## Unlocking the Financial Potential of Local Governmentowned Land and Buildings in Sub-Saharan Africa

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This report reflects the views of the author and does not necessarily represent the views of UN-Habitat, nor those of Harvard University and its faculty. It is submitted in partial fulfillment of the requirements for the degree of Master in Public Policy.



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# Abbreviations

SSA	Sub-Saharan Africa
GLB	Government-owned land and/or building
OSR	Own-source revenue
Р3	Public-private partnership
UN-Habitat	United Nations Human Settlements Programme
UEFB	Urban Economy and Finance Branch at UN-Habitat

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# Section 0

## **Executive Summary**

### **Research Focus and Rationale**

This report explores how local governments in Sub-Saharan Africa (SSA) can better manage government-owned land and buildings (GLBs) to mobilize resources and minimize cost.

Increasing urbanization and expenditure-driven devolution is placing greater financial strain on local governments in SSA. Specifically, local governments face increased demand and responsibility for urban services and infrastructure, but limited options to pay for greater capacity to meet that demand. Consequently, jurisdictions tend to be heavily dependent on fund transfers from national governments and donors.

Instead, SSA local governments need to boost revenues collected directly by themselves, referred to as own-source revenues (OSR). Property tax, while representing long-term potential, is time-consuming and resource-intensive to implement. Other traditional sources such as licensing fees and user charges often have negative economic distortion effects that must be carefully balanced. This suggests SSA local governments should explore alternative interim or complementary revenue sources to address financing gaps more immediately.

GLBs are one such potential source that is underexplored in the SSA context today. Specifically, public property serves as an asset base from which local government can reduce expenditures, raise direct operating and capital income, and mobilize private investment. Addressing GLBs also has nonfinancial benefits around good governance and sustainable and equitable urban development.

### **Primary Findings**

A literature review and academia-based interviews helped identify nine levers local governments can consider to more effectively take financial advantage of their GLBs:

	Lifecycle management: Adopt acquisition-to-disposal view, including preventative maintenance, to optimize costs across a property's entire use.
<b>Operations</b> to reduce expenditure	Energy-efficient management: Implement environmentally sustainable systems and technologies to reduce utility spending.
	<b>Space and property rationalization:</b> Identify underutilized or redundant properties and spaces within properties; reoptimize for higher-value use.
<b>Transactions</b> to raise direct revenue	<b>Property-based user fees:</b> Administer charges linked to access or use of government-owned spaces.
	<b>Property leasing:</b> Lease unused sites in order to obtain interim income from the property.
	Sale of property: If a property is of no long-term strategic use, sell the property for an immediate lump-sum payment.

# **Investments** to mobilize private resources

**Sale of "rights":** Sell air rights of above a property, transferable developer rights to shift floor-to-area allowances, or rights to operate a service.

**P3s for social development:** Secure private partners to invest in the building and/or operation of a property with a public-service purpose.

**P3s for commercial development:** Secure private partners to invest in the building and/or operation of a property with a commercial purpose.

By comparing the relative economic impact, political risks, administrative feasibility, and market requirements of these nine levers, several themes around their relative tradeoffs emerged. Understanding themes for which conditions each lever may be most appropriate then allowed for the development of a two-part diagnostic to help local governments prioritize levers based on their specific contexts:

### **Diagnostic Question Components**

	Evaluation 1A: What are the jurisdiction's fiscal priorities?			
Part One	Evaluation 1B: What types of properties does the jurisdiction have?	Applied once to a		
	Evaluation 1C: To what extent does the jurisdiction have existing revenue collection and property tax capabilities?	jurisdiction to quickly eliminate incompatible		
	Evaluation 1D: What private market conditions exist in this jurisdiction?	GLB levers		
	Evaluation 1E: How exposed is the jurisdiction to governance and institutional risk factors?			
Part Two	<b>Evaluation 2:</b> How complex is it to implement each lever compared to its economic potential within a given jurisdiction?	Repeated across remaining levers to determine feasibility and potential for specific jurisdiction		

Part one of the diagnostic is a higher-level assessment of a jurisdiction's operating context to quickly parry-down lever options.

Part two of the diagnostic represents a more robust analysis. It determines which levers are most financially beneficial for a jurisdiction compared to how that jurisdiction's capabilities affect implementation feasibility. Because this second analysis is more intensive, it is easier to conduct after first narrowing-down options via the part one diagnostic's initial screening.

Furthermore, part one raises environmental factors which would affect the success of individual levers regardless of a jurisdiction's internal capability to implement them, meaning the part two evaluation would be less relevant if a lever is eliminated based on earlier diagnostic factors.

### **Application of Findings**

To demonstrate how local governments can apply the defined diagnostic framework to themselves, this report used seven counties in Kenya as an illustrative example. The counties were assessed collectively to maintain confidentiality. The diagnostic assessment determined that operationally-oriented GLB levers and some user fees are most strongly suited to the example counties' GLB portfolio, revenue capability, market conditions, and risk factors:

- **Immediately**: counties can adopt advertisement fees and rationalization focused on internal spaces. These have limited additional capability needs to implement, but lower financial and economic potential.
- **Near-term**: counties can also build-up technical capabilities around energy-efficient and lifecycle management to capture more moderate financial returns that can be reinvested into public services or other higher-potential revenue streams.

More importantly, the example Kenya diagnostic also elevated **pervasive challenges around land governance and institutions**. Recent shifts in local government structures and responsibilities, combined with poor data tracking and cross-government planning, result in ambiguity and limited transparency around GLB management. These challenges do not necessarily preclude local governments from adopting GLB levers at a more incremental pace, but they do require parallel steps to mitigate the institutional risks of doing so. There is especially a need for increased emphasis on updated property registries, oversight processes, and coordinated decision-making. These needs extend beyond Kenyan local governments and are applicable across SSA.



# Section 1

## **Research Focus and Methodology**

This report explores how county and municipal jurisdictions in Sub-Saharan Africa (SSA) can better manage government-owned land and buildings (GLBs) to generate resources, both revenue and investments, and minimize cost. It is structured around three components:

- 1. A <u>rationale</u> for why GLBs are relevant to the fiscal health and urban development of local governments in SSA
- 2. A <u>comparative assessment</u> of what levers exist to unlock the financial potential of GLBs and defines the conditions under which each lever is most relevant, leading to a diagnostic framework for prioritizing levers
- 3. An <u>illustrative diagnostic</u> articulating how the prioritization framework might apply to a subset of Kenyan counties

While insights developed through this research are intended to have applicability for local governments across SSA, the final diagnostic is explicitly centered around Kenya. Narrowed framing ensured data-collection was achievable within the logistical and time constraints of this project. It also took advantage of UN-Habitat's Nairobi headquarters in Kenya to better facilitate connections with local governments, which offset the limited public information on local government property management in SSA countries today.

Four types of data sources, adopted based-on time and logistical constraints, inform this report's content:

### **Literature Review**

A literature review pulling from academic papers, practitioner guides, and policy reports identified potential GLB levers available to governments to address revenue and expenditure challenges. It also informed the existing state of local government finance and GLBs in Kenya and SSA.

### **Government-based Interviews and Survey**

UEFB identified Kenyan local governments willing to participate in a survey and/or in-person interview, which were conducted through January 2020. The interviews and survey led to descriptive statistics and qualitative evidence for how Kenyan counties manage property assets today. Seven counties agreed to participate, but data will only be shown in aggregate to protect participants' confidentiality. The counties are Bomet, Kajiado, Kilifi, Kisumu, Kwale, Nyamira, and Vihiga.

These counties were those willing to engage in this research and were not selected through an explicit rationale. However, they still manage to represent three distinct Kenyan regions: Lakes region towards the Ugandan border, Lower Eastern region near the Tanzanian border, and Coastal region along the Indian Ocean. These three regions happen to be the areas that economists view as the primary urban population hubs in Kenya, making them ideal for understanding challenges faced by urbanizing local governments.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> Cira et al. 2016



Figure 1: Map of Kenya with surveyed and interviewed regions circled

Source: Cira et al. 2016

### **Academia-based Interviews**

This report also leveraged topical experts, based at universities and research centers, with familiarity on municipal operations, tax and revenue policy, and land management in SSA. These conversations informed what asset-based levers are available to local governments and identified best-practices and pit-falls for managing government property. Nine individuals shared their thoughts for this project:

- Liza Rose Cirolia, Researcher at the African Centre for Cities
- Anders Jensen, Assistant Professor of Public Policy at Harvard Kennedy School
- Steven Kelman, Professor of Public Management at Harvard Kennedy School
- Adi Kumar, Executive Director at Development Action Group
- John Macomber, Senior Lecturer of Business Administration in the Finance unit at Harvard Business School
- William McCluskey, Reader at the School of the Built Environment at the University of Ulster

- Robert McGaffin, Researcher at the African Centre for Cities and University of Cape Town Urban Real Estate Research Unit
- Jennifer Musisi, Bloomberg Harvard City Leadership Initiative City Leader and former Executive Director of Kampala, Uganda
- George Proakis, Planning Director for Somerville, MA and Lecturer in Urban Planning and Design at Harvard Graduate School of Design

### **Administrative Data**

Administrative sources addressed remaining data gaps around local government finance trends and GLB management in Kenya. Administrative sources reviewed include the UN-Habitat Global Municipal Finance Database as well as public budget and financial documents, organizational charts, and agency business plans.

While this report uses a variety of sources, limitations around data still exist. First, data availability for smaller jurisdictions is relatively limited. This project therefore relies on public information about larger metropolitan areas and capital cities. Second, time constraints prevented data collection from a broader pool of SSA countries. Consequently, this report does not comprehensively review the contexts of all SSA and instead uses privately-collected data from a subset of Kenyan counties to test findings. This inherently makes some conclusions only partially generalizable to other countries in SSA. Finally, data collected through government-based interviews and surveys relied on self-reported information and has not been thoroughly vetted for accuracy.



# Section 2

## **Relevance of GLBs to Local Government in SSA**

The combination of increasing urbanization and expenditure devolution is placing greater financial strain on local governments in SSA as jurisdictions attempt to meet growing demand for urban infrastructure and services. The level of financial strain suggests jurisdictions require multiple revenue-raising solutions to achieve fiscal stability. This section explores these local government finance challenges and opportunities in more detail.

### **Increasing Fiscal Pressure on Local Government**

Local government in SSA is facing increasing pressures to meet public services demand while having limited revenue mechanisms in place to do so.

One cause of pressure is rapid urbanization in SSA. The African continent had one of the largest increases in urban population since 1950.<sup>2</sup> The population will continue to grow into the future by almost one billion people across 2015 to 2050, the fastest growth globally along with Asia.<sup>3</sup> Increased urbanization results in greater demand for urban infrastructure and services at the local level.<sup>4</sup> For example, the shift from rural to urban in Africa has led to more urgency in providing basic sanitation, water, healthcare, and transport services.<sup>5</sup> It has also led to a higher number of informal settlements and an under-optimized urban form with long-term implications for local governments.<sup>6</sup>



### Figure 2: Historical and projected urban population in Africa

Source: United Nations Department of Economic and Social Affairs

The second major cause of fiscal pressure is devolution of service responsibilities from national governments to their local counterparts.<sup>7</sup> Historically, national governments undertook most activities, but in the last decades, the international community has pushed decentralization

<sup>&</sup>lt;sup>2</sup> United Nations Department of Economic and Social Affairs 2018

<sup>&</sup>lt;sup>3</sup> Cartright et al 2018; United Nations Department of Economic and Social Affairs 2018

<sup>&</sup>lt;sup>4</sup> Cartright et al 2018

<sup>&</sup>lt;sup>5</sup> Saghir and Santoro 2018

<sup>&</sup>lt;sup>6</sup> Stren 2014

<sup>7</sup> Slack 2009

reforms in emerging markets.<sup>8</sup> However, different types of decentralization have occurred at different paces. A review of 30 SSA countries found that most had greatly or moderately decentralized across political and administrative dimensions by the early 2000s, but fiscal decentralization across countries remained weak.<sup>9</sup> Expenditure decentralization has outpaced revenue decentralization in SSA so that local governments' share of spending exceeds their share of revenues (see Figure 3).<sup>10</sup> This mismatch means central governments pushed public services expenditure to local governments without providing resources to meet these additional responsibilities.



#### Figure 3: Spending versus revenue decentralization

Note: SSA countries in orange have greater share of spending vs. revenue than countries from other regions; Source: Hobdari et al. 2018

The consequence has been a local government fiscal gap that hampers service delivery in fast-growing cities.<sup>11</sup> Figure 4 illustrates this fiscal gap. Some SSA cities, usually large capitals, can cover their per capita budgets and capital expenditures through revenues collected directly by themselves, referred to as own-source revenues (OSR). Unfortunately, many SSA municipalities have a serious gap between their expenditures and OSR. Gombe and Ibadan in Nigeria collect just \$1 per capita of revenue despite having \$66 and \$20 per capita budgets respectively.<sup>12</sup> Low revenue collection rates and high fiscal gaps are consistent with more robust studies.<sup>13</sup>

Partial devolution and large fiscal gaps lead SSA local governments to depend heavily on external funding sources. In particular, jurisdictions tend to strongly rely on intergovernmental transfers from national governments.<sup>14</sup> International donor support from institutions like the

- 11 Stren 2014
- <sup>12</sup> UN-Habitat Municipal Finance Database

<sup>&</sup>lt;sup>8</sup> Paulais 2012

<sup>9</sup> Paulais 2012

<sup>&</sup>lt;sup>10</sup> Hobdari et al. 2018; Fjeldstad 2006

<sup>&</sup>lt;sup>13</sup> Stren 2014; Berrisford et al. 2018

<sup>14</sup> Fjeldstad 2006

World Bank also helps finance major capital projects.<sup>15</sup> For example, nearly 90% of subnational government revenues in Kenya and Rwanda and 96% in Uganda are from grants and subsidies from national government or donors.<sup>16</sup> On average, 61% subnational government revenue in Africa are donor- and national government-funded compared to only 40-50% across all other global regions.<sup>17</sup>

City (data year)	Per capita budget	Per capita capital expenditures	Per capita OSR (% OSR)	Per capita total revenue with external funds
Accra, Ghana (2014)	\$26	\$6	\$8 (34%)	\$24
Gombe, Nigeria (2013)	\$66	\$19	\$1 (2%)	\$50
Kinshasa, DRC (2015)	\$41	\$18	\$41 (100%)	\$41
Port Elizabeth, South Africa (2013)	\$648	\$93	\$30 (5%)	\$600
Ndola, Zambia (2014)	\$32	\$9	\$22 (69%)	\$32
Arusha, Tanzania (2012)	\$65	\$50	\$6 (10%)	\$60
Kigali, Rwanda (2014)	\$20	\$14	\$17 (85%)	\$20
Nakuru, Kenya (2014)	\$58	\$10	\$12 (22%)	\$55
Kampala, Uganda (2014)	\$68	\$28	\$24 (35%)	\$69
Ibadan, Nigeria (2013)	\$20	unknown	\$1 (5%)	\$20
Lagos, Nigeria (2013)	\$145	\$5	\$91 (63%)	\$144

Figure 4: Per	capita budgets	and revenue	of example Africar	municipalities
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Note: Dollar values are in USD, Source: UN-Habitat Global Municipal Finance Database with author's additional analysis

Dependency on external sources is not sustainable. As Figure 4 shows, even with external support, certain municipalities still fall short of their budget expenditures. For example, Arusha, Tanzania has a \$65 per capita budget and \$50 per capita capital expenditure but a total revenue per capita of only \$60. Furthermore, dependency limits the funding pool local governments can leverage to deliver urban infrastructure and services while increasing competition among

<sup>15</sup> Stren 2014

<sup>&</sup>lt;sup>16</sup> OECD 2019

<sup>&</sup>lt;sup>17</sup> OECD 2019

jurisdictions for finite national government resources.<sup>18</sup> It also undermines local governments' ability to dynamically and autonomously respond to community needs. <sup>19</sup> Alternatively, mobilizing local revenue sources can better enable political and administrative accountability through community empowerment.<sup>20</sup>

### **Considering Own-Source Revenue Streams**

Local governments in SSA must instead look to strengthen their fiscal health and improve public services via self-funding. Self-funding can entail either borrowing or aforementioned own-source revenues. These revenue sources must not compete with or cannibalize revenues collected by national governments to ensure the funding pool is overall largened rather than simply redistributed and conflicts don't arise between local and national governments.<sup>21</sup>

Borrowing is an important future capital funding source for local governments.<sup>22</sup> Borrowing is when a government issues debt through bonds, secures a loan through a bank, or adopts a revolving fund. While reliant on external investors, subnational government borrowing still helps reduce dependency on national government transfers. Unfortunately, multiple African countries enforce constitutional restrictions on local governments issuing debt.<sup>23</sup> Creditors also consider SSA local governments high-risk, fearing municipalities will use borrowing to close recurrent financing gaps after over-spending and become bankrupt.<sup>24</sup> Thus, jurisdictions cannot easily take on debt. Borrowing is additionally unsuited for operating expenses or capitalized operating expenses since it does not generate new revenue for debt repayment. Given these challenges, borrowing alone cannot address the full scope of local governments' financial needs.

Another option is for local governments to boost OSR. Most OSR for SSA local governments come from various user fees, charges, and taxes, though the exact nature of these varies from country to country (see Figure 5).<sup>25</sup> In Namibia, South Africa, Kenya, Mauritius, Tanzania, and Malawi most local OSR comes from tariffs, fees, charges, and fines. These include revenue from building permits, trade licenses and markets, cemeteries, traffic fines, advisements, parking fees, and late payment fees. In Benin, Rwanda, and Senegal, most local OSR comes from non-property taxes such as business tax, wage tax, and services tax depending on the jurisdiction. In Zimbabwe, OSR from taxes is majority property taxes. Local governments in some countries like Eswatini and Cabo Verde also receive revenue from property income, which consists of rents from publicly-owned land and interest or dividends from investments.

Of these OSR streams, property tax is one of the largest untapped revenue sources for SSA local governments.<sup>26</sup> Property tax globally represents a higher percentage of subnational tax revenue in developing countries than it is in SSA.<sup>27</sup> In OECD countries, property tax on average accounts for 31% of all subnational tax revenue while this number is closer to ~10-20% averaged across African countries.<sup>28</sup> SSA jurisdictions with more advanced capabilities,

<sup>&</sup>lt;sup>18</sup> Hobdari et al. 2018; Berrisford et al. 2018

 <sup>&</sup>lt;sup>19</sup> Hobdari et al. 2018; Berrisford et al. 2018
 <sup>20</sup> Fjeldstad 2006

<sup>&</sup>lt;sup>21</sup> Fjeldstad et al. 2014

<sup>&</sup>lt;sup>22</sup> Gorelick 2018

<sup>&</sup>lt;sup>23</sup> Gorelick 2018

<sup>&</sup>lt;sup>24</sup> Fjeldstad 2006; Gorelick 2018

<sup>&</sup>lt;sup>25</sup> OECD 2019

<sup>&</sup>lt;sup>26</sup> Franzsen and McCluskey 2017

<sup>27</sup> Fjeldstad 2006

 $<sup>^{\</sup>rm 28}$  OECD 2016; OECD 2019 with author's own estimate

especially larger capital cities, have turned to property tax revenue as a reliable income source.<sup>29</sup> Unfortunately, the majority of SSA local governments continue to underperform in property tax collection.<sup>30</sup>



Figure 5: Own-source revenue breakdown for example African countries

Source: OECD World Observatory on Subnational Government Finance and Investment with author's additional analysis

Addressing property tax underperformance in SSA is challenging, despite its long-term potential. Property tax is time-consuming and resource-intensive to implement for administratively weak jurisdictions due to the systems and expertise needed for property valuation, ownership tracking, and payment collections.<sup>31</sup> It also relies on an effective base on which to levy a tax, which is challenging in poorer jurisdictions.<sup>32</sup> Lastly, property taxes are politically unpopular as officials wish to avoid backlash and complaints from property owners.<sup>33</sup> While development organizations have invested in building-up property tax capability in SSA, results remain mixed.<sup>34</sup> This suggests SSA local governments should explore alternative interim or complementary sources to address financing gaps more immediately.

The other two revenue sources identified by experts as important to local finances are license fees and user charges. Fee revenues from sources such as business licenses are relatively low today, though some early reforms in SSA have improved license revenues by raising tariffs and reducing administrative costs, showing their potential.<sup>35</sup> User charges are an effective way to align payments with service delivery and serve as a mechanism for a jurisdiction to recuperate government costs for providing a given service.<sup>36</sup> However, maintaining affordable charge prices and the cost to collect charges means their net gain to

<sup>&</sup>lt;sup>29</sup> Franzsen and McCluskey 2017

<sup>&</sup>lt;sup>30</sup> Franzsen and McCluskey 2017

<sup>&</sup>lt;sup>31</sup> Franzsen and McCluskey 2017; Fjeldstad 2006; UN-Habitat 2009

<sup>&</sup>lt;sup>32</sup> Franzsen and McCluskey 2017

<sup>33</sup> Fjeldstad 2006

<sup>&</sup>lt;sup>34</sup> Fjeldstad 2006

<sup>35</sup> Fjeldstad 2006

<sup>&</sup>lt;sup>36</sup> Fjeldstad 2006

jurisdictions may be limited and earmarked to fund exclusively the service for which the fees are charged.<sup>37</sup>

Additionally, license fees and user charges experience multiple challenges. Both revenue sources are burdensome to lower-income residents and small businesses.<sup>38</sup> They also suffer from high non-compliance, corruption, and administrative complexity, which makes payment collections difficult and expensive to reform, though not prohibitively so.<sup>39</sup> Furthermore, many OSR systems in SSA local governments already have a complex jumble of taxes and fees, with jurisdictions simply adopting whatever charges they can to raise revenue.<sup>40</sup> This leads to a hodgepodge of charges that create negative economic distortions and distribution effects.<sup>41</sup> These challenges do not mean licenses and user charges should not remain core revenue sources for local governments, only that it is worth considering other options that may have more attractive tradeoffs.

This leaves rarely-considered property income as the third overarching category of OSR to evaluate. Property income as a revenue source only appears in a smaller subset of SSA countries, based-on the limited data available.<sup>42</sup> Yet, estimates find, on average, property assets make-up 40-95% of a jurisdiction's total assets and often, local governments' property asset values exceed their operating budgets.<sup>43</sup> Furthermore, GLBs are intertwined with both property taxes and user charges. <sup>44</sup> Market, parking, advertisement, and tourist site fees are all derived from physical assets, and public land development can affect property taxes. These observations raise an interesting question on whether publicly-owned properties more broadly can help reduce SSA local government fiscal gaps and complement more traditional revenue sources.

### The Critical Role of GLBs in Finances and Urban Development

An often-overlooked financial stream for local SSA governments are jurisdictions' physical property or nonfinancial assets. Local governments in most countries own large amounts of properties with both service delivery potential and market value potential.<sup>45</sup> In Uganda, for example, it wasn't until jurisdictions started tracking assets that they discovered Ugandan local governments collectively had over \$500m in equipment, machinery, public land, and infrastructure.<sup>46</sup> While most of these assets perform critical public functions, they can still offer financial benefits. This is especially true for government-owned land and buildings (infrastructure too but most in SSA is under national government) that can be more easily operated, leased, sold, or commercialized than moveable property such as police cars or office equipment.

From a revenue perspective, GLBs serve as an asset base from which local government can raise direct operating and capital income or mobilize private investment.<sup>47</sup> Figure 7 contains a consolidated table from Peterson and Kaganova illustrating how municipalities have secured

<sup>&</sup>lt;sup>37</sup> UN-Habitat 2009

<sup>&</sup>lt;sup>38</sup> Fjeldstad 2006; UN-Habitat 2009

 <sup>&</sup>lt;sup>39</sup> Fjeldstad 2006; UN-Habitat 2009
 <sup>40</sup> Fjeldstad et al. 2014

<sup>&</sup>lt;sup>41</sup> Fjeldstad et al. 2014

<sup>&</sup>lt;sup>42</sup> OECD 2019 with author's own analysis

<sup>&</sup>lt;sup>43</sup> Kaganova 2010; Freire and Kopanyi 2018

<sup>&</sup>lt;sup>44</sup> Academia-based interviews; Freire and Kopanyi 2018

<sup>&</sup>lt;sup>45</sup> Kaganova 2010; Freire and Kopanyi 2018

<sup>&</sup>lt;sup>46</sup> UNCDF 2018

<sup>47</sup> Kaganova 2010

revenue or investment through land properties. The relevance of GLBs across multiple financial dimensions (i.e. operating, capital, investment) makes them unique resources versus more traditional revenue sources that typically address only operating budget needs and do not leverage private funds.



Figure 6: Local government revenue sources and report focus on land and buildings

Source: Author's own analysis adapted from Kamiya and Zhang 2017

Another financial benefit of GLBs is they are an avenue through which local governments can reduce expenditures. Holding properties involves cleaning, utility, and repair costs that can quickly add-up for governments.<sup>48</sup> Even a vacant property may have safety and maintenance expenses.<sup>49</sup> Estimates from the World Bank suggest that optimized management and operations of local government properties can reduce operating and maintenance costs by 10-15% without reducing total property holdings.<sup>50</sup>

Regardless, GLBs only serve as a complementary funding source. As discussed earlier, experts agree that the core of local government revenue potential will reside in taxes, with license fees and user charges remaining prominent as well. However, in the SSA context where local governments have limited financing levers available, GLBs, when managed properly, can help bring in some much-needed extra support. There are also nonfinancial benefits to improved GLB management which make the topic worth exploring beyond just addressing local fiscal gaps.

One nonfinancial benefit is the role better GLB management plays in supporting "good governance." There are anticorruption effects derived from introducing greater transparency around government property holdings and transactions, which is pertinent given extensive corruption in SSA's land sector. For example, Klopp recounts irregular privatization and political patronage of public lands in Kenya.<sup>51</sup> Nonfinancial asset management also helps governments

<sup>48</sup> Farvacque-Vitkovic and Kopanyi 2014

<sup>&</sup>lt;sup>49</sup> Farvacque-Vitkovic and Kopanyi 2014

<sup>&</sup>lt;sup>50</sup> Kaganova 2010; Farvacque-Vitkovic and Kopanyi 2014

<sup>&</sup>lt;sup>51</sup> Klopp 2000

better delineate between national versus local responsibilities by clarifying control over certain properties.<sup>52</sup> Lastly, the concreteness of GLBs is conducive for raising community engagement.<sup>53</sup>

Location and Activity	Land Financing Amount and Use of Proceeds	Comparative Magnitude of Land Finance		
Cairo, Arab Rep. of Egypt: Auction of desert land at urban fringe for new towns (May 2007, 3100 hectares). Seller was national ministry.	US\$3.12 billion: To be used to reimburse costs of internal infrastructure, to build connecting highway to Cairo Ring Road, and for general central govt. budget	Proceeds from this one sale equaled 117 times total urban property tax collections in the country; equal to approximately 10 percent of total national government revenue.		
Mumbai, India: Auction of land in the city's new financial center (January 2006, November 2007, total 13 hectares) by Mumbai Metropolitan Regional Development Authority (MMRDA).	US\$1.2 billion: To be used primarily to finance projects in metropolitan regional transportation plan. Together with revenue from other land sales, is planned to finance the first phase of Mumbai metro system and 23-km bridge across the Mumbai harbor to the mainland.	10 times MMRDA's total capital spending in fiscal 2005; 3.5 times total value of municipal bonds issued by all local urban bodies and local utilities in India in the past decade.		
Hyderabad, India: Contribution to private consortium by Greater Hyderabad Municipal Corporation of land surrounding planned metro line and metro stations.	According to contract agreement, (July 2008) a private company was to build the entire metro system in return for the land and concession rights, without cost to government. Over the lifetime of operation the company would return an additional US\$270 million (present value) to government.	It appears (as of late 2009) that this arrangement has fallen through, victim of the decline in land values and reduced demand for land development. The private company has been unable to raise the equity and debt (total: US\$2.5 billion) necessary to build the metro. It missed payments on the construction bond.		
Istanbul, Turkey: Sale of old municipal bus station and former government administrative building site (March-April, 2007).	US\$1.5 billion in auction proceeds, said by municipal and national governments to be dedicated to capital investment budget.	Total Istanbul municipal capital spending in fiscal 2005 was US\$994 million; municipal borrowing for infrastructure investment in 2005 was US\$97 million.		
Cape Town, South Africa: sale of Victoria and Albert Waterfront property by Transnet, the parastatal transportation agency (November 2006).	US\$1.0 billion, to be used to recapitalize Transnet and support its investment in core transportation infrastructure. Part of proceeds used to finance pension obligations, which in turn strengthened balance sheet and allowed Transnet to borrow from market without government guarantee or subsidy.	Sale proceeds exceeded Transnet's total capital spending in fiscal 2006; equal to 17 percent of five-year capital investment plan prepared in 2006.		
Warsaw, Poland Sale at auction of municipal land assets.	Proceeds: Actual 2007, 330 million zlotys (approx: US\$110 million). Budgeted 2009, 144 million zlotys. Budgeted as capital revenue within the capital budget.	Land sales in 2007 exceeded municipal borrowing by 20percent. Budgeted revenues from land sales in 2009 were 70percent of budgeted borrowing by city.		
China subnational land leasing for financing large-scale urban infrastructure.	According to the China Index Academy, the following cities led the way in land-leasing contract revenues in 2009: Hangzhou (105.4 billion yuan), Shanghai (104.3 billion) and Beijing (92.8 billion).	In Beijing's case, land leasing contract value in 2009 was equal to 45percent of total fiscal revenue.		

Figure	7:	Fxamp	le m	agnitudes	of	land	financing	in	municipalities
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Source: Peterson and Kaganova 2010

<sup>&</sup>lt;sup>52</sup> Kaganova 2010

<sup>&</sup>lt;sup>53</sup> Kaganova 2010

The second major nonfinancial benefit of GLBs is they enable sustainable urban form and service delivery since government has more control over how its properties are developed versus private parcels. For example, a jurisdiction can strategically develop publicly-owned land in a way that reduces service network costs, optimizes public facilities' accessibility to community members, and/or spurs surrounding growth.<sup>54</sup> Government control also allows for greater redistribution and equity since jurisdictions can allocate land below market-value for social purposes and ensure community access to spaces.<sup>55</sup>

For these reasons, researching GLBs in the SSA context represents an exciting opportunity not only for their potential in shrinking fiscal gaps, but also for identifying a channel through which local governments can strengthen governance and urban development.

<sup>&</sup>lt;sup>54</sup> Environmental Protection Agency 2014

<sup>55</sup> Kaganova 2010



# **Section 3**

## **Understanding Options around GLBs**

The fiscal and urban challenges described in Section 2 suggest there is opportunity for SSA local governments to more strategically utilize GLBs. The question remains, however, of what levers exist to do so. Given the growing popularity of public asset management outside of SSA, there are fortunately multiple examples for SSA local governments to turn to.

Because this report focuses specifically on the financial potential of GLBs, this Section will explore only GLB management levers geared towards either reducing government expenditures via improved operations and maintenance of real properties, increasing revenues directly through property-based income, or mobilizing resources by attracting external investment.

### Levers for Unlocking the Financial Potential of GLBs

There are nine main levers available to local governments for unlocking the financial potential of their GLBs.<sup>56</sup> These levers arise from a literature review of local finance and asset management practices, coupled with interviews of university faculty and research fellows with public finance research backgrounds. Figure 8 shows these levers organized under three categories: operational improvements that reduce expenditures, transactions that increase revenues, and investments that mobilize private resources.



Figure 8: Nine levers for unlocking GLB financial potential, categorized in three groups

Source: Author's own analysis

<sup>&</sup>lt;sup>56</sup> Author's own analysis informed by frameworks and levers proposed across AlMujadidi et al 2019, Bova et al. 2013, Kagan ova 2012, Peterson 2008, Taquiddin and Nallathiga 2011, and Academia-based interviews

#### Lifecycle-based Management

Holding properties involves cleaning, utility, and repair costs that can quickly add-up for governments.<sup>57</sup> Even a vacant property may have safety and maintenance expenses.<sup>58</sup> Jurisdictions can more effectively manage the day-to-day operations and maintenance of their GLBs to reduce their net expenditures by optimizing acquisition, maintenance, rehabilitation, and disposal across an asset's full lifespan instead of on a short-term or reactive basis. It also allows for more calculated tradeoffs between investments in one GLB versus another.

#### **Energy-efficient Management**

Energy-efficient management is when government adopts environmentally sustainable approaches to its properties to reduce electricity, water, and gas expenses. Energy-efficient approaches can consist of "green" equipment and optimization systems such as LED lightbulbs, upgraded HVAC, and improved building insulation. They can also include behavioral campaigns like getting government staff to turn off lights or reduce air conditioning use. There is some overlap between energy-efficiency and lifecycle management.

### **Space and Property Rationalization**

Without a portfolio-wide view of GLBs, local governments risk underutilization or redundancies in their properties. This can manifest itself in three ways. First, local governments may have partially empty buildings whose occupants can be consolidated into fewer sites.<sup>59</sup> Second, there may be an inefficient use of internal spaces including storage of unnecessary equipment or documents and excessive employee per square footage ratios.<sup>60</sup> Third, GLBs may not be utilized for their most optimal purpose. For example, a higher-value plot of land in town center may be most valuable to a government as a mixed-income housing site collecting rents than as a government backend office which could operate in a lower-value land plot.

#### **Property-based User Fees**

GLBs serve as a material base for services, which often require collection of user fees to ensure their sustainable operation.<sup>61</sup> Property-based user fees are charges levied by local government to grant an individual access to or use of physical space, including:

- Parking fees for bus and taxi depots as well as street or garage parking
- Billboards and advertisements on government property
- Market fees for formal and informal stalls
- Slaughterhouse fees
- Entry fees such as to museums or nature reserves

<sup>&</sup>lt;sup>57</sup> Farvacque-Vitkovic and Kopanyi 2014

<sup>&</sup>lt;sup>58</sup> Farvacque-Vitkovic and Kopanyi 2014

<sup>59</sup> Wiseman 2017

<sup>60</sup> Wiseman 2017

<sup>61</sup> Freire and Kopanyi 2018

They do not include user fees based-on a pure service such as business licensing fees or utility tariffs. While property-based user fees are already common in many jurisdictions, government collections tend to underperform their potential.<sup>62</sup>

### **Property Leasing**

Jurisdictions may have sites for which they have no near-term use. In these cases, local government can lease a property to obtain interim income until the property becomes useful in another capacity. Leases can be short-term (e.g. monthly, yearly) such as renting-out excess residential, office, or recreational space at market- or subsidized-rates. Leases can also be longer-term (e.g. 5yrs, 10yrs, 99yrs) to grant a lessee greater ability to invest in the property. Such arrangements could include leasing-out fields for agricultural activities or vacant land for a private investor to build on.

Property leasing in this report is distinct from other levers. The government charges a property lease to a tenant over a reoccurring period. This contrasts propertybased user fees which are one-time charges (e.g. when a bus parks in a depot lot). They are also distinct from P3 developments in that the jurisdiction does not set specific investment requirements for the other party within the scope of a standard lease.

### Sale of Property

The sale of property is the most straightforward. Should a local government either determine a GLB is no longer of strategic long-term use or find itself in need of urgent funds, then selling a property for a more immediate, lump-sum payment may be appropriate. Again, this is distinct from P3s in that the property sale does not include broader investment arrangements for the site.

### Sale of "Rights"

The sale of rights relies on an abstract understanding of GLB assets, rooted in the intangible aspects of a given property. There are three "rights" scoped in this research:

- Air rights, which allow a buyer to build in the space above a GLB (e.g. private offices above a public library)
- Transferable developer rights, in which a jurisdiction forgoes building-out its property and transfers the equivalent floor-to-area allowance to the buyer
- Service rights tied to a public space, in which a buyer operates and collects revenue from that service but also takes on associated costs (e.g. sell exclusive right to parking meters or advertisements on bus stops)

Under these scenarios, the government is not selling-off a property in its entirety, but rather a subcomponent of a property which offers special value to a buyer.

### P3s for Social Developments

P3s for social developments involve a jurisdiction securing a private partner to either help build or operate a site serving a social or public service purpose. Such partnership arrangements can be in the form of a concession (e.g. private entity invests

Investments

Transactions

in rehabilitation of a public market but gets to collect stall fees for a set period). They can also be structured as a cross-subsidization (e.g. private entity is allowed to build marketrate housing, but must use a portion of proceeds to offer affordable units). Under the right conditions, such P3s may reduce a government's capital or operating expenditures needed to build and manage a given facility.

### P3s for Commercial Developments

P3s for commercial developments involve a jurisdiction engaging in a purely forprofit venture with a private partner by leveraging surplus land or buildings in its portfolio. For example, professional stadium, mixed-use, and retail projects undertaken by a jurisdiction fall under this category. Under such arrangements, a local government is actively seeking a financial return on investment, though there may also be community development benefits involved. In theory, a local government could unilaterally develop commercial projects. However, given the expertise involved in doing so, this report focuses on scenarios involving either a private partner or a semi-private entity such as an economic development corporation.

The nine identified levers should not be considered in a vacuum since each may be more or less applicable within different environments.

### **Comparative Dimensions for Assessing Available Levers**

Relevance of the nine levers will certainly vary based-on a jurisdiction's individual needs and capacity, meaning each local government will prioritize the levers differently. To assist in an eventual prioritization, there are four dimensions this report used to articulate the tradeoffs of each lever:

### Figure 9: Four dimensions to compare GLB levers

Source: Defined by author, informed by academia-based interviews



Economic Impact What is the financial and economic upside versus costs?



Administrative Feasibility What property types, resources, and capabilities are required to implement?



**Political Acceptance** What are the associated social and political risks?



What market and regulatory conditions must be present?

These dimensions seek to capture not only how beneficial each lever is for a jurisdiction, but whether a jurisdiction also has the right internal capabilities and external environmental conditions to effectively adopt each lever. A detailed analysis of each lever, matching this report's four tradeoff dimensions, is included in the Appendices.



# **Section 4**

## A Diagnostic Framework for Prioritizing GLB Levers

Through the comparative dimension analyses mentioned in Section 3 and completed in the Appendices, several themes beyond just the four initially assessed dimensions emerged. These themes, which emerged from analyzing each GLB lever against the four comparative dimensions, suggest there are broader operating context factors that are correlated to how successfully each GLB lever could be implemented in a given jurisdiction. Figure 10 summarizes the analysis themes into six major findings and indicates the primary dimensions which informed each finding.

#### Figure 10: Analysis findings from assessing GLB levers against comparative dimensions

Analysis Findings	Informing Dimension(s)
Levers have different relevance depending on a jurisdiction's <b>fiscal priorities</b>	Econ. Impact
Levers have different relevance depending on the <b>property portfolio</b> of a given jurisdiction	Admin. Feasibility
Levers are more or less beneficial depending on a jurisdiction's existing revenue collection and property tax capabilities	Admin. Feasibility Econ. Impact
Levers have different relevance depending on a jurisdiction's <b>private market conditions</b>	Market Req.
Levers carry more or less risk depending on a jurisdiction's institutions and governance	Admin. Feasibility Market Req. Pol. Acceptance
Levers are more or less complex to implement, often corresponding to their fiscal potential	Econ. Impact Admin. Feasibility Pol. Acceptance

Source: Author's own analysis

These six findings are further adaptable into a diagnostic framework that governments can use to self-assess and determine which GLB levers are most aligned to their unique conditions. Based-on the nature of the findings, such a diagnostic framework takes a two-part prioritization structure, illustrated in Figure 11.

Part one of the diagnostic is a higher-level assessment of a jurisdiction's operating context to quickly parry-down lever options. The first five findings can be turned into questions to evaluate a local government's current-state situation overall. Answering the five questions only requires an assessment to be conducted once per jurisdiction. Consequently, the questions serve as a relatively faster model to eliminate GLB levers most incompatible with the environment and needs of a local government. This is as opposed to repeating a jurisdiction-level assessment for

every single one of the nine levers, which would prove time-consuming and potentially resourceintensive (e.g. assessing all nine levers against the four comparative dimensions in Section 3 for a 9 x 4 step analysis). Furthermore, part one raises environmental factors which would affect the success of individual levers regardless of a jurisdiction's internal capability to implement them. The part two evaluation is therefore less relevant if a lever is eliminated based-on these earlier diagnostic factors.





Source: Author's own analysis

Instead, part two of the diagnostic is a more robust lever-based analysis of a local government's specific capabilities and environment. It determines which levers are most financially beneficial for a jurisdiction compared to how that jurisdiction's capabilities affect implementation feasibility. Because this second analysis is more intensive, it is easier to conduct after first narrowing-down options via the part one diagnostic's initial screening. For this step, a jurisdiction needs to estimate what the financial upside of the remaining levers would be for its specific GLBs (e.g. project cost savings from adopting energy-efficient management). It also needs to concretely contrast its current internal capabilities with the capability requirements of the remaining levers to identify gaps that may hinder implementation.

Both part one and part two diagnostic components are summarized in the remainder of this Section. Each evaluative question is matched to the nine GLB levers to articulate which levers are best-suited for a jurisdiction depending on the evaluative question results. This Section is a higher-level summary; detailed data and source citations informing the Section's conclusions are in the Appendix.

### **Evaluation 1A: What are the Jurisdiction's Fiscal Priorities?**

Analyses across the nine identified levers show clear differences around what type of fiscal priorities each GLB lever addresses. A government's fiscal priorities may revolve around:

*Budget Addressed* - government needs to improve operational vs. capital budgets *Cashflow Type* - government wants to reduce expenditures vs. generate revenue *Impact Timeline* - government requires immediate financial boost vs. long-term benefit

These differences are critical considering this report's emphasis on the financial potential of GLBs.

Fully Applies	Budget Addressed		Cashflow Type		Impact Timeline	
Partially Applies Negatively Applies	Reoccurring Operational	"One-Time" Capital	Cost Savings	Revenue Generation	Near-Term	Delayed
Lifecycle Management						
Energy-efficient Management						
Space/Property Rationalization						
Property-based User Fees						
Property Leasing						
Sale of Property						
Sale of "Rights"						
P3s: Social Development						
P3s: Commercial Development						

### Figure 12: Lever relevance based-on fiscal priorities

Source: Author's own analysis

Figure 12 summarizes which GLB levers may be most appropriate based-on a local government's fiscal priorities, and shows:

**Energy-efficient management and property rationalization** reduce reoccurring operations and maintenance costs. Though, energy-efficient management can require some up-front, one-time rehabilitation and equipment investments to implement. Once government adopts optimized activities for its facilities, it can capture financial benefits of these levers relatively quickly and maintain savings in perpetuity.

**Lifecycle management** is the reverse: it requires an up-front increase in routine preventative maintenance to reduce future capital costs. This means government needs a longer time horizon to realize its financial benefit.

**Property-based user fees and leasing** generate reoccurring operational revenues since they assume repeated charges for use of a GLB. However, predicting year-to-year variations in these income sources is challenging, especially for leasing revenues. While long-term leases lock-in annual income in a consistent manner, there is uncertainty around the renewal of short-term leases. Thus, short-term leases may be better for contributing to "one-time" capital budgets instead. Both user fees and leases result in more immediate revenue capture.

**Sale of property and rights** represent larger bulk-payments to the local government through "one-time" transactions, so government receives funds in the nearer-term. Consequently, revenue from these levers is best-suited for a jurisdiction's "one-time" capital budget. Occasionally, revenue-sharing models under sale of service rights could lead to recurring income.

**P3 developments** are highly dependent on individual partnership arrangements, and therefore fit less cleanly into fiscal priority buckets. As a general rule, P3s may only partially reduce capital investments needed for development as private partners may expect local governments to contribute land, loan guarantees, or a percentage of construction costs for a project. Local governments may also have to offer subsidies to attract private investors, which reduces net operating income. P3s that emphasize performance metrics or include provisions for property tax, commercial fees, or revenue-sharing can reduce operational costs and create a reoccurring revenue stream. Given the longer implementation timelines and high initial investment, however, government requires a longer time horizon to capture these financial benefits.

## **Evaluation 1B: What Types of Properties does the Jurisdiction have?**

The breadth of property uses within government portfolios means governments need to consider how each parcel is distinct from another. Kaganova, who has written extensively on government real property asset management, recommends three property classifications:





These classifications distinguish between the roles local government plays in real-estate, which Kaganova describes as,

"The traditional role of government includes supplying the correct quantity of property for public goods and services at the lowest cost, compared with alternative feasible

Source: Adapted from Kaganova 2012

arrangements including private sector provision. The non-traditional role of government includes supporting local economic development and obtaining governmental revenues from alternative sources."<sup>63</sup>

Each property classification reflects different government goals, and therefore different GLB management actions are more or less feasible and appropriate based-on property type.

Fully Applies		Type of GLBs*	Amount of GLBs		
Partially Applies	Required Operational	Discretionary Social	Commercial Surplus	Deficit	Surplus
Lifecycle Management					
Energy-efficient Management					
Space/Property Rationalization					
Property-based User Fees					
Property Leasing					
Sale of Property					
Sale of "Rights"					
P3s: Social Development					
P3s: Commercial Development					

Figure 14: Lever relevance based-on portfolio of land and buildings

\*Note: Vacant properties can be categorized based-on planned future use in order to inform the appropriate tools that should be applied for that property

Source: Author's own analysis informed by frameworks and levers proposed across AlMujadidi et al 2019, Bova et al. 2013, Kaganova 2012, Peterson 2008, Taquiddin and Nallathiga 2011, and Academia-based interviews

To address these variations, Figure 14 maps identified GLB levers to the three property classifications to inform which levers will be most effective for a local government depending on its property portfolio make-up:

**Mandatory GLBs** provide prerequisite government functions and legally-mandated services. Governments cannot take actions that will undermine or harm these functions such as selling-off an active school site or commercializing a police station. The strategy for these assets is instead to manage them as efficiently as possible to minimize their maintenance and operation expenditures.<sup>64</sup>

**Discretionary GLBs**, used for social purposes at the policy choice of government, offer more flexibility. Assets under this classification, while socially-oriented, serve supplementary rather than core community functions. Governments should monitor the usage of discretionary properties to ensure their space is optimized and users contribute

63 Kaganova 2012

<sup>64</sup> Kaganova 2012

to the maintenance or costs of the space.<sup>65</sup> Consequently, jurisdictions can more easily partner with the private sector to better facilitate these GLBs' use and charge for access to the property. This can only be done, however, to the extent that social service delivery is not meaningfully impacted.

**Surplus GLBs** give governments the most autonomy. Once a GLB is surplus, it means it is not strategically necessary for the near- or mid-term delivery and functioning of government services. This allows the government to prioritize income-generating activities through the property and put the site to its highest and best use.<sup>66</sup> Granted, even with a purely commercial site, long-term planning needs for both the government and the community still constrain somewhat how a jurisdiction manages the property.

Figure 14 also illustrates the impact of a net GLB portfolio surplus or deficit on available lever options:

**Surplus** is when government has more GLBs than it needs to deliver public services. Because income-generating properties are the result of surplus, levers such as commercial developments, land sales, and land leasing are only applicable when there is excess property not necessary for public service delivery.

**Deficit** is when a jurisdiction owns less GLBs than it needs to operate and serve the community. Levers relevant to mandatory and discretionary public uses will also be relevant even in the case of a property deficit. This is because even with a shortfall of needed GLBs, a government will still have core operational sites that need to be strategically managed.

However, these principles can get complex. Property may be better suited for one type of use than another. In these cases, a government may have excess land, but still be at a deficit for achieving a specific purpose. For example, a government may own agricultural land in remote areas of its jurisdiction and no land in densely populated areas. While the agricultural land is available for redevelopment, it is unlikely to be useful for providing a public service (e.g. hospital, school) that is feasibly accessible to residents. Thus, that government has a deficit of central urban land but not remote rural land.

## **Evaluation 1C: To What Extent does the Jurisdiction have existing Revenue Collection and Property Tax Capabilities?**

Because property tax and revenue collection capabilities are a major focus of SSA public finance experts today, it is important to consider their relation to GLB levers. This relationship is especially worth interrogating considering the high OSR potential expected from property taxation and improved revenue collection.

<sup>65</sup> Kaganova 2012

<sup>66</sup> Kaganova 2012

Fully Applies Partially Applies	Relationship with Other Revenue Capabilities		
	Benefits from Revenue Collection Capability	Benefits from Property Tax Capability	Benefits from Revenue Boost of Both Capabilities
Lifecycle Management			
Energy-efficient Management			
Space/Property Rationalization			
Property-based User Fees			
Property Leasing			
Sale of Property			
Sale of "Rights"			
P3s: Social Development			
P3s: Commercial Development			

#### Figure 15: Lever relationship with revenue collection and property tax

Source: Author's own analysis

Academia-based interviews revealed mixed opinions around how local governments should think about sequencing GLB investments against tax and revenue collection investments. Despite different opinions, these interviews offered proposed guidelines adapted into Figure 15:

**Benefits from revenue collection capability** means these levers are more financially beneficial if their implementing local government already has a certain level of revenue collection capability. By revenue collection capability, this report refers to both collection rate (i.e. how much of revenues owed does the government actually collect) and collection cost-effectiveness.

- Property-based user fees exist already in most SSA local governments, so the baseline expectation is the majority of jurisdictions have basic collection capabilities for these fees. Unfortunately, the effectiveness of user fee collection may be suboptimal and leading to missed revenue opportunities. Additionally, if a government introduces new user fees, it may need new mechanisms to collect them.
- P3 developments may benefit from an already strong revenue collection organization within local government depending on the P3s' structure. P3s typically rely on operational income to offset initial capital investments and generate positive returns. Operational income can be in rents or user fees. Some P3s may keep collection responsibility for these rents or fees with the government while others may shift that responsibility to the private partner. If government is responsible, it needs the capability to effectively do so.
**Benefits from property tax capability** means these levers will be more financially beneficial if their implementing local government already has some property tax capability. By property tax capability, this report refers to the ability to appropriately estimate and track property values and ensure an adequate collection rate.

- Sale of property and P3 developments can serve as future property tax revenue sources for local governments. This is especially true if the property takes on a commercial use after a sale or P3 transaction. Of course, the opportunity to collect property tax revenue depends both on a jurisdiction's tax code and the negotiated arrangement of a P3.
- Property leasing and sale of rights may benefit from some existing property tax capabilities depending on the transaction's nature and the jurisdiction's tax code. For example, the government, as lessor, may assign property tax responsibility to its ground leases and tenants. Similarly, for air rights above a GLB, property taxes may apply to any additional floor space the air rights buyer constructs.

**Benefits from revenue boost of both capabilities** mean these levers are easier to invest in when government already has preexisting revenue sources that give it financial flexibility. For example, Kampala, Uganda could only fund the repossession of illegally occupied public lands as well as new land acquisitions for future developments because it had first grown its financial asset base through the adoption of revenue collection IT systems and a private land register to manage property taxes.<sup>67</sup>

- P3 developments can require a large amount of upfront capital investments, even with private sector contributions. Consequently, a local government cannot afford such development projects without an already strong revenue stream. This is especially true if the local government is unable to obtain intergovernmental transfers and donor funds for a project, or it seeks to acquire expensive new properties as part of its developments.
- Lifecycle and energy-efficient management also require upfront investments for implementation (i.e. preventative maintenance or upgraded equipment), but to a lesser extent. A local government may feel more secure making initial investments for these levers if it already has sufficient revenues to give it budget flexibility.

Beyond the specific relevance of revenue collection and property taxes to individual GLB levers, there are also broader advantages and disadvantages of these capabilities versus the GLB levers collectively:

**Revenue collection and property tax capabilities are critical components** of local government's long-term financial sustainability. <sup>68</sup>

<sup>67</sup> Academia-based interviews

<sup>68</sup> Academia-based interviews

- Property tax's long-term potential likely exceeds GLB levers' unless a jurisdiction operates in an environment with predominately state-owned land<sup>69</sup>
- Building-out these capabilities lead to predictable, reoccurring income streams that are easier to budget towards service delivery as opposed to certain GLB levers (e.g. property sales) which are volatile
- These capabilities' predictability enables government to become a stronger strategic planner for its budgets and service delivery
- However, revenue collection and property tax also require relatively long time horizons to implement and are resource-intensive to develop

**Instead, certain GLBs may offer more immediate opportunities** for governments to capture financial benefits (see Evaluation 1A):<sup>70</sup>

- Many SSA local governments today already receive a larger share of own-source revenues from land sales, leases, and property-related user fees than from property taxes<sup>71</sup>
- GLB levers can act as an avenue through which local government can build-up property tax capability. For example, as a jurisdiction leases-out parcels of land or develops sites via P3s, it can incrementally implement property taxes and revenue collection mechanisms on these properties before rolling-out more widely
- P3 development projects can increase surrounding land values and thus the total property tax revenue opportunity for a jurisdiction
- As established in Section 2, better managing GLBs has positive effects around corruption, urban development, and social equity, and thus warrants attention

When taken all together, it ultimately appears that GLB investments can be made in parallel and as complements to investments in revenue collection and property tax capability.

## **Evaluation 1D: What Private Market Conditions Exist in this Jurisdiction?**

The nine identified levers also depend on private market qualities. These qualities are relevant to GLB levers for two reasons. First, certain levers require expertise or equipment offered by the private sector for a local government to best implement them. Second, some levers rely on market conditions that elevate GLBs' property value and make investment financially attractive to the private sector. This report considers four categories of private market conditions: real-estate developers, technical providers, market demand, and access to finance.

<sup>69</sup> Academia-based interviews

<sup>70</sup> Academia-based interviews

<sup>71</sup> Academia-based interviews

Figure 16: Lever relevance based-on private market conditions

Fully Applies	Private Market Conditions					
Partially Applies	Real-Estate Developers	Technical Providers	Market Demand	Access to Finance		
Lifecycle Management						
Energy-efficient Management						
Space/Property Rationalization						
Property-based User Fees						
Property Leasing						
Sale of Property						
Sale of "Rights"						
P3s: Social Development						
P3s: Commercial Development						

Source: Author's own analysis

Figure 16 summarizes what private market conditions need to exist for different GLB levers to be successful in a given jurisdiction:

**Real-estate developers** plan, construct, hold, and finance properties for a return on investment versus contractors who incrementally construct a site to the specifications of a property owner after receiving set payments.

- P3 developments require real-estate developers to serve as a strategic partner for local government. To realize potential cost savings on a project, local governments need private investors to financially contribute to project construction and/or operations. Private investors also bring cost-saving efficiencies, especially in the case of commercial developments where government unlikely has sufficient inhouse expertise to oversee such initiatives. Unfortunately, African cities tend to have contractor-driven rather than developer-driven real estate markets.<sup>72</sup> Under these conditions, a local government would need to take on planning and construction for a project, and instead structure a P3 around operations and maintenance of a site. If there are few developers, governments may also not receive high quality, competitive bids needed for success.
- Sale of rights may also require a developer counterpart. Potential buyers for air or transferable development rights are most likely private sector actors that would need to integrate their vision into the existing GLB site, oversee construction of that site, and then operate that property for financial return.

<sup>&</sup>lt;sup>72</sup> Academia-based interviews

**Technical providers** are private actors that offer specialized services, equipment, and materials in areas where expertise is critical.

- Energy-efficient management depends the most on technical providers. Energyefficient upgrades rely on materials, equipment, and IT systems that help reduce a facility's energy consumption. External expertise may also be necessary to install and operate such equipment and systems. Further, depending on government's internal capability, determining a building's baseline energy assessments and conservation opportunity may require support from an external consultant.
- P3 developments and certain sale of rights require technical expertise for operating specialized sites and services. For example, if a local government sells-off rights to its parking fee collection, the buyer of those rights needs to be able to successfully operate those parking sites. Similarly, operating mixed-income housing or a commercial shopping mall in a P3 necessitates availability of a private partner with relevant technical expertise. In many P3s, developers may dually serve this operational expert role.
- Lifecycle management and portfolio rationalization may benefit from external expert support in the case a government has limited internal facilities management capability, but such external support isn't necessarily required.

**Market demand** represents two components: demand for property and demand for a service tied to different property types.

- *Property rationalization, property leasing, and property sales* require demand for land or building space to be most effective. Without adequate demand, the GLB will not have as much value and thus transferring or repurposing it will not provide local government with as much financial benefit.
- Property-based user fees depend on users' willingness to pay to use a given space
  or obtain a service tied to a space. For example, community residents must find
  formal market stalls more attractive than informally selling goods on the street to
  opt-into paying higher fees. If a certain public or social service proposition isn't
  attractive enough, then users will find a way to bypass user fees either through
  non-compliance or by using informal alternatives.
- *P3 developments and sale of rights* depend on both property and service demand. Significant demand for land must exist for private actors to respond to investment and partnership incentives offered by local government. This means the private sector must view winning access to GLBs as desirable. Private actors must also feel assured that there is sufficient community demand for a property's eventual useoffering for them to make a profit during that property's operations. For example, a commercial developer must know that the market can sustain retail businesses if it is to develop a new shopping mall.

Access to finance represents the ability of the private sector to secure debt and equity investors for their projects as well as of the public sector to secure debt.

- Leasing, property sale, and sale of rights occasionally require private sector access to finance to ensure buyers can afford a land purchase or invest capital into their acquired site.
- *P3 developments* depend on both private and public access to finance depending on the project. A development initiative requiring large investment, especially capital expenditures, will require that the private partner obtain loans or equity financing to help cover upfront expenses. Public sector may also need to issue debt depending on the P3 to fund the local government's financial contribution to a project, if any. Access to financing may be less relevant for smaller-scale projects or projects in which the public sector provides other contributions types like land write-downs or operating subsidies.

## **Evaluation 1E: How Exposed is the Jurisdiction to Governance and Institutional Risk Factors?**

The literature and academia-based interviews also revealed common themes around overall administrative feasibility and political acceptance factors that apply across all nine levers. They revolve around three governance and institutional risk factors which can harm success in jurisdictions' management of their GLBs:

**Risk 1: Lack of accountability and transparency** leads to political rather than professional management of local government GLBs. Political management of GLBs not only undermines the ability of jurisdictions to capture their properties' full financial potential, but it also hampers the effective use of GLBs towards delivering optimized public services. Furthermore, limited accountability and transparency opens up a jurisdiction's land sector to issues of corruption, a risk discussed in Section 2.

**Risk 2: Lack of long-term planning and coordination** results in a misallocation of resources across GLBs or unoptimized management of those GLBs. For example, if each public agency in a jurisdiction independently manages its GLBs without a coordinating function, then the local government cannot shift surplus GLBs from one department to a department with an urgent deficit. It also undermines standardized adoption of operational best-practices.

**Risk 3: Ambiguity in land governance** means property ownership is not clearly defined, which prevents a jurisdiction from investing resources in that property or from being able to strategically use the site for public good. Ambiguity in governance includes poorly delineated responsibilities or incomplete land transfers between different levels of government. It also includes disputes between government and a private individual claiming rights to a property as well as disputes across a jurisdiction's public agencies.

#### Figure 17: Lever susceptibility to governance risk factors

	Risk factors					
Fully Applies Partially Applies	Susceptibility to Limited Accountability and Transparency	Susceptibility to Limited Planning and Coordination	Susceptibility to Limited Clarity in Land Governance			
Lifecycle Management						
Energy-efficient Management						
Space/Property Rationalization						
Property-based User Fees						
Property Leasing						
Sale of Property						
Sale of "Rights"						
P3s: Social Development						
P3s: Commercial Development						

Source: Author's own analysis

Figure 17 maps how susceptible each GLB lever is to the three risk factors:

Lifecycle management, energy-efficient management, and property rationalization are somewhat susceptible to lack of planning and coordination. All three require a broader vision around the longer-term use and operation of both individual GLBs and the GLB portfolio as a whole. They also involve managing GLBs that may be "owned" by different government departments and agencies, potentially requiring a coordinating function. However, because lifecycle and energy-efficient management can be piloted on just a subset of GLBs, they feel these challenges less acutely. It's rationalization in particular that is dependent on a whole-portfolio view to ensure true optimization. It is also difficult to optimize properties without knowing what a jurisdiction owns, making rationalization partially susceptible to governance clarity issues.

**Property-based user fees** are most susceptible to issues of accountability and transparency. Officials and users can easily take advantage of revenue collection mechanisms for such fees if they lack transparency since there could be ambiguity around whether the government is truly obtaining its expected revenues.

**Property leasing, sale of property, sale of rights, and P3 developments** are susceptible to all three risk factors. First, because these levers involve an exchange or transaction with the private sector, lack of accountability and transparency can enable government officials to use these levers to grant favors. Second, these levers depend on a GLB being deemed "surplus" or "discretionary" properties. Making this determination requires having a long-term planning view around future asset needs and purposes. Lastly, a

government cannot dispose of a property or make major investments in the property without knowing its ownership; otherwise the jurisdiction exposes itself to legal risks.

## Evaluation 2: How Complex is It to Implement Each Lever Compared to Its Economic Potential within a Given Jurisdiction?

Part two of the GLB lever diagnostic framework seeks to establish the relative potential of a lever versus its complexity-to-implement.

Potential refers to a lever's financial and economic potential as either a cost-saving or revenue-generating mechanism. The exact financial and economic potential of levers undoubtedly depends on the specificities of the jurisdiction and how a specific lever is being adopted within a given initiative. Therefore, potential is a relative measure to compare which levers have more or less potential than other levers, rather than an absolute indicator.

Complexity captures each lever's scope of implementation needs and political acceptance risks. By aggregating considerations from both the implementation and acceptance dimensions, complexity gives a sense of how difficult is it to adopt a specific lever and what level of capability sophistication a jurisdiction needs to have for success. Again, this is a relative measure for comparison rather than an absolute measure.



Figure 18: Prioritization of levers by potential vs. complexity

The potential-complexity tradeoff must be understood for each specific jurisdiction because a jurisdiction's major capability gaps versus those needed for each GLB lever and the financial and economic potential of a lever will be unique to each context. However, the Appendix analyses provide more generic benchmarks around the relative complexity to implement a GLB lever compared to its relative potential based-on research reports and case studies. Using these benchmarks, Figure 18 shows there are four categories of levers:

**Quick Wins** have lower economic potential than other levers, but are least complex to implement. They lead to reoccurring sources of income or cost-savings which make them additionally attractive. For this reason, these levers are viable tools for most jurisdictions.

- Energy-efficient management leads to ~10-35% savings on energy costs.<sup>73</sup> This lever has some upfront investment, but payback time can be relatively quick. Implementation requires baseline data on operations and expertise on efficiency equipment. Investments' limited visibility may hamper political support, but pilots can provide proof-of-concept to gain buy-in.
- Property rationalization savings benchmarks vary from ~0.1%-5% of operating budget.<sup>74</sup> Jurisdictions save on lease, operations, and maintenance costs by reducing underutilized space and ensuring highest-value uses. Implementation depends on a centralized and coordinated view over the GLB portfolio's facility management. Staff and agencies may push-back against changes to their offices.

**Foundational Bets** require moderate capacity to implement, but also represent a greater level of potential. They are levers that can serve as an interim financial cushion for local governments to then use for reinvestment in even more attractive revenue streams.

- Lifecycle management can reduce lifespan operations and maintenance costs by 8-15% and capital investments by 33%, though maintenance expenses may increase in the short-term.<sup>75</sup> Implementation relies on extensive planning, coordination, and inventory management. It can be supported through staff's technical expertise on lifecycle modeling and legal frameworks incentivizing GLBs' financial management. Pilots may ease implementation if capabilities are constrained. This lever can face political pushback since benefits are long-term and less visible.
- Property-based user fees exist in local governments already, but not at full potential (e.g. Kenyan counties collect only 61% parking and 83% advertising fee potential)<sup>76</sup>. Upside from this lever requires implementing improved fee design, forecasting, cost-management, collections, and audit processes. Fees risk unpopularity and noncompliance when service quality is inadequate or they disproportionately affect low-income households.
- Property leasing in SSA benchmarks represents ~5-45% of local OSR, depending on the extensiveness and surplus of GLB portfolios.<sup>77</sup> Implementation requires an asset-registry to determine surplus, negotiation and contract management, contract enforcement, and legal frameworks to prevent patronage and negligence in leasing decisions. Political risk includes pushback from officials using GLBs for their own benefit or from community members wanting a different land-use.

<sup>73</sup> Euston-Brown 2014; Energy Efficiency in Local Government Operations 2011; Sullivan et al. 2010

<sup>74</sup> Wiseman 2017; City of Toronto 2019; White 2018

<sup>&</sup>lt;sup>75</sup> Freire and Kopanyi 2018; Campanaro et al. 2017; World Economic Forum 2014; Sullivan et al. 2010

<sup>&</sup>lt;sup>76</sup> Adam Smith International 2018

<sup>77</sup> Berrisford et al. 2018; Peterson 2006; Goodfellow 2015

**Ancillary Options** are financially and economically attractive, but are complex to implement. This complexity is especially due to their high associated political risks. Because of the risks, they are "ancillary" and should only be used in infrequent, strategic circumstances.

- Sale of property generates a high one-time revenue boost (e.g. Istanbul, Turkey auctioned-off an old bus station and office for \$1.5b).<sup>78</sup> Implementation requires an inventory and plan to determine GLB surplus, valuation expertise, and strict policies and bidding processes that prevent political abuse of land sales. Acceptance risks drive most of this levers' complexity. Politicians may undermine transparency efforts if they benefit from clientelism, and communities often object to "privatization" of public goods and "profit-centric" government.
- Sale of rights is similar to property sales. Selling rights represents lump-sum revenue opportunity (e.g. Sao Paulo, Brazil sold \$190m in development rights from 2005-2009).<sup>79</sup> But, acceptance risks are high due to corruption opportunities and community discomfort with shifting control of public goods to private hands. The latter is particularly risky when government sells private sector service rights. Implementation needs are the same as property sales, but also with requirements around contract development and compliance management to ensure buyers meet the sale and service operations conditions.

**Longterm Bets** are levers which have long-term positive impacts on both local urban development and government finances, but are challenging to implement successfully. Challenges revolve around sophisticated technical expertise and strong regulatory environment needs.

- *P3 Developments'* direct benefits are reduced capital and operating costs for government. Their indirect benefits are property tax or fee income and improved public service offerings. For example:
  - Mandaluyong, Philippines' P3 to rebuild its dilapidated public market led to avoided rehabilitation costs and \$191-382k in new annual tax income for the municipality.<sup>80</sup>
  - In 2017, Joburg Property Company, a municipal-owned entity in South Africa, received \$1.1m in investment and transaction revenues from development and asset management activities.<sup>81</sup>

Achieving P3s requires specialized procurement and legislation, valuation expertise, contract negotiation, enforcement, and oversight capability, and complex financial and project delivery arrangements. The political risks are high due to ceded control of public goods to the private sector and dependency on

<sup>78</sup> Peterson 2009

<sup>79</sup> Peterson 2009

<sup>&</sup>lt;sup>80</sup> World Bank 2019

<sup>&</sup>lt;sup>81</sup> City of Joburg Property Company

development approval processes. These risks are most pertinent for commercial developments, which communities may view as inappropriately profit-seeking.

The relative potential-complexity tradeoffs of the levers also imply that the levers should be seen as building-blocks for one another.

First, the consistent requirements for jurisdictions across all levers are procurement, planning, and coordination, though what aspects of those capabilities are most relevant vary by lever. This means adopting "simpler" levers such as energy-efficient management or property leasing may allow local governments to incrementally strengthen their GLB management processes so that they can gradually take on more complicated versions of procurement, planning, and coordination capabilities for levers like P3 developments.





Source: Palmer et al. 2015 with author's own analysis

Second, jurisdictions can use levers with less capability requirements and quicker payback time to accumulate sufficient funds to reinvest in more resource-intensive levers with higher financial and economic potential. Within a given lever, local governments can begin by piloting initiatives across just a subset of their properties for proof-of-concept and additional cashflow, before scaling across their full GLB portfolio. For example, jurisdictions can use their limited funds to make a subset of buildings energy-efficient and then use the savings from those buildings to make other facilities energy-efficient in a cascading effect.

The same iterative process applies across levers. A jurisdiction adopting "quick win" levers first, can use savings from those levers to build capability for the "foundational bets" levers. Then it can reapply the revenue from "foundational bets" towards investments for "long-term bets." Under this cascade scheme, the "quick wins" help close the initial fiscal gap, the "foundational bets" push a jurisdiction gradually into an operating surplus, and the "long-term bets" provide accumulated returns for ongoing investment and urban development (see Figure 18).



# **Section 5**

### **Applying Research Findings to Kenyan Counties**

Having developed a framework for GLB levers in Section 4, there is now value in demonstrating how such a framework may be applied to a specific context.

In Kenya, pressures around urbanization and decentralization have led to increased urgency for county governments, the primary form of local government, to grow their OSR. While Kenya is experiencing a rapid urbanization rate, it is still relatively under-urbanized, meaning the country has the opportunity to leverage urbanization for economic transformation.<sup>82</sup> However, government services, including utility and sanitation services, have not kept adequate pace with urbanization and undermine Kenya's ability to drive economic growth.<sup>83</sup> This shortcoming appears to be exasperated by two key challenges.

First, Kenya's poorly functioning land sector is a constraint to the country's sustainable urbanization.<sup>84</sup> Urban informality, low density, and sprawl are major challenges. They are driven by a mix of rapid urbanization and historical factors leading to land market distortions. Distortions include high land costs, delayed land transactions, and risk of forged land documents.<sup>85</sup> Institutional failures also exasperate challenges. Specifically, over-bureaucratization of land management has led to parallel land titling and asset register systems which enable corruption.<sup>86</sup> Historical over-centralization of management under colonialism also left Kenya with urban plans inadequately suited for the country's needs.<sup>87</sup> These planning systems remain ineffective today in that they fail to prevent unauthorized and uncoordinated development.<sup>88</sup>



#### Figure 20: Kenyan counties' capacity to collect own revenue compared to share of spending

<sup>85</sup> Cira et al. 2016

Source: Hobdari et al. 2018

<sup>82</sup> Cira et al. 2016

<sup>&</sup>lt;sup>83</sup> Cira et al. 2016 <sup>84</sup> Cira et al. 2016

<sup>86</sup> Cira et al. 2016

<sup>87</sup> Cira et al. 2016

<sup>88</sup> Cira et al. 2016

OSP antogony	2013/14		2014/15		2015/16		2016/17	
OSK category	Kshs M	%						
Business permits	364	1.2%	3,517	9.6%	4,299	12.0%	5,061	14.8%
Property-related revenue	3,805	12.5%	5,428	14.9%	6,203	17.4%	4,835	14.1%
Vehicle parking fees	303	1.0%	2,983	8.2%	3,851	10.8%	4,176	12.2%
Health facility operations/serv.	202	0.7%	2,382	6.5%	2,455	6.9%	3,775	11.0%
Natural resource revenue	1,520	5.0%	1,850	5.1%	1,711	4.8%	1,931	5.6%
Cesses	77	0.3%	976	2.7%	1,279	3.6%	1,213	3.5%
Market/trade centre fee	1,028	3.4%	1,002	2.7%	965	2.7%	1,045	3.1%
Housing	39	0.1%	809	2.2%	1,752	4.9%	983	2.9%
Other unclassified receipts	-	0.0%	1,834	5.0%	2,728	7.6%	887	2.6%
External services fees	21	0.1%	209	0.6%	23	0.1%	527	1.5%
All other OSR sources	23,175	75.9%	15,542	42.5%	10,456	29.3%	9,767	28.6%
Grand Total	30,533	100%	36,532	100%	35,723	100%	34,200	100%

#### Figure 21: County governments' own-source revenue streams

Source: Kenya Treasury and Planning 2019

Second, rapid urbanization has made adequate financing for public services essential to sustainable growth. <sup>89</sup> Unfortunately, recurrent financing for service delivery and asset maintenance is a continuing issue.<sup>90</sup> Resource distribution under national law shifts resources away from urban counties which carry some of the largest costs to rural counties.<sup>91</sup> Furthermore, imbalanced expenditure versus revenue devolution means most counties collect a low share of their OSR versus their share of spending and have limited scope to increase revenues, remaining dependent primarily on fees (see Figures 20 and 21).<sup>92</sup> This leads to an operating deficit in many counties. <sup>93</sup> Property tax has the most potential for offsetting deficits, but the political, informational, and technical challenges are high.<sup>94</sup> Operational deficits also harm counties' ability to make capital investments, including by undermining their ability to borrow.<sup>95</sup>

The intersection of both land-based and financial-based challenges makes Kenya a strong candidate for the adoption of GLB levers.

### Part One Diagnostic Evaluation of Example Kenyan Counties

Section 4's diagnostic can help determine which GLB levers may be best-suited to address some of the financial and land management challenges in Kenya. To simplify the assessment scope, the seven Kenyan counties interviewed and surveyed as part of this report's research serve as an example for applying the diagnostic framework. However, for confidentiality purposes, the seven counties were assessed collectively using indicative-only information basedon the Kenyan context and interview and survey responses. This makes the following assessment more illustrative than definitive.

<sup>89</sup> Cira et al. 2016

<sup>&</sup>lt;sup>90</sup> Cira et al. 2016 <sup>91</sup> Cira et al. 2016

<sup>&</sup>lt;sup>92</sup> Hobdari et al. 2018

<sup>&</sup>lt;sup>93</sup> Cira et al. 2016

<sup>94</sup> Adam Smith International 2018; Cira et al. 2016

<sup>95</sup> Cira et al. 2016

#### **Evaluation 1A - Fiscal Priorities**

The urgency of counties' financial state means they should prioritize levers with near-term impacts, but exact budget or cashflow type is less pertinent.

Kenyan counties today experience multiple constraints around their budgets. For example, a review of county finances determined that in fiscal year 2016/17, the counties' approved budgets totaled Kshs 399 billion, of which 60% was for recurrent expenditures and 40% for development or capital expenditures.<sup>96</sup> Originally, national government was to provide Kshs 300 billion of funds, the counties to raise Kshs 58 billion of OSR, and the counties to use Kshs 37 billion in cash balances from previous years to collectively pay for the budgeted amounts.<sup>97</sup>



Figure 22: County actual expenditures as percentage of approved budget

Note: Researched regions circled in blue; Source: Kenya Office of the Controller of Budget 2017

However, the actual total funds available to counties was just Kshs 369 billion, leading to a Kshs 30 billion shortfall in funding versus the initial budgeted expenditures.<sup>98</sup> While some of the gap was explained by a lower-than-expected contribution from the national government, 83% of the gap was due to counties only collecting 56% of their initially expected local revenue.<sup>99</sup> This meant actual county expenditures also fell behind projections, with counties spending only

<sup>&</sup>lt;sup>96</sup> Kenya Office of the Controller of Budget 2017

<sup>&</sup>lt;sup>97</sup> Kenya Office of the Controller of Budget 2017

<sup>98</sup> Kenya Office of the Controller of Budget 2017

 $<sup>^{\</sup>rm 99}$  Author's own analysis based on Kenya Office of the Controller of Budget 2017

65% of planned capital and 89% of planned operating expenditures. Figure 22 shows that underspending was especially pronounced in this report's seven focus counties.<sup>100</sup>

Shortfalls in OSR and the resulting underspending of budgets help explain the challenges around urban infrastructure and services detailed at the beginning of this Section. Given how important investment in public services is to Kenya's sustainable growth, there is not a strong reason to prioritize operational funds versus capital funds; both are critical. The urgency for funds also implies that the distinction between cost savings versus revenue generation is less immediately pertinent for the example Kenyan counties. Instead, the main priority for counties is to obtain revenue in the near-term so they can more immediately start expanding services and mobilizing new revenue streams. Figure 23 highlights levers best-matching this requirement.

Fully Applies	Budget Addressed		Cashflow Type		Impact Timeline	
Partially Applies Negatively Applies	Reoccurring Operational	"One-Time" Capital	Cost Savings	Revenue Generation	Near-Term	Delayed
Lifecycle Management						
Energy-efficient Management						
Space/Property Rationalization						
Property-based User Fees						
Property Leasing						
Sale of Property						
Sale of "Rights"						
P3s: Social Development						
P3s: Commercial Development						

#### Figure 23: Fiscal priority evaluation of Kenyan counties

Note: Most relevant item(s) boxed in blue; Source: Author's own analysis

#### **Evaluation 1B - GLB Portfolio**

County portfolios are primarily mandatory and discretionary property types, with most counties facing an overall portfolio deficit.

Six of seven Kenyan counties provided more granular data around their GLB portfolios. While there were unsurprisingly variations in counties' GLB portfolios, responses were sufficiently consistent to provide a cohesive view of the types of land and building uses under jurisdictions' purviews. After incorporating interview and survey data from the six responding counties into Kaganova's recommended three property classifications, results breakdown as:<sup>101</sup>

<sup>&</sup>lt;sup>100</sup> Lower absorption rates are also partially driven by administrative delays

<sup>&</sup>lt;sup>101</sup> Government-based interviews and survey

#### **Mandatory Properties**



#### **Discretionary Social**





#### **Surplus Properties**



The survey and interview results suggest that these counties have predominantly "mandatory" properties for core government operations, complemented with "discretionary" green spaces and community facilities. There is no distinct trend around what kind of incomegenerating properties county respondents own, but most responding counties typically owned only a small variety of commercial property.

All participating counties additionally said they owned less land and buildings than they needed to operate, implying an overall deficit in their GLB portfolios. Despite four counties reporting having vacant properties, however, all six responded that they lease property from others for extra government office space. This mismatch implies either that the vacant properties

are not appropriate as office spaces or that the counties have the opportunity to reoptimize how they use their GLBs to take advantage of vacant sites. Some counties also reported that most land in their jurisdiction is private, heavily limiting their flexibility within their GLB portfolio. The testimony of these counties is supported by analysis from the World Bank determining that the public sector holds "virtually no vacant government-owned land in Kenyan cities."<sup>102</sup>

Based-on the above, Figure 24 indicates which levers best match the example Kenyan counties' portfolio characteristics.

Fully Applies		Type of GLBs*	Amount of GLBs		
Partially Applies	Required Operational	Discretionary Social	Commercial Surplus	Deficit	Surplus
Lifecycle Management					
Energy-efficient Management					
Space/Property Rationalization					
Property-based User Fees					
Property Leasing					
Sale of Property					
Sale of "Rights"					
P3s: Social Development					
P3s: Commercial Development					

Figure 24: GLB portfolio evaluation of Kenyan counties

Note: Most relevant item(s) boxed in blue; Source: Author's own analysis

#### **Evaluation 1C - Revenue Collection and Property Tax**

*Counties have some baseline revenue collection capabilities, but limited property tax capabilities or flexibility in their budgets.* 

On revenue collection, Kenyan counties face major challenges, but do have some systems in place for their current collections of charges. Reports on subnational revenue mobilization in Kenya identified five major barriers in counties' collection capabilities: <sup>103</sup>

- Reliance on manual or only partially-automated collection systems creates large revenue leakages; automation is hampered by poor power supply and internet
- Resistance from community members around paying taxes and fees due to dissatisfaction with services and multiplicity of charges; 86% of counties reported this resistance<sup>104</sup>

<sup>&</sup>lt;sup>102</sup> Cira et al. 2016

<sup>&</sup>lt;sup>103</sup> Kenyan National Treasury and Planning 2019, Development Initiatives 2018

<sup>&</sup>lt;sup>104</sup> Mutua and Wamalwa 2017

- Limited internal controls and auditing mechanisms expose revenue collections to corruption and payment evasion issues
- Lack of internal expertise on revenue forecasting, collection, oversight, and cost management for collections
- Delayed progress in operationalizing the required legal and policy frameworks for effective revenue administration

Despite these shortcomings, counties' existing revenue collection remains functional enough to allow counties a ~10% share OSR, primarily through various license and fee sources. <sup>105</sup> Furthermore, some, though not all, counties have made recent strides in addressing challenges. For example, Nairobi and Narok counties have outsourced aspects of their collections process. <sup>106</sup> Other counties have adopted training programs, staff recruitment initiatives, and mobile money-based platforms roll-outs to improve revenue collection.<sup>107</sup>

On property tax, Kenyan counties' performance remains weak.<sup>108</sup> The main barriers to effective property tax are: <sup>109</sup>

- Lack of property rating and valuation legislation at the county level
- Valuation rolls which either do not exist, are not updated, or exist in multiple parallel versions, with efforts to address hampered by the high cost of improving systems
- Use of unimproved site values for urban property and flat rates for rural and agricultural land, which limit the base from which taxes can be levied
- Widespread noncompliance leading to large amounts of unpaid rates

However, unlike general revenue collection, progress on developing property tax capability is limited. There is a shortage of experienced public sector employees available to provide valuation services, and private valuers are often poor quality.<sup>110</sup> Counties have also yet to follow-through on tax enforcement, and only a small number of counties have invested in ensuring lands are adjudicated and registered.<sup>111</sup>Consequently, property tax collections have deteriorated across counties rather than improved in recent years and are much lower than their levels before Kenya's devolution reforms.<sup>112</sup>

Based-on the above, any GLB levers adopted by the example Kenyan counties may partially benefit from existing revenue collection capabilities but are unlikely to benefit from property tax capabilities. Additionally, counties' current operating deficit suggests they have limited revenue they can use to invest in mobilization mechanisms.<sup>113</sup> Figure 25 shows which levers best match the selected Kenyan counties' revenue collection and property tax status.

<sup>&</sup>lt;sup>105</sup> Kenyan National Treasury and Planning 2019

<sup>&</sup>lt;sup>106</sup> Development Initiatives 2018

<sup>&</sup>lt;sup>107</sup> Development Initiatives 2018

<sup>&</sup>lt;sup>108</sup> Kenyan National Treasury and Planning 2019; Adam Smith International 2018

<sup>&</sup>lt;sup>109</sup> Kenyan National Treasury and Planning 2019, Development Initiatives 2018; Franzsen and McCluskey 2017

<sup>&</sup>lt;sup>110</sup> Kenyan National Treasury and Planning 2019

 <sup>&</sup>lt;sup>111</sup> Kenyan National Treasury and Planning 2019
 <sup>112</sup> Kenyan National Treasury and Planning 2019

Kenyan National Treasury and Planni

<sup>113</sup> Cira et al. 2016

Fully Applies	Relationship with Other Revenue Capabilities					
Partially Applies	Benefits from Revenue Collection Capability	Benefits from Property Tax Capability	Benefits from Revenue Boost of Both Capabilities			
Lifecycle Management						
Energy-efficient Management						
Space/Property Rationalization						
Property-based User Fees						
Property Leasing						
Sale of Property						
Sale of "Rights"						
P3s: Social Development						
P3s: Commercial Development						

#### Figure 25: Other revenue capability evaluation of Kenyan counties

Note: Most relevant item(s) boxed in blue with dotted-line meaning only partial relevance; Source: Author's own analysis

#### **Evaluation 1D - Private Market Conditions**

Kenya has a relatively healthy private market environment; however, it is unclear to what extent favorable market conditions are concentrated exclusively in Nairobi versus also extended to other counties.

A report from the African Centre for Cities on harnessing land values determined that Nairobi had an active real-estate developer market.<sup>114</sup> This included an environment with both larger international developers and smaller local companies.<sup>115</sup> While it is likely that a strong presence of developers in Nairobi would be translatable to other counties, one expert interviewed cautioned that it was still unclear whether a true land development and developer culture has fully occurred in other regions of Kenya.<sup>116</sup> Further research may clarify this, but was not possible within the timeline of this report.

The same African Centre for Cities report found that commercial developers in Kenya are often able to access international finance sources and smaller property buyers can use personal savings or micro-lenders for funding. <sup>117</sup> However, domestic lending markets remain underdeveloped. <sup>118</sup> Furthermore, counties themselves have relatively limited capacity to borrow, primarily due to their large operating deficits which makes them unattractive loan recipients. <sup>119</sup> While Kenya has an initial framework for subnational borrowing, strict debt controls mandated by the national government can also be prohibitive.<sup>120</sup>

Market demand has similarly mixed status in Kenya. Demand for land is relatively high in urbanizing hotspots, even beyond Nairobi. For example, a 2017 assessment of land costs in Kenya

<sup>&</sup>lt;sup>114</sup> African Centre for Cities 2015

<sup>&</sup>lt;sup>115</sup> African Centre for Cities 2015 <sup>116</sup> Academia-based interviews

<sup>&</sup>lt;sup>117</sup> African Centre for Cities 2015

<sup>&</sup>lt;sup>118</sup> African Centre for Cities 2015

<sup>&</sup>lt;sup>119</sup> Cira et al. 2016

<sup>120</sup> Cira et al. 2016

found that four out of seven focus counties for this research have had strong growth in land prices: Kisumu, Kilifi, Kwale, and Kajiado.<sup>121</sup> More recent reports, however, suggest Kenya's realestate market is facing a slow-down, especially for residential but also for commercial spaces.<sup>122</sup>

Last is the state of technical providers in Kenya. Interviews with counties did not reveal any concerns over their ability to find providers to assist on GLB levers like lifecycle or energy-efficient management.<sup>123</sup> Additionally, Nairobi's status as an attractive regional hub for global businesses, combined with its strong real-estate development industry, suggests the country has a growing domestic services industry and increasing access to international businesses to support implementing various GLB levers.<sup>124</sup> That said, it is hard to properly discern the availability of quality technical providers without more targeted research, not achieved in the scope of this report. For this reason, this market condition should be viewed more carefully.

Figure 26 highlights these findings, with an overall conclusion that private market conditions required for the GLB levers exist, but perhaps only at a baseline level and less so for access to finance.

Fully Applies	Private Market Conditions					
Partially Applies	Real-Estate Developers	Technical Providers	Market Demand	Access to Finance		
Lifecycle Management						
Energy-efficient Management						
Space/Property Rationalization						
Property-based User Fees						
Property Leasing						
Sale of Property						
Sale of "Rights"						
P3s: Social Development						
P3s: Commercial Development						

#### Figure 26: Private market evaluation of Kenyan counties

Note: Most relevant item(s) boxed in blue with dotted-line meaning only partial relevance; Source: Author's own analysis

#### **Evaluation 1E - Risk Factors**

Counties face ongoing challenges around transparency, governance, and planning, but many have started adopting mitigating factors.

Every county interviewed raised ambiguity in property ownership and governance as the biggest challenge they face in GLB management.<sup>125</sup> Across 2011-2012, Kenya's Parliament passed reforms consolidating over 175 local councils under a 47 county structure as part of a model

<sup>&</sup>lt;sup>121</sup> Tubei 2018

<sup>122</sup> Cytonn Real Estate 2019

<sup>123</sup> Government-based interviews and survey

<sup>124</sup> Ngunjiri 2017

<sup>125</sup> Government-based interviews and survey

defined under Kenya's new 2010 Constitution. <sup>126</sup> These reforms led to simultaneous devolution of responsibilities and assets from national government to counties and the counties' absorption of responsibilities and assets from municipal councils. Slow implementation of the reforms has resulted in incomplete property transfers among different levels of government, lost institutional knowledge around which properties are publicly-owned, and ambiguity around national government's framework for land management. <sup>127</sup> Furthermore, informal settlements and businesses are relatively widespread in Kenya.<sup>128</sup> This means illegal encroachment onto public lands is common and often requires messy and expensive political and legal battles to combat.<sup>129</sup>

The other major challenge for Kenyan counties is transparency and accountability in GLB management. Every county interviewed or surveyed reported that most decisions around their GLBs were politically-driven.<sup>130</sup> Anecdotally, there are issues around government officials taking advantage of undocumented GLBs to claim land for themselves.<sup>131</sup> Similarly, some counties reported that the few land parcels their governments did lease-out were done so at heavily discounted rates through political favors rather than on a strategic basis for the broader public interest.<sup>132</sup> Such phenomena are corroborated by Klopp's study tracking corruption and patronage in land management in Kenya.<sup>133</sup>

Counties also have relatively decentralized GLB management structures which undermine coordination and planning. In most counties, properties are distinctly operated by separate agencies or departments (e.g. housing department independently manages residential facilities).<sup>134</sup> While some surveyed counties report having asset management plans, interview conversations suggest these are primarily general land-use plans rather than a coordinated effort to allocate resources against GLBs or to optimize facility management across multiple government departments.<sup>135</sup> This includes limited adoption of lifecycle management and planning across the counties.<sup>136</sup> In interviews, most counties mentioned that few resources go towards GLB maintenance today and instead any spare resources are focused on developing new infrastructure.<sup>137</sup>

Fortunately, some interviewed counties have begun early steps to improve their GLB planning and coordination. One county recently introduced a "Director of Asset Management" position to centralize decision-making, while others are currently evaluating options around cross-departmental procurement for asset management needs.<sup>138</sup> Every county reported having an asset registry, though these were all outdated or incomplete with no real systematic process for continuously inventorying public lands.<sup>139</sup> Counties also cited lack of GIS systems and delayed land transfers from national and municipal governments as a barrier to updating registries.<sup>140</sup>

<sup>&</sup>lt;sup>126</sup> Franzsen and McCluskey; Cira et al. 2016

<sup>&</sup>lt;sup>127</sup> Government-based interviews and survey

<sup>&</sup>lt;sup>128</sup> Cira et al. 2016

<sup>129</sup> Government-based interviews and survey; Academic-based interviews

<sup>&</sup>lt;sup>130</sup> Government-based interviews and survey

<sup>&</sup>lt;sup>131</sup> Government-based interviews and survey

 <sup>&</sup>lt;sup>132</sup> Government-based interviews and survey
 <sup>133</sup> Klopp 2000

<sup>&</sup>lt;sup>133</sup> Klopp 2000

 $<sup>^{\</sup>rm 134}$  Government-based interviews and survey; World Bank 2016

<sup>&</sup>lt;sup>135</sup> Government-based interviews and survey

<sup>&</sup>lt;sup>136</sup> Government-based interviews and survey <sup>137</sup> Government-based interviews and survey

<sup>&</sup>lt;sup>138</sup> Government-based interviews and survey

<sup>&</sup>lt;sup>139</sup> Government-based interviews and survey

<sup>&</sup>lt;sup>140</sup> Government-based interviews and survey

These findings are evidence of an positive, albeit imperfect, trend towards stronger GLB management.

Overall, it appears as if GLB planning and coordination activities are slowly improving across counties, but risks around accountability, transparency, and governance remain high. Figure 27 therefore shows that levers with high susceptibility to these latter risks are best excluded.

	Risk factors					
Fully Applies Partially Applies	Susceptibility to Limited Accountability and Transparency	Susceptibility to Limited Planning and Coordination	Susceptibility to Limited Clarity in Land Governance			
Lifecycle Management						
Energy-efficient Management						
Space/Property Rationalization						
Property-based User Fees						
Property Leasing						
Sale of Property						
Sale of "Rights"						
P3s: Social Development						
P3s: Commercial Development						

Figure 27: Institutional and governance risk factor evaluation for Kenyan counties

Note: Most relevant item(s) boxed in blue with dotted-line meaning only partial relevance; Source: Author's own analysis

### Part Two Diagnostic Evaluation of Example Kenyan Counties

Based-on the described operating context for the interviewed and surveyed Kenyan counties, it is possible to provide an initial and illustrative prioritization of the nine GLB levers for these jurisdictions collectively. Figure 28 shows how each GLB lever aligns with the part one diagnostic evaluations of the seven Kenyan counties.

The first phase of evaluations eliminates the GLB levers emphasizing either purely transactional sales or more sophisticated private sector investment mobilization. The main eliminating factors revolved around these levers' dependency on jurisdictions having property surplus and their susceptibility to institutional risk. These levers also tend to have a more intertwined relationship with property taxes. Elimination does not mean these levers may not be relevant in the future, only that the existing conditions in the example Kenyan counties are not well-aligned to their success today. This leaves four levers that warrant further consideration through part two of the developed diagnostic framework.



#### Figure 28: Most applicable levers for selected Kenyan counties

*Note: Most relevant item(s) boxed in blue; Source: Author's own analysis* 

#### **Evaluation 2 - Potential and Complexity**

For this secondary evaluation, the process for jurisdictions would normally be more tactical. First, jurisdictions would make order-of-magnitude estimates on the financial and economic benefits versus costs of each lever. Second, they would map their current capabilities to each lever's required capabilities to identify any prohibitive gaps. However, there are multiple difficulties around assessing potential and complexity-to-implement on a collective basis across seven Kenyan counties in the context of this illustrative diagnostic.

Instead, in this report, Evaluation 2 will consist of a higher-lever estimate of what the main capability gaps may be for the remaining four levers and what may affect the levers' potential in the Kenyan counties. The estimated assessment of the levers is based-on anecdotes around Kenyan counties' capabilities and financial opportunities obtained through government-and academia-based interviews. They are also informed by general capacity challenges and revenue opportunities discussed in reports on Kenya.<sup>141</sup> Capacity challenges in particular tend to revolve around procurement, revenue collection administration, internal staff expertise, planning procedures, and data tracking. These lead to the following views:

#### Lifecycle management

 Potential: In the long-term, cost savings should be theoretically high by reducing future capital investment needs by 33%.<sup>142</sup> Actual savings, though, may be moderated given counties spend limited resources towards maintenance and so would have potentially not spent as much towards capital fixes anyways.<sup>143</sup>

<sup>&</sup>lt;sup>141</sup> Such as from Cira et al. 2016, Kenyan National Treasury and Planning 2019, Development Initiatives 2018, and Franzsen and McCluskey 2017

<sup>&</sup>lt;sup>142</sup> Campanaro et al. 2017

<sup>&</sup>lt;sup>143</sup> Government-based interviews and survey

 Complexity-to-implement: The primary capability barriers for counties is technical expertise on modeling efficiency across GLBs' lifespan and determining the resource allocation implications.<sup>144</sup> Building this capability should be feasible, especially if counties can secure external technical assistance. There may also be political barriers driven by the required upfront investment and longer payback periods.

#### **Energy-efficient management**

- Potential: Savings would likely be similar to those projected for South Africa's smaller municipalities (13-16% off baseline energy expenditures).<sup>145</sup> In the context of counties' overall budget, however, this may be relatively small. Most county expenditures go towards staff, then operations and maintenance. <sup>146</sup> Energy spending would represent a fraction of this latter category.
- Complexity-to-implement: The main capability gaps are having an energy-usage monitoring system, technical expertise on equipment upgrades, and potentially procurement depending on if counties outsource using a performance-based contract. Given some of the interviewed counties were in process of adopting this lever already, these gaps should be feasibly closed.<sup>147</sup> There should be limited political pushback since cost is low and payback quick, especially if counties start with pilot initiatives in a few buildings for proof-of-concept.

#### Space and Portfolio rationalization

- Potential: Larger non-SSA municipalities saved ~2-5% in operating expenses through property rationalization.<sup>148</sup> Given the smaller scale of the Kenyan county portfolios and that most are in deficit, their biggest opportunity is more around fitting more staff per-floor-area rather than fully freeing-up properties.<sup>149</sup> This would suggest Kenyan counties' savings would thus be lower than benchmarks.
- Complexity-to-implement: A proper rationalization exercise requires crossgovernment coordination and an updated asset registry for a full-portfolio view. Counties are looking to move in this direction, but the progress is slow. Instead, if counties focus on maximizing use of internal spaces or apply rationalization on a by-department basis, they may be able to achieve savings even under more fragmented management conditions.<sup>150</sup>

#### **Property-based user fees**

<sup>&</sup>lt;sup>144</sup> Government-based interviews and survey

<sup>&</sup>lt;sup>145</sup> Euston-Brown 2014

<sup>&</sup>lt;sup>146</sup> Kenyan National Treasury and Planning 2019

<sup>&</sup>lt;sup>147</sup> Government-based interviews and survey

<sup>&</sup>lt;sup>148</sup> Wiseman 2017; White 2018

<sup>&</sup>lt;sup>149</sup> Government-based interviews and survey; Author's onsite observations

<sup>&</sup>lt;sup>150</sup> Author's onsite observations

- Potential: The potential of charges and fees in Kenya is relatively high, though most of the potential seems to be in business licensing, which is not property-based.<sup>151</sup> Actual property-based fees such as parking and market fees tend to have high costs to implement, offsetting much of their revenue potentials.<sup>152</sup> All of these fees also have economic distortion effects and disproportionately burden low-income residents.<sup>153</sup> For these reasons, the potential may be more moderated. These tradeoffs are less true, however, for advertisement fees, which perform at 83% of potential revenues.<sup>154</sup>
- Complexity-to-implement: Most property-based user fees face difficult administrative gaps around fee design, collection processes, and reducing corruption and non-compliance.<sup>155</sup> These gaps are driven specifically by limited staff expertise and lack of technical systems and tools.<sup>156</sup> Expanding fees are also likely politically unpopular. Again, advertisement fees do not face these same barriers. The biggest challenge for counties around advertisements appears to be lack of proper legislation at the county-level on advertisement guidelines.<sup>157</sup>



Figure 29: Complexity and potential estimate of remaining levers for Kenyan counties

Source: Author's own analysis

Figure 29 summarizes the conclusions from using this assessment. The above findings suggest that the example Kenyan counties should be able to adopt advertisement fees and rationalization focused on internal spaces more immediately, even though these levers' potential is relatively limited. In the near-term, it is also feasible for counties to address their

<sup>&</sup>lt;sup>151</sup> Adam Smith International 2018; Conversations with UEFB team at UN-Habitat

<sup>&</sup>lt;sup>152</sup> UN-Habitat 2009; Fjeldstad 2006 ; Adam Smith International 2018

<sup>&</sup>lt;sup>153</sup> UN-Habitat 2009; Fjeldstad et al. 2014

<sup>&</sup>lt;sup>154</sup> Kenyan National Treasury and Planning 2019

<sup>&</sup>lt;sup>155</sup> Kenyan National Treasury and Planning 2019; Conversations with UEFB team at UN-Habitat

<sup>&</sup>lt;sup>156</sup> Kenyan National Treasury and Planning 2019

<sup>&</sup>lt;sup>157</sup> Kenyan National Treasury and Planning 2019

technical expertise capability gaps around energy-efficient and lifecycle management to capture more moderate financial returns. Given their complexity to implement traded-off with their moderated potential, other property-based fees and full portfolio rationalization should be deprioritized.

The overall benefit of prioritizing levers in this way is that the seven researched counties can use the operational "quick wins" levers with speedier pay-back time to begin accumulating savings and incrementally improving their cashflows. As the savings grow, counties can then redirect those savings into more substantial investments with even higher returns – whether that be public services or building-up more resource-intensive capability in higher-potential resource mobilization streams such property taxes, business licenses, and eventually P3 development projects.<sup>158</sup>

<sup>&</sup>lt;sup>158</sup> Academia-based interviews



# **Section 6**

### A Broader Case for Investing in Better GLB Governance

While the bulk of this research has focused on the tactical relevance of specific GLB levers for the financial needs of local governments in SSA, the broader issue of good GLB governance has been an implicit theme throughout this report. This theme is especially highlighted both by the discussion of how susceptible different GLB levers are to institutional risk factors in Section 4 and Section 5's description of governance barriers faced by Kenyan counties. The illustrative diagnostic of Kenyan counties demonstrated how the risk factors around accountability and transparency, lack of long-term planning and coordination, and ambiguity in land governance, aren't just theoretical. They represent a real and pervasive set of barriers to effective GLB management.

These institutional challenges aren't just contained to Kenya; local governments in other SSA countries face them as well.<sup>159</sup> Recent legal changes in local government structures and responsibilities, combined with poor data tracking and cross-government planning, result in ambiguity and limited transparency around GLB management.<sup>160</sup> Gumede writes that:<sup>161</sup>

"Often African countries lack accurate information about the quantity, location and the condition of land and property owned by the state....do not have a uniform system to assess the value, the costs and to do inventories...[departments] overseeing state-owned land and property are ineffective, are themselves poorly managed and plagued by corruption...[with property management] fragmented between different spheres of government."

This synopsis is consistent with assertions from more comprehensive research reviews that local governments in developing and emerging economies often lack basic institutional needs for property management.<sup>162</sup>

Regardless of the broader diagnostic framework developed in Section 4, it is therefore difficult to imagine SSA local governments being able to implement the individual requirements of identified GLB levers without mitigating such institutional risks. Fortunately, research on government asset management from North America, Europe, and Asia provide SSA countries with a strong roadmap for how to mitigate their institutional and governance risks as it relates to GLBs. Kaganova and Telgarsky completed an international literature review and study of both GLB management challenges and best-practices. Figure 30 captures the recommended solutions that arose from their research.

<sup>159</sup> Academia-based interviews

<sup>&</sup>lt;sup>160</sup> Academia-based interviews

<sup>&</sup>lt;sup>161</sup> Gumede 2017

<sup>&</sup>lt;sup>162</sup> Kaganova and Nayyar-Stone 2000; Freire and Kopanyi 2018; Kaganova and Telgarsky 2017; Grubisic, et al. 2009

		Part 1: Buildings	Part 2: Land	Part 3: Infrastructure
Good practice	Characteristics of the good practice			
Basic asset management				
Know what you have	Inventory of assets, level of completion	Х	X (4)	X (5)
	Level of inventory computerization	Х	X (4)	X (5)
	Breadth of inventory information	X		
Know why you need these assets	Existence of specialized asset management classification	Х	X (4)	
Market valuation of assets for decision making and	Existence of regulations requiring market valuation of buildings and/or land before transactions are conducted	Х	Х	
transactions	Use of market valuation in practice, for decision-making	X (1)	X (1)	
	Use of market value (or market rent) in practice, in transactions	Х	Х	
Good governance: transparency	Transparency of documents and procedures related to this asset type	X (2)	X (2)	
	Transparency of transactions with assets of this type	X (3)	X (3)	
	Periodic reporting to decision-makers on this group of assets	Х	Х	X
	Periodic reporting to the public on this group of assets	Х	Х	
Good governance: use of auctions for allocating assets to the private sector	Use of auctions for allocating assets of this type to the private sector	Х	х	
Good governance: how revenues from allocating	Regulation on using revenues from the transfers of assets for capital investment or debt repayment	Х	Х	
assets are used	Practice of using revenues from the transfers of assets for capital investment or debt repayment	Х	х	
Advanced asset managemen	it			
Unified city-wide framework	Established responsibility for a common city-wide framework and approaches to management of assets of this type	х	х	х
Strategic asset management planning	Existence of strategic asset management plan (SAMP) or a similar specialized strategic document covering an asset type	X	Х	X
Training opportunities for staff	Training and professional development opportunities for staff managing assets of this type	Х	Х	X
Life-cycle costing and management	Use of proactive maintenance / preventive repair plans and schedules for assets	Х		X (5)
	Use of condition records about assets for repair and replacement planning	Х		X (5)
	Updating condition records	Х		X (5)
	Monitoring and recording annual operating and maintenance (O&M) costs for each building /part of buildings or major components of infrastructure systems	Х		X (5)
Capital investment planning	Use of norms and standards for service provision and service levels for planning building and/or infrastructure needs	X		X
	Projecting long-term investment needs for main building groups and/or infrastructure	Х		X (5)
	Existence of government-wide multi-year capital investment plan (as a part of the budgeting system) that covers buildings and/or infrastructure	Х		х
	Considering future life-cycle costs while planning technical solutions for capital investment in particular buildings and/or infrastructure	Х		X
	Assessing impact of future operation and maintenance (O&M) costs resulting from planned capital investment on the future operating budget	Х		X
	Existence of special protected funds or accounts for accumulating funding for buildings' and/or infrastructure capital repairs and replacement	Х		Х

#### Figure 30: Local government asset practices for good governance and management

Notes: Numbers in parentheses indicate that a related question has further details as summarized below:

 Applied to allocation of buildings or land to four types of users: the private sector, social users, government users, and contribution to municipal enterprises or PPPs.

(2) (a) Applied to three types of users (private sector, NGO, and municipal enterprise) and (b) identifies four potential ways (public website, local newspapers, TV, etc.) of publicizing the information for each type of user.

(3) (a) Applied to three types of users (private sector, NGO, and municipal enterprise) and (b) identifies five elements of transaction information to be published (e.g. name of buyer, characteristics of the asset, etc.)

(4) Applied to four types of land: parcelized land held by a local government and its budgetary entities; non-parcelized land held by a local government and its budgetary entities; parcelized land held by city-owned companies; and non-parcelized land held by city-owned companies.

(5) Applied to each infrastructure system under municipal ownership/control.

Source: Kaganova and Telgarsky 2017

When Figure 30 is also cross-referenced against other authors' research, four common mitigating approaches emerge to reduce institutional risks in SSA local governments. These mitigators are: <sup>163</sup>

An up-to-date asset registry that provides an understanding of existing land assets, their market values, their disaggregated uses, and their lifecycle stage. Additionally, developing and maintaining an asset registry can identify any titling or land transfer issues and ensure greater government accountability. Jurisdictions should ideally adopt computerized registries rather than manual systems to facilitate administration of any future leases, sales, and operations data and ensure GLBs' revenue and cost targets are met.

A coordinated asset planning effort which lays-out the implications of short-term and long-term service delivery, financial, and urban development needs on requirements for the GLB portfolio as well as what investments will best support those requirements. Such efforts should also integrate GLBs' operational needs into other strategic considerations (e.g. forecast of GLB lifecycle costs in long-term financial budgets and alignment of GLB categorizations to land-use plans).

**Clear procedural standards and guidelines** that articulate the decision-making rights for public property, parameters for disposing or acquiring property to prevent political abuse, and guidelines for procurements with the private sector. Guidelines also ensure consistency across multiple government agencies, which helps facilitate coordination.

Auditing and legal enforcement capabilities that create record reviews to prevent clientelism from politicians, give the local government power to reclaim illegally taken public land, and validate private partners are fulfilling contractual obligations in the case of property sales, rights sales, property leases, and P3s.

In many ways, these mitigating actions are overarching enablers for adopting the GLB levers explored in this report (see Figure 31).

Specifically, there is ample overlap between the mitigator best-practices and the three operations GLB levers, especially in their emphasis on an asset registry. This suggests that while ensuring overall good governance of GLBs is critical, it should not prevent local governments from adopting some GLB levers more incrementally. In Kenya, multiple interviewed counties implied that outdated GLB registries and delayed cross-government land transfers prohibited them from making any progress around their GLB management.<sup>164</sup> In reality, governments can apply levers like energy-efficient and lifecycle management to the assets they already know they have, and then use scaling-up these levers as incentive for completing their asset registers and improving intergovernmental coordination. In this way, preliminarily adopting operations levers serves as a parallel avenue through which local governments can build-out their governance capabilities.

<sup>&</sup>lt;sup>163</sup> Kaganova and Nayyar-Stone 2000; Freire and Kopanyi 2018; Kaganova and Telgarsky 2017; Grubisic, et al. 2009; Academia-based interviews <sup>164</sup> Government-based interviews and survey

Operations	Transactions	Investments			
Lifecycle-based management	Property-based User Fees	Sale of "rights"			
Energy-efficient management	Property leasing	P3s for Social Development			
Space and property rationalization	Sale of property	P3s for Commercial Development			
	Up-to-date asset registry				
	Coordinated asset plann	ing effort			
	Clear procedural standard and guidelines				
	Auditing and legal enforcement capabilities				

#### Figure 31: Institutional risk mitigators mapped to GLB levers

#### **Risk Mitigators**

Note: Dotted line means somewhat applies, Source: Author's own analysis

Where jurisdictions require strong caution is in adopting more transaction- and investment-based levers without addressing institutional risk first. These GLB lever types may be too susceptible to governance issues for local governments to implement them without additional mitigating safeguards (see Section 4, Evaluation 1E). Consequently, without sufficient governance structures in place, implementing these later levers may lead to an overly profitmaximizing approach by jurisdictions, high exposure to patronage, and under-optimized administrative capacity for GLB resource mobilization and value delivery.<sup>165</sup>

In particular, governance and institutional investments are certainly core enablers to allowing local governments to unlock the financial potential of their GLBs. More importantly, however, an emphasis on transparency, accountability, planning, and ownership is what allows local governments to achieve GLBs' financial potential explicitly in service to, not at the expense of, their communities' long-term needs and well-being.

<sup>&</sup>lt;sup>165</sup> Academia-based interviews



# Appendices

### **Appendix: Back-End Analysis Informing Diagnostic Framework**

This Appendix captures the back-end data "snippets and factoids" used to inform the diagnostic in Section 4 of this report and shows how the Section 3 comparative dimensions eventually led to the proposed diagnostic. In reality, a thorough report of equivalent length to this one could have been written about any one of the identified levers. Instead, the assessments for this research only provide as much context as is needed to articulate the tradeoffs of each lever so that jurisdictions can then determine which ones are worth focusing on more robustly. The analysis does not go into details for how jurisdictions might implement these levers, nor what specific mechanisms and precautions they need to develop for implementation. For readers interested in adopting these levers, there are many guides and resources on how to do so available online, some of which they can find through this report's citations.

In the below tables, there are two flags. First, there may be redundancies in comments across levers, which is done purposefully to demonstrate the mapping of specific information from different sources to the conclusions made in this report about that lever. Second, text in brackets [] represents an additional interpretation made by this report's author in relation to a piece of information obtained through literature review and interviews.

GLB Lever	Key Informing Dimension Analysis		
Lifecycle Management	<ul> <li>Economic Impact         <ul> <li>Without disposing properties or outsourcing facilities management, optimizing the lifecycle and portfolio of GLBs can lead to a 10-15% reduction in operations and maintenance cost.<sup>166</sup></li> <li>Estimates suggest fixed assets' useful life can be shortened by 33% without appropriate operations and maintenance investment, leading to a 33% increase in long-term capital investment needs<sup>167</sup></li> </ul> </li> </ul>		
Energy-efficient Management	<ul> <li>Economic Impact         <ul> <li>Investment needs and payback time vary by type of upgrade<sup>168</sup>:</li> <li>Indoor lighting – medium investment with short payback time (&lt;3yrs)</li> <li>Building retrofit – medium to high investment with long payback time (&gt;6yrs)</li> </ul> </li> </ul>		

### **Evaluation 1A: What are the Jurisdiction's Fiscal Priorities?**

<sup>166</sup> Farvacque-Vitkovic and Kopanyi 2014

<sup>167</sup> Campanaro et al. 2017 ; World Economic Forum 2014

<sup>168</sup> Limaye and Derbyshire 2014

	<ul> <li>Public lighting – medium to high investment with medium payback time (3-6yrs)</li> <li>Utility optimizations – medium to high investment with long payback time (&gt;6yrs)</li> <li>Savings primarily through reducing reoccurring utilities cost<sup>169</sup></li> </ul>
Space and Property Rationalization	<ul> <li>Economic Impact</li> <li>City of New York achieved annual rent and energy savings within first 3yrs of portfolio optimization effort<sup>170</sup></li> <li>Toronto achieved \$2m annual rent savings and a 26% utility cost reduction through 8 pilots across 3yrs<sup>171</sup></li> </ul>
Property-based User Fees	<ul> <li>Fees feed into jurisdictions operating budget as revenue<sup>172</sup></li> </ul>
Property Leasing	<ul> <li>Economic Impact</li> <li>Short-term or long-term leases can be paid out either as annual payments or an up-front lump sum<sup>173</sup></li> <li>Land sales or lease are easiest revenue source to fund up-front costs for infrastructure<sup>174</sup></li> </ul>
Sale of Property	<ul> <li>Economic Impact</li> <li>Land sales or lease are easiest revenue source to fund up-front costs for infrastructure<sup>175</sup></li> <li>Governments can best minimize land sale risk from volatile markets by using land sale proceeds as one-time capital revenue; in general, land sales are "not a permanently recurring source"<sup>176</sup></li> <li>Advantage of land sales is the revenue is relatively immediate<sup>177</sup></li> </ul>
Sale of "rights"	<ul> <li>Economic Impact</li> <li>Sale of transferable development and air rights are a one-off transaction most effective for raising infrastructure funding<sup>178</sup></li> <li>Sale of service rights structured as joint ventures or concessions can provide reoccurring revenue streams<sup>179</sup></li> </ul>
P3s for Social Development & Commercial Development	Economic Impact

<sup>169</sup> See Evaluation 2 Table

<sup>175</sup> Freire and Kopanyi 2018
 <sup>176</sup> Peterson 2009

- <sup>177</sup> Academia-based interviews
- <sup>178</sup> Berrisford et al. 2018; Palmer et al. 2015

<sup>179</sup> See Evaluation 2 Table

<sup>&</sup>lt;sup>170</sup> Wiseman 2017

<sup>&</sup>lt;sup>171</sup> City of Toronto 2019

<sup>&</sup>lt;sup>172</sup> Farvacque-Vitkovic and Kopanyi 2014

<sup>&</sup>lt;sup>173</sup> Author's own analysis based-on review of literature

<sup>&</sup>lt;sup>174</sup> Freire and Kopanyi 2018
<ul> <li>P3s can be structured to capture recurring revenue from user-based fees such as toll roads or parking facilities<sup>180</sup></li> <li>P3s can also facilitate savings capture from allowing private companies to take over operations of inefficient multiple sectors and there are increased into a new development 181</li> </ul>
public assets and then reinvestment those savings into new development <sup>202</sup>
<ul> <li>Multiple case studies show how PPPs can be structured so that all or part of the required capital costs are undertaken by the private partner; however, that private partner must be given an opportunity to recuperate costs over a longer concession period before the property reverts back to the local government<sup>182</sup></li> </ul>

## **Evaluation 1B: What Types of Properties does the Jurisdiction have?**

GLB Lever	Key Informing Dimension Analysis
Lifecycle Management	Administrative Feasibility
Energy-efficient Management	<ul> <li>Proposed financial principles and goals based on property type<sup>183</sup>:         <ul> <li>For "mandatory" properties: increase efficient use, minimize operating costs, relocate offices and services to function not prime areas, make cost-benefit to identify best-use of asset, reclassify space excessively used as "mandatory" to "discretionary" or "surplus"</li> <li>For "discretionary" properties: analyze costs to inform tradeoffs, generate program alternatives to reduce property-related subsidies to extent possible,</li> <li>For "surplus" properties: lease at highest and best use, evaluate income-generation performance, make targeted investments to enhance income generation, sell under-performing properties for one-time revenues, reduce maintenance and liability on properties that cannot be leased or sold</li> </ul> </li> <li>For land sales and leasing, government must control large supply of land<sup>184</sup></li> </ul>
Space and Property Rationalization	
Property-based User Fees	
Property Leasing	
Sale of Property	
Sale of "rights"	
P3s for Social Development & Commercial Development	

<sup>&</sup>lt;sup>180</sup> Friedman 2016

<sup>&</sup>lt;sup>181</sup> Friedman 2016

<sup>&</sup>lt;sup>182</sup> See Evaluation 2 Table

<sup>183</sup> Kaganova 2012; Kaganova and Nayyar-Stone 2000 -- allowed author to manually map levers to these principles by property type

<sup>&</sup>lt;sup>184</sup> Berrisford et al. 2018

## **Evaluation 1C: To What Extent does the Jurisdiction have Existing Revenue Collection and Property Tax Capabilities?**

GLB Lever	Key Informing Dimension Analysis
Lifecycle Management	<ul> <li>Economic Impact</li> <li>Inclusive a preventative or predictive maintenance component which may require jurisdictions to have sufficient existing revenue to fund on-going operations and maintenance investments<sup>185</sup></li> </ul>
Energy-efficient Management	<ul> <li>Economic Impact</li> <li>Depending on the type of efficiency upgrade, requires a level of upfront investment that may be difficult to fund without existing revenue sources<sup>186</sup></li> </ul>
Space and Property Rationalization	Not Applicable based-on research
Property-based User Fees	<ul> <li>Administrative Feasibility</li> <li>User fees by definition rely on existing revenue collection capabilities<sup>187</sup></li> </ul>
Property Leasing	Economic Impact
Sale of Property	<ul> <li>Interviews suggest these levers can also facilitate collection of property taxes or be used to pilot property taxes on a smaller subset of properties<sup>188</sup></li> <li>Opportunity for governments to collect property taxes on development and air rights-based projects since these increase a parcel's floor-to-area ratio<sup>189</sup></li> <li>In Zimbabwe, Cote d'Ivoire, and Nigeria, owners of property for new developments are typically charged a one-time land use fee or recurring property tax by the local government<sup>190</sup></li> <li>Kampala, Uganda was able to have funds to invest in development projects due to revenue raised from improved revenue collections systems and bolstering of property tax<sup>191</sup></li> <li>P3s relying on income from service charges on the property may benefit from revenue collection capability if the government is still charged with such responsibility<sup>192</sup></li> </ul>
Sale of "rights"	
P3s for Social Development & Commercial Development	

<sup>185</sup> See Evaluation 2 Table

<sup>186</sup> Author's own analysis based-on Limaye and Derbyshire 2014

<sup>187</sup> See Evaluation 2 Table

<sup>188</sup> Academia-based interviews

<sup>189</sup> Author's own analysis

<sup>190</sup> Palmer et al. 2015

<sup>191</sup> Academia-based interviews

<sup>192</sup> See Evaluation 2 Table

## **Evaluation 1D: What Private Market Conditions Existing in this Jurisdiction?**

GLB Lever	Key Informing Dimension Analysis
Lifecycle Management	<ul> <li>Market Requirements</li> <li>Technical staff, independent consultants, and asset management auditors can support proper lifecycle management of GLBs<sup>193</sup></li> </ul>
Energy-efficient Management	<ul> <li>Market Requirements</li> <li>Requires energy-efficiency service and equipment providers accessible to local government<sup>194</sup></li> <li>Financial implementation may require an energy performance contract [implying need for technical experts]<sup>195</sup></li> </ul>
Space and Property Rationalization	<ul> <li>Market Requirements</li> <li>Toronto and UK Government hired external consultants as part of their detailed portfolio baselining and target setting, but it appears as if New York City implemented portfolio optimization primarily with a small group of internal staff<sup>196</sup></li> <li>Savings most meaningful when real estate prices are high<sup>197</sup></li> </ul>
Property-based User Fees	<ul> <li>Market Requirements</li> <li>There must be adequate quality of services, and demand for those services, for people to be willing to pay user fees and charges<sup>198</sup></li> </ul>
Property Leasing	<ul> <li>Market Requirements</li> <li>Competition for investment in developing economies could lead to lower levels of premiums and rent [implies a jurisdiction needs high demand to offset this]<sup>199</sup></li> <li>Existence of private land market helps government set lease price and tax assessments for a property<sup>200</sup></li> <li>Demand for property, leading to increased land value, is a prerequisite for ensuring governments can capture income from land-based financing<sup>201</sup></li> </ul>

<sup>&</sup>lt;sup>193</sup> Campanaro et al. 2017

<sup>&</sup>lt;sup>194</sup> Author's own analysis based-on Limaye and Derbyshire 2014

<sup>195</sup> Energy Efficiency in Local Government Operations 2011; Limaye and Derbyshire 2014; A Guide to Energy Management in Public Buildings 2008

<sup>&</sup>lt;sup>196</sup> City of Toronto 2019; UK Office of Government Property 2018; Wiseman 2017

<sup>&</sup>lt;sup>197</sup> Wiseman 2017; Academia-based interviews

<sup>&</sup>lt;sup>198</sup> Taylor 2016

<sup>&</sup>lt;sup>199</sup> Hong 1999

<sup>200</sup> Anderson 2012

<sup>&</sup>lt;sup>201</sup> Berrisford et al. 2018; Academia-based interviews

	• Conditions for land-based financing include demand for property which is "determined by access to land rights, the strength of the property developer sector and access to property finance" <sup>202</sup>
Sale of Property	<ul> <li>Market Requirements</li> <li>Land sales are susceptible to volatility in urban land markets<sup>203</sup></li> <li>Developing country land prices also reflect cost and availability of credit<sup>204</sup></li> <li>Demand for property, leading to increased land value, is a prerequisite for ensuring governments can capture income from land-based financing<sup>205</sup></li> <li>Conditions for land-based financing include demand for property which is "determined by access to land rights, the strength of the property developer sector and access to property finance"<sup>206</sup></li> </ul>
Sale of "rights"	<ul> <li>Market Requirements</li> <li>Requires strong market demand for residential or commercial development, especially in the case of development rights transfers that seek to increase density<sup>207</sup></li> <li>Buyers of air rights and transferable development rights are likely to be real-estate developers interested in building-up FAR; also means they may need financing as part of broader development project using these rights<sup>208</sup></li> <li>Concessions and sale of service rights will require technical providers familiar with operating and generating revenue from a certain type of service<sup>209</sup></li> <li>Land-based financing requires willing land owners and developers<sup>210</sup></li> <li>Access to finance drives demand for land development and raise land prices<sup>211</sup></li> <li>Conditions for land-based financing include demand for property which is "determined by access to land rights, the strength of the property developer sector and access to property finance"<sup>212</sup></li> </ul>
P3s for Social Development & Commercial Development	<ul> <li>Market Requirements</li> <li>Land-based financing requires willing land owners and developers<sup>213</sup></li> </ul>

<sup>&</sup>lt;sup>202</sup> Palmer et al. 2015

- <sup>208</sup> Author's own analysis
- <sup>209</sup> Author's own analysis
- <sup>210</sup> Berrisford et al. 2018
- $^{\rm 211}$  Berrisford et al. 2018

<sup>213</sup> Berrisford et al. 2018

<sup>203</sup> Peterson 2009

<sup>&</sup>lt;sup>204</sup> Peterson 2009; Berrisford et al. 2018

<sup>&</sup>lt;sup>205</sup> Berrisford et al. 2018; Academia-based interviews

<sup>&</sup>lt;sup>206</sup> Palmer et al. 2015

<sup>&</sup>lt;sup>207</sup> MA Executive Office of Energy and Environmental Affairs (year unknown); Grover et al. 2018

<sup>&</sup>lt;sup>212</sup> Palmer et al. 2015

## Evaluation 1E: How Exposed is the Jurisdiction to Governance and Institutional Risk Factors?

GLB Lever	Key Informing Dimension Analysis
Lifecycle Management	<ul> <li>Administrative Feasibility         <ul> <li>Inter-agency management task force and increased cross-government information sharing can help create a cohesive management vision<sup>218</sup></li> <li>Planning and budgeting proper operations and maintenance can prevent underinvestment in GLBs<sup>219</sup></li> <li>Transparency around assets and their conditions can support management accountability<sup>220</sup></li> </ul> </li> </ul>
Energy-efficient Management	<ul> <li>Administrative Feasibility         <ul> <li>Coordination important when building occupant is different from decision-maker on operations and maintenance decisions due to misaligned incentives<sup>221</sup></li> <li>Requires energy tracking system to identify baseline consumption and targeting goals implies certain level of planning is needed<sup>222</sup></li> </ul> </li> </ul>

<sup>214</sup> Berrisford et al. 2018

<sup>215</sup> Palmer et al. 2015

<sup>216</sup> PPP Knowledge Lab (year unknown)

<sup>217</sup> Friedman 2016

<sup>218</sup> Campanaro et al. 2017

<sup>219</sup> Campanaro et al. 2017

<sup>220</sup> Campanaro et al. 2017

<sup>221</sup> A Guide to Energy Management in Public Buildings 2008

<sup>222</sup> Author's own analysis based-on Energy Efficiency in Local Government Operations 2011

Space and Property Rationalization	<ul> <li>Administrative Feasibility         <ul> <li>Benchmarks from UK and North America suggest centralized and coordinated portfolio planning was key step in property rationalization and optimization<sup>223</sup></li> <li>Also implies that some clarity in ownership is necessary to have accurate view of planning needs and properties within scope of jurisdiction's portfolio<sup>224</sup></li> </ul> </li> </ul>
Property-based User Fees	<ul> <li>Administrative Feasibility</li> <li>Corruption from revenue collectors as well as evasion and resistance to make payments remain an issue in counties in Kenya<sup>225</sup></li> </ul>
Property Leasing	<ul> <li>Administrative Feasibility         <ul> <li>Unlocking public land values requires having an inventory of land to determine what parcels the government actually owns, and then a long-term planning function to decide which are surplus<sup>226</sup></li> <li>Property leased to private sector tend to be priced well-below market rents which allows public officials and agencies to exchange these low rents for political influence, corrupt payments, or other problematic arrangements<sup>227</sup></li> <li>Land-based financing requires "certainty about land use, which is based on a credible city planning framework"<sup>228</sup></li> </ul> </li> <li>Political Acceptance         <ul> <li>In places like Nairobi, close connection between land and corruption means vested interests can undermine land-based value capture<sup>229</sup></li> </ul> </li> </ul>
Sale of Property	<ul> <li>Administrative Feasibility</li> <li>Land sales tend to be conducted off budget which results in lack of transparency and accountability; the large sums also invite corruption and institutional capture<sup>230</sup></li> <li>Unlocking public land values requires having an inventory of land to determine what parcels the government actually owns, and then a long-term planning function to decide which are surplus<sup>231</sup></li> </ul>

- <sup>226</sup> Peterson 2013
- <sup>227</sup> Peterson 2013

- <sup>230</sup> Peterson 2009
- <sup>230</sup> Peterson 2009 <sup>231</sup> Peterson 2013

<sup>&</sup>lt;sup>223</sup> Wiseman 2017; City of Toronto 2019; UK Office of Government Property 2018

<sup>&</sup>lt;sup>224</sup> Author's own analysis; Academia-based interviews

<sup>&</sup>lt;sup>225</sup> Adam Smith International 2018

<sup>&</sup>lt;sup>228</sup> Palmer et al. 2015
<sup>229</sup> Berrisford et al. 2018

	<ul> <li>Land-based financing requires "certainty about land use, which is based on a credible city planning framework"<sup>232</sup></li> <li>Political Acceptance         <ul> <li>In places like Nairobi, close connection between land and corruption means vested interests can undermine land-based value capture<sup>233</sup></li> </ul> </li> </ul>
Sale of "rights"	<ul> <li>Administrative Feasibility         <ul> <li>Communication across agencies to clarify opportunities and constraints around "rights" transactions [implies planning and coordination need]<sup>234</sup></li> <li>Planning needs specifically as it relates to aligning zoning regulations with strategic air rights and development rights transfer program [implies planning and coordination need]<sup>235</sup></li> <li>Adoption of a mechanism for selling "rights," where an auction system seems most common [seems to be a mechanism to reduce politically-based allocations and ensuring transaction is at market value]<sup>236</sup></li> <li>Land-based financing requires "certainty about land use, which is based on a credible city planning framework"<sup>237</sup></li> </ul> </li> <li>Market Requirements         <ul> <li>Review and permitting process and authority to manage "rights" transactions with clear program guidelines and mechanisms to ensure the buyer appropriately complies with terms of rights sale [implies planning and coordination need]<sup>238</sup></li> </ul> </li> </ul>
P3s for Social Development & Commercial Development	<ul> <li>Administrative Feasibility</li> <li>P3s exposed to risk of nontransparency and corrupt deals between government and developer<sup>239</sup></li> <li>Unlocking public land values requires having an inventory of land to determine what parcels the government actually owns, and then a long-term planning function to decide which are surplus<sup>240</sup></li> <li>Land-based financing requires "certainty about land use, which is based on a credible city planning framework"<sup>241</sup></li> <li>Political Acceptance</li> </ul>

<sup>&</sup>lt;sup>232</sup> Palmer et al. 2015

<sup>237</sup> Palmer et al. 2015

<sup>&</sup>lt;sup>233</sup> Berrisford et al. 2018

<sup>&</sup>lt;sup>234</sup> MA Executive Office of Energy and Environmental Affairs (year unknown)

<sup>&</sup>lt;sup>235</sup> Beyer 2014; Grovey et al. 2018

<sup>&</sup>lt;sup>236</sup> Author's own analysis based on various articles

<sup>&</sup>lt;sup>238</sup> MA Executive Office of Energy and Environmental Affairs (year unknown); The World Bank (year unknown)

<sup>239</sup> Peterson 2009

<sup>240</sup> Peterson 2013

<sup>&</sup>lt;sup>241</sup> Palmer et al. 2015

<ul> <li>Municipalities in developing contexts often select projects based on political versus financial and economic criteria linked to long-term investment and debt management<sup>242</sup></li> <li>Corruption is major problem in public procurement in Africa with public officials often directing contracts to their preferred bidders; P3s in particular offer more room for manipulation due to their complexity – examples include Kenya's Norther Corridor road network and Tanzania's 1995 power purchasing agreement<sup>243</sup></li> <li>Desentrelisation without increased accountability and transportance corruption in P2s or well as</li> </ul>
<ul> <li>Decentralization without increased accountability and transparency can increase corruption in P3s as well as lead to fragmented or overlapping jurisdictions which creates coordination problems<sup>244</sup></li> <li>Accountability, transparency, collaborative decision-making, and strategic and integrated processes are all part of an enabling environment for local government P3s<sup>245</sup></li> </ul>

# Evaluation 2: How Complex is It to Implement Each Lever Compared to Its Economic Potential within a Given Jurisdiction?

GLB Lever	Key Informing Dimension Analysis
Lifecycle Management	<ul> <li>Economic Impact</li> <li>Without disposing properties or outsourcing facilities management, optimizing the lifecycle and portfolio of GLBs can lead to a 10-15% reduction in operations and maintenance cost.<sup>246</sup></li> <li>US city transportation authority estimated that preventative maintenance on roadways would result in 50% less annual cost-per-mile expenditure and extend roadway life by 10yrs<sup>247</sup></li> <li>Estimates suggest fixed assets' useful life can be shortened by 33% without appropriate operations and maintenance investment, leading to a 33% increase in long-term capital investment needs<sup>248</sup></li> <li>Estimates suggest that the cost of maintaining the US transportation is just 1/3 of replacing it<sup>249</sup></li> </ul>

- <sup>243</sup> Farlam 2005
- <sup>244</sup> PPP Knowledge Lab (year unknown)
- <sup>245</sup> Plummer 2002
- <sup>246</sup> Farvacque-Vitkovic and Kopanyi 2014
- <sup>247</sup> Audier, et al. 2014
- $^{\rm 248}$  Campanaro et al. 2017; World Economic Forum 2014

<sup>249</sup> World Economic Forum 2014

<sup>&</sup>lt;sup>242</sup> Freire and Kopanyi 2018

<ul> <li>Estimates on federal facility management in the US suggest preventative maintenance represents 12-18% additional savings over reactive maintenance programs; and predicative maintenance offer another 8-12% cost savings versus preventative maintenance<sup>250</sup></li> <li>"Tracking and proactively maintaining an asset during its entire useful life has financial and practical implications for municipalities"; maintenance increases savings in the long-term as improper management practices mean local governments will either prematurely replace or repair an asset or do so too late<sup>251</sup></li> <li>Local governments tend to underinvest in operation and maintenance [suggesting under-optimized financial management of assets]<sup>252</sup></li> <li>Other benefits include improved service delivery through well-functioning GLBs and reducing public safety ricks caused by deteriorating accett<sup>253</sup></li> </ul>
Administrative Feasibility
<ul> <li>Chinese municipalities are expected to have both near-term and long-term plans around capital investment to support asset management<sup>254</sup></li> </ul>
<ul> <li>Implementation typically facilitated through checklists of elements and standardized specifications including an emphasis on strategy that integrates financial planning, asset inventory, a strong information system, and an institutional structure with clear responsibilities<sup>255</sup></li> </ul>
<ul> <li>Regular cataloging on GLB conditions (incl. baselining) and market-based valuation of property are important to inform maintenance decisions; this can be supported through government-wide standards<sup>256</sup></li> <li>Proper investment planning requires technical engineering expertise and support procedures<sup>257</sup></li> </ul>
<ul> <li>Local governments need to explicitly earmark funds for maintenance to ensure they are not diverted elsewhere<sup>258</sup></li> </ul>
<ul> <li>Clear determination of ownership rights, asset uses, mandates and functions, as well as audit mechanism and criteria for acquisition and disposition also support lifecycle management<sup>259</sup></li> </ul>
<ul> <li>Introduction of performance targets can ensure accountability and investment in GLBs<sup>260</sup></li> </ul>

- <sup>252</sup> Campanaro et al. 2017
- <sup>253</sup> Campanaro et al. 2017; World Economic Forum 2014; Sullivan et al. 2010
- <sup>254</sup> Campanaro et al. 2017
- <sup>255</sup> Campanaro et al. 2017
- <sup>256</sup> Campanaro et al. 2017; World Economic Forum 2014
- <sup>257</sup> Sullivan et al. 2010
- <sup>258</sup> Campanaro et al. 2017; World Economic Forum 2014
- <sup>259</sup> Campanaro et al. 2017; World Economic Forum 2014
- <sup>260</sup> Campanaro et al. 2017

<sup>&</sup>lt;sup>250</sup> Sullivan et al. 2010

<sup>&</sup>lt;sup>251</sup> Campanaro et al. 2017; Sullivan et al. 2010

	<ul> <li>The right contracting and outsourcing mode, including adoption of performance-based contracting and technical standardization focused on lifecycle management can reduce costs by 10-40% and 5-15% respectively<sup>261</sup></li> <li>Certain forms of preventative and predictive maintenance as well as lifecycle costing models may require specialized equipment or IT systems [but this does not appear absolutely necessary for gains]<sup>262</sup></li> </ul>
	Market Requirements
	<ul> <li>China used a new budget law to encourage medium- and long-term budgeting of public finances that included better financial management of fixed assets<sup>263</sup></li> </ul>
	Political Acceptance
	<ul> <li>Less visibility to the public and possible tradeoff with paying for new infrastructure may undermine political will for investments, unless prioritize public-facing GLBs<sup>264</sup></li> </ul>
	<ul> <li>Limited incentives for public employees to focus on long-term asset performance maximization, including budget constraints which undermines upfront maintenance<sup>265</sup></li> </ul>
	<ul> <li>Lifecycle management projects can be piloted and implemented incrementally to illustrate proof-of-concept and build buy-in<sup>266</sup></li> </ul>
Energy-efficient Management	Economic Impact
	<ul> <li>Projected savings in South Africa for energy-related savings in municipalities' facilities include<sup>267</sup>:         <ul> <li>17-35% off baselines for metro and larger towns; assume applied to all multi-story office buildings and larger compounds with full suite of lighting, HVAC, water heading interventions</li> <li>13-16% off baselines for "smaller" municipalities; assume applied to all office buildings above 1000sqm primarily through efficient lighting upgrades</li> </ul> </li> <li>Cape Town, South Africa achieved 22% energy savings through efficient lighting, water heater insulation, and behavioral adjustments in its Parow municipal building<sup>268</sup></li> <li>Ekurheleni Metropolitan Municipality in South Africa retrofitted 3 pilot buildings for an initial cost of R170,000, leading to 53% savings on energy and a 1.2yrs payback time on investment<sup>269</sup></li> </ul>

- <sup>265</sup> Audier, et al. 2014
- <sup>266</sup> Sullivan et al. 2010

- <sup>268</sup> A Guide to Energy Management in Public Buildings 2008
- <sup>269</sup> Fryer (year unknown)

<sup>&</sup>lt;sup>261</sup> World Economic Forum 2014<sup>262</sup> Sullivan et al. 2010

<sup>&</sup>lt;sup>263</sup> Campanaro et al. 2017

<sup>&</sup>lt;sup>264</sup> Government-based interviews and survey; Campanaro et al. 2017; Sullivan et al. 2010

<sup>&</sup>lt;sup>267</sup> Euston-Brown 2014

<ul> <li>US municipalities typically saved 10-30% on energy expenses from improving the efficiency of local government buildings<sup>270</sup></li> <li>Savings of 5-20% on energy bills can be achieved without significant capital investment<sup>271</sup></li> <li>Other benefits including saving on costs to provide energy services by reducing energy demand, government-led catalyst for efficiency programs in industry and residences, and if done at scale incentivized green jobs since labor is core part of efficiency upgrades<sup>272</sup></li> </ul>
Administrative Feasibility
<ul> <li>Requires energy tracking system or data analysis to identify baseline energy usage, estimate reduction potential, and monitor progress towards targets<sup>273</sup></li> </ul>
• Technical complexity to implement vary by type of upgrade <sup>274</sup> :
<ul> <li>Indoor lighting – low</li> </ul>
<ul> <li>Building retrofit – medium</li> </ul>
<ul> <li>Public lighting – low to medium</li> </ul>
<ul> <li>Utility optimizations – medium to high</li> </ul>
and means staff technical expertise around technologies and management techniques is important <sup>275</sup>
• Requires purchasing of green equipment and materials, potentially updating agency procurement standards
to ensure green technologies are adopted in perpetuity, and exploring bulk procurement across agencies and with other local governments to minimize transaction costs <sup>276</sup>
• Financial implementation may require an energy performance contract [implying procurement capability] or a revolving energy fund [implying loan and budgeting management capability] <sup>277</sup>
<ul> <li>Because the agency occupying a building may be distinct from the agency in charge of its operations and maintenance decisions, coordination is important to ensure aligned incentives and planning<sup>278</sup></li> </ul>
• Ability to incrementally implement starting with simpler lighting upgrades and then structure as self-funded program by using savings from initial pilots for further efficiency investments <sup>279</sup>
Market Requirements

<sup>&</sup>lt;sup>270</sup> Energy Efficiency in Local Government Operations 2011

<sup>&</sup>lt;sup>271</sup> Sullivan et al. 2010

<sup>&</sup>lt;sup>272</sup> Opportunities in Energy Efficiency for Municipalities in South Africa 2018; Energy Efficiency in Local Government Operations 2011

<sup>&</sup>lt;sup>273</sup> Energy Efficiency in Local Government Operations 2011

<sup>&</sup>lt;sup>274</sup> Limaye and Derbyshire 2014

<sup>&</sup>lt;sup>275</sup> Development of Energy Efficiency in Sub-Saharan African Cities – year unknown; A Guide to Energy Management in Public Building 2008

<sup>&</sup>lt;sup>276</sup> Energy Efficiency in Local Government Operations 2011; Euston-Brown 2014

<sup>&</sup>lt;sup>277</sup> Energy Efficiency in Local Government Operations 2011; Limaye and Derbyshire 2014; A Guide to Energy Management in Public Buildings 2008

<sup>&</sup>lt;sup>278</sup> A Guide to Energy Management in Public Buildings 2008

<sup>279</sup> Energy Efficiency in Local Government Operations 2011; Development of Energy Efficiency in Sub-Saharan African Cities (year unknown); Implementing Municipal Energy Management Systems 2019

	<ul> <li>Green building codes and standardized energy-efficient procedures and guidelines can ensure consistency across agencies and incorporate efficiency into future facilities and rehabilitations<sup>280</sup></li> <li>Cost of utilities, as determined by tariffs and subsidies, affects incentives for governments to adopt efficiency programs, especially when energy prices are lower than cost of supply<sup>281</sup></li> <li>Political Acceptance         <ul> <li>Less visibility to the public and lack of improvement to public services may undermine political will for investments<sup>282</sup></li> <li>Investments may be appealing to community members concerned with climate sustainability<sup>283</sup></li> <li>Low-cost lighting upgrades and quick payback time could allow for pilots that generate broader political support after proof-of-concept<sup>284</sup></li> </ul> </li> </ul>
Space and Property Rationalization	<ul> <li>Economic Impact <ul> <li>City of New York conducted portfolio optimization reducing 400,000sqft of office space in 3yrs (both by eliminating vacant spaces and improving usage rates of others) for \$15m annual rent savings and \$4m in energy cost savings – equivalent to 2.5% of total city budget; expect total \$36m savings by end of project<sup>285</sup></li> <li>Louisiana state government estimates \$9m annual savings through rationalization, and Wisconsin estimates %5.6m savings through lease renogotiation as part of optimization effort<sup>286</sup></li> <li>City of Toronto undergoing optimization project with expected \$30m in annual lease, operating, and capital savings and \$170m in value generated from unlocked land for development; expected \$4.4m in investment to initiate planned project<sup>287</sup></li> <li>Bristol City Council achieved £125m in savings across 5yrs from increasing space utilization and reducing total office estates<sup>288</sup></li> <li>In China, starting through the 1990s, municipalities moved many administrative offices to suburban or exurban locations to free up higher-value land from city centers<sup>289</sup></li> <li>Scale of savings likely higher in large urban government with high real estate costs, but ability to realize efficiencies still transferable<sup>290</sup></li> </ul> </li> </ul>

<sup>280</sup> Energy Efficiency in Local Government Operations 2011; Development of Energy Efficiency in Sub-Saharan African Cities (year unknown)

- <sup>285</sup> Wiseman 2017
- <sup>286</sup> Wiseman 2017
- <sup>287</sup> City of Toronto 2019
- <sup>288</sup> White 2018
- <sup>289</sup> Peterson 2013
- <sup>290</sup> Wiseman 2017

<sup>&</sup>lt;sup>281</sup> Limaye and Derbyshire 2014

<sup>&</sup>lt;sup>282</sup> Government-based interviews and survey

<sup>&</sup>lt;sup>283</sup> Author's own analysis

<sup>&</sup>lt;sup>284</sup> Author's own analysis based on Government-based interviews and survey

	<ul> <li>Non-financial benefits included reduced energy usage, improved retention of younger workers and increased employee satisfaction from open space offices, unlocking city land for higher uses<sup>291</sup></li> <li>Administrative Feasibility         <ul> <li>Coordinated asset management with centralized decisionmakers<sup>292</sup></li> <li>Full view of GLB portfolio to determine baseline existing space used and cost as well as track and monitor savings and progress goals – implies need for asset registry and more detailed survey of internal facility spaces<sup>293</sup></li> <li>New York City effort achieved by "small team of city staff" [suggesting limited people needs to execute]<sup>294</sup></li> <li>UK government property strategy implies need for personal with "deep property, commercial, and transformation expertise" including specifically in planning, project management, facilities management, and valuation<sup>295</sup></li> <li>Ability to work incrementally in achieving optimization which streamlines implementation and can be structured as self-funded program (e.g. savings from initial rationalization used for further required optimization investments)<sup>296</sup></li> </ul> </li> <li>Market Requirements         <ul> <li>May be good practice to set facility management and space set-up standards across different levels of government and for different agencies to follow<sup>297</sup></li> </ul> </li> <li>Political Acceptance         <ul> <li>Expect resistance from agencies and government employees around moving to denser work spaces, requiring more sharing of spaces, and redistributing or eliminating space across agencies<sup>298</sup></li> </ul> </li> </ul>
Property-based User Fees	<ul> <li>Economic Impact         <ul> <li>Asset are material base for services whose sustainability relies on collection of user fees, but principle for user fees often not followed in developing countries [suggests under-optimization of revenue]<sup>299</sup></li> <li>User charges can be an effective way to align payments with service delivery and serve as a mechanism for a jurisdiction to recuperate government costs for providing a given service<sup>300</sup></li> </ul> </li> </ul>

<sup>297</sup> UK Office of Government Property 2018

<sup>298</sup> Wiseman 2017

<sup>300</sup> Fjeldstad 2006

 <sup>&</sup>lt;sup>291</sup> Wiseman 2017; City of Toronto 2019
 <sup>292</sup> Wiseman 2017; City of Toronto 2019; UK Office of Government Property 2018
 <sup>293</sup> Wiseman 2017; City of Toronto 2019

<sup>&</sup>lt;sup>294</sup> Wiseman 2017

 <sup>&</sup>lt;sup>295</sup> UK Office of Government Property 2018
 <sup>296</sup> Wiseman 2017; City of Toronto 2019

<sup>&</sup>lt;sup>299</sup> Freire and Kopanyi 2018

<ul> <li>Kampala, Uganda was able to increase parking fees by a factor of ~3x and other fees and charges by a factor of ~2x through improved revenue design and collection systems<sup>301</sup></li> <li>Estimates for Kenyan counties suggest they are only achieving 61% of their parking fee revenue potential and 83% of their outdoor advertising fee potential, with a total potential Kshs 18.9b across these sources<sup>302</sup></li> <li>Tend to suffer from high levels of non-compliance, corruption, and administrative complexity, which makes payment collections difficult and expensive to reform [suggests under-optimization of revenue]<sup>303</sup></li> <li>Hodgepodge of fees and charges may lead to negative economic distortions and distribution effects<sup>304</sup></li> </ul>
<ul> <li>Technical expertise is needed around defining what a good tariff or fee level is, ensuring effective billing and collection systems, understanding the actual cost of service, and improving revenue forecast systems<sup>305</sup></li> <li>Need for strong performance monitoring and internal auditing capability of revenue administration<sup>306</sup></li> <li>Information sharing arrangements and coordination can help ensure integrity of OSR, coupled with review of IT and data systems<sup>307</sup></li> <li>Support from fully or semi-automated systems to minimize leakage and streamline processes<sup>308</sup></li> <li>Clearly defined revenue allocation mechanisms to ensure revenues from different sources are appropriately earmarked<sup>309</sup></li> </ul>
Market Requirements
<ul> <li>Gaps in collection could be partially addressed through legislation around compliance obligations and collection powers<sup>310</sup></li> </ul>
Legislative and policy frameworks for effective revenue administration can better support collections <sup>311</sup> Relitical Accountance
User charges often set below desirable cost recovery levels due to local politics <sup>312</sup>
<ul> <li>Certain tariffs may be unaffordable for poor families and could exclude these households from accessing certain services [may lead to political backlash or noncompliance]<sup>313</sup></li> </ul>

<sup>&</sup>lt;sup>301</sup> Taylor 2016

<sup>&</sup>lt;sup>302</sup> Adam Smith International 2018

<sup>303</sup> Fjeldstad 2006; UN-Habitat 2009

<sup>&</sup>lt;sup>304</sup> Fjeldstad et al. 2014

<sup>&</sup>lt;sup>305</sup> Freire and Kopanyi 2018; Adam Smith International 2018; Farvacque-Vitkovic and Kopanyi 2014; Kamiya and Zhang 2017

<sup>&</sup>lt;sup>306</sup> Adam Smith International 2018; Kenyan National Treasury and Planning 2019

<sup>&</sup>lt;sup>307</sup> Adam Smith International 2018

<sup>&</sup>lt;sup>308</sup> Kenyan National Treasury and Planning 2019

<sup>&</sup>lt;sup>309</sup> Farvacque-Vitkovic and Kopanyi 2014

<sup>&</sup>lt;sup>310</sup> Adam Smith International 2018

<sup>&</sup>lt;sup>311</sup> Kenyan National Treasury and Planning 2019

<sup>&</sup>lt;sup>312</sup> Freire and Kopanyi 2018; Farvacque-Vitkovic and Kopanyi 2014

<sup>&</sup>lt;sup>313</sup> Freire and Kopanyi 2018; Fjeldstad 2006; UN-Habitat 2009 ; Taylor 2016

	• Kampala, Uganda saw backlash from various industry associations due to modifications in their fee structure and collection practices <sup>314</sup>
Property Leasing	<ul> <li>Economic Impact         <ul> <li>Hong Kong's Mass Transit Railway Corporation made HK \$6.9b in profit from property rental and management on property for which MTR retained ownership<sup>315</sup></li> <li>Addis Ababa, Ethiopia both directly allocates land leases and auctions leases to GLBs, often at a reduced price; however, all land is publicly owned in this jurisdiction meaning their system is less transferable elsewhere – in total, ~6% of total revenue in the municipality comes from land leasing<sup>316</sup></li> <li>In other Ethiopian municipalities, land leasing can represent from ~21-45% of total revenue<sup>317</sup></li> <li>In Kigali, Rwanda rent of public administration lands and leases income on government asset appeared to represent ~10% of own-source revenues in 2013-14<sup>318</sup></li> <li>Property leased to private sector tend to be priced well-below market rents or is not used strategically by local governments as a revenue source [presents an opportunity to review and increase rents if appropriate]<sup>319</sup></li> <li>In comparison to land sales, leasing allows local governments to retain ownership of the land for future land use needs and protects the jurisdiction against speculators looking to flip the property<sup>320</sup></li> <li>Other benefit is government can include land use requirements into land lease to manage local urban development<sup>321</sup></li> </ul> </li> <li>Administrative Feasibility</li> <li>Clear guidelines for public land auctions allow governments to capture greater value from transactions – e.g. Ethiopia's use of auctions for leasing increased prices 2-80x higher than administrative negotiation<sup>322</sup></li> <li>May want flexibility for lease renewals, contract modifications, and an annual lend rent to ensure jurisdiction captures increases in land values instead of being locked-in to a single rate; may lead to higher negotiation costs with interested lessees<sup>323</sup></li> </ul>

- <sup>314</sup> Taylor 2016
  <sup>315</sup> Peterson 2013
  <sup>316</sup> Berrisford et al. 2018
- <sup>317</sup> Peterson 2006
- <sup>318</sup> Goodfellow 2015
- <sup>319</sup> Peterson 2013; African Centre for Cities 2015
   <sup>320</sup> Freire and Kopanyi 2018
   <sup>321</sup> Hong 1999; Berrisford et al. 2018
   <sup>322</sup> Peterson 2009; Freire and Kopanyi 2018

- <sup>323</sup> Hong 1999; Anderson 2012

	<ul> <li>Ability to develop contract with lease conditions and strong enforcement mechanisms also necessary to ensure requirements dictated by jurisdiction in a lease agreement are being followed<sup>324</sup></li> <li>Public inventory of lands gives visibility into what parcels government actually owns, what should be designed as surplus, and enables intergovernmental norms for transparency in reporting<sup>325</sup></li> <li>Case studies suggest need for central active-management policy for GLBs to best unlock value from land leasing, sales, and joint ventures<sup>326</sup></li> <li>Land-based financing requires "certainty about land use, which is based on a credible city planning framework"<sup>327</sup></li> <li>Ethiopia struggles with administrative collection of leases due to capacity issues and reliance on manual tracking systems [implies need for more robust database]<sup>328</sup></li> <li>Market Requirements</li> <li>Reliance on land revenues could lead to conflict of interest between government desire to maximize funds versus its broader public role<sup>329</sup></li> <li>Unchecked peri-urban development and informal settlements can complicate the ability of local governments to adopt the necessary mechanisms for land-based financing<sup>330</sup></li> <li>General need for a strong regulatory environment which both enables land-based financing, but imposes limitations to prevent abuse<sup>331</sup></li> <li>Political Acceptance</li> <li>In places like Nairobi, close connection between land and corruption means vested interests can undermine political will to engage in land-based financing<sup>332</sup></li> </ul>
Sale of Property	<ul> <li>Economic Impact         <ul> <li>Cairo, Egypt auctioned desert land for development of new towns, raising \$3.12b for infrastructure investments<sup>333</sup></li> <li>Mumbai, India actioned land in financial center, raising \$1.2b to finance new transportation network<sup>334</sup></li> </ul> </li> </ul>

<sup>324</sup> Hong 1999

<sup>325</sup> Peterson 2013; Government-based interviews and survey

- <sup>326</sup> Peterson 2013
- <sup>327</sup> Palmer et al. 2015
- <sup>328</sup> Academia-based interviews
- <sup>329</sup> Hong 1999
- <sup>330</sup> Berrisford et al. 2018
- <sup>331</sup> Academia-based interviews; African Centre for Cities 2015; Palmer et al. 2015 <sup>332</sup> Berrisford et al. 2018
- <sup>333</sup> Peterson 2009
- <sup>334</sup> Peterson 2009

<ul> <li>Istanbul, Turkey sold old bus station and administrative site for \$1.5b via auction; will be used to fund capital investments<sup>335</sup></li> <li>Cana Taum, South Africa cald underfront property for \$1b and will reinvest in terms at station.</li> </ul>
<ul> <li>Cape Town, South Africa sold waterfront property for \$1b and will reinvest in transportation infrastructure<sup>336</sup></li> </ul>
<ul> <li>Addis Ababa, Ethiopia and Harare, Zimbabwe both sell undeveloped GLBs to developers who will take on costs for servicing that parcel<sup>337</sup></li> </ul>
<ul> <li>Bratislava, Slovakia finances ~15% of annual capital budget from asset sales<sup>338</sup></li> </ul>
• Estimates suggest 60-70% of urban infrastructure investment in China over past 20yrs were funded by
municipal land sales [though China's state-controlled system helps facilitate this] <sup>339</sup>
<ul> <li>Other benefits include potential catalyst of land development via land sale and broader economic boost of reinvesting funds into new infrastructure<sup>340</sup></li> </ul>
<ul> <li>Jurisdictions can participate in "land banking" or value capture in order to strategically hold and sell land after value-enhancing investments in an area have been made<sup>341</sup></li> </ul>
Administrative Feasibility
<ul> <li>Determining whether to sell requires having an inventory of public GLBs, comparing value for public use versus market value, and then divest from noncore land through a strategic process – including having a planned land asset management strategy<sup>342</sup></li> </ul>
<ul> <li>Technical expertise around market valuation, inventory creation, and strategic asset planning necessary to inform decisions<sup>343</sup></li> </ul>
<ul> <li>Clear guidelines for public land auctions allow governments to capture greater value from transactions – e.g.</li> <li>Egypt's auctions increase processed by factor of 10:1 vs. before they used auctions<sup>344</sup></li> </ul>
<ul> <li>International case studies demonstrate the importance of having "specialized, professionally managed institutions[for] sale, lease, or joint development"<sup>345</sup></li> </ul>
<ul> <li>Public inventory of lands gives visibility into what parcels government actually owns, what should be designed as surplus, and enables intergovernmental norms for transparency in reporting<sup>346</sup></li> </ul>

335 Peterson 2009

<sup>336</sup> Peterson 2009

- <sup>337</sup> Berrisford et al. 2018
- <sup>338</sup> Peterson 2006
- <sup>339</sup> Peterson 2013
- <sup>340</sup> Peterson 2009
   <sup>341</sup> Peterson 2009; Berrisford et al. 2018
- <sup>342</sup> Peterson 2009
- <sup>343</sup> Peterson 2009; Palmer et al. 2015
- <sup>344</sup> Peterson 2009; Freire and Kopanyi 2018
- <sup>345</sup> Peterson 2013
- 346 Peterson 2013

	<ul> <li>Case studies suggest need for central active-management policy for GLBs to best unlock value from land leasing, sales, and joint ventures<sup>347</sup></li> <li>Market Requirements         <ul> <li>Risk of public agencies becoming profit-maximizing developers instead of stewards of public good means strict policies and processes for land sales and disposition need to be in place, especially to prevent public sector's use of expropriation to accumulate and resell land<sup>348</sup></li> <li>Laws requiring publicly released capital budgets and land sale earmarking/guidelines on how sale proceeds are allocated can protect against corruption and ensure fair compensation across stakeholders<sup>349</sup></li> <li>Unchecked peri-urban development and informal settlements can complicate the ability of local governments to adopt the necessary mechanisms for land-based financing<sup>350</sup></li> <li>General need for a strong regulatory environment which both enables land-based financing, but imposes limitations to prevent abuse<sup>351</sup></li> </ul> </li> <li>Political Acceptance         <ul> <li>Community members and public sector employees express discomfort over the government engaging in "business" or "for-profit" activities, of which land sales is included<sup>352</sup></li> <li>In places like Nairobi, close connection between land and corruption means vested interests can undermine political will to engage in land-based financing<sup>353</sup></li> </ul></li></ul>
Sale of "rights"	<ul> <li>Economic Impact         <ul> <li>The Massachusetts Bay Transportation Authority in the US sold its air rights above the North Station transit terminal for \$20m plus repair costs; it is also negotiating a similar deal above the Back Bay Station<sup>354</sup></li> <li>Sao Paulo, Brazil sold \$190m worth of development rights for additional high-density construction across 2005-2009 to finance their capital projects; others like New York, Lima, Stuttgart, and Bethesda have similar programs<sup>355</sup></li> <li>Multiple US cities have joint advertising ventures where a private company pays for, constructs, and maintains bus shelters in exchange for the right to sell advertisement on them and sharing the advertising revenue with the municipal government<sup>356</sup></li> </ul> </li> </ul>

<sup>347</sup> Peterson 2013

- <sup>353</sup> Berrisford et al. 2018
- <sup>354</sup> Beyer 2014

<sup>&</sup>lt;sup>348</sup> Peterson 2009; Peterson 2013

<sup>&</sup>lt;sup>349</sup> Peterson 2009; Berrisford et al. 2018

<sup>&</sup>lt;sup>350</sup> Berrisford et al. 2018

<sup>&</sup>lt;sup>351</sup> Academia-based interviews; African Centre for Cities 2015; Palmer et al. 2015 <sup>352</sup> Government-based interviews and survey

<sup>&</sup>lt;sup>355</sup> Peterson 2009; Freire and Kopanyi 2018

<sup>&</sup>lt;sup>356</sup> Kramer 2019

<ul> <li>The City of Chicago in the US sold its rights to 75yrs of parking meters revenue for \$1.15b; though it should be noted this deal has since been heavily criticized due to the restrictions imposed on the city in the deal<sup>357</sup></li> <li>Many jurisdictions globally offer retail/service concessions in public-owned facilities such as parks, museums, and airports; for example, ~30% of revenue from non-aeronautical activities in airports come from retail concessions<sup>358</sup></li> <li>Other benefits include strategic management of density and development (e.g. preserve rural and</li> </ul>
agricultural areas while concentrating development in others) <sup>359</sup>
Administrative Feasibility
<ul> <li>Communication across agencies to clarify opportunities and constraints around "rights" transactions<sup>360</sup></li> </ul>
<ul> <li>Technical expertise to designate sale of "rights" opportunities, determine valuation of these "rights," and develop formula for allocation<sup>361</sup></li> </ul>
<ul> <li>Planning needs specifically as it relates to aligning zoning regulations with strategic air rights and development rights transfer program<sup>362</sup></li> </ul>
<ul> <li>Adoption of a mechanism for selling "rights," where an auction system seems most common<sup>363</sup></li> </ul>
<ul> <li>Procurement, bid management, contract, and oversight expertise as the City of Chicago parking meter case and US bus shelter ventures show that poorly structured and negotiated contracts will harm local governments and service delivery in the long-term<sup>364</sup></li> </ul>
Market Requirements
<ul> <li>Review and permitting process and authority to manage "rights" transactions with clear program guidelines and mechanisms to ensure the buyer appropriately complies with terms of rights sale; a good regulatory framework is critical<sup>365</sup></li> </ul>
<ul> <li>A concern in SSA is not all countries appear to have legislative environment pertaining to things like "air rights," which pose a barrier to adoption and good management of this lever<sup>366</sup></li> </ul>
Political Acceptance
<ul> <li>Community members and public sector employees express discomfort over the government engaging in "business" or "for-profit" activities<sup>367</sup></li> </ul>

<sup>357</sup> Kling 2019

<sup>363</sup> Author's own analysis

<sup>&</sup>lt;sup>358</sup> Lucas 2018

<sup>&</sup>lt;sup>359</sup> MA Executive Office of Energy and Environmental Affairs (year unknown)

<sup>&</sup>lt;sup>360</sup> MA Executive Office of Energy and Environmental Affairs (year unknown)

<sup>&</sup>lt;sup>361</sup> MA Executive Office of Energy and Environmental Affairs (year unknown)

<sup>&</sup>lt;sup>362</sup> Beyer 2014; Grovey et al. 2018

<sup>&</sup>lt;sup>364</sup> Kling 2019; Transit Center 2018

<sup>&</sup>lt;sup>365</sup> MA Executive Office of Energy and Environmental Affairs (year unknown); The World Bank (year unknown)

<sup>&</sup>lt;sup>366</sup> Author's own analysis based-on scan of Africa-based articles on air rights

<sup>&</sup>lt;sup>367</sup> Government-based interviews and survey

	<ul> <li>Lessons from US bus advertisement ventures show rights-based transactions can lead to services only being provided in high-profit potential areas [implies a high risk of social backlash]<sup>368</sup></li> <li>In places like Nairobi, close connection between land and corruption means vested interests can undermine political will to engage in land-based financing<sup>369</sup></li> <li>Selling development can be controversial since it may be seen as the local government making money by selling the right to by-pass zoning and density restrictions<sup>370</sup></li> </ul>
P3s for Social Development & Commercial Development	<ul> <li>Economic Impact <ul> <li>Mandaluyong City in the Philippines engaged in a P3 to rebuild primary public market, avoiding rehabilitation capital costs and collecting \$191-382K in new annual tax income; municipality could not have afforded rehabilitation otherwise<sup>371</sup></li> <li>Joburg Property Company, a municipal-owned entity in South Africa, received \$1.1M USD in investment and transaction revenues from commercial development and asset management activities; excludes market value from property holdings and property tax and business licensing revenues also gained<sup>372</sup></li> <li>Uganda has used P3s for both social projects (e.g. several local market developments) and commercial projects (e.g. development of Serena Hotel in Kampala)<sup>373</sup></li> <li>In Sheberghan, Afghanistan, the municipality built a new bus terminal, investing \$50k while USAID contributed \$120k and a private partner another \$60k; the private partnership is responsible for the terminal's operation and management as well as constructing 16 municipality-owned shops at no cost to the municipality and pays a lease to the municipality for the shops<sup>374</sup></li> <li>In Mohali, India, a private partner did the design, build, finance and operation of a \$74m bus terminal and commercial facility through a 20-year terminal concession and a 90-year commercial space concession; the private partner paid and \$8.2m upfront fee to the government as well as an annual \$400k concession fee<sup>375</sup></li> <li>In the Cagayan de Oro City, Philippines slaughterhouse redevelopment the private partner won a 25yrs Build-Operate-Transfer contract with a \$3m investment value; the private partner pays the city a monthly usage fee for the right to operate the facility<sup>376</sup></li> <li>The Jozini Tiger Lodge, a hotel in South Africa, was funded through a loan from a South African NGO and venture capital from private investors; the private partners maintain 69% ownership shares of the lodge for</li> </ul> </li> </ul>

<sup>368</sup> Transit Center 2018

- <sup>369</sup> Berrisford et al. 2018
- <sup>370</sup> Freire and Kopanyi 2018
- <sup>371</sup> "Municipal Public-Private Partnership Framework," World Bank 2019 <sup>372</sup> City of Joburg Property Company 2016/2017 Integrated Annual Report
- <sup>373</sup> Ssebabi (year unknown)
- <sup>374</sup> The World Bank 2019
- <sup>375</sup> The World Bank 2019
- <sup>376</sup> The World Bank 2019

10yrs, during which they are responsible for the financial means to operate, maintain, and provide quality services at the lodge; the local community owns 31% of shares and receives dividends for public investment <sup>377</sup>
<ul> <li>An energy-efficient street lighting P3 in Bhubaneswar, India led to a 10yr concession with the private partner financing, installing, operating, and maintaining new streetlights; the city saves \$100k annually from decreased energy usage and pays 90% of those savings to the private operator<sup>378</sup></li> </ul>
• Other benefits include accelerating private investment for broader urban development, long-term sharing of infrastructure costs, and transferring project risks to the private sector <sup>379</sup>
<ul> <li>Other benefits include improvement of specific service delivery, promote long-term cost effectiveness, and access new skills and expertise outside of the public sector<sup>380</sup></li> </ul>
<ul> <li>One challenge is many P3s often have large cost overruns which can offset the financial benefit to local governments; they also come with higher set-up costs to design a deal<sup>381</sup></li> </ul>
Administrative Feasibility
• P3s require same information and analysis as land sale as well as similar competitive selection process <sup>382</sup>
<ul> <li>Public inventory of lands gives visibility into what parcels government actually owns, what should be designed as surplus, and enables intergovernmental norms for transparency in reporting<sup>383</sup></li> </ul>
<ul> <li>Case studies suggest need for central active-management policy for GLBs to best unlock value from land leasing, sales, and joint ventures<sup>384</sup></li> </ul>
<ul> <li>Success of delivery depends on local government capacity to "design, construct, operate and maintain the infrastructure and resulting services"<sup>385</sup></li> </ul>
<ul> <li>Need for strong procurement and RFQ/RFP process to solicit developers competitively; this is often lacking in municipalities but there are examples for jurisdictions building this capacity<sup>386</sup></li> </ul>
<ul> <li>Municipalities in developing countries run the risk of information asymmetry leasing to issues around valuation of assets and subsidy arrangements for P3s; negotiation capability is critical but a challenge for understaffed and inexperienced municipalities in developing contexts<sup>387</sup></li> </ul>

<sup>377</sup> The World Bank 2019

- 378 The World Bank 2019
- <sup>379</sup> Peterson 2009; Friedman 2016; Plummer 2002
- <sup>380</sup> Plummer 2002
- <sup>381</sup> Friedman 2016; Leigland 2018
- <sup>382</sup> Peterson 2009
- 383 Peterson 2013
- <sup>384</sup> Peterson 2013
- <sup>385</sup> Parlmer et al. 2015
- <sup>386</sup> Friedman 2016; PPP Knowledge Lab (year unknown)
- <sup>387</sup> Freire and Kopanyi 2018

<ul> <li>Top technical expertise needed by public sector for P3s is understanding project risk profiles and capital financing needs, engagement community in process, negotiating a deal fair to public sector and which focuses on problem solving, able to strategically use range of public sector instruments to reduce risk and financing costs, and thorough market analysis<sup>388</sup></li> </ul>
• Requires planning and coordination capability that leads to a shared and informed vision of project needs <sup>389</sup>
• Requires execution and monitoring capability so that public sector can ensure adhesion to contract terms <sup>390</sup>
Market Requirements
General need for a strong legal and regulatory environment which both enables land-based financing and
P3s, but imposes limitations to prevent abuse and ensure transparency <sup>391</sup>
<ul> <li>Review of development approval processes to responsibility facilitate progress of P3 projects<sup>392</sup></li> </ul>
Political Acceptance
<ul> <li>Community members and public sector employees express discomfort over the government engaging in "business" or "for-profit" activities<sup>393</sup></li> </ul>
<ul> <li>Landowners and developers may pushback against land value-sharing with government or taking on certain development costs instead of the government<sup>394</sup></li> </ul>
• Lack of political will can undermine interest from investors or lead to blocking of potential projects <sup>395</sup>
<ul> <li>In places like Nairobi, close connection between land and corruption means vested interests can undermine political will to engage in land-based financing<sup>396</sup></li> </ul>
 • Success of land-based financing also depends on support of national government to local government <sup>397</sup>

- <sup>394</sup> Berrisford et al. 2018
- <sup>395</sup> Plummer 2002
- <sup>396</sup> Berrisford et al. 2018

<sup>397</sup> Palmer et at. 2015; Farlam 2005

<sup>&</sup>lt;sup>388</sup> Friedman 2016; Plummer 2002; PPPLRC (year unknown)

<sup>&</sup>lt;sup>389</sup> Friedman 2016; Plummer 2002

<sup>&</sup>lt;sup>390</sup> Friedman 2016; Farlam 2005; Plummer 2002

<sup>&</sup>lt;sup>391</sup> Academia-based interviews; African Centre for Cities 2015; Palmer et al. 2015; Farlam 2005; PPP Knowledge Lab (year unknown); Plummer 2002

<sup>&</sup>lt;sup>392</sup> Friedman 2016

<sup>&</sup>lt;sup>393</sup> Government-based interviews and survey

# **Appendix: Ethics and Transparency Statement**

In developing this report's methodology, the primary ethical consideration which arose was around protecting both government officials and academic professionals interviewed or surveyed. To mitigate risk to these individuals, a number of actions were taken:

- For academia-based interviews: Participants were explicitly asked for consent around listing them in this report. They were also notified that this would be a publicly available document. Citations from these interviews were grouped together to minimize identifying a specific individual for comments which might cause them professional or reputational harm. Individual notes from the interviews have not been shared.
- For government-based interviews and survey: Participants were verbally or in-writing provided a disclaimer about the nature of this research, the confidentiality and data protocols (including who would have access to their responses), and the contact information of the researcher and project client. They were also explicitly reminded that they could pass on a question or end the interview/survey all together if they became uncomfortable. The participants' names and roles were not recorded to protect them from any professional consequences in participating in this research. Furthermore, to respect the confidentiality of participating counties, all response data was only referenced in aggregate rather than individual form. Counties were notified that their county names would be explicitly listed in this report.

Additionally, this project received financial support from Harvard University's Ash Center for Democratic Governance (\$2,000) and Mossavar-Rahmani Center for Business and Government (\$1,000). Funding went towards travel and logistical expenses for a two-week trip to various Kenyan counties in January 2020. UN-Habitat did not provide any monetary compensation, nor did any other unlisted organizations and individuals.

# **Appendix: Opportunities for Future Research**

The research conducted for this report focused on developing a framework for how local governments in Sub-Saharan Africa can think about mobilizing resources from and minimizing costs for their GLBs. To illustrate both the relevance and application of such a framework, this report specifically discussed GLB management opportunities within the Kenyan context. While insights developed through the Kenyan context have at least some applicability for local governments across SSA, they still have their limitations due to the uniqueness of each SSA country's context. Additionally, in demonstrating how local governments can use the report's findings to prioritize GLB levers, the focus remained on only a handful Kenyan counties.

For these reasons, ample opportunity remains for further research into the topics discussed in this report, including:

#### Going deeper on an individual Kenyan jurisdiction

For confidentiality purposes, this report considered seven Kenyan counties only in collective form. As a result, the prioritization conducted in Section 5 is still a relatively high-level assessment of which GLB levers are most appropriate for those counties. There is opportunity to select one county in which to conduct deeper quantitative analysis on GLB lever potential and then pilot these levers to determine their practical effectiveness.

#### Exploring variations based on jurisdiction type

The Kenyan jurisdictions used to illustrate this report's proposed GLB framework represent moderately-urbanized counties. It would be interesting to see how the proposed framework may lead to variations in the case of a municipality versus a county, or even in the case of more rural versus metropolitan jurisdictions.

#### Testing framework relevance within alternative country contexts

While a number of challenges around Kenya's public finances, land governance, and urban development are applicable elsewhere, how exactly these challenges' dynamics play-out in different SSA countries will vary based-on each country's governance structures, private sector conditions, and economic development trends.

#### Understanding options for national government engagement

Many of the governance challenges mentioned in Section 6, as well as the regulatory and legal enablers raised in Evaluation 2 rely on action by national governments. A stream of research could more explicitly consider what actions national governments can take to best enable local governments to unlock the financial potential of their GLBs.

#### Identifying lever case studies throughout SSA

The Appendices have some benchmarks of local governments already using GLB levers in the SSA context. However, the true extent of GLB levers' adoption in these settings remains unclear and can be better documented as illustrative examples.

#### Further unpacking GLB management in SSA

Research for this report suggests that government property management in the SSA context is still relatively underexplored. There is ample opportunity to better understand

what the range of GLB governance practices are in local governments today, and further build-out recommendations for how to address current institutional gaps.

The hope is that the findings from this project can be iterated on and refined to increase their overall relevance across multiple contexts and reinforce their accuracy and practicality.

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