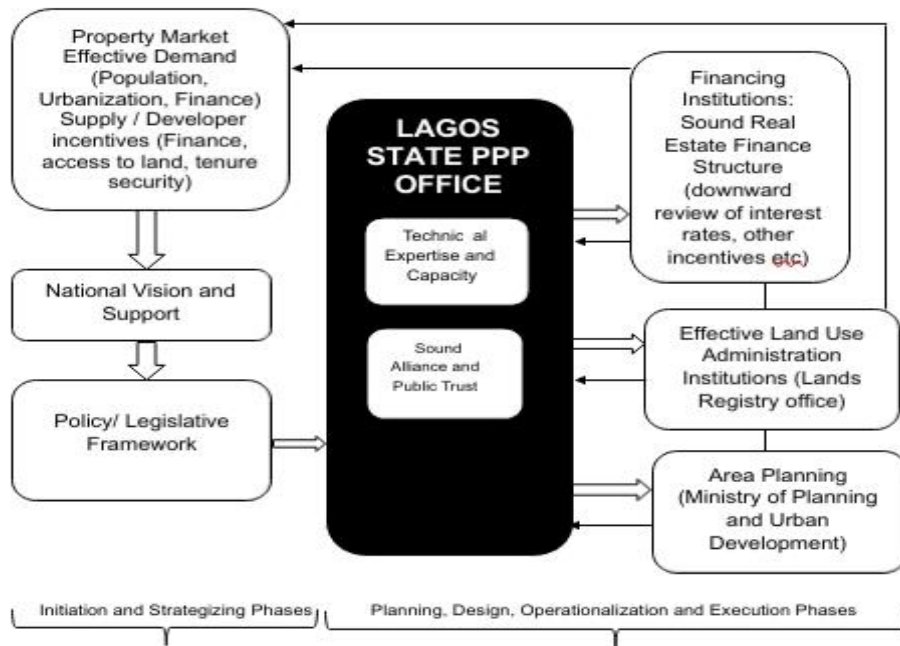


Figure 3: Operational Framework for Land Value Capture in Lagos State

Figure 3 shows the LVC operational framework developed. Property market enabling conditions, national vision/support and an enabling legislation fall under the 'Initiation' and 'Strategizing' phases as indicated in Table 2. At the 'Planning', 'Designing' 'Operationalization' and 'Execution' phases are the other baseline conditions.

The process and operational elements are all integrated into a diagrammatic representation. From the figure, population and property market conditions are vital to the conceptualization and initiation of LVC. This brings about a vision and political commitment. A policy guideline must then be formulated and structured in order to establish or identify a lead implementing institution (the Lagos state PPP office), roles, responsibilities, and other participating institutions. The office coordinates the participating ministries, departments and agencies (MDAs) involved in the LVC process. The Lands registry bureau in Lagos, in addition to promoting property market vibrancy through efficient title administration and tenure security, will provide information to support LVC legislation. Technical expertise at the Lagos state PPP must include specialization and understanding of real estate market conditions, the estimation of valorisation and distributional impacts with techniques such as the 'hedonic' approach. Public trust also must be strategically gained through a tradition of delivering on promises, public consultations, and taxpayer engagements. In all of these, there must be a frictionless flow of work between the participating MDAs holding the responsibilities that come with these baseline conditions.

7. Summary and Conclusions

Generally, LVC has a key role to play in addressing the infrastructure financing deficits in Lagos. This prompted a study of this nature, to explore the prospects of LVC operationalization in Lagos. The study found that LVC holds potential for use in Lagos in terms of an active real estate market, policy framework, technical capacity, area planning and a lead implementing institution. However,

the areas of security of land rights, mortgage finance, and public alliance require some amount of reform. The following are conclusions derived from the study.

- The creation of strategic and supportive policies, or introduction of new provisions on LVC in the PPP Law of 2011.
- Digitization of land registries; downward review of rates, and harmonization of processes in title registration.
- Political commitment and broad level identification of LVC for infrastructure development.
- Downward review of interest rates, loan maturity extensions towards enhancing mortgage/development finance.
- The LSURPD should include strict mandates directed at implementing agencies.
- Policy and practice guidelines must feature a balance between economic outcomes and social inclusivity.
- Strategic promotion of acceptability among the populace, and land users particularly. Pushing of drives towards education of the public on LVC. Also, transparency of processes and public access to information
- Expansion of capacities to include proficiencies in urban market dynamics, highly technical environmental valuation techniques and econometrics.

Nevertheless, the actions at different levels and across departments and agencies must work in synergy and cooperation with the lead implementing institution. By doing so, case and location specifics can be learnt for recreating projects on a larger scale. It is also recommended that a pilot project on a small scale is tested since this financing mechanism is 'alien' to the region.

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