

STATE OF AFRICAN CITIES REPORT 2026

Harnessing the Value of Urban Land for Socioeconomic Transformation in African Cities

UN-Habitat | Lincoln Institute of Land Policy | World Resources Institute



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State of African Cities Report 2026: Harnessing the Value of Urban Land for Socioeconomic Transformation in African Cities

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Acknowledgements

This report was prepared through a collaborative effort led by a multidisciplinary team of principal authors from the United Nations Human Settlements Programme (UN-Habitat), the Lincoln Institute of Land Policy, and the World Resources Institute. The lead authors include Paterson Gauntner and Gulelat Kebede; Astrid R.N. Haas; and Emmerentian Mbabazi, Hellen Wanjohi-Opil, and Obadiah Mungai.

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Foreword from UN-Habitat

Africa's urban story is often framed as a future challenge. This report makes clear that it is already a present reality. Over half of Africans now live in cities and towns, and an additional 700 million urban residents are projected by 2050, when the continent's urban population will reach 1.4 billion. More than half of Africa's future urban footprint has yet to be built. This unprecedented moment presents both significant risks and extraordinary opportunities. Decisions made today on how land is governed, planned, financed, and serviced will shape whether African cities emerge as engines of inclusive prosperity or become sites of deepening inequality, informality, and vulnerability. Africa's cities face urban investment needs of approximately US\$157 billion annually—far beyond current public spending—yet are awash in untapped wealth in the form of rapidly appreciating urban land.

The State of African Cities Report 2026 responds to this pivotal moment by placing urban land at the center of Africa's development challenge. Rapid land transformation lies at the heart of urban expansion, yet rising land values often outpace incomes, institutional capacity, and infrastructure provision. Much of this value remains poorly governed and inequitably captured, contributing to displacement, exclusion, insecure tenure, limited public space, and acute housing shortages—particularly for low-income and informal communities. The scale of the deficit is sobering: a backlog of at least 51 million housing units, public space occupying just 15 per cent of urban land against UN-Habitat's 45–50 per cent benchmark, and property tax revenues at 0.07 per cent of GDP—compared with 0.64 per cent in Asia and 0.70 per cent in Europe.

The report advances a critical shift in perspective: urban land is not only a physical or economic asset, but a foundation for social equity, fiscal sustainability, environmental resilience, and the urban social contract. It demonstrates that land-based finance and land value capture can help close urban investment gaps when carefully designed, context-specific, and embedded within coherent land governance and planning frameworks. What is needed is a distinctly African model—one that recognizes the continuum of land rights, builds on customary and group tenure systems, and treats informality not as a problem to be erased but as a reality to be planned for. The report cautions against technocratic or one-size-fits-all solutions, emphasizing alignment with Africa's diverse tenure systems, institutional capacities, and socio-political realities.

Drawing on diverse experiences across the continent, the report shows that progress is possible through incremental, participatory, and transparent reforms that deliver visible public benefits and build trust. The evidence is already on the ground: Rwanda's land tenure regularization has strengthened women's rights and digital land administration; Freetown's property tax reform has multiplied municipal revenues for street cleaning, road repairs, and waste services; Lagos shows how simplified, formula-based valuation can outperform technically sophisticated systems; and Togo, Ethiopia, Kumasi, Banha, Kigali, and Cape Town offer further lessons on land readjustment, public space, and inclusionary housing.

The report’s call to action is therefore clear. Local governments must move with urgency, deploying simplified, feasible instruments at scale rather than waiting for perfect cadastres. National governments must empower cities through clearer fiscal authority, harmonized legislation, and matching support—particularly for the secondary and intermediate cities where most of Africa’s urban future will unfold. The international community must shift from fragmented technical assistance to sustained partnerships that pair revenue support with investment in transparency, capacity, and the educational institutions that will train the next generation of urban professionals.

Africa’s urban future is being shaped now. Harnessing urban land for equitable and resilient development demands political commitment, institutional coordination, and above all, people-centered urban policies. This report—produced through the partnership of UN-Habitat, the Lincoln Institute of Land Policy, and the World Resources Institute, offers both the evidence and the pathway. The decisions taken in this decade will determine whether the value generated by Africa’s urban transformation is captured for the public good or lost to the few. Let us act decisively, equitably, and together.



Oumar Sylla,
Director, Regional Office for Africa
UN-Habitat

Foreword from Lincoln Institute of Land Policy

At the Lincoln Institute of Land Policy, our mission is rooted in a simple but powerful idea: that land policy, when thoughtfully designed and effectively implemented, can improve lives, strengthen economies, and sustain the natural systems on which communities depend. Nowhere is this mission more urgent—or more consequential—than in Africa’s rapidly urbanizing cities.

The State of African Cities Report 2026, Harnessing the Value of Urban Land for Socioeconomic Transformation in African Cities, arrives at a critical moment. Across the continent, urban populations are expanding at an unprecedented pace, with hundreds of millions of additional residents expected in the coming decades. This growth is generating significant increases in land value, while also bringing into sharper focus long-standing challenges: infrastructure deficits, widespread informality, and constrained municipal finance systems.

At its core, this report reinforces a central insight that guides the Lincoln Institute’s work in Africa: land is not only a physical asset, but also a powerful lever for finance, governance, and inclusion. When cities are able to harness land value through appropriate policies—such as land value capture and other land-based financing tools—they can create new pathways to fund infrastructure, expand access to housing, and invest in climate resilience. But as the report makes clear, these outcomes depend on more than technical design. They require coordinated action across institutions, stronger land administration systems, and approaches that reflect local realities.

This is where the Institute’s work in Africa has been focused—supporting cities and national governments to strengthen municipal fiscal systems, improve land valuation and data, and build the professional and institutional capacity needed to make these tools work in practice. Our approach emphasizes learning by doing, peer exchange, and adapting global knowledge to local context rather than importing models wholesale.

What stands out in this report is not only the scale of the challenge, but also the depth of innovation already underway across African cities. From tenure reforms to climate-responsive land use planning, there is a growing body of experience that points toward more effective and inclusive approaches to managing urban growth.

The relevance of this report lies in its ability to advance more systematic, context-sensitive initiatives in and for Africa’s cities—grounded in evidence, responsive to local conditions, and designed for long-term impact. We were proud to contribute to this important effort and look forward to continued collaboration with our partners to support fiscally stable, resilient, and inclusive cities across Africa.

Enrique R. Silva,
Chief Program Officer
Lincoln Institute of Land Policy



Foreword from World Resource Institute

By 2050, Africa's urban population is expected to double, with two out of three Africans living in cities. Housing, roads, electricity and water, alongside urban services like quality public spaces, waste disposal, sanitation, health and education, will continue to face rising demand as urban agglomerations expand. Land is central to sustainable growth and livelihoods across the continent, and the African Union urges governments to find pathways for ensuring that land can play its primary role in generating value for Africa's development process.

Yet as urban land prices rise with demand, revenue systems in many African cities are ill-equipped to finance the capital investments required to extend infrastructure, or the operating budgets needed to deliver reliable basic services to growing populations. Cities need tailored tools and systems anchored in improved policy and data management frameworks to respond to compounding crises while investing in solutions that strengthen the climate resilience of communities and urban infrastructure.

Land-based financing mechanisms, like property taxes, provide an opportunity to capture land value and land transactions to improve long-term financial sustainability. The revenues raised through land-based financing must also be reinvested in communities so that underserved residents are not excluded from the economic and social benefits.

The World Resources Institute works with decision-makers to transform human systems that profoundly impact people, nature and the climate. To enable change at the pace and scale needed, we also work to shift the economic, finance and governance structures that shape people's decisions and behaviours. Through our Cities program, we work with local governments around the world to shape a future where cities work better for everyone. This report, a collaboration with UN-Habitat and the Lincoln Institute for Land Policy, recommends practical approaches, grounded in the African context, on how efficient delivery of land services can meet the basic requirements of urban residents in Africa, while ensuring equity and resilience to climate change.

I encourage all city leaders to consider how these [recommendations/solutions] can power the structural transformation that our continent needs to drive equitable economic growth.

Aklilu Fikresilassie, PhD,
Africa Cities Director
World Resources Institute



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Acronyms

AfDB	African Development Bank
AUC	African Union Commission
CEPAC	Certificados de Potencial Adicional de Construção (Certificates of Additional Construction Potential)
DCCFE	Direction du Cadastre, de la Conservation Foncière et de l'Enregistrement
DfID	Department for International Development
FCC	Freetown City Council
FDRE	Federal Democratic Republic of Ethiopia
GIS	Geographic Information System
ICDT	International Centre for Tax and Development
IPCC	Intergovernmental Panel on Climate Change
ISO	International Organization for Standardization
KCCA	Kampala City Council
LBF	Land-based finance
LR	Land readjustment
LTRP	Land Tenure Regularization Programme
LUC	Land-use change
LVC	Land value capture
OECD	Organisation for Economic Co-operation and Development
PILaR	Participatory, inclusive land readjustment
TDR	Transfer of Development Rights
TIF	Tax Increment Financing
UCCC	University Coalition on Curriculum for Cities
UNDESA	United Nations Department of Economic and Social Affairs
UNECA	United Nations Economic Commission for Africa
WRI	World Resources Institute

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Executive summary

African cities are growing rapidly, leading to immense increases in the value of land. At the same time, they face severe financial gaps and an urgent need to guide ongoing development while investing in basic services. Near-term actions taken to support inclusive and sustainable urbanization, or the failure to do so, will shape the socioeconomic development of Africa's cities both now and for decades to come. Land-based finance (LBF) offers a largely untapped set of instruments to harness the value of urban land to finance and guide urban development.

This report examines the potential and challenges of land-based finance, and proposes that new approaches, grounded in the unique realities of African cities, be taken to leverage the powerful set of instruments within the LBF umbrella.

Chapter 1 introduces the topic and establishes the broader background of the financial needs of African cities. Chapters 2 and 3 examine the context of African cities pertaining to land tenure, regulations, and institutional frameworks, shedding light on the implications for implementing LBF. Chapters 4 and 5 take a deeper look at ways to utilize LBF to address the critical needs of African cities, specifically housing, public space, and climate adaptation.

Each chapter draws upon a set of African case studies to illustrate and generate evidence. Chapter 6 concludes with a set of overarching lessons drawn from the cases and the prior chapters, with recommendations for local and national governments, and the international community.

Chapter 1: The role of land-based finance in urban development

Africa's cities are expanding rapidly, reshaping the continent's economic and social landscape. Approximately half of Africans now live in cities and towns, and an additional 700 million urban residents are projected by 2050, when the continent's urban population will reach 1.4 billion. Over half of Africa's future urban footprint is yet to be built, meaning that today's decisions about land management and infrastructure investment will shape the region's development trajectory.

Urban infrastructure needs are estimated at roughly \$157 billion annually, far beyond current levels of public investment. Land-based finance offers a way to address this gap by capturing part of the value created as cities expand and densify, and by reinvesting revenues in infrastructure, services and public goods. Although widely used in other regions, LBF instruments remain underutilized in African cities due to institutional, administrative and political challenges.

HIGHLIGHTS

- Urbanization is rapidly increasing the value of land. As cities expand and densify, land values rise. Capturing a portion of this value can help pay for infrastructure and services necessary to support urban growth.
- Land-based finance includes a wide range of instruments, and applicability depends on local context. Instruments include property taxes, betterment charges, increment taxes, land leases, developer obligations, strategic land management, transfer of development rights and land readjustment. The diversity of African cities as well as common institutional and political challenges make adaptation and tailoring of LBF instruments critical to their success.
- Without safeguards, rising land values and new charges can burden low-income households or lead to displacement. Progressive rates, exemptions, flexible payment mechanisms and protections for low-income and informal residents are important tools to mitigate these risks.
- The impacts of land-based finance extend beyond revenue generation. When implemented well, these tools can improve fiscal stability, strengthen land administration, support better urban planning, influence spatial development patterns and contribute to environmental sustainability.



Close to **50%**

of Africans already live in cities and towns

+ 700 million

urban residents are expected by 2050



Urban infrastructure needs are estimated at roughly

\$157 billion annually

Chapter 2: The foundational role of land tenure in urban financing

Without clear and secure land rights, LBF instruments such as property taxes, betterment levies, land readjustment, and other valuecapture tools cannot function effectively. Land tenure security underpins urban productivity, private investment, and the ability of governments to assess, tax, and plan land. Although most urban areas in Africa exhibit layered tenure—statutory cores, hybrid belts, and extensive informal settlement rings shaped by historic exclusion and current governance capacity in formal land rights need not be synonymous with insecurity. Governments can design LBF instruments to allow inclusive, contextspecific revenue mobilization while also strengthening tenure security.

HIGHLIGHTS

- Land is fundamental to sustainable livelihoods in Africa, and governments must ensure it effectively supports development. However, land tenure systems across the continent are diverse and shaped by cultural, historical, economic and governance factors—making land-based urban financing (LBF) highly dependent on the nature and clarity of these tenure arrangements.
- To make LBF work, African cities will benefit from recognizing a continuum of land rights, giving legal backing to intermediate forms such as shortterm occupancy certificates and collective ownership. Given the dominance of customary and informal tenure in many cities, urban authorities need innovative, contextspecific strategies to adapt LBF to these realities in order to sustainably finance services for rapidly growing populations.
- Digital, accurate, transparent and updated land information systems are essential to enable cities to manage titles, leases, and conditions efficiently and to realize the expected benefits of improved tenure systems.
- LBF can simultaneously mobilize revenue and bolster tenure security. While developing and updating a full land cadastre is important, waiting for universal titling before deploying LBF risks revenue losses while urban growth spirals out of control. Policymakers can design LBF tools that enhance land governance while strengthening the social contract between citizens and city governments through transparent and inclusive reinvestment in local services. Cities can also leverage ongoing land law and administration reforms—recognizing a continuum of rights, clarifying institutional mandates, improving land markets and enhancing trust—to build confidence among investors and the public and to effectively implement LBF instruments.

Chapter 3: Regulatory and institutional frameworks for effective land value capture

Effective land value capture in African cities is determined less by legal design than by how rules are translated into practice across institutions, administrative systems and political cycles. Across the continent, implementation is hampered by fragmented governance, misaligned mandates between national and local governments, outdated planning legislation and severe shortages of trained urban professionals, particularly in small and medium-sized cities. These bottlenecks are compounded by incomplete property registries and valuation systems that struggle to keep pace with rapid urbanization, informality and peripheral growth. Therefore, sequencing institutional reforms carefully, and building local professional capacity to design, administer, and enforce instruments, are as decisive as the legal frameworks themselves. Experiences from Rwanda, Togo, Cape Town and Lagos show how this is possible through incremental, fit-for-context reforms are already enabling cities to operationalize land value capture in very different contexts.

HIGHLIGHTS

- Coordination mechanisms that bridge planning, valuation, and fiscal functions across national and local institutions play a central role in enabling land value gains to be systematically identified, captured and reinvested.
- Iterative urban legislative reform, grounded in local tenure realities and institutional capacity rather than imported models, can shift land value capture from a discretionary, case-by-case practice into a predictable, rule-based component of urban finance, building the stability and legitimacy that implementation requires.
- Functional property registries and simplified valuation systems provide the administrative backbone on which all land-based finance instruments depend, and cities can build these incrementally, using routine tax administration to drive data improvement while advancing land registry development in parallel.
- Fit-for-purpose valuation approaches, including proxy and interim methods, can outperform technically sophisticated models in low-capacity contexts as administrative credibility and consistency generate greater compliance and institutional learning.
- Investing in modernized curricula, mid-career professional development, and gender-inclusive pathways into planning, valuation, and municipal finance is critical to translating legal and administrative reforms into operational reality and is the foundation on which sustainable land value capture depends.

at least **51**
million
units are needed today



Chapter 4: How land value capture can foster inclusionary housing

Africa faces a housing challenge of enormous scale: at least 51 million units are needed today, and the continent's urban population is set to grow by 700 million by 2050. Inadequacy is rooted in how land is governed, valued, and serviced, compounded by poverty, income volatility, and labour markets that put formal housing beyond reach for most households. Land value capture and land-based finance have an important contribution to make, but as one component of a broader integrated housing strategy that combines fiscal and regulatory tools with direct public investment, housing finance reform, and enabling governance. Critically, rising land values that make many of these instruments viable can themselves drive displacement and deepen exclusion if left unmanaged, requiring complementary safeguards including tenure protections, anti-eviction measures, and gender-responsive land rights.

HIGHLIGHTS

- Land costs account for nearly a third of total housing prices across African cities, making the tenure arrangements, regulatory practices, and planning decisions that govern land central to any credible housing strategy.
- Density bonuses paired with inclusionary zoning can align private development incentives with public housing goals, though their viability depends on active real estate markets, credible planning enforcement, and institutional capacity to assess value uplift and monitor compliance.
- Where land readjustment builds on existing community practices, recognizes customary and informal tenure, and ensures replotted land is serviced and legally accessible, it offers a collaborative and locally grounded pathway to housing adequacy.
- Developer obligations and property taxation can anchor housing adequacy over time by linking development activity to infrastructure provision and service delivery, as well as through cross-subsidization and ensure that growth in high-value areas contributes to improved servicing in lower-income settlements.
- African cities' experiences with sites-and-services demonstrate that early, modest public investment in infrastructure can unlock substantial private housing investment but it requires pairing such investment with land-based finance instruments, robust targeting of lower-income households, and tenure protections to make these gains fiscally sustainable and socially equitable.

Chapter 5: Land-based finance strategies for public space and climate adaptation

African cities face a growing shortage of public space while also confronting escalating climate risks such as flooding and extreme heat. Rapid urban expansion, often informal and unplanned, has reduced green areas, fragmented urban layouts, and pushed many residents into hazard-prone locations, as climate change intensifies risks to lives and economies. Land-based finance offers an opportunity to capture some of the value created by environmental investments to recoup their costs, thereby providing avenues to expand public space, improve climate resilience, and guide growth in sustainable patterns.

HIGHLIGHTS

- Public space, which includes streets and open spaces, is scarce in many African cities, occupying on average 15 per cent of urban land across a sample of cities, far below the 45–50 per cent standard set by UN-Habitat. Access to green space is highly unequal within cities, and increasingly privatized. Simultaneously, climate risks are rising quickly. Populations exposed to flooding, extreme heat, and sea-level rise are growing by millions each year in Africa’s urban areas, with informal settlements often facing the greatest exposure and the least capacity to adapt.
- Public space investments such as parks and improved streetscapes often translate clearly into higher land values. Conversely, climate risk reduction is often poorly capitalized into land values due to information gaps and low penetration of insurance and mortgage markets that link disaster risks to property pricing.
- Pairing climate interventions with public space improvements is one promising avenue to link them to land values and thereby make them amenable to land value capture. For example, creating public parks in no-build flood zones and reducing urban heat through green spaces are ways that public space interventions can help link climate adaptation to value creation and capture.
- Land readjustment and strategic land management are particularly useful land-based finance instruments for creating public space. These approaches can create or reserve land for streets, parks, and other public uses while guiding urban expansion and generating land value that covers the costs.
- Achieving pro-poor and equitable outcomes requires deliberate policy choices. The areas most exposed to climate risks often have the least ability to finance improvements, making cross-subsidization important. Moreover, limited scale and one-off interventions will predominately serve the wealthy and exclude or displace poor communities from climate safe neighbourhoods with abundant public space. Therefore, increasing the scale of interventions is urgent and fundamental to broaden their reach.

Chapter 6: Designing effective land-based finance policies

Land-based finance remains underutilized in most African cities. Despite rapid urban growth and rising land values, only a small share of the land value created by urbanization is captured for public purposes. Yet many cities are already experimenting with instruments and achieving positive results across a wide spectrum of outcomes, including through fiscal, institutional, social, environmental, and economic impacts.

HIGHLIGHTS

- The diversity of African cities requires approaches that are tailored to contextual realities. Attempts to replicate methodologies designed for cities elsewhere are unlikely to succeed, but contextualized approaches have demonstrated a high degree of success.
- A focus solely on revenues risks overburdening taxpayers and undermining public support for LBF. Linking revenues to service delivery and visible outcomes is paramount to LBF effectiveness and sustainability.
- Public participation and transparency are also helpful for successful LBF administration and essential for legitimacy.
- Social equity must be built into LBF design. Without safeguards, rising land values and assessments can displace vulnerable households. Exemptions, tenure protections, and inclusionary approaches are needed to ensure that the benefits of urban development are widely shared.
- Current digital and GIS-based technologies present major opportunities to reduce cost and improve effectiveness across every component of LBF administration, including property identification, valuation, assessment and payment.
- Horizontal coordination between agencies and between local jurisdictions, as well as vertical coordination between government levels is needed to mitigate institutional fragmentation. National governments have a key role to play in supporting subnational implementation of LBF.
- Progress often comes through simplified approaches rather than waiting for perfect legal or institutional conditions to be in place. Rapidly surveyed fiscal cadastres, formula-based valuation systems, and simplified urban expansion plans hold the major advantage of being implementable, and can contribute to gradual improvement of systems as capacity grows.
- Scaling up is critical to achieving meaningful impact. Many current LBF initiatives remain small pilots. Expanding successful approaches across cities and metropolitan regions will be necessary for LBF to shrink the urban finance gap and make progress toward inclusive urban development.

Chapter 1: The role of land-based finance in urban development

Urban land is a source of immense and increasing value across the African region. Land-based finance presents an opportunity to harness that value to address significant urban investment gaps and to improve not only revenue generation, but a wide range of social, economic and environmental outcomes.

This chapter establishes the context of urbanization and the investment requirements of African cities, and proposes land-based finance as a mechanism to connect the opportunities of urbanization with a means for their achievement. It explains the theory of land value capture, describes the variety of instruments that fall under the umbrella of land-based finance, provides an overview of the current state of practice in African cities, and proposes a set of criteria to assess the impacts of land-based finance.

The chapter concludes by providing some conclusions and looks ahead to the remainder of the report.

KEY TAKEAWAYS

- Africa's urbanization is rapidly transforming the continent and the lives of its residents. A standardized classification of human settlements reveals that 73 per cent of Africans already live in cities and towns, and 800 million more are projected to join them by 2050. Half of Africa's urban area is yet to be built, signifying enormous opportunities to shape the future of African cities, and significant challenges to finance the necessary investments, estimated at \$157 billion annually.
- Land-based finance offers a mechanism to harness the value of land as it increases with urbanization. Land-based revenues have several beneficial properties, particularly when they capture unearned increases in property values and are reinvested in infrastructure and public space.
- However, land-based finance is widely underutilized in African cities. Widespread informality, unregistered land, poor property rights, local governments lacking in authority and capacity, and high poverty and inequality are some of the reasons. Still, land-based finance holds untapped potential, and can have wide-ranging impacts on fiscal, economic, institutional, social, spatial and environmental outcomes, thus contributing to the socioeconomic transformation of Africa's cities.
- The remainder of this report delves deeper into various facets of land-based finance in African cities, including the ways tenure systems, regulations and the institutional environment impact its application (chapters 2 and 3), the ways it can help create adequate housing (chapter 4) as well as public space and climate resilience (chapter 5), and what governments and the international community can do to make better use of land-based finance (chapter 6).

1.1. INTRODUCTION

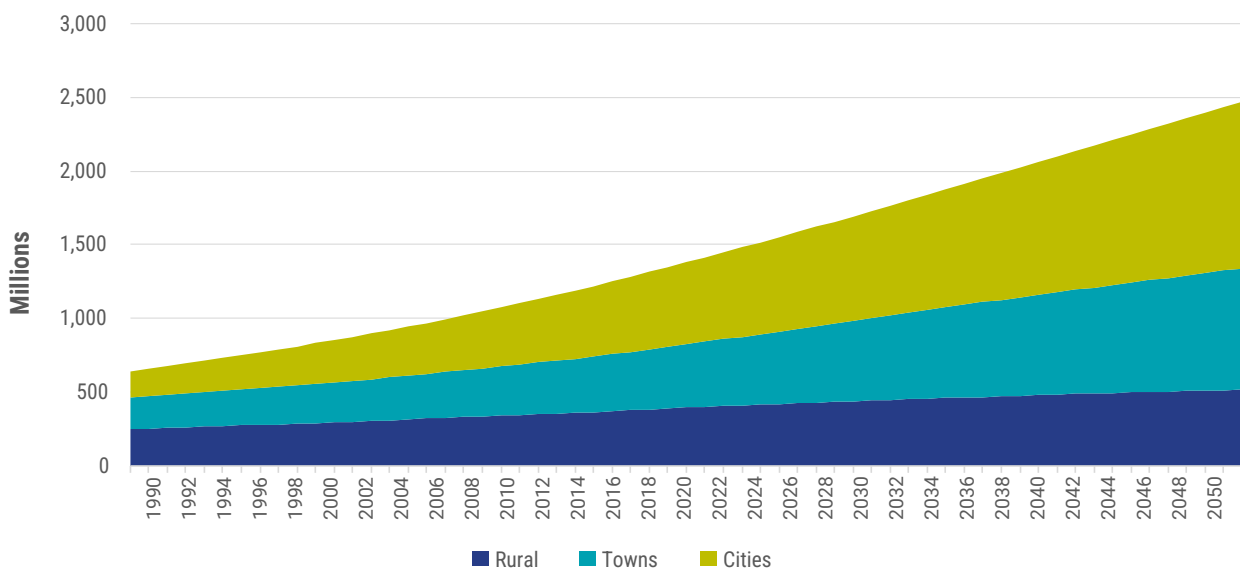
Africa’s cities are hubs of opportunity and economic dynamism, driving gains in quality of life even as they also concentrate poverty and deprivation. They are expanding at an extraordinary pace, which intensifies the opportunities and challenges they bring.

For the hundreds of millions taking part in Africa’s urbanization, virtually every facet of life is affected by the transition into cities.

In the quarter century between 2000 and 2025, African cities and towns gained 590 million new inhabitants, and in the following 25 years to 2050, over 700 million more will join them (see Figure 1).

According to the newly harmonized classifications of urban areas based on actual settlement patterns rather than jurisdictional boundaries, already 38% of the regions population live in cities and 32% live in towns.¹

Figure 1. Africa’s urban and rural populations, 1990–2050



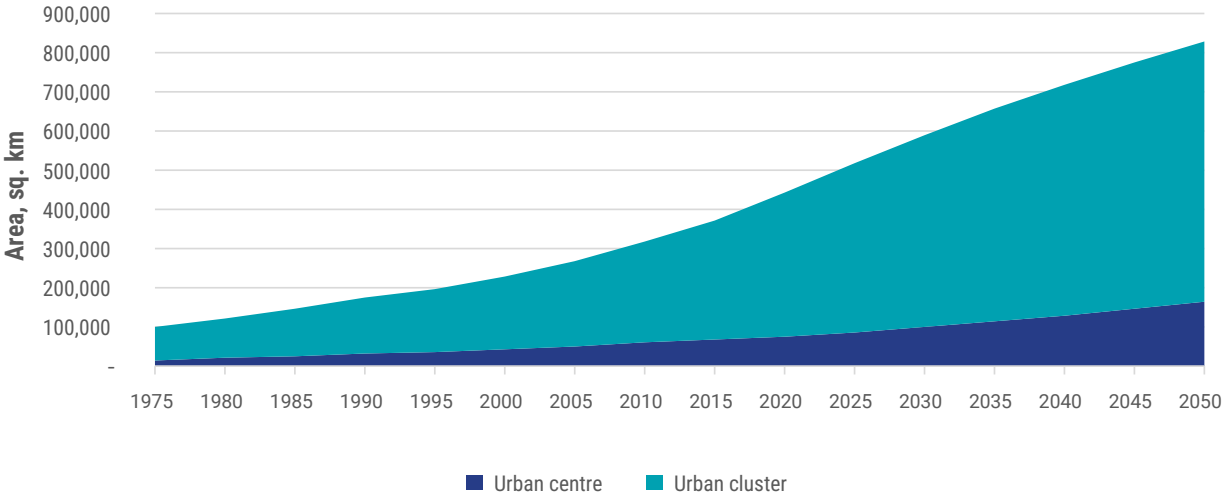
Source: Authors using data from UNDESA 2025 World Urbanization Prospects, degree of urbanization classification (DEGURBA).

In addition to the massive expansion of urban populations, the extent of urban land is also rapidly increasing. Land classified as urban in Africa has increased from just over 100,000 square kilometres in 1975 to 520,000 square kilometres

in 2025, and is poised to add over 300,000 more square kilometres by 2050, with the majority of that land classified as moderate density clusters rather than high density urban centres (see Figure 2).

¹ This is the degree of urbanization (DEGURBA) method which is the newly implemented harmonized global standard used by the UN Statistics Division. It classifies cities as areas with at least 1,500 inhabitants per km² and a population of at least 50,000 inhabitants. It classifies towns and semi-dense urban clusters as areas outside major cities with at least 300 inhabitants per km² and a population of at least 5,000 inhabitants.

Figure 2. Land classified as urban in Africa: 1975–2050



Source: Authors using data from the Global Human Settlement Layer, DEGURBA classifications.

Urban centres are defined as high density contiguous areas with a density of at least 1,500 inhabitants per km² and a population of at least 50,000. Urban clusters are moderate density contiguous areas with a density of at least 300 inhabitants per km² and a population of at least 5,000 in the cluster.

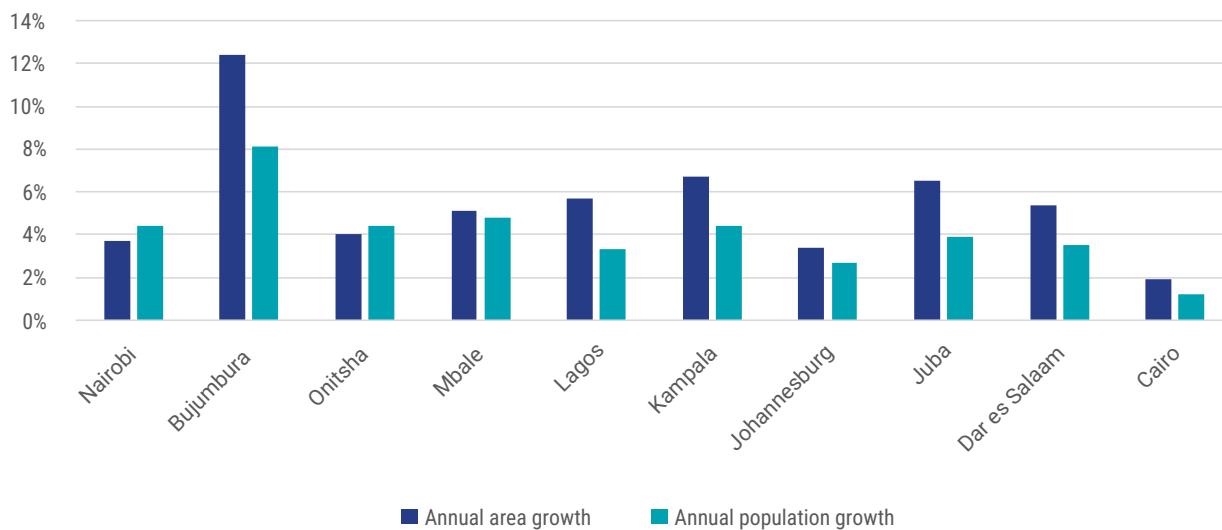
Importantly, the urban transition is tied to a massive uplift in the value of land. Globally, land is a major and often overlooked asset, exceeding the value of all equities, securities and gold combined (Coomes, MacDonald and le de Waroux, 2018), and its value rises rapidly as it is brought into the urban fabric. Of the largest ten most expansive urban agglomerations, eight are projected to continue

expanding at a faster rate than their population growth in coming years, converting enormous areas of land from rural to urban with associated value increases (Figure 3). For example, data from Nairobi’s suburbs and satellite towns show that land values have increased 1.3 fold and 2.1 fold, respectively in the decade from 2015–2025 (Haas Real Estate, 2025).

It is not just the conversion of land from rural to urban but the densification of urban land that is increasing land values, as higher densities are associated with rising value. Expansion and densification are both being driven by demand arising from population and income growth.



Figure 3. Forecasted annual rate of increase in area and population to 2050 in Africa's 10 most expansive agglomerations



Source: Authors using data from Organisation for Economic Co-operation and Development (OECD) et al. 2025.

The pace and scale of urbanization present both a massive challenge and an enormous opportunity. Half of Africa's urban area is yet to be built (OECD et al. 2025). The implication is that the region is at a critical juncture that will shape the cities of the future.

Given the observed settlement patterns showing that the region is already 73 per cent urbanized (UNDESA, 2025), the window of opportunity to act is narrower and more pronounced than previously thought. Failure to act now risks locking cities into unsustainable development patterns that impose high long-term social, environmental and economic costs, and high costs to alter.

Additionally, the scope of managing the urban transition will require emphasis on the shift from rural to urban, towns to cities, and focus on density and patterns of agglomeration. Guiding urbanization as it occurs is significantly less costly

than retrofitting unplanned urban development. Today's urban land management and urban public investments will play a major part in determining whether the urbanization process propels Africa's development forward or traps its people in entrenched poverty.

Accessing the financial resources to guide urbanization in inclusive and sustainable patterns is a challenge felt across the continent, yet the massive value created as land urbanizes is left largely untapped. Land-based finance offers opportunities for African cities to harness this value.

The remainder of this chapter reviews the financing needs of Africa's cities, explains the theory and instruments of land-based finance, and examines their use in practice, setting the stage for a deeper examination of the key issues explored in subsequent chapters.

1.2. THE FINANCIAL NEEDS OF AFRICA'S CITIES

1.2.1. The state of basic services

Major investments in African cities have had discernible progress in recent decades, with the percentage of those living in slums and those lacking electricity, basic water and basic sanitation gradually decreasing on average across countries (Figure 4).²

However, public investments have not kept pace with rapid urban growth, and the total number of urban residents lacking basic services has actually risen over the same period of time (Figure 5), illustrating the extreme pressure urbanization is putting on urban basic services.

Figure 4. Percentage of urban population lacking basic services, average of African countries, 2000–2022

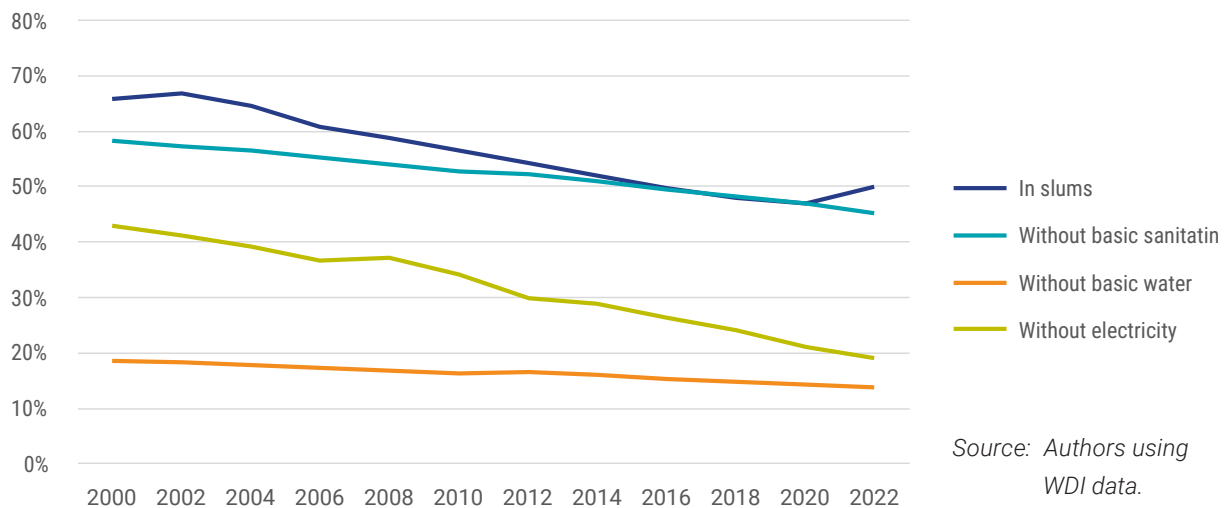
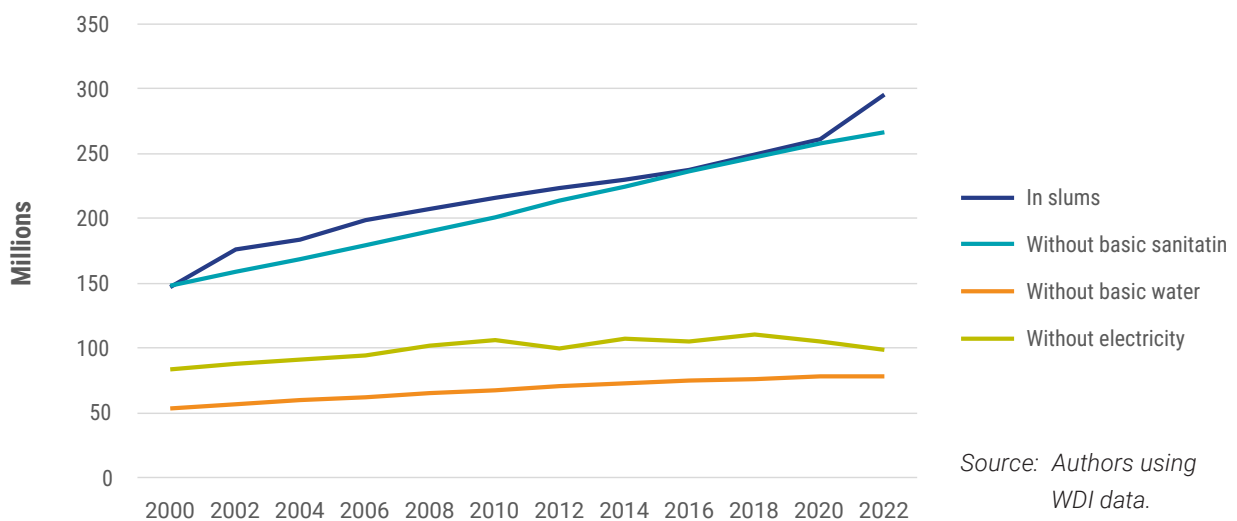


Figure 5. Total urban population lacking basic services, Africa, 2000–2022



² Regional averages mask significant differences between countries and between cities. Detailed city-level and country-level data can be found on a wide range of indicators in UN-Habitat's Urban Indicators Database: data.unhabitat.org.

1.2.2. The state of recurrent expenditures

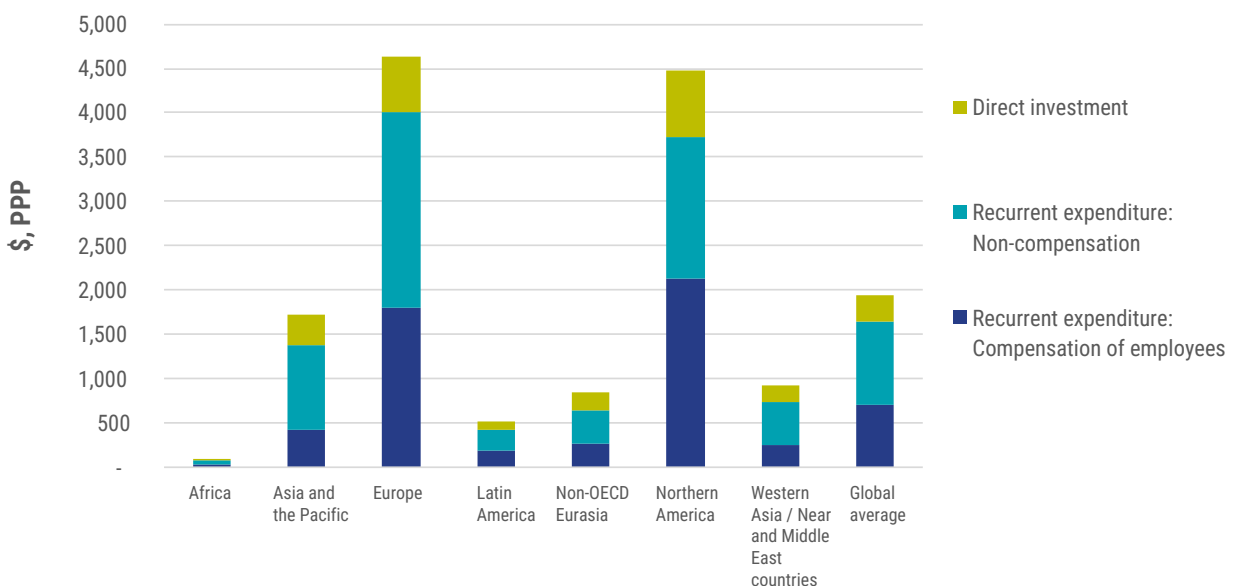
Recurrent expenditures at the subnational level are critical to the daily functioning of African cities. As the tier of government closest to residents, local authorities are best positioned to understand and respond to locally specific needs, and are responsible for an array of essential services such as waste collection, local roads, drainage, public health, and primary education.

Meeting these needs requires steady funding for staff, operations, and routine maintenance, not just one-time capital projects.

Yet in most cities, recurrent budgets fall far short of what is required. The African average across 33 countries with data shows that in 2020, subnational governments spent a total of \$PPP 84 on recurrent expenditures, nearly half of which was for employee compensation, compared to a global average of \$PPP 1,649 (Figure 6).

When maintenance is deferred and service gaps persist, infrastructure deteriorates more quickly, ultimately leading to higher repair and replacement costs and placing even greater strain on already limited local resources.

Figure 6. Subnational government expenditures by category, regional averages, 2020



Source: Authors using data from OECD SNG WOFI database.

1.2.3. The state of capital expenditures

The rapid pace of urban growth in Africa's cities necessitates major investments in urban infrastructure.

Based on a combination of existing estimates updated to reflect urban populations and gross domestic product (GDP), the investment needs of Africa's cities are \$157 billion annually, or 5.34 per cent of regional GDP, including \$120 billion

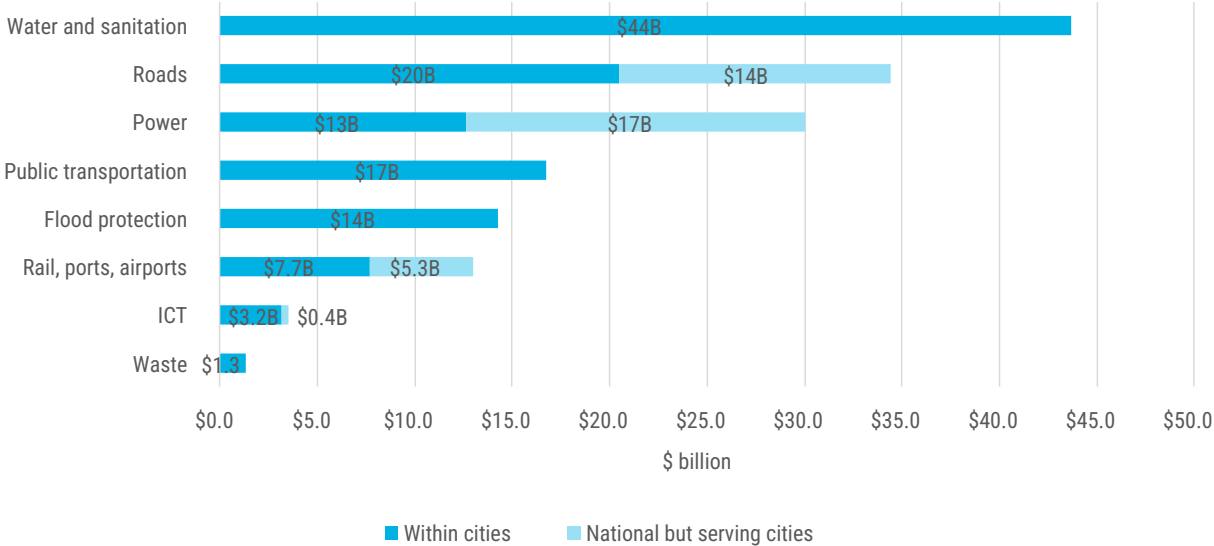
for infrastructure within cities and \$37 billion for national trunk infrastructure (see Figure 7; Kebede and Gauntner, 2024).

These estimates include only major categories of capital investment, and do not cover education, emergency services, or the additional costs associated with slum upgrading. Estimating the gap in spending is challenging, but prior research

has found that Africa’s total infrastructure investments (both urban and rural) are in the 1–2 per cent of GDP range (Foster, Rana and

Gorgulu, 2022; World Bank, 2017), meaning that the vast majority of the urban investment need is unfunded.

Figure 7. Africa’s annual urban investment needs by sector



Source: Kebede and Gauntner, 2024.

1.2.4. Avenues to mobilize public resources for Africa’s cities³

Three major avenues for mobilizing the resources needed to support sustainable urban development are as follows: The first is optimizing revenues. Urban tax bases are typically larger, more formal, and less volatile than rural or resource-based taxes, offering greater potential for stable revenue.

Realizing this potential requires a tailored approach to taxing parts of the informal sector that is heterogeneous and comprised of everything from micro to large enterprises, in addition to strategic taxation of the rapidly growing digital services economy. Stronger efforts are also needed to close loopholes, curb illicit financial flows, and ensure that high-income individuals and firms pay their fair share.

The second and related avenue is empowering cities and subnational governments. Although cities generate an estimated 70 per cent of Africa’s GDP (Kebede & Gauntner, 2024), Africa’s

subnational governments spend a mere \$PPP 15 per capita on average on investments, in comparison to the \$PPP 292 global average (see Figure 7). Strengthening subnational finance requires building administrative capacity, more clearly linking revenues to visible improvements in service provision, and systematically leveraging the value of urban land.

Without these reforms, cities will remain constrained despite their central role in economic growth. Third, countries need to expand access to finance for subnational investments in cities.

Stronger and more consistent revenue mobilization is a prerequisite for creditworthiness (which has not yet been achieved in most African cities) and for accessing longer-term financing for infrastructure. Land-based revenues can be part of the solution. Instruments such as municipal bonds and climate finance mechanisms hold

³ The issues summarized here are examined at length in Kebede and Gauntner (2024).

promise, but their effective use depends on sound fiscal management and clear intergovernmental frameworks. Evidence from recent studies highlights practical steps cities can take to strengthen their readiness for such financing (see Box 1).

At the same time, mobilizing more resources is not enough. Governments must also put limited funds to better use by improving both allocative efficiency, which means investing in the right priorities, and technical efficiency, which means, delivering those investments at lower cost and higher quality. This dual focus is essential to closing infrastructure and service gaps under tight fiscal constraints.

Land-based finance is a critical piece of this puzzle. The property tax and land lease are already the largest contributors to own-source revenues for many African cities, yet raise far below the level of revenues seen in other regions, highlighting the massive untapped potential of land. Land values rise with urbanization, many land-based revenues are assigned to subnational governments, and land can generate a steady income stream that supports borrowing and long-term investment.

Land-based instruments, if paired with well-targeted expenditures, also have the potential to strengthen the social contract by more clearly linking revenue collection with expenditures to meet the needs and expectations of urban residents.

Box 1. Coordinated actions to close Africa's urban finance gap

The African Development Bank Group's report, *From millions to billions: Financing the development of African cities* (Haas et al. 2023) proposes a pathway for African cities to take bold and coordinated actions to close the financing gap and attract finance on their own terms. Demand-side actions include:

- Investing in multilevel governance that supports local authorities and collaborates to close capacity gaps
- Reforms to both strengthen local own-source revenues and stabilize fiscal transfers
- Improving absorption capacity by enhancing the ability of cities to spend on appropriate projects and implement them in a timely and accountable manner
- Developing project pipelines with better quality data about infrastructure projects, their development process, and their financial structure

Supply-side actions to change the perspective and approach of the global financial sector on African cities include the following:

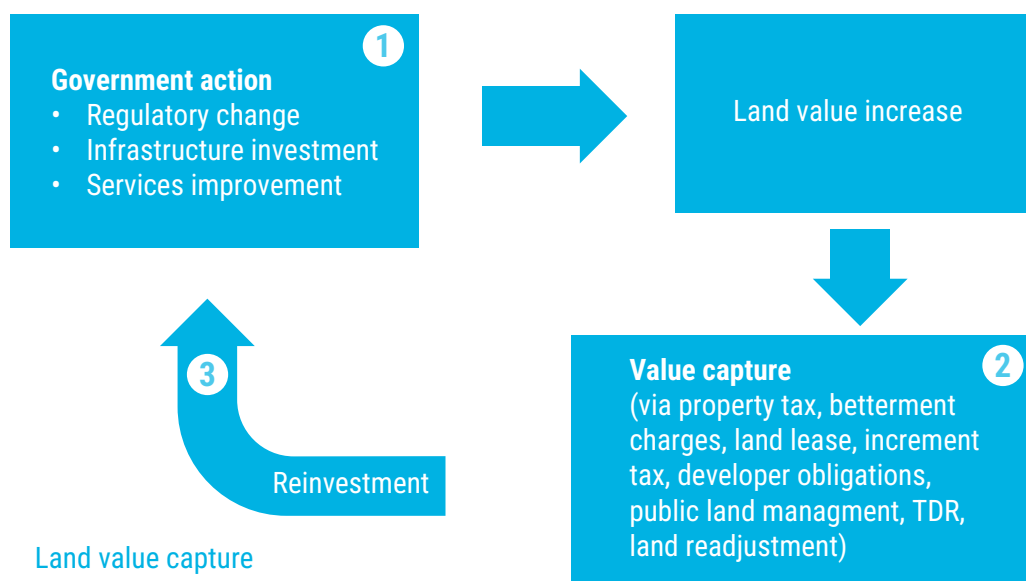
- Partnering directly with credit rating agencies to get a more accurate city-specific rating
- Developing domestic capital markets and mobilizing domestic capital through regulatory reform, institutional capacity-building, and actions to connect domestic savers and borrowers
- Developing complementary urban infrastructure and services projects that build upon national-scale mega-infrastructure deals

1.3. THE OPPORTUNITY OF LAND-BASED FINANCE

Land-based finance (LBF) encompasses a range of instruments that harness the value of land to generate public revenues and create public assets, enabling governments to obtain value in monetary and non-monetary forms, including land, infrastructure and services. LBF is often built on a foundation of land value capture (LVC), which

is more narrowly defined as a three-step process: (1) value creation through public investment or regulatory action; (2) value capture by government; and (3) reinvestment of value in public benefits (see Figure 8; Palmer and Berrisford, 2015; OECD and Lincoln Institute of Land Policy, 2022).

Figure 8. The three steps of land value capture



Source: Authors.

The link between public investments, land values, and value capture is the subject of theories dating back to early classical economists and popularized by Henry George.

In *Progress and Poverty* (1871), George argues that public actions, such as infrastructure investment and regulations, raise land values, thus creating unearned windfall gains for private landowners, and that these socially created increases should be captured for public use rather than accruing privately. Economists still regard land-based revenues to be among the best sources for local governments.

Whereas taxes on movable assets are often best administered nationally to avoid distortions arising from impacts on supply, horizontal competition leading to a race to the bottom, or taxes being born by non-residents, land is immovable and can be taxed without the risk of it departing the municipality (Berrisford, Cirolia & Palmer, 2018; Walters, 2016; Walters, 2020).

In addition, because the value of land often reflects actions by the public sector, payments based on land values can serve as a “benefit tax”, or compensation for a wide range of local public benefits (Walters, 2016).⁴

⁴ Importantly, the value of land is distinguished from the value of improvements or buildings on the land, which reflect the personal investments of the owner rather than public investments.

In reality, land can increase in value due to a variety of factors:

- **Public investment:** Global evidence supports the idea that public investments in infrastructure are capitalized in property values to an amount equal to or more than the investment (Deininger & Goyal, 2024). In African cities, investments in physical infrastructure (for example, roads, drainage), digital connectivity, and security all influence land values (Goodfellow et al. 2024).
- **Other public actions:** Land values reflect public actions that shape the quality of the local economy, safety and security, and zoning regulations that protect the parcel from conflicting land uses.
- **Private investments:** These can also impact land values when they are in the same market or neighbourhood, and privately delivered community services can also raise the value of land.
- **Market distortions:** Information asymmetries related to broker-driven price distortions and opaque land transactions, informal sales, politically motivated land pricing and money laundering may shape land values where land markets are poorly developed (Goodfellow et al. 2024). When government actions to extend infrastructure and land titles does not match the demand for urban land, it can artificially constrain the supply of formal plots, pushing prices up (see Case 1).

- **Outside factors:** Market demand due to population growth or income growth, environmental conditions, geographic constraints on growth, social preferences, speculation driven by domestic and diasporic investment and international financial flows including aid all impact land values (Goodfellow et al., 2024).

When government action is responsible for the uplift in value, land value capture in its purest form can be utilized with the rationale that the value generated by public investments should accrue back to the State. Further investment can result in a virtuous cycle of reinvestment and value increase (see Figure 8).

However, it should be noted that because LVC is predicated on increasing land values, it poses inherent risks to the poor who may be cost-burdened or displaced from high value land.

Social equity is therefore a critical consideration with any LVC instrument.⁵ When external market pressures rather than government action increase land values, the government can still levy taxes, just as it does on other sources of wealth or income; and, in such cases, land-based revenues will theoretically be utilized to provide services that benefit those paying and others impacted by increased demand (e.g. through supports to affordable housing). However, many of Africa's urban areas are serviced informally and by the private sector. Public land value capture without public services makes less theoretical sense as well as potentially undermining the fiscal contract⁶ between taxpayers and the government.

5 Preventing LVC approaches from harming the poor is a theme throughout this report. See strategies for preventing and mitigating inequitable outcomes in table 1.

6 i.e. the implicit agreement between that citizens pay taxes in exchange for public services, which is fundamental to good governance.

1.4. LAND-BASED FINANCE INSTRUMENTS

There are a variety of instruments that can harness the value of land to generate revenue or public assets. The property tax is the most basic and most common. It and the land lease are levied annually on the total value of land (see Case 1 and Case 2).

Other instruments are levied in conjunction with property sale (capital gains tax, transfer tax) or in conjunction with the issuance of development permits (developer obligations, sale of development rights). Strategic land management involves the government taking on the role of developer in order to improve land and gain revenue from the improvements, and is particularly important in places where there are large public landholdings. By contrast, transfer of development rights and land readjustment do not raise revenues directly but leverage land values to shift the locations of development (see Table 1).

More advanced land-based financing mechanisms include bonds or loans collateralized by property taxes or public land and public-private partnerships or special purpose vehicles in which the public sector contributes land or land-based revenues and the private sector provides financing, construction, or operations.

Minimum administrative requirements are similar across the instruments listed in Table 1:

- Legal authority to use the instrument
- A complete and updated cadastre⁷ to identify liable payers or contributors (of financial resources, land, or in-kind contributions)
- Ability to calculate the charges that should be assessed
- Ability to conduct billing, collection and enforcement

- Transparency to allow for public accountability and prevent corruption
- Adequate political support from taxpayers and powerful stakeholders

These administrative requirements are often challenging in the context of weak land information systems and limited technical and administrative capacity (see chapters 2 and 3 and discussion below). It should be noted that legal and tenure systems differ significantly across countries, with State landownership in countries like Ethiopia, Guinea-Bissau, Mozambique, Tanzania, and Zambia, prevalent customary tenure systems in some countries and cities. These differences impact the applicability and the need for contextualization of various instruments (see chapters 2 and 3).



⁷ A cadastre is a land registry showing landholder rights and used for taxation purposes.

Table 1 Land-based finance instruments

Instrument	Definition	Example	Common challenges	Requirements for socially equitable outcomes
Property tax	Annual tax levied on land value, building value, or both	Municipal tax on all urban parcels to fund services	Poor or outdated cadastral data; weak valuation capacity; low collection and enforcement; political pushback	Progressive rate structure; exemptions or reliefs for low-income households and those not benefitting from services; transparent, accountable collection; public participation in taxation decisions; enforcement targeting upper income brackets; measures to protect low-income households from displacement
Betterment charges / Special assessments / Improvement levies	Charge paid once or in instalments by landowners whose property values increase because of specific public investments in infrastructure or services, collected to pay for those specific investments	Additional charges added to property tax bills of benefitting properties to pay for a new sanitation system or for investments in an improved road	Technical challenge of measuring uplift, benefitting properties and fair assessment; limited legal or administrative framework; poor payment compliance	Inclusive stakeholder consultation; clear, transparent tax assessment calculation; safeguards for low-income or vulnerable landowners (e.g. instalment payments, exemptions); transparent use of proceeds
Land value increment tax / Capital gains tax	Tax, applied at the time of land sale, on the increase in land value (capital gains)	When the city rezones peri-urban land or invests in transit, a portion of the resulting increase in land value is taxed when the land is sold	Valuation complexity; inflation-related distortions; exemptions complexity; incentive not to report sales or understate sales prices to the detriment of property record accuracy; sometimes not under the purview of local-level government (classified as income tax, levied nationally)	Transparent methodology to assess uplift and account for landholder investments and inflation; progressive rate structure; clear and equitable exemptions; public participation in taxation decisions; enforcement targeting upper income brackets

Instrument	Definition	Example	Common challenges	Requirements for socially equitable outcomes
Land lease	Government grants annually payable leases, sometimes with a first year down payment, to developers or households.	Issuance of 50-year land leases for residential use on government-owned land with 10% upfront payment and annual payments thereafter	Lack of up-to-date land records; undervaluation resulting in value capture by private resellers; risk of displacing informal landholders	Transparent, competitive lease procedures; public disclosure of valuations and deals; protections for informal or low-income occupants before lease; issuance of leases at the scale of demand to prevent price hikes that exclude the poor
Developer obligations / Impact or development fees (cash or in-kind) / Sale of development rights / Density bonuses	Fees (paid in cash or in kind) required from developers as a condition for building permits or subdivision, often to pay for public investment needs arising from the development; Or rights to develop at higher densities than base zoning in exchange for developer contributions	Fee on a new housing subdivision to finance sewer extension or road building; or inclusionary zoning ordinance requiring developers build a percentage of housing for low-income households	Weak enforcement; lack of capacity to negotiate or monitor in-kind contributions; failure to ring-fence funds resulting in unmitigated development externalities; mismatched timing of revenues and investment needs; informal and unregulated development avoids charges	Accountability and transparency in how fees are assessed and spent; ensuring fees do not only benefit high-income communities, sometimes through cross-subsidization of locations outside the development area
Strategic land management / Public-land development	Government actively acquires, holds, develops and leases or sells land, capturing value uplift from public actions (infrastructure, zoning, planning) for later use or debt repayment	A municipality buys peri-urban land near a planned transit station and later leases or sells it for mixed-use development, with proceeds used for public infrastructure or housing	High upfront capital needs; land titling and ownership disputes; governance risks (corruption, lack of transparency)	Transparent acquisition and disposal procedures; public disclosure of plans, valuations and deals; effective social use of revenues from redevelopment; safeguards against displacement of vulnerable or informal residents

Instrument	Definition	Example	Common challenges	Requirements for socially equitable outcomes
Transfer of development rights (TDR)	Regulations allowing development rights in “sending areas” to be sold to developers in “receiving areas” thus shifting the intensity of development to more suitable locations and compensating property owners in less suitable areas in the process	Regulations allowing land owners on environmentally sensitive land to sell their building rights to developers building in the city centre	Weak or ambiguous zoning and land-use rules; poor control over development or pervasive informal development; lack of market development; information and bargaining power asymmetries	Accessible information about the process and options; fair valuation mechanisms; safeguards to build or protect affordable housing in desirable locations; equitable spatial distribution of zones (not concentrated in wealthy districts); transparency of outcomes
Land readjustment (LR)	Pooling private land parcels, reorganizing them into a planned pattern of plots and public space, then returning adjusted plots to owners, with a portion of their original land area allocated to public uses	Peri-urban landowners pool land, which is divided into serviced urban plots with a standard percentage set aside for roads and parks	Complex to negotiate; need for owner consent or strong legal powers; title and ownership uncertainties; administrative capacity to manage redistribution; risk of exclusion of renters and informal landholders	Transparent and inclusive consultation; mechanisms to compensate or protect informal landholders and renters

Source: Authors

1.5. LAND-BASED FINANCE IN PRACTICE

1.5.1. Underutilization and common challenges

Land-based finance can be a powerful tool to utilize the value created by growth and fuel major urban investments, as has been the case in rich countries such as France, Japan, and the United States (Lall, Henderson & Venables, 2017). Land-based finance has also been used successfully in much of the Global South, in conjunction with urbanization. Cities in Brazil, Colombia and India demonstrate how betterment levies and charges for development rights can finance major urban infrastructure. In contexts with extensive public landownership, such as Western Asia and China, land leasing and public-private development arrangements have generated substantial revenues for infrastructure, with China standing out for using land lease financing at scale to fund urban growth (DfID, 2015).

However, in much of Africa, in spite of the fast pace of urbanization, cities have been slower in the uptake of land-based finance. Perhaps the most frequently used qualifier of LBF in the African context is “underutilized”.

Africa is a diverse region, and its thousands of cities feature a heterogenous array of contexts, yet there are a common set of challenges that often impede implementation of LBF (see Box 2). These are discussed in detail in subsequent chapters, as well as the need for context-specific approaches to overcome them.

The importance of political will as a precondition for the successful use of land-based finance cannot be overstated. As aptly summarized by an UN-Habitat publication on implementing LBF: “Without political will and effective leadership, small surmountable legal hurdles can quickly turn into protracted legal disputes as elites attempt to stall the political process. Without political support, reforms are also likely to be overturned and reversed in times of crisis. More frequently still, lack of political support undermines the new processes and prevents proper implementation and enforcement,” (Walters, 2020, p. 45).

Box 2. Common challenges that impede use of LBF in African cities

- Legal and regulatory constraints on application of LBF instruments
- Outdated, incomplete, or contested land registrations
- Weak development control and high informality
- Complex and costly property valuation systems
- Shortfalls in administrative capacity
- Political fragmentation of revenue administration responsibilities
- Lack of public support
- Political resistance
- Reduction of the tax base due to exemptions and poverty

While acknowledging the heterogeneity of African cities, it is possible to note several distinctive features that are common in the region: the blending of urban and rural characteristics on the peri-urban edge, overlapping systems of governance with weak municipalities, high levels of informality where landholders lack legal rights, and deep poverty and inequality (Pieterse & Parnell, 2014). These characteristics complicate the use of land-based finance instruments, presenting administrative and political challenges, as well as raising concerns about social equity.

Local land systems and political contexts further condition how land-based finance operates in practice. In African cities, land often carries layered social, historical, and symbolic meanings, shaped by colonial legacies, customary tenure, and contested claims, which make valuation and taxation particularly sensitive (see chapter 2; Goodfellow et al., 2024). Goodfellow (2025) points out that the dynamics of land value in African cities may differ significantly from traditional models: land values may rise where there is limited State presence to regulate and without public infrastructure.

Instead of publicly created value accruing to private landholders, privately created value through the implementation of private roads, hospitals, schools and open space boosts the value of land, which is often held collectively. These dynamics add complexity to attempts to apply land value capture.

1.5.2. Utilization by instrument

Among the list of possible land-based finance instruments (see Table 1), the property and transfer taxes are the most widely used in Africa, as both are applied in almost all African countries. The transfer tax is often levied by the central government, and is usually assessed at 1–10 per cent of property sales value with a maximum rate of 15 per cent on some classes of transactions.

Political dynamics also matter greatly: differences in elite interests, ethnic composition, central-local relations, and local political competition can lead to starkly different outcomes across cities, even within the same country (Jibao & Prichard, 2015; see Case 2). As a result, the effectiveness of land-based finance in African cities depends not only on technical design, but on governance arrangements and political leadership that are often highly context-specific (see chapter 3).

Despite the challenges, there are often context-specific approaches to begin implementing LBF without waiting for administrative and institutional shortcomings to be fully resolved. Such “good enough” approaches are one theme of this report.

The unique features of African cities, their land systems, and their governance structures means that LBF approaches developed elsewhere cannot simply be transferred and expected to function similarly. Contextual tailoring is paramount. Approaches to strengthen tenure security by recognizing a continuum of land rights, including group rights can go hand-in-hand with LBF reforms adapted to the specific landholding arrangements (see chapter 2), and the application of LBF can contribute to land management systems (see for example Case 2). It is both possible and necessary to adapt LBF instruments for contexts where informality is high and local government capacity for tax administration and plan implementation is low.

Property tax revenue typically accrues to the local level with the exception of several French-speaking countries (Franzsen & McCluskey, 2017). There is high potential for revenues from the property tax: an estimated \$60 billion region-wide. However, actual collections are far below the average calculated across other low-income countries, with taxes only collected on 10–20 per cent of

parcels in most African countries (Deininger and Goyal, 2024; Franzsen & McCluskey, 2017). Other LBF instruments are used less frequently, although this differs by country (see Table 2).

In spite of historically slow uptake of LBF in African cities, technological innovations are making the use of LBF instruments easier and less costly.

This includes the increasing utilization of GIS and digital technologies to overcome administrative challenges, including those pertaining to property identification, registration, record keeping, valuation, billing and collection (see Case 1 and Case 2).

Table 2 Use of land value capture instruments across 9 African countries surveyed

	Betterment levy	Developer obligations	Charges for development rights	Land readjustment	Strategic land management
Egypt	Frequently	Frequently	Frequently	Occasionally	Frequently
Ethiopia	Not used	Not used	Not used	Occasionally	Occasionally
Ghana	Rarely	Frequently	Not used	Not used	Occasionally
Morocco	Rarely	Occasionally	Not used	Occasionally	Occasionally
Namibia	Not used	Frequently	Not used	Not used	Occasionally
Nigeria	Rarely	Frequently	Not used	Not used	Occasionally
South Africa	Occasionally	Frequently	Not used	Occasionally	Occasionally
Tunisia	Not used	Not used	Not used	Rarely	Occasionally
Uganda	Not used	Not used	Not used	Rarely	Rarely

Source: Authors using data from OECD and Lincoln Institute of Land Policy, 2022.

1.5.3. LBF and equitable results

In African cities with high inequality and high rates of informality, ensuring LBF instruments are socially equitable should be a primary concern.

This will require transparency and accountability in valuation, assessment, and expenditure of revenues. Across instruments, equitable outcomes depend less on the tool itself than on deliberate design choices that prioritize inclusion, redistribution and fair enforcement.

Theoretically, taxes and fees on wealth (including land) are thought of as more equitable than other types of revenues. However, in urbanizing African cities, landholders whose land values are rising quickly are often those on the urban periphery without access to other major sources of wealth

or liquid assets. Progressive rate structures, exemptions, or flexible payment arrangements are often needed to avoid overburdening low-income households, and safeguards are critical to prevent displacement of informal residents, renters, or small landholders.

Without accommodations and protections, low-income households are at risk of displacement through forced evictions, market pressures, and the inability to pay rising assessments (see, for example, the issues around displacement of informal households in Addis Ababa in Case 1).

Assessments paid annually and based on land values (such as the annual property tax, land leases, or annually paid special assessments) will

be challenging for cash poor households. Such households may need a deferment until they can sell, capitalizing on the increased value of their land. South Africa is the only African country that offers deferral, and then only “under exceptional circumstances” (Franzsen & McCluskey, 2017). When it comes to exemptions, there is a trade-off between being well-targeted to those who need them, and the complexity of administration.

Another major problem common to land-based finance in African cities is the failure of governments to use land-based revenues to benefit payers, resulting in low tax morale, breaking the fiscal contract, and making taxpayers worse off. Local governments may use revenues to improve administrative buildings or purchase government vehicles, rather than expenditures that benefit taxpayers in a more tangible way. Even developer obligations intended to mitigate the spillover effects of development are often

not ring-fenced and not used for infrastructure investment (Palmer & Berrisford, 2015).

Experience shows that higher property tax revenues do not automatically translate into greater public investment or improved service delivery. The assumed link between taxation and accountability relies on citizens’ ability to bargain by withholding taxes when governments perform poorly (i.e. “revenue bargaining”).

However, this mechanism breaks down where taxation is enforced coercively and citizens lack real leverage, a dynamic that can be especially harmful to vulnerable groups. When increased revenues are not paired with improved budgeting, expenditure quality, or responsiveness, there is a higher risk that gains will accrue to political elites, and those paying, who are already poor and marginalized, will be made worse off (Gauntner, 2023).

1.6. CRITERIA FOR ASSESSING THE IMPACT OF LBF

Land-based finance presents a major opportunity, not only for harnessing land values for revenue generation, but for bringing about a wide range of outcomes that contribute to the socioeconomic transformation of African cities. The impact of implementing LBF will depend on the details of its design and the way it is implemented, including the specificities of assessment, collection, enforcement, and importantly, the ways revenues are utilized. The main question to be answered is: to what degree do results of LBF lead to an improvement in the well-being of taxpayers and residents? In this context, there are a variety of avenues through which land-based finance can shape outcomes, including via fiscal, economic, institutional, social, spatial and environmental pathways (see Table 3).

Keeping in mind the plethora of impacts on government, households, businesses, and the environment, there may be trade-offs to manage in the design and implementation of LBF. For example, governments must balance the benefits of a broad tax base against avoiding taxing a large share of lower-income households and small businesses. Similarly, they must balance administrative simplicity against more targeted exemptions. Such trade-offs must be managed transparently in order to obtain public support. Participation of stakeholders is useful in this regard, and public engagement that raises awareness about the need for land-based revenues, including their intended use, can be invaluable for LBF effectiveness.

Table 3 Criteria for assessing the impact of land based finance area of impact

Area of impact	Criteria
Fiscal	<ul style="list-style-type: none"> ▪ Revenue generated ▪ Administrative cost effectiveness ▪ Stability of revenue (predictable with limited volatility) ▪ Buoyancy of revenue (growing as the economy expands)
Social	<ul style="list-style-type: none"> ▪ Payment burden on poor households ▪ Total impact, including spatial impacts and the distribution of services delivered, on vulnerable populations (such as women, members of minority groups and those in informal settlements) ▪ Impact on housing affordability
Economic	<ul style="list-style-type: none"> ▪ Degree of investment in infrastructure and services that can attract and support local business ▪ Financial impact on firms and potential firms
Institutional	<ul style="list-style-type: none"> ▪ Revenue administration transparency ▪ Impact on quality and management of the land and property registry (cadastre) ▪ Impacts on land market efficiency (for example, through more transparent records or increased formalization of transactions) ▪ Budgeting process impacts, including on transparency or public engagement ▪ Improvements to development control
Spatial	<ul style="list-style-type: none"> ▪ Impacts on densification, sprawl, connectivity, or deterrence of speculation ▪ Creation or protection of public space
Environmental	<ul style="list-style-type: none"> ▪ Deterrence of development in environmentally fragile or high-risk areas ▪ Facilitation of low-carbon development patterns such as transit-oriented development

Source: Authors.

1.7. THE REMAINDER OF THIS REPORT

The remainder of this report provides a deeper analysis of the issues surrounding the use of land-based finance in African cities. Chapter 2 examines LBF and the complexities of land tenure systems in African cities, including informal landholding and group rights. The chapter discusses the implications of a spectrum of tenure systems, including customary tenure, for land-based finance.

Chapter 3 explores the role of regulatory and institutional frameworks in the implementation of LBF, identifying the aspects of legal frameworks that can facilitate or constrain its use, and

showing that administrative practices and capacities have just as critical a role to play in effective implementation. The chapter suggests approaches and entry points for improving the ability of governments to utilize LBF.

Chapter 4 examines the intersection of housing and land-based finance. It explains the links between land management and housing outcomes and demonstrates how land-based finance can contribute to adequate housing through developer contributions and by expanding the supply of serviced land for housing construction.

Chapter 5 lays out the connected challenges of public space and climate adaptation, and assesses the ways land-based finance can be utilized to tackle these issues through a variety of instruments, particularly strategic land management and land readjustment.

Chapter 6 concludes the report by reflecting on the state of land-based finance practiced in African cities, and by making recommendations for effective implementation at the local, national and international levels.

Throughout the report, case studies illustrate the experience of African cities with various land-based finance instruments.

Cases come from Egypt, Ethiopia, Ghana, Nigeria, Rwanda, Sierra Leone, South Africa, Tanzania, and Togo, and illustrate how land-based finance has been adapted and used in a wide variety of African contexts.



Case 1. Urban growth realities and trade-offs of State-held land in Addis Ababa

By Iman Abubaker, Agraw Ali, Alemakef Tassew

Historical background and legal framework

Ethiopia's land tenure system is fundamentally rooted in the 1974 land proclamation, which abolished private ownership in favour of State and public stewardship. This principle was solidified in the 1995 Constitution (Article 40), which stipulates that land is the common property of the Nations, Nationalities, and Peoples of Ethiopia (FDRE, 1995). According to the Urban Lands Lease Holding Proclamation (No. 721/2011), urban land is primarily administered through a leasehold system where developers and residents secure 99-year land use rights, where tenants pay a down payment followed by annual installments. In contrast, agricultural land is held under perpetual land use rights. While these rural rights are technically State held, they function as a quasi-freehold in practice because they are inheritable, although they cannot be sold or mortgaged (World Bank, 2019).

The Government has moved to standardize this landscape through Proclamation No. 1381/2024, which mandates the conversion of all non-leasehold urban landholdings to the lease system upon transfer or title renewal. This move aims to eliminate the administrative fragmentation caused by older permit systems and unify urban management under a single legal framework. This provides the city administration with a powerful tool for land mobilization. Unlike cities where private land assembly can take decades, Ethiopian cities can execute massive citywide projects, such as the recent Corridor and River Side Development Projects, which involved rapid clearance and redevelopment of continuous urban stretches under a single public authority, at a speed and scale rarely seen in the African region.

While this is straightforward for Addis Ababa and all other urban centres in Ethiopia, the challenge arises in peri-urban areas where urbanization is changing the rural landscape and the conversion to urban leasehold system requires a nuanced approach to compensate, properly, when converting from rural to urban land.

Urban planning and valuation distortions

Municipal control of land exercised within a national legal framework enables the city to implement top-down urban planning, yet the valuation process remains a point of significant friction. Currently, urban land valuation relies on a dual mechanism consisting of benchmark lease prices alongside competitive auctions (Weldegebriel, 2022). Benchmark lease prices are established by the municipal land administration as reference to minimum values, differentiated by land-use zones and infrastructure criteria, and are applied when parcels are prepared and announced for lease. Once land is released, most urban parcels are allocated through public tendering, where bidders submit price offers and the winning auction bid becomes the effective lease price recorded by the city.

This system creates substantial price distortions. While benchmark lease prices remain low to encourage development, auction prices in high-demand areas have reached astronomical heights. For instance, despite the ceiling of ETB x per m² set by the city, auctions in the Nifas Silk Lafto sub-city fetched bids as high as ETB 406,667 per m² of prime land in 2023. These distortions are exacerbated by a persistent undersupply of formal plots. Consequently, the high value of urban leases is often a reflection of scarcity rather than productive value creation, subverting the narrative of public investment-led growth.

Economic factors and investment drivers

Municipal governments in Ethiopia rely heavily on land leasing as a primary revenue stream. Research indicates that land leasing can contribute between 21 per cent and 45 per cent of total municipal revenue (Yimam, S. H., Lind, H., & Alemu, B. Y., 2022). While the 2025 Property Tax Proclamation suggests revenue be used for services, the lack of a transparent, formula-based reinvestment rule remains a challenge. For private developers, the system poses high upfront costs. Public leasing systems distort the property market and limit traditional ownership, making land prone to speculation, which undermines and complicates the actual land value linked to productivity, location value, or development costs. To deter land speculation, lessees are typically required to begin development within 6 to 18 months and complete construction within 48 months.

Failure to meet these timelines can result in the termination of the lease. Despite these rules, weak enforcement and the lack of a secondary land market make the sector prone to speculative hoarding by well-connected actors.

Governance and environmental protection

Another key challenge of a public land tenure and ownership system is that it can be more prone to corruption, especially if institutions are weak and do not have strong management tools such as data. Citizens often find Addis's land procedures opaque. Many do not fully understand their rights under the leasehold system, nor do they easily access up-to-date land information. Raising public awareness of land rights, improving registry transparency, and involving communities in planning such as making lease auctions and allocations more open and competitive, they might reduce under-the-table deals. The lack of transparent land registry has historically facilitated corruption. To overcome this problem, the city is modernizing its land management through a GIS-based digital cadaster under Proclamation No. 1381/2024. This system assigns a Unique Identification Code to every parcel, aiming to reduce under-the-table deals and clarify lease rights for the public (Capital Ethiopia, 2025).

Public ownership allows the city to designate and protect large ecological assets, such as Entoto Forest and Unity Park. Recent Riverside Development projects have employed public-private partnerships for maintenance and operation, improving upkeep but raising concerns regarding inclusive public access and the commercialization of common spaces. WRI's green space accessibility analysis for Addis Ababa (2023) highlights important downsides in this regard. Only a small share of residents live within walkable distance of parks, about 17.4 per cent of the city lacks any park service access, and entrance fees and safety concerns further limit use. These findings suggest that public-private partnership-led management and commercialization may deepen existing inequities in access, particularly for low-income groups, even where parks remain formally public.

Public ownership of parkland alone has not prevented encroachment, underscoring the need for strong governance, institutional coordination, and enforcement mechanisms to safeguard these spaces. Moreover, capturing the social and environmental benefits and associated externalities of urban green spaces—within an already distorted land valuation system—remains a key challenge for the city's land value capture efforts.

Policy directions and future improvements

The legislative landscape in Ethiopia is undergoing a transformative shift to correct market distortions and enhance municipal self-sufficiency. Central to this reform is the Property Tax Proclamation No. 1365/2025, enacted in March 2025 (Ministry of Justice, 2025). This law marks a departure from reliance on one off lease auctions by introducing a systematic tax on property and use rights. By taxing roof and wall structures as well as the underlying leasehold rights based on government fixed valuation rates, the city aims to capture the gains of existing landholders. In tandem, the Draft Urban Land Lease Proclamation introduces a more flexible negotiated lease model for strategic projects and mandates that at least 20 per cent of all urban land prepared for allotment must be strictly reserved for residential housing construction (Addis Fortune, 2025).

Takeaways for other African cities

The Addis Ababa experience provides a powerful case study for other rapidly growing African cities on the risks and rewards of centrally owned and locally managed land. The primary lesson is that while State ownership allows for the rapid execution of transformative infrastructure; it must be balanced with market signals to avoid extreme price distortions. The public land model aims for social gains, but outcomes vary. On one hand, it has funded social housing and citywide redevelopment projects and prevented outright land monopolies. On the other hand, it has disproportionately affected the poorest, often those living in informal settlements (since formal plots are costly) and have been evicted at the State's discretion with poor compensation.

Government-led redevelopment projects should put strong social and environmental measures in place to protect the most underserved and low-income communities and ensure proper compensation, including in situ resettlement options, serviced plot replacement for the relocated residents, livelihood restoration programmes, and cross-subsidized affordable housing quotas within redevelopment areas. Without these good governance practices, the drawbacks may outweigh the benefits of social projects, exacerbate inequality, and reduce trust in government. The transition to a dual lease and property tax system offers a roadmap for cities looking to capture land value increases sustainably. Relying solely on high upfront lease fees can deter small-scale builders and increase housing costs. Instead, a more equitable approach involves lower upfront costs coupled with an annual property tax. Finally, top-down urban renewal that shifts the poor to the periphery results in the spatialization of poverty. In situ land adjustment mechanisms are necessary to ensure residents benefit directly from land value gains.



Captivating aerial view of Gondar, Ethiopia with lush greenery and architecture under a cloudy sky. © Abenezer Muluken/ Pexels



Case 2. Property tax reform in Freetown, Sierra Leone

Freetown's property tax reform illustrates how an administratively pragmatic approach to land-based taxation can rapidly expand local revenue capacity in a low-income, post-conflict context. Following Sierra Leone's civil war, the 2004 Local Government Act reintroduced decentralized local governments after decades of extreme centralization. Despite this renewed fiscal authority, city councils initially struggled to collect property taxes and consistently fell far short of revenue targets. In 2006, several city councils began property tax reforms focused on digitalization, automation, and enforcement among large taxpayers. This dramatically improved performance in most cities. However, despite some improvements in Freetown, the city was widely viewed as underperforming relative to its potential.

A decisive shift occurred in 2019, when Freetown overhauled its property tax administration with support from the International Centre for Tax and Development (ICTD) and the United Kingdom's Foreign, Commonwealth & Development Office funding.

Central to the reform was the election of Mayor Yvonne Aki-Sawyer, whose concern over unreliable central transfers led her to prioritize local revenue mobilization.

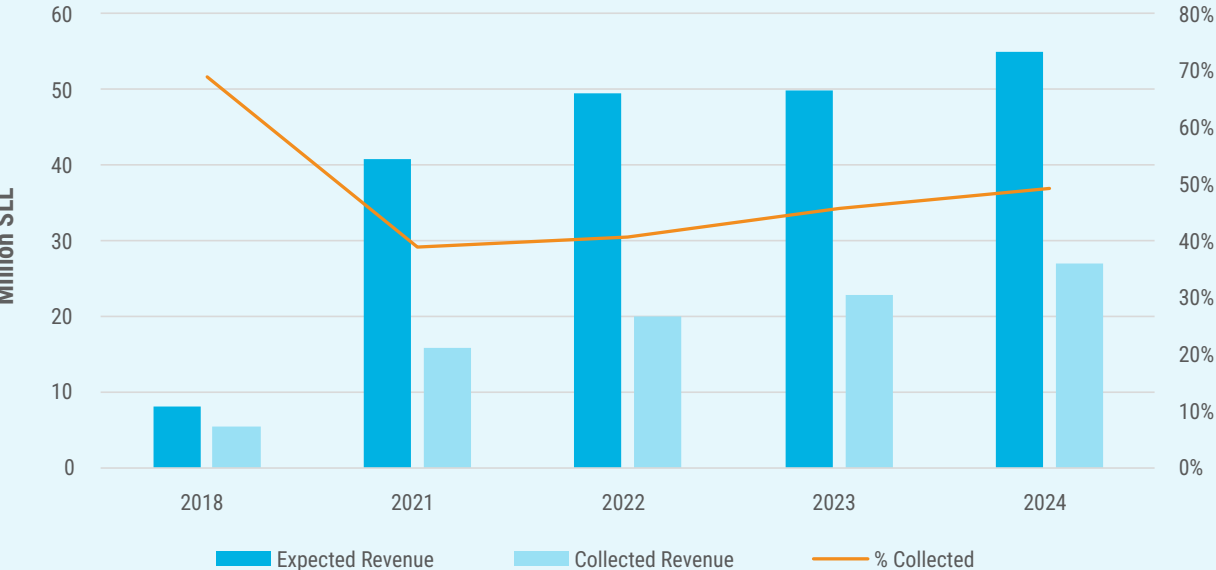
Instead of beginning with the slow and complex process of updating the legal property register, the project rapidly created an operational fiscal cadastre using geographic information system (GIS), global positioning system (GPS), and rapid foot surveys. Over 100,000 properties were registered, and a transparent, points-based valuation formula, calibrated from a 1–2 per cent property sample, simplified and standardized valuations. Property bills were issued to all landholders and addressed to named owners where possible. Where owners were unknown, bills were simply addressed to "the owner," allowing landholders to come forward voluntarily and establishing a practical foundation for future legal cadastre updates.

Political buy-in was critical. The reform team first got central Government approval for the revised valuation method by presenting evidence that the new method would have an acceptable level of accuracy.

Next, the team secured the support of the local valuation department, emphasizing the continued value of their work. Public outreach about the changes was also vital for reform success. Later surveys found that 70 per cent of respondents supported the reform, due to improved fairness and transparency.

The results were substantial. Revenue potential increased nearly sevenfold, based on the number of assessed properties, and actual collections increased nearly fivefold (see Figure 9). Complementary reforms followed, including participatory budgeting in 2021 and clearer communication to taxpayers about how revenues were spent. Revenues from property taxes were used in part to repair major roads, clean streets and public markets, and employ hundreds of waste management workers (FCC, 2020).

Figure 9. Property tax revenues before and after reform in Freetown, Sierra Leone



Source: Authors using data from personal communication with W. Prichard on 16 December, 2025.

*Note: 2019 figures are excluded due to distortions from a large amount of one-time arrears collection; 2020 property tax collection was abandoned due to the Covid-19 pandemic and central-local tensions.

Some challenges still remain. Enforcement in Freetown is still weak and heavily dependent on voluntary compliance. This partly reflects ongoing tensions between the city and central Government, which retains control over staff hiring.

Freetown’s property tax reform is not a case of pure land value capture, as property valuation is based on built property characteristics, and valuation is not intended to reflect increased value arising from public investments.

However, land and building values are highly correlated, and the valuation formula incorporates neighbourhood-specific adjustments, therefore reflecting differing land values. Thus, the system demonstrates how an administratively simple property tax can deliver visible, stable, and broadly accepted land-based revenues.

Operationalizing a fiscal cadastre has not replaced the legal cadastre, but has contributed data that is useful for official property registrations.

Since 2021, reforms have been continuously strengthened with ICTD support: collection relative to potential has risen, billing and payment systems have improved, and pilots are under way to simplify data updates.

The low-cost information technology system developed for Freetown has since been upgraded and adopted nationally. A highly successful enforcement pilot in a secondary city has built public legitimacy through collaboration with chiefs and religious authorities in combination with a transparent focus on higher value properties, and there are plans to adopt this to improve enforcement in Freetown. By March 2026, the system will transition fully to local ownership, after several years of capacity-building and support from ICTD, marking a significant step toward sustainable property tax reform.

Case references: Jibao and Prichard (2015); Prichard (2022); Prichard (2023); Wilson (2002); and personal communication with W. Prichard on 16 December, 2025.

Chapter 1 Conclusions and takeaways

Urbanization is transforming Africa, and its cities are expanding at unprecedented rates. An additional 800 million people are expected to join Africa's urban areas by 2050, which are projected to expand by 300,000 square metres (UNDESA, 2025). This means that the majority of urban land is yet to be developed and serviced (OECD et al., 2025), presenting both major opportunities and challenges.

The urban public finance gap is massive. The number of urban residents lacking services has actually risen in recent decades due to rapid urban population growth, despite major urban investments. The scale and pace of Africa's urban growth requires an estimated \$157 billion annual investment in urban infrastructure and significant recurrent expenditure, the vast majority of which is currently unfunded (Kebede & Gauntner, 2024). Cities must, in coordination with higher levels of government, optimize revenues, improve decentralized revenue administration, and take a concerted approach to expand access to financing.

Land-based revenues are a major area of opportunity for African cities, and land value capture has a number of beneficial properties.

Land value capture focuses on unearned or "windfall" wealth accruing to landholders. Land-based revenues are often less distortionary and less volatile than other revenue sources, and they can help link the value created by public investments to payments from landholders who benefit. There are a variety of instruments available to harness the value of urban land.

Land-based finance is widely underutilized in African cities.

While almost all countries utilize the property tax and the transfer tax, the performance of these instruments is well below potential, with property taxes only levied on 10–20 per cent of parcels in most countries (Deininger and Goyal, 2024). Most other land-based finance instruments are not utilized extensively in the majority of African cities. This is in part due to several distinctive features of African cities, which make administration of LBF challenging.

These include widespread informality, complex systems of land tenure, poor cadastral and valuation information systems, limited decentralization, and high rates of poverty and inequality. Contextualization of LBF implementation is paramount, and can be paired with efforts to strengthen tenure security, including in contexts of informality and customary tenure (discussed further in chapter 2).

There are a variety of criteria to judge and tailor land-based finance approaches, but the overarching question is: to what degree does

implementation result in an improvement in the well-being of taxpayers and urban residents?

Land-based finance can shape outcomes in many ways, including through fiscal, economic, institutional, social, spatial and environmental impacts. The degree to which LBF administration will result in socially equitable outcomes and the degree to which LBF revenues will be put to good use are not guaranteed.

There are trade-offs to manage, and transparency and public participation are useful to make difficult choices and build public support.

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Chapter 2: Foundational role of land tenure in urban financing

This chapter emphasizes the foundational role of secure land tenure in the implementation of land-based financing instruments. It is premised on the argument that without clear and secure land rights, attempts to capture benefits from land for public benefit are fundamentally undermined. It highlights the complexity of urban land tenure models and governance in African cities, discusses the reciprocal relationship between land tenure and land-based financing and proposes aspects of a governance environment that fosters a dynamic synergy between land tenure and land-based financing systems.

KEY TAKEAWAYS

- Land tenure clarity and security is central to the functioning of LBF instruments. Given the complexities of urban land tenure, African cities should adopt innovative, context-specific approaches to adapt LBF to customary and informal contexts in order to finance service provision sustainably for their rapidly growing urban populations.
- Intermediate forms of land rights, such as short-term occupancy certificates and certificates of collective ownership, should be given legal backing to allow holders to use them within the financial sector and for municipal or city authorities to clarify any benefits from land-based financing instruments associated with such land.
- Data systems are foundational: Digital, secure land databases are a prerequisite for cities to realize the promised benefits of titling and to manage leases, conditions, and renewals effectively.
- The goal for African policymakers should be to design LBF instruments that contribute to the gradual improvement of land governance while reinforcing the “social contract” between the citizen and the city through transparent, inclusive, context specific, politically aware reinvestment in local services. LBF implementation can also be utilized to strengthen tenure security while mobilizing revenue.
- While the formalization first approach is a valid long-term goal, it is resource and time intensive. City governments can take advantage of reforms in the land laws to recognize a continuum of rights, clarify mandates in levels of government, improve the functioning of land markets, strengthen trust in the land sector and foster equity to build investor and public sector confidence to implement LBF instruments.

2.1. INTRODUCTION

The African Union's Framework and Guidelines on land policy in Africa define land tenure as the nature of and manner in which rights and interests over various categories of land are created or determined, allocated and enjoyed. Land is a fundamental factor for production and the foundation of all economic activities including urban development.

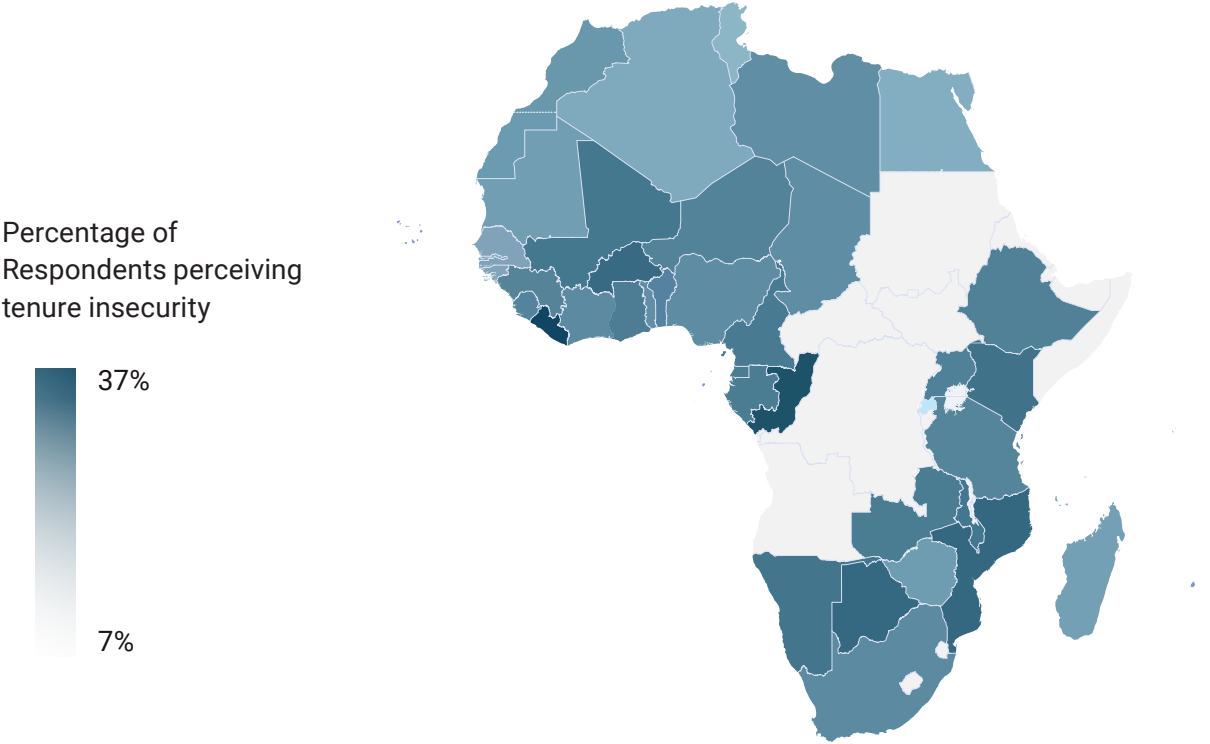
Land also supports biodiversity and can hold deep traditional value and sense of identity for communities. Land's centrality to sustainable livelihoods in Africa requires that African governments take appropriate measures to ensure that it plays its primary role in the development process (AUC et al. 2010). In order to derive optimum benefit from land, the relationship among individuals or groups with respect to land should be known and accepted. This relationship is governed by rules that define the right to use land, control how land is used and to transfer the land, as well as associated responsibilities and restraints (Cox & FAO, 2002). This is a land tenure system.

In Africa, there are a variety of legally recognized and unrecognized regimes relating to land tenure, use, management and environmental governance and contemporary processes of social organization and mobilization. The contemporary processes include those derived from class, gender, region, culture, ethnicity, nationality, and generational cleavages, which now predominate in shaping access to, control, and utilization of land. These social structures further complicate the basis of claims over land resources (AUC et al. 2010).

Land tenure security is a key component of Africa's Agenda 2063 and crucial for poverty reduction and sustainable development. Secure land tenure not only enables people to invest in their livelihoods, but also, through cadastre and registration, increases real estate values, provides the basis for assessment and collection of land-related taxes, and through the setting up of national spatial data infrastructure improves intersectoral cooperation and coordination, spatial data sharing and introduction of e-governance. In Mozambique, for example, the rental value was about twice as high for land with documentation as for land without formal documentation, while in Uganda, the accumulated fiscal revenue generated by a land administration project between 2012 and 2017 exceeded \$113 million, twice the investment funded by the World Bank (Wehrmann & Lange, 2019).

Tenure insecurity, on the other hand, is both a primary and underlying issue, exacerbating other pressures that create uncertainty for equitable development (Holland et al., 2022). Figure 10 shows the perception of tenure insecurity across Africa. Wehrmann & Lange (2019) say 90 per cent of landholdings in developing countries are not documented, administered or protected; and 55 per cent of the urban population in Africa south of the Sahara lives in slums, where people normally lack formal recognition of land tenure rights.

Figure 10. Percentage of people who perceive their tenure as insecure



Source: Prindex Data 2024.

Compounding tenure insecurity is the rapid urbanization in African cities that is increasing pressure on land. Many African cities are grappling with the provision of basic services and infrastructure to meet the increasing demand of their growing populations. Many African cities are developing anew or updating physical development plans that formulate how city spaces are zoned and guide where public infrastructure should be developed.

However, these plans may not consider the significant proportion of urban residents living in informality (Watson, 2014), are not structured to cope with extremely fast-growing urban population, and existing municipal revenue and finance-generating structures fall well short of the capital expenditures which upgrading or extension of infrastructure would require (Maseland, 2010). Effective governance of secure land tenure is essential for the productive and sustainable use and

protection of land (Wegerif et al. 2025) and obtaining inputs from key informants. In the last decade, there has been significant progress in land tenure policies that have improved the recognition of customary and other communal land rights and improved women’s land rights. The formal registration of individual rights to customary and community land has now been achieved cost-effectively, with more rights going to women in a number of settings, and without leading to widespread commoditisation or land dispossession.

There is a mixed picture, with countries trying different ways to grapple with common challenges such as securing customary tenure rights, unlocking development potential, improving women’s land rights, and managing the contesting interests in land. There are important examples of best practices in some countries that can be learnt from, such as the legislation of Free Prior and In-

formed Consent (FPIC and land policies and land management should be inclusive and responsive to the needs of all land users, especially vulnerable. With an appropriate land management regime, urban land can be turned into a major revenue source for municipalities (Maseland, 2010)

Effective governance of secure land tenure is essential for the productive and sustainable use and protection of land (Wegerif et al. 2025) and land policies and land management should be inclusive and responsive to the needs of all land users, especially vulnerable. With an appropriate land management regime, urban land can be turned into a major revenue source for municipalities (Maseland, 2010), through capturing of the value arising from public sector investments and redistributing it more equitably. Most countries use some form of land-based financing, although it may be referred to differently; for example, property taxes or development fees.

Capturing the benefit from increased land value due to public investment presents a further opportunity for revenue generation to support further urban investment.

This chapter emphasizes the need for secure land tenure in advancing land-based financing and general urban development. Section 2.2 discusses the complexity of urban land tenure systems and their governance in African cities. Section 2.3 considers the reciprocal relationship between land tenure and land-based financing. Section 2.4 proposes aspects of a governance environment that allows the land tenure system to be harnessed for implementing land-based financing instruments. Section 2.5 is a case study discussing the land regularization programme in Rwanda and its implications for land-based financing. The chapter concludes with section 2.6 summarizing the key takeaways for improving land tenure security toward unlocking land-based financing.

2.2. UNDERSTANDING URBAN LAND TENURE SYSTEMS IN AFRICA

Land tenure in Africa is complex and context-specific, influenced by different cultures, economic, governance, and historical factors (Cotula et al. 2004). Within the continent, multiple forms of land tenure and associated rights exist: such as customary, statutory (formal titling), State-held/public, communal, informal and hybrid tenure systems. Customary land tenure has been the oldest and dominant form of landownership in Africa.

This system is rooted in the collective sharing of rights over land, varying across cultural contexts. Land rights were use-based and not documented, often with shifting boundaries, and managed by traditional authorities. However, from the nineteenth century, Africa's land systems began to change through a colonial introduction of statutory models.

2.2.1. Transition towards statutory land tenure systems

Statutory systems in Africa were promoted by colonial governments, post-independence governments and much later by development institutions (UN-Habitat, 2011) for multiple

reasons. First, in British-ruled African cities, statutory land administration systems were introduced primarily to secure areas occupied by colonial administrators and European settlers,

while customary tenure systems continued elsewhere. This is visible even today in the cities of Kinshasa (DRC), Nairobi (Kenya), Kampala (Uganda), Accra (Ghana) and Harare (Zimbabwe).

This transition continued in both colonial and post-colonial Africa fueled by a widespread belief that individual and formal land titles were the only forms of protection for urban property owners (Nkurunziza, 2004) and thus enablers of private investment, public revenue generation, and enable efficient use of land (Cotula et al., 2004).

In other instances, this was part of efforts to deal with historical injustices and marginalization (Twumasi et al., 2025). In a large part of urban Africa, the statutory land systems created spatial inequalities that post-independence authorities have struggled to correct. Apartheid land tenure systems in South Africa largely reserved urban land for the white community, excluding black communities.

2.2.2. Varying formal tenure systems

Urban landownership structures vary widely across Africa. Countries such as Uganda, Kenya, South Africa and Ghana permit private landownership in cities. Ethiopia and Tunisia on the other hand retain State ownership of land, although leases to private persons can be issued and transferred. The State ownership model simplifies public infrastructure development compared to systems requiring costly compensation for privately owned urban land.

As the continent urbanizes, municipal and national authorities have continued to promote statutory models of land tenure. Examples include issuance of land leases where rights are granted for a fixed period and require payment of land rents. Leases are common in the cores of large cities or towns in Africa. Freehold titles, which offer almost absolute rights over land, can still be found in the outer rings of cities and peri-

In cities such as Johannesburg and Cape Town, municipal authorities have used the country's 2025 Expropriation Act to allow for compulsory acquisition of land in the public interest (such for public housing). These municipalities have also tried to push developers toward mixed-income developments that integrate low-income households (see Stellenbosch case in chapter 5). Countries like Mozambique undertook statutory land tenure reforms to incorporate customary considerations within the ambit of statutory land systems. This is aimed at allowing for communal landownership even if their rights to the land had not been formally documented as well as participatory governance, aspects that colonial systems disallowed (Kenjio, 2020). Even with the varying tenure systems in African cities, customary tenure continues to shape peri-urban expansion on the continent.

urban zones. However, traditional landownership systems can still be found in newer urban centres dotting predominantly rural landscapes. Even so, this is not the case in Uganda's cities where a "dual-urban core" is found, with areas close to the colonial administrative some having formalized tenure, while surrounding areas retained customary arrangements. In Kampala for instance, leaseholds are common in industrial, commercial, or foreign investment zones, with many city suburbs falling under either freehold tenure or customary tenure (known as 'mailo-land').

However, while these statutory models are intended to simplify land administration, they face challenges in Africa's urban areas. First, different titling systems confer varying rights over the use of land. For example, in urban zones where land is held under freehold titles, municipal authorities

have limited ability to control development (especially in the absence of an approved spatial plan which is missing or limitedly enforced in most urban areas).

Additionally, whereas governance over freehold and the subsequent collection of related property taxes is controlled cities, for example in Uganda, there is no municipal control over property rate collection for many cities where governance over freehold land is under the purview of national governments. In urban zones covered by leasehold titles, theoretically, municipal authorities have a better capacity to raise land lease rates, gradually, for serviced areas (although this process should

adopt robust participatory processes), enforce development control through land usage restrictions, or revitalize old neighbourhoods through the process of renewal of leases. Yet this is often not the case. Attempts to convert urban freehold land into leases often face public opposition as well as a lack of legal provisions enabling such conversions.

Finally, municipal authorities can only take advantage of the benefits of proper titling systems if they have robust and secure land databases (preferably digital ones), which remain out of reach for many African urban jurisdictions.

2.2.3. Complexities and pervasiveness of informal tenure

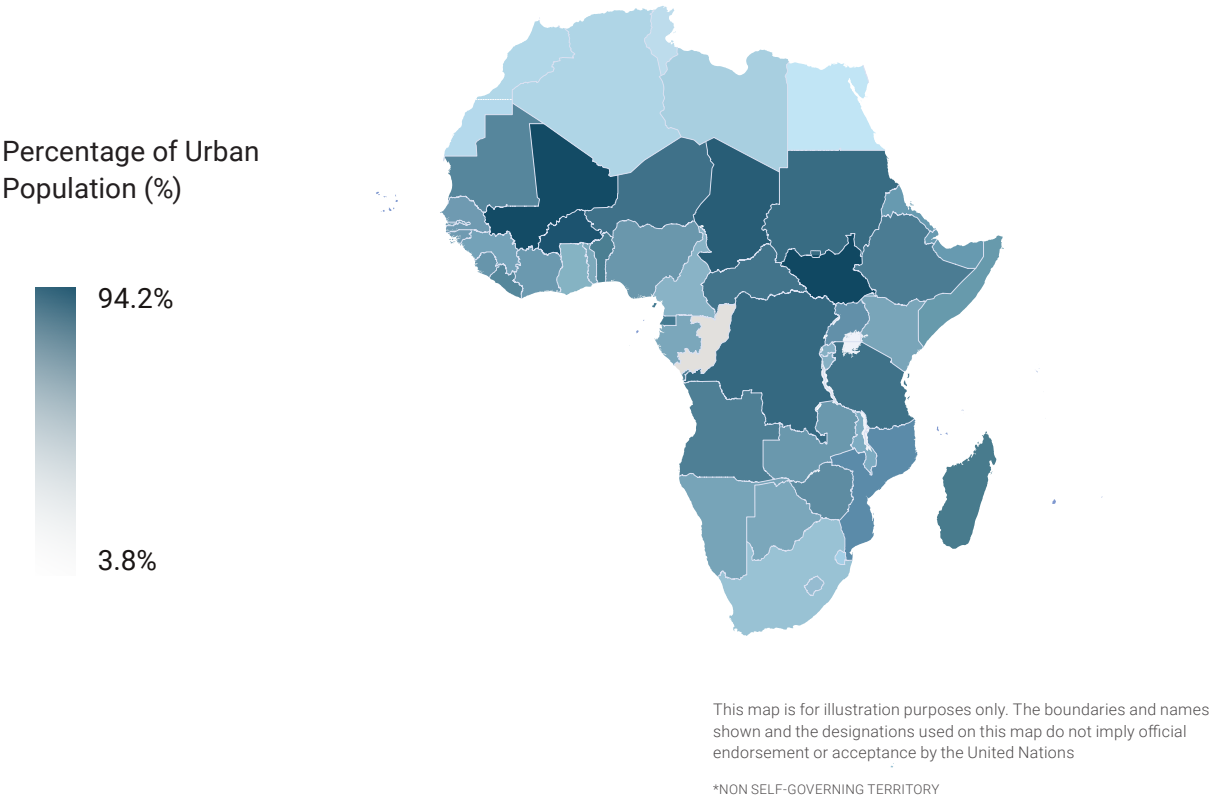
The complexity in urban land tenure (an overview of which is summarized in Table 2) stems from the existence of both formal and informal processes and structures, and in some instances, the duality of statutory and customary rules.

Formal land governance structures, while ideal, can be exclusionary when accompanied by prohibitively high titling costs. They may also be subject to abuse or corruption. For instance, in Kenya, some local administrators have been accused of illegally allocating urban parcels of land to “landlords”, including on environmentally fragile zones. In other instances, vulnerable urban communities occupying undeveloped public or private land claim ownership often for over a decade, a concept called “adverse possession” (UN-Habitat, 2011).

In cities like Addis Ababa, Ethiopia, the Government owns all land, which makes it easy to undertake infrastructural development. However, under such circumstances vulnerable urban communities do not have security of tenure, and their condition is worsened by forced evictions. This situation contributes to the expansion of informal settlements at the city fringes (Taye et al., 2025).

The resultant contestations, tenure insecurity and lack of social safeguards discourage investment in improved housing or infrastructure. Today, an estimated 54 per cent of urban dwellers in Africa live in informal settlements (Li et al., 2025). Figure 11 shows the breakdown of urban population living in informal settlements.

Figure 11. Proportion of urban dwellers in slums or informal settlements



Source: UN-Habitat Urban Indicators Database.

2.2.4. Regularizing tenure in urban informal settlements

The legacy of colonial land systems in urban Africa is intricately linked with the birth of informality in the continent’s cities. While the statutory land systems introduced in cities such as Nairobi before independence protected colonial zones, they also deprived Africans the right to own , or even gain access to urban land (Kenjio, 2020). Various scholars have documented that this also led to the loss of customary values on landownership, management, and administration (Kenjio, 2020).

Efforts by urban and national authorities to regularize urban land tenure in informal settlements raise critical questions. For instance, who should be the beneficiary between influential urban “landlords” or the urban poor living as tenants? What form of restrictions and safeguards should be placed on the formalized titles to avoid gentrification and improve the quality of life of the urban poor?

What elements of customary tenure could be innovatively adapted that would prevent displacements, share benefits more equitably and allow for participatory governance?

Land tenure in Africa is complex and context-specific in African cities shaped by historic exclusion and current governance capacity. Tenure security should not be at the expense of inclusion. Tenure regularization can protect occupants while promoting participatory governance and enabling service provision without triggering displacement. State ownership simplifies acquisition for public works but needs strong safeguards to prevent tenure insecurity among low-income residents and peripheral displacement.

Table 4 Overview of urban land tenure systems in Africa

Tenure system	Core features	Where seen in urban Africa (examples)	Advantages / potential	Challenges / risks in practice	Illustrative policies / notes	Possible LBF Instrument
Customary	Collective or lineage-based landholding; norms and rules vary across ethnic groups; rights often unwritten and mediated by traditional authorities	Very common in peri-urban fringes and secondary towns; persists around colonial cores in Uganda (e.g. mailo land in Kampala suburbs); present in expanding peri-urban belts of Ghana, Kenya, Nigeria, Zambia,	High community legitimacy; flexible access; supports communal land management; often provides low-cost entry for the urban poor	Vulnerable to rapid land market pressures; susceptible to elite capture; hard to integrate into urban planning; weak legal protection when cities expand; disputes during conversion to statutory systems	Colonial cities kept customary tenure outside European zones (e.g. Accra, Nairobi, Kampala,). Some reforms (e.g. Ghana Lands Act, Mozambique,) now recognize customary rights formally	Land readjustment
Statutory (formal titles)	Rights defined by law and registered; includes freehold and leasehold	Colonial-era cores; planned estates; investment zones; peri-urban freeholds in Ghana, Kenya, , South Africa, Uganda	Strong legal protection; clarity for land markets; easier collateralization; can boost municipal revenues	High titling costs; corruption risks; uneven implementation; fragmented registries; statutory systems often deepen spatial inequality	Promoted by colonial and post-colonial governments and development agencies (UN-Habitat 2011, Cotula et al. 2004)	Property tax, Transfer Tax, Developer Obligations
State-held / Public	State owns land; citizens granted use rights, usually through leases	Ethiopia, Tunisia (full State ownership); used in Addis Ababa for major infrastructure projects	Easier public land assembly; simplifies infrastructure delivery; avoids high compensation costs	Tenure insecurity for informal dwellers; forced evictions common; expansion of informal settlements at fringes	Addis shows expanding informality when low-income groups lack secure rights (Taye et al., 2025)	Strategic Land management

Tenure system	Core features	Where seen in urban Africa (examples)	Advantages / potential	Challenges / risks in practice	Illustrative policies / notes	Possible LBF Instrument
Communal	Community-based ownership; overlaps with customary norms but sometimes formalized	Peri-urban expansion zones; rural-urban transition areas; recognized explicitly in Mozambique land reforms	Protects communal resources; can prevent speculative dispossession; basis for inclusive planning	Hard to map/plan parcels; internal governance disputes; risk of elite capture	Mozambique DUAT system recognizes community claims even when undocumented (Kenjio, 2020)	Land Readjustment
Informal	Occupation without formal title; layered claims including informal landlords	Informal settlements in most cities; 54 per cent of urban Africans live informally	Improves access to land/housing for the poor; flexible and fast; supports informal economies	High tenure insecurity; risk of eviction; limited service provision; unsafe locations; complex landlord-tenant relations	In Kenya, illegal allocations by local officials reported; adverse possession often claimed (UN-Habitat, 2011)	Land Readjustment; Transfer of Development Rights
Hybrid / Transitional	Mix of customary and statutory arrangements; partial or incremental titling	Uganda (dual system: customary/mailo and statutory cores); Kenya (KISIP block titling in Nairobi, Mombasa)	Balances protection and formalization; reduces displacement; enables structured upgrading	Legal gaps in conversion; administrative complexity; risk of gentrification without safeguards	KISIP: block titles + Settlement Executive Committees to manage	

2.3. THE RECIPROCAL DYNAMICS OF LAND TENURE AND LAND-BASED FINANCING IN AFRICAN CITIES

The effectiveness of urban financing strategies in Africa is inextricably linked to the underlying land tenure system. While land value capture (LVC) is a specific tool used to recover value, increases created by government actions—such as infrastructure investments or rezoning—it represents only one facet of the broader land-based financing (LBF) ecosystem. LBF encompasses a wider array of instruments, as described in chapter 1, all of which rely on a clear understanding of the relationship between land, the State, and the occupant.

Both land value capture and land-based financing depend on how land rights are defined, recorded, governed, and enforced. In practice, LBF instruments assume (i) identifiable rights-holders or taxpayers, (ii) sufficiently clear and enforceable claims, (iii) workable valuation benchmarks, and (iv) institutions capable of billing, collection, and dispute resolution. Where these conditions are weak—especially under customary, informal, or group tenure—LBF becomes harder to implement, but it can also become a pathway to stronger tenure security. Evidence from comparative LVC practice in the Global South reinforces that land tenure is not a background variable but an enabling condition that shapes whether LVC can

generate revenue and whether benefits are shared equitably. Reviewing São Paulo, Addis Ababa, and Hyderabad, Mahendra et al., (2020) highlight the importance of legal and planning processes—especially those linked to land tenure and land governance—alongside market conditions and government capacity, in determining whether LVC produces observable fiscal gains and equity benefits.

In other words, weak tenure records and limited enforceability do not only raise transaction costs; they can prevent LVC mechanisms from being implemented at all, thereby undermining both revenue mobilization and redistribution objectives.

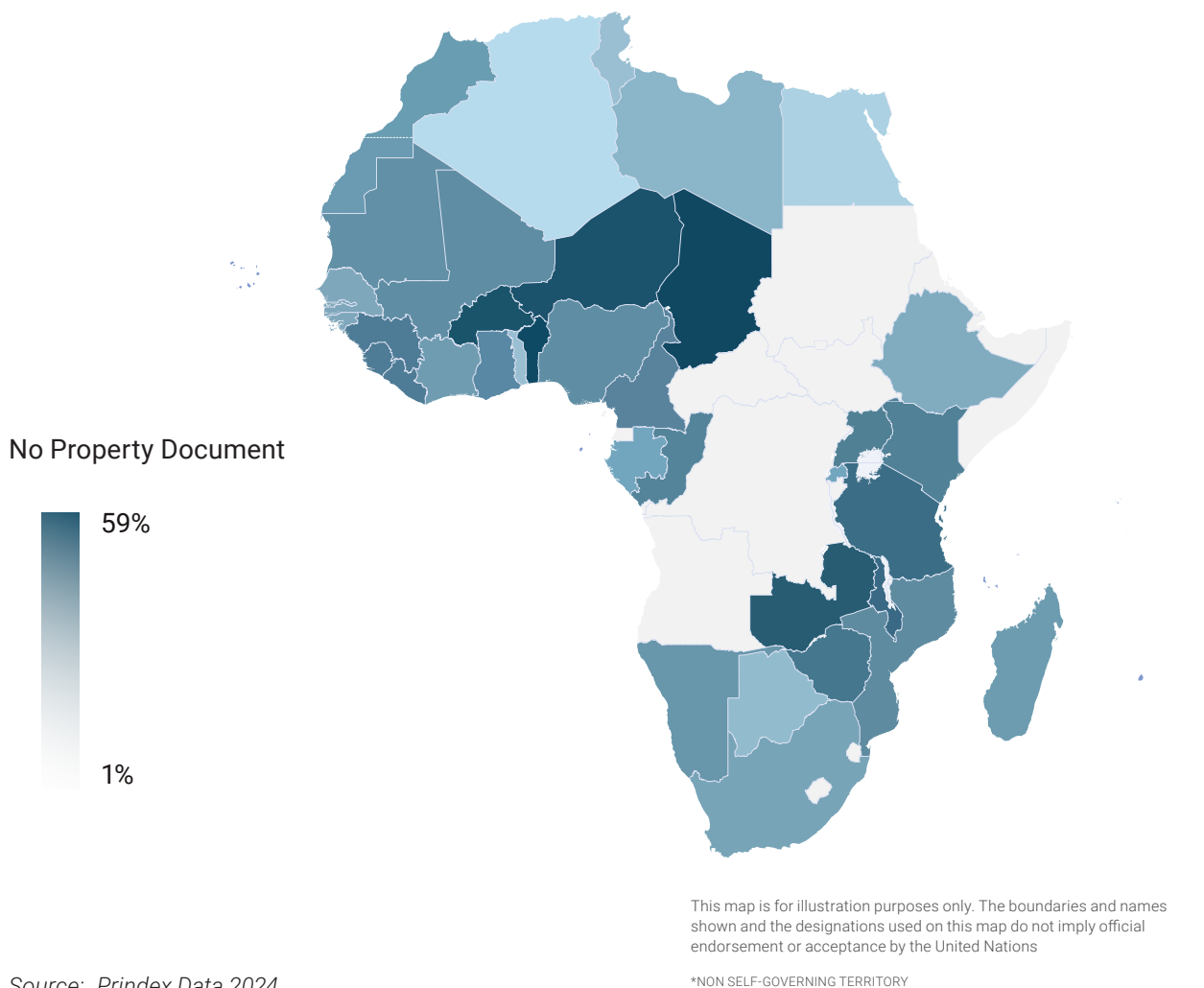
The identification, documentation and “who pays” problem

In contexts dominated by customary or informal tenure, identifying who holds the rights to a parcel—and thus who is liable to pay (taxes, fees, or betterment charges) or can benefit from value capture—is exceptionally difficult. Rights may be communal, overlapping, contested, undocumented, or only partially formalized. As shown in figure Figure 12, a significant percentage of people across Africa lack property documentation recognized by courts.



Agricultural fields and rural landscape near Lilongwe, Malawi. © SINAL Multimédia/ Pexels

Figure 12. Percentage of People with no court recognized document as evidence of property ownership



Source: Prindex Data 2024.

These constraints are amplified under group (customary/community) tenure, where rights are often shared collectively, transfers are restricted by community norms, governance may sit with customary authorities, and individual parcels may not be clearly demarcated.

This creates a core institutional tension: LBF requires clear, attributable obligations and benefits, while group tenure often organizes rights and decision-making collectively.

Group tenure and its implications on property taxation and LVC

Group tenure settings raise specific operational questions for LBF:

- **Property taxation:** Who is the taxpayer—the community as a corporate entity, customary authority, or individual occupants? If parcels are not individually surveyed, billing is difficult. Valuation is constrained where markets are thin and comparable sales data are limited, reducing the reliability of assessment rolls and weakening enforceability.

- **Land value capture:** Many LVC tools presume the ability to levy charges on beneficiaries or negotiate contributions linked to specific parcels. Under group tenure, development typically requires collective consent, raising transaction and negotiation costs; disputes over benefit-sharing can emerge; and risks of elite capture increase if internal accountability is weak.
- **Land market functioning and valuation:** Group tenure frequently restricts sales and mortgageability, reducing market liquidity and investor confidence. Without functioning, transparent land markets, valuation benchmarks are weaker making several LBF/LVC instruments harder to operationalize.

These challenges historically fed the view that systematic titling and registration are a necessary prerequisite for LBF” (Goodfellow, 2017a). Yet that “formalization-first” sequencing can fail in fast-urbanizing contexts where administrative capacity lags behind growth—delaying revenue mobilization for years.

Box 3. Land-based financing as a gateway to tenure security: Illustrative experiences

Recent global experiences challenge the assumption that formal titles must precede taxation. Instead, several African nations have successfully utilized land-based financing to build “fiscal cadastres”—registries for tax purposes—which inadvertently formalize the rights of occupants.

- **Somalia:** In the absence of a functioning national land registry following civil conflict, UN-Habitat utilized GIS mapping to identify properties in Somaliland and Puntland. The issuance of property tax receipts provided residents with their first official government documentation. These receipts are now widely used as *de facto proof of address and identification, granting informal settlers access to utilities and reducing the fear of eviction (UN-Habitat, n.d).*
- **Freetown, Sierra Leone:** The city introduced a “points-based” valuation system that explicitly included informal settlements previously invisible to the State. By bringing these properties into the tax net, the municipality established a social contract: residents pay taxes in exchange for a recognized voice in demanding services (waste collection, drainage) and a validated right to be in the city (Robi, 2024). See Case 2.
- **Togo:** In contexts where customary and statutory laws conflict, the continuous payment of municipal taxes serves as vital evidence. Tax receipts are frequently accepted in disputes to prove “peaceful and continuous occupation,” acting as a stepping stone toward formal legal ownership.

By prioritizing the “fiscal cadastre” over the “legal cadastre,” these initiatives generate immediate revenue while strengthening the perceived tenure security of the most vulnerable urban residents.

Moving beyond the “formalization first” prerequisite

Emerging practice shows that LBF can help build the records needed for governance even before full legal titling is achieved, by prioritizing a “fiscal cadastre” (for taxation and service delivery) alongside or ahead of a “legal cadastre”. This approach can generate near-term revenue while incrementally strengthening tenure security—especially for vulnerable residents—through government-recognized documentation of occupancy and payment. Illustrative experiences (see Box 3) also suggest a practical sequencing: build minimum, credible land and occupancy records for taxation and service delivery now, while legal formalization proceeds over time. The case evidences also supports moving beyond a linear “formalize first, finance later” narrative. While clear tenure and registries can improve billing, collection, and dispute resolution, (Mahendra et al. 2020)

Ethiopia; the Outer Ring Road in Hyderabad, India; and Água Espraiada Urban Operation in São Paulo, Brazil. It combines desk research with interviews of local key informants with deep knowledge of the policy and market dynamics in the three cities and representing different perspectives. The analysis highlights the relevance of legal and planning processes (especially with respect to land tenure show that where land governance and administrative systems are weak, LVC designs that rely on strong records and enforcement can stall, producing few public revenues and limited equity gains. This strengthens the case for incremental approaches (including fiscal cadastres and appropriate valuation) that can mobilize resources and improve State–citizen accountability even while legal cadastres remain incomplete.

Tenure conditions that enable specific LBF Instruments

Once a foundation of secure tenure—or at least a robust record of occupancy supported by locally legitimate governance—is in place, it becomes much easier to deploy land-based financing instruments. Property taxation and betterment levies, for example, rely on being able to identify liable taxpayers and to implement enforceable billing and collection systems.

Similarly, liens and special assessments depend on a legally defensible way to attach payment obligations to a specific landholding or occupant. Land readjustment also requires clear rules for contributions and benefit-sharing when owners (including groups) pool land for coordinated redevelopment (Smolka, 2013). In this respect, group tenure can be advantageous where credible community governance enables large-scale land assembly and collective negotiation, helping to

reduce the fragmentation that often hampers readjustment, particularly in dense urban areas or informal settlements with very small plots, where collective approaches can provide a bridge toward formalization. Finally, more secure and legible tenure strengthens “bankability” by increasing the feasibility of using land as collateral to finance compliance costs, upgrades, or land value capture–related payments.

Practical pathways for integrating group tenure into LBF—without dispossession **The key**

policy question is less whether group tenure should be replaced, and more how collective tenure can be integrated into LBF in ways that are enforceable, equitable, and accountable. Three pragmatic pathways emerge:

1. **Formalization without individualization:** Map and register community land; recognize collective legal personality; enable communities to enter enforceable contracts (e.g. for leasing or joint development).
2. **Leasehold conversion models:** Communities retain underlying ownership while issuing long-term, tradable/useable leaseholds for development; lease revenues can be shared between community and State/municipality.
3. **Community-based value capture:** Quantify infrastructure-induced uplift and apply pre-agreed benefit-sharing formulas, including ring-fenced local infrastructure funds, provided collection, auditing, and internal distribution rules are transparent and enforceable.

Across all pathways, effectiveness hinges on legitimacy of the representative authority, clear fiscal rules and accountability in revenue distribution to reduce elite capture risk (illustrated in Box 4)

Box 4. Country case illustrations of customary and group tenure integration into LBF

- **Kenya:** The Community Land Act (2016) provides a legal basis for identifying and registering community land and recognizing communities broadly (including geographic and socioeconomic interest). The Act allows derivative rights to members and does not prohibit internal allocation of use rights. However, much community land remains unregistered in practice, limiting the expansion of property-rating systems despite updated rating legislation (e.g. the National Rating Act 2024). This underscores that registration and workable records are prerequisites for scaling taxation on community land.
- **Ghana:** With a large share of land under customary ownership, reforms have sought to improve governance and documentation. Customary Land Secretariats —established under the Land Administration Project—aim to strengthen record-keeping, transparency, and dispute resolution. Ghana also illustrates revenue-sharing through the Office of the Administrator of Stool Lands, which collects stool land revenues and distributes them by formula (with a defined share to district assemblies). While the formula is clear, oversight of how some shares are reinvested remains a recurring accountability challenge—highlighting that hybrid LBF systems can work, but governance safeguards matter.

Source: Wily, 2018; Mwathane et al., 2022; Biitir & Nara, 2016.

Barriers to effective implementation

Even when tenure issues are addressed, several institutional factors curtail the fair implementation of LBF. See Box 5 for an illustrative case study on Ethiopia.

Obsolete or contradictory land laws often fail to account for the reality of informal markets, making it difficult to apply LBF instruments equitably.

A lack of up-to-date, transparent land information systems prevents accurate valuation and assessment.

Many municipal authorities lack the technical expertise, staffing, and technological infrastructure required to manage complex LBF systems.

Box 5. Case Study – Addis Ababa (Ethiopia): Leasehold LVC hindered by records and collection

Addis Ababa demonstrates how weak property records and limited collection capacity can prevent land value capture mechanisms from producing revenues or equitable outcomes. Mahendra et al (2020) describe a citywide system that is “essentially a leasehold” used to generate public revenue for infrastructure and housing. In the Lideta redevelopment area, financing was intended to come from land leasing, sales of apartments and commercial buildings, and property taxes. However, the study finds that these mechanisms were not successfully implemented, in part due to lack of clear property records and ineffective leasing payment collection, resulting in very little public revenue generation. Development remained incomplete and skewed toward higher-end condominiums, with lower-income households pushed out (Mahendra, et al., 2020).

The case study demonstrates that tenure clarity and enforceable records are not abstract prerequisites; they directly affect whether lease revenues can be collected and whether redevelopment-linked value gains translate into public investment rather than exclusion.

Ensuring equity and avoiding displacement

The implementation of LBF in Africa must navigate a landscape of legal pluralism where statutory and customary systems coexist (Boone, 2014; Chimhowu, 2019). Efforts to formalize for the sake of revenue can inadvertently disenfranchise vulnerable groups, such as women and pastoralists, if not designed inclusively (Meinzen-Dick et al., 2019).

There is also a significant risk that LBF mechanisms could exacerbate inequality by enabling “elite capture” of land value or by imposing financial burdens on the poor that lead to displacement (Durand-Lasserve & Selod, 2009); see Box 6. Consequently, land tenure reforms must be pro-poor, gender-sensitive, and culturally appropriate.

Importantly, “effective LVC” is not only a question of how much revenue is raised; it is also about who bears costs and who receives benefits. Even where an LVC instrument generates substantial funds, equity outcomes depend on earmarking rules, investment choices, and the treatment of informal or low-income residents affected by redevelopment (Mahendra, et al., 2020).

Land tenure and land-based financing (including land value capture) are mutually reinforcing: clear, enforceable, and well-recorded land rights make LBF/LVC workable (who pays, how to value, how to collect), but LBF can also be used to strengthen tenure security—especially in customary/informal settings—by building fiscal cadastres (e.g. mapping, tax rolls, and receipts) that provide de facto recognition and documentation even before full legal titling.

Box 6. Case Study – São Paulo (Brazil): “Financially successful LVC, mixed equity.

São Paulo’s CEPACs (charges for building rights) illustrate high-yield LVC under strong institutional capacity—yet with mixed equity outcomes. Under the Água Espraiada Urban Operation (OUCAE), the municipality sold Certificates of Additional Construction Potential (CEPACs) via auctions, generating

BRL 2.9 billion from 3.4 million CEPACs sold between 2004 and 2012 (Mahendra, et al., 2020). While this indicates that revenue-generation goals can be achieved when legal and financial systems can support such instruments, the distribution of benefits was less progressive: 33.7% of value captured was directed to services directly benefiting low-income families, whereas 59.6% supported road infrastructure more likely to benefit higher-income vehicle owners. The study also reports that displacement associated with construction was not matched by sufficient alternative social housing for many affected low-income households (Mahendra, et al., 2020).

The São Paulo's case study reveals that even with "good" LVC mechanics, tenure security and social outcomes hinge on governance choices—especially reinvestment priorities and safeguards for households vulnerable to displacement.

2.4. ENABLING ENVIRONMENT FOR LAND TENURE REGULARIZATION THAT FACILITATES LAND-BASED FINANCING

Millions of hectares of land are expected to be converted to urban land by 2050 (Collier et al. 2018) and the growth in urban land is projected to exceed urban population growth at 3.2 per cent, compared with 2.3 per cent (OECD et al., 2025). Urban growth is expected to generate substantial increases in land values, but irregular land tenure systems and an unclear or restrictive policy environment relating to the land and people's relationship to the land means that many African

cities are unable to harness this opportunity for land-based financing. Aspects of the land tenure governance environment that can strengthen cities to implement land-based financing include reform of laws on land rights, administration and implementation of land services; reform of urban land markets; strengthening trust in the land sector; and fostering equity in land access and governance.

2.4.1. Reform of laws on land rights, administration and implementation of land services

The African Union Framework and Guidelines on Land Policy in Africa (AUC et al., 2010) urges member states to modernize land legislation, secure tenure, and use land for equitable development. Most African countries have undertaken some reform of the land sector. More is needed to regularize informal tenures and recognize continuum of rights; implement systematic land registration programmes; clarify mandates and coordination among levels of government; strengthen dispute resolution; and relax regulations to improve access to the formal land market.

- **Regularize informal tenures and recognize a continuum of rights:** Section 2.2 noted the dominance of customary tenure in landownership in African cities and the informal settlements characterizing African urban contexts. UN-Habitat and GLTN propose a framework that goes beyond individual formal titling to recognizing a flexible spectrum of tenure rights including squatting, customary tenure, occupancy rights and group rights. There is need to review existing laws as well as religious and customary laws relating to land rights to

identify conflicting provisions, overlapping jurisdictions, discriminatory practices, and potentially excluding processes. Countries have started the registration of customary land. Ghana has made the establishment of the Customary Land Secretariats mandatory per the Ghana Land Act of 2020, and Côte d'Ivoire, Mozambique, Uganda, and Zambia have been issuing certificates to formalize traditional land rights. Liberia and Sierra Leone—which are emerging from civil conflict—have new land laws that substantially strengthen customary and women's land rights while providing for land leasing and other market-based land access options (Pott et al., 2024).

- **The Social Tenure Domain Model developed by UN-Habitat and GLTN can be useful for land administrators to articulate different people, land relationships and to record the related land rights.** Legitimizing a continuum of rights, including the right to use or lease lands, protects vulnerable urban residents from evictions and land grabbing by powerful interests. In 2012, Namibia, through the Flexible Land Tenure Act allowed communities to obtain blocks of multiple plots and a title that granted perpetual occupancy and transfer rights. This measure was aimed at 30 per cent of residents in informal settlements (Lall et al., 2017). Clarity on legitimacy of a continuum of land rights allows for instruments such as land readjustment to be more easily applied in improving informal settlements (as discussed in section 2.3).
- **Implement systematic digital land registration programs:** Many countries in Africa still function with paper-based land administration systems. Land administration systems are highly centralized, and land offices and staffing are under-resourced and lack capacity and modern technologies (Pott

et al. 2024). The titling processes are often very expensive and mapping and surveying procedures constitute over half of the cost of land registration programmes. More cost-effective surveying technologies, such as satellite imagery and simplified valuation systems, can be used. Malawi and Sierra Leone have piloted or are implementing simplified valuation methodologies (see Freetown, Sierra Leone case in chapter 1). In Rwanda, during the 2009–2013 Land Tenure Regularization programme, mass participatory mapping efforts were conducted based on aerial and satellite photographs, alongside locally trained para-surveyors. Freehold and leasehold titles were issued for almost all of Rwanda's land in under five years, at an average cost of only \$6 per parcel (Collier et al., 2018).

- **Where governments have invested in digitization, results are visible.** Rwanda's Land Tenure Regularization programme produced a national digital cadastre covering over 11 million parcels. This database has made it possible to assess properties accurately, expand the tax base, and increase local revenues. Ghana's digital land registry and property addressing system are also improving valuation and billing accuracy, while Kenya's Ardhī Sasa platform is streamlining land transactions and reducing disputes.
- **Clarify mandates and coordination among levels of government:** Most African countries have vertical institutional fragmentation and a complex relationship among the multiple bodies. Devolution of responsibilities is not clear-cut or always followed with fiscal empowerment. Both national and city-level agencies are often still involved in land and urban management and in infrastructure and services provision, often with overlapping or unclear regulatory scope and responsibilities.

Chapter 3 notes the potential reluctance or deference to implement LBF instruments for fear of legal challenge arising from unclear mandates. Impacts of this ambiguity are unpacked in chapter 4, including the undermining of investor confidence and the public sector's ability to negotiate and enforce inclusionary outcomes from land development. Qualified, formally recognized land institutions with clear mandates, customer service orientation, and digital records are not only critical to implementing new laws and procedures but also strengthen the opportunity to leverage any increase in land value for urban financing. Benin, Cabo Verde, Côte d'Ivoire, Ghana, Liberia, and Sierra Leone have built new independent institutions to streamline service delivery (Teyssier & Stickler, 2024).

- **Strengthen dispute resolution:** Effective land tenure regularization requires governments to resolve land disputes efficiently, transparently and at scale. Across African cities, overlapping tenure systems, unclear boundaries, and weak documentation generate widespread land conflicts, which account for a significant share of civil court cases and directly constrain land registration, land-use enforcement, and land-based financing (Lall et al., 2017; Wehrmann & Lange, 2019). These weaknesses can be overcome by strengthening dispute resolution as a core institutional function rather than treating it as a parallel legal process. Formal courts alone cannot manage the volume and complexity of urban land disputes, as they are often slow, costly, and inaccessible. Many countries are bridging this gap by institutionalizing alternative dispute resolution mechanisms—such as mediation, arbitration, and community-based land committees—that resolve conflicts more quickly and align with customary practices (AUC et al., 2010).

A strong dispute resolution framework provides further support for the recognition of a continuum of rights and can also be incorporated in the implementation of strategic land management in order to strike a balance between using land to its optimum potential while minimizing exclusion and elite capture. Embedding dispute resolution directly into land tenure regularization has proven particularly effective. Rwanda integrated local mediation committees into its Land Tenure Regularization programme, resolving boundary and inheritance disputes before issuing titles and substantially reducing post-registration litigation, thereby strengthening the credibility of the land registry and enabling property taxation (Ngoga, 2019). Ethiopia, Mozambique, and Sierra Leone have adopted similar approaches during systematic registration (Pott et al. 2024). Clarification of institutional mandates, legal recognition of dispute outcomes, and subsequent update of cadastral records are key to sustaining these gains. Inclusive, gender-responsive dispute resolution further strengthens tenure security, builds public trust, and supports functioning land markets essential for land-based financing (Chigbu et al., 2021; Teyssier & Stickler, 2024).

- **Relax regulations and processes to improve access to the formal land market:** Restrictive regulations are strangling development in African cities, discouraging investment and participation by the poor in the land sector. Dar es Salaam requires lots to be at least 400 square metres. Anyone who wants to buy a standalone house in the formal sector near the centre must be able to afford a lot this size, leading many to the alternative of informal ownership (Lall et al., 2017). In Lagos, titling costs can reach up to 30 per cent of the cost of construction (Collier et al. 2018).

Formal property registration in Africa takes, on average, 58.9 days and costs 9 per cent of the property value. Both figures are more than twice the comparable figures in Europe and Central Asia.

Registration can take almost 300 days in Togo, and can cost more than 20 per cent of the property value in the Republic of Congo (Lall et al., 2017). Authorities should be sensitive to the vulnerability of a significant number of urban residents and design then implement policies that create feasible pathways towards formality. Senegal in 2011 passed a new land tenure act allowing people with temporary occupancy permits in urban areas to convert them into permanent titles at no cost (Lall et al., 2017). The use of cost-effective and simple land tenure regularization techniques

in Rwanda made the registration process cheap and accessible for the majority of landowners. People who could not afford the cost and formed part of the national poverty category were exempt from paying the registration fees and were issued with their respective land titles (Ngoga, 2019).

Chapter 5 notes the exposure to climate risks and the low access to quality public space faced by the vulnerable urban underserved. Regularization processes considerate of the urban poor improve access to the land market and creates opportunities to strengthen market mechanisms. They not only allow for LBF tools such as transfer of development rights promoting development in locations more suited to growth and with less climate risks, but create opportunities for more public space development.

2.4.2. Reform of urban land markets

Clear rights to urban land are a precondition for the emergence of a formal land market. When urban land markets cannot function properly, the result is inefficient land use. In Harare and Maputo, for example, more than 30 per cent of land within 5 kilometres of the central business district remains unbuilt due to a number of factors that include difficulty in establishing ownership arising from land records limitations, and speculation in the land market that encourages hoarding rather than development.

Currently, land markets in African cities operate largely informally and in an opaque environment. As such, land value and transaction data are unavailable in almost all urban land markets in Africa (Pott et al., 2024) and the sometimes contradictory systems with inaccurate mapping and poorly maintained land records impose high costs and are dispute enablers. Efficient land markets enable the transfer and allocation of land to its most productive use, and facilitates strategic land use that can reduce environmental impacts and contribute to sustainable development.

LBF instruments such as transfer of property rights can support the strengthening of land markets. Their implementation requires an enabling environment that includes: strengthening of land registration systems; alignment of land rights recognition, LBF instruments and physical development plans; and ensuring that urban land market reform occurs within the general land sector reform.

- **The lack of an accurate, transparent and regularly updated land registration system (discussed in chapter 3) prevents urban land markets from functioning well.** It creates obstacles to the raising of capital for development and investment, and to the raising of revenue by the local authority. These dysfunctions distort the price and availability of land for efficient urban development, prompting recourse to informality in building (Lall et al., 2017). This was in fact a key justification for Rwanda's land tenure reform programme (see Case 3).

- It was noted that the significant demand for serviced urban land led to the emergence of an active informal land market, causing significant increases in land prices (up to 25 per cent land inflation rate) as well as land conflicts with more than 80 per cent of court cases involving land disputes (Ngoga, 2019).
- **Legally enforceable land rights enable governments to impose obligations on landowners toward the implementation of physical development plans.** In 2012, Kampala Capital City Authority (KCCA) finalized the Kampala Physical Development Plan. The Plan's implementation was premised on the assumption that Kampala's complex land tenure regime would be simplified to enable the property market to function more efficiently. While there has been some improvements in land regularization and administration, the full resolution of the land tenure complexity is not likely in the short term and remains the most binding constraint on the Plan's implementation (Ngoga, 2018).
- In Nairobi, the informal settlement of Kibera occupies prime central land, constraining effective urban planning and public service delivery. Kibera is characterized by very low living standards, poor drainage, ungraded dirt paths, open sewage and overcrowding. **Informal and disputed land rights are road blocks to upgrading and deprive the government of important revenue flows from land and property taxation** (Collier et al., 2018). Urban property taxation has not reached its full potential in Africa and is, on average, only 0.5 per cent of GDP compared with 2 per cent in member countries of the Organization for Economic Co-operation and Development (Pott et al., 2024). Without clear legally enforceable rights, cities cannot identify who is liable for property taxes or other LBF contributions, as discussed in section 2.3.
- **Reform of the urban land market should occur in tandem with the general land sector reform, including through digitization to increase transparency of transactions in the land and real estate markets.** Kenya's global ranking in the real estate transparency index went from 53 in 2018 to 48 in 2022 based on the introduction of a national land information system (Pott et al. 2024).

2.4.3. Strengthening trust in the land sector

As African governments reform policies and institutions for land administration by legitimizing customary land tenure and recognizing the rights of residents in informal settlements, it is essential that people understand and perceive their rights regarding the land as secure, and trust that navigating the existing processes will meet their expectations. Participatory planning, transparency and accountability to counter corruption are vital to building trust in the land sector.

Participation in land use planning: Land sector reforms must be inclusive of all stakeholders, especially those who already feel excluded. Multi-stakeholder participation through broad citizen engagement and targeted communications with various groups is crucial at all stages of land sector reform, from policy analysis and reform through piloting and implementation (Teyssier & Stickler, 2024). Land use planning can stimulate tenure security and tenure security can be an outcome of land use planning in that it can delineate or remedy unclear land borders and property rights (Ngoga, 2018).

Traditional land use planning is top-down, led by Government and its administrative agencies. Participation here focusses on ensuring that stakeholders and the public are given a chance to comment on how the land should be used. Tenure-responsive land use planning is an approach to planning that integrates particular tenure goals in the planning process for a specific area. It ensures participation, negotiation and consultation, institutionalizes transparency and mechanisms for dispute resolution, engenders a culture of gender and youth responsiveness, promotes appropriate strategies, pro-poor mapping and documentation (Chigbu et al., 2021).

Applying these processes in land use planning is important in limiting elite capture and tokenism, which are major insecurity generating factor in land tenure. Tenure-responsive land-use planning processes also lend themselves to the implementation of some LBF instruments in a tenure responsive manner and can therefore be leveraged to strengthen both. Land readjustment, for example, depends on voluntary cooperation, therefore stakeholder participation is key to build confidence in the fairness and transparency of its implementation (see chapter 4).

Tenure-responsive land-use planning is a good approach for tenure-ambiguous areas, such as customary and informal tenures. The approach not only ensures community participation but also raises awareness of the value of planning and brings clarity to land tenure issues (Ngoga, 2018). Kampala Capital City Authority, whose implementation of the 2012 physical development plan for Kampala has been stalled by tenure complexity, is considering integrated neighbourhood planning projects where land, transport and other services are planned jointly for a neighbourhood, rather than as part of separate projects.

A pilot for the Kisenyi slum area was undertaken using tenure responsive land use planning with support from GLTN and UN-Habitat as well as other local and international partners (see Box 6).

The pilot scheme took into account the local reality from a social, economic and cultural context and the implementation affordability of the plans. While the outcomes from the process have not been implemented, the process itself can be capitalize on or lessons drawn upon to implement other LBF instruments, such as strategic land management, to reallocate land to other uses, or in-kind developer contributions to ensure they are appropriate to the location.

Build confidence for institutions in the land sector: People support what they understand. Chapter 4 posits an enabling condition for property tax as a clear link of the tax to visible benefits and consistency in application. African Centre for Cities (2015) and OECD and Lincoln Institute (2022) report that transparent management and public participation are essential for legitimacy. Data from Afrobarometer shows up to 57 per cent of respondents thought most or all civil service in their countries were corrupt (see Figure 13). Quoting Transparency International's Global Corruption Barometer, Pott, Stanley, et al (2024) single out the land sector is one of the most corrupt in Africa, with bribes frequently required for services.

In places like Dar es Salaam where insecurity of tenure is largely driven by concerns over State expropriation (Panman & Lozano-Gracia, 2021) and the high cost of formalizing property documents, households may be reluctant to engage in or willing to pay for titling. Reforming institutions is a long-term challenge, but measures to improve and build confidence in formal systems will likely increase demand for titles over time (Panman & Lozano-Gracia, 2021), thereby contributing to tenure security, more efficient land markets and investments in the land.

2.4.4. Fostering equity in land access and governance

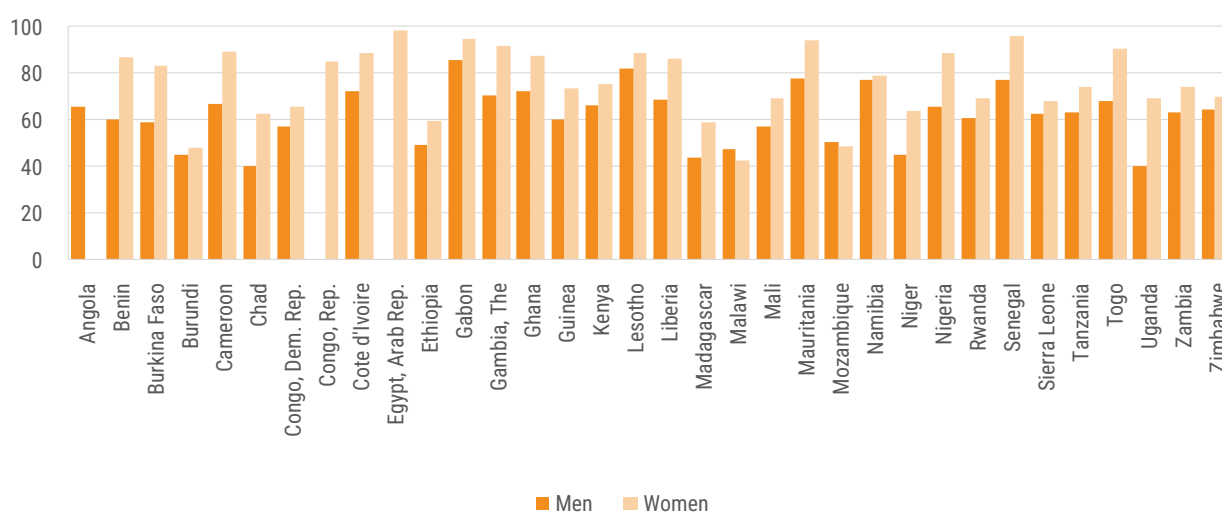
Land sector reforms should not only be geared at increased land revenues, land productivity, sustainable land management, but also at social cohesion and gender equality. There are also some groups (such as women, youth, migrants) whose access and rights to land have not always been well protected by customary systems. Women have less access to land and less secure land rights than men in many customary systems, and government institutions are insufficiently gender-sensitive, which contributes to persistent gender gaps in land access (Teyssier & Stickler, 2024).

Figure 14 shows the percentage of women who do not own land is consistently higher than men in many African countries. Land sector reforms should seek to end and not perpetuate inequalities (discussed in section 2.3). Liberia, which recognized customary land rights for the first time in 2018 through the Liberia Land Rights Act of 2018, includes key measures to safeguard women's land rights.

The Act does so by requiring customary land demarcation and registration to be done with women's full participation in both the process and the Customary Land Development and Management Committees (Stanley, 2024).

Low-income households are often excluded from formal markets due to high transaction costs. As noted for Namibia and Senegal, informally settled residents can be incentivized to formalize their tenure rights through free or subsidized transactions. Intermediate forms of land rights, such as short-term occupancy certificates and certificates of collective ownership, should be given the legal backing to allow holders to leverage them within the financial sector. Communication strategies supporting land sector reforms must be tailored to local contexts, using local languages and engaging trusted community leaders (religious, traditional, and civic) to explain the purpose and benefits of the reforms. Experiences in cities like Dakar, the Senegalese capital, highlight the necessity of clear communication to counter reluctance.

Figure 14. Percentage of men Vs women who do not own land



Source: World Bank, Gender Data Portal, latest available year for each country between 2010–2024.

Informal land rights need not be synonymous with insecure land rights but urban development should foster community ties to ensure land rights are agreed upon by different actors, that the land management processes are clear and

transparent in order to strengthen urban land markets and create space for the implementation of LBF instruments in ways that foster equity and build confidence in the land sector.



Case 3. Modernizing land tenure and land regularization: Insights from Rwanda

By Marc Manyifika

Before the mid-2000s, Rwanda's land tenure system was characterized by a coexistence of customary practices and fragmented statutory regulations (Ali et al., 2014). Most landholders, particularly in rural and peri-urban areas, lacked formally documented rights, while boundaries were often undefined and records incomplete or paper-based (World Bank, 2019). This resulted in widespread tenure insecurity, frequent disputes, and limited transparency in land governance.

Vulnerable groups (including women, orphans, returnees, and households affected by post-conflict displacement) were disproportionately disadvantaged under the pre-reform system, as customary norms did not consistently guarantee equal or independent land rights (Daley et al., 2010). In urban areas, tenure informality constrained public authorities' capacity to plan, service, and leverage land to finance cities, thereby complicating infrastructure provision, compensation and land acquisition for public purposes (UN-Habitat, 2022).

In response, the Government of Rwanda launched the Land Tenure Regularization Programme (LTRP) in 2009. The programme aimed, systematically, to demarcate, adjudicate, and register land rights nationwide using a participatory, low-cost approach (Ali et al., 2014). Satellite photos were used to outline boundaries, and community committees were used to identify plots of land. Land records were progressively digitized and integrated into a national land administration information system, significantly improving consistency, accessibility, and oversight.

Rwanda's land tenure reform achieved near-universal coverage within a short period, with more than 10 million parcels demarcated and registered by 2013 (Ali et al., 2014). The mandatory registration of joint spousal ownership substantially strengthened women's land rights and contributed to improved tenure security for vulnerable groups (World Bank, 2019). Empirical studies show that tenure security improvements reduced land disputes, increased investment in land and housing, and enhanced perceptions of fairness in land administration (Alemu et al., 2008; Ali et al., 2014). The transition from fragmented paper records to a centralized digital land registry improved transparency by reducing discretionary decision-making and increasing traceability of land transactions (UN-Habitat, 2022).

In urban contexts, land regularization provided a critical enabling foundation for spatial planning and municipal finance. Clearer tenure facilitated land acquisition for infrastructure, supported more predictable compensation processes, and enabled the application of selected land-based revenue instruments, particularly property taxes (IGC, 2021). Rwanda's experience illustrates that tenure clarity can support land value capture efforts without requiring a fully mature legal cadastre at the outset.

Despite substantial progress, land tenure challenges persist. Rapid urbanization continues to exert pressure on land markets, particularly in secondary cities and peri-urban areas, exposing low-income households to displacement risks associated with rising land values and redevelopment (Goodfellow, 2017b). Formal registration alone has not eliminated tenure insecurity where planning enforcement and housing affordability remain limited.

Access to land administration services remains uneven. While digitization improved efficiency, transaction costs and procedural requirements can still exclude poorer households and residents of informal settlements (World Bank, 2019). Dispute resolution mechanisms face increasing caseloads in areas undergoing rapid land use change.

Institutional coordination also remains a challenge. In some cases, tenure regularization preceded detailed urban planning, creating tensions between registered rights and subsequent zoning or redevelopment priorities (UN-Habitat, 2022). This underscores that land tenure reform is an ongoing governance process rather than a one-off intervention.

Rwanda's experience highlights that land tenure reform is highly context specific. Post-conflict conditions, strong central coordination, and sustained political commitment enabled rapid nationwide implementation, conditions that may not be replicable elsewhere (IGC, 2021). Lessons should therefore be adapted rather than replicated. A fully legal land cadastre is an important objective but not an absolute prerequisite for improving land administration or initiating land-based financing. Incremental approaches can generate meaningful gains in tenure security and transparency while legal and institutional frameworks continue to evolve, as evidenced in Rwanda and other cities (IGC, 2021; UN-Habitat, 2022).

Finally, tenure security should be treated as a means to inclusive urban development rather than an end in itself. Safeguards are required to prevent formalization from exposing vulnerable groups to displacement or speculative pressures. Integrating tenure reform with urban planning, infrastructure provision, and social protection measures is essential for equitable urban transformation.

The case highlights the highly context specific nature of land tenure reform; the importance of tenure security as a means to urban development by enabling the application of land-based revenue instruments; the importance of strong political commitment; and the meaningful gains to tenure security and transparency delivered by incremental approaches even as cities move toward fully legal land cadastres.

Chapter 2 conclusion and takeaways

Land is central to sustainable livelihoods and African governments should take appropriate measures to ensure that it plays its primary role in the development process. Land tenure in Africa is complex and context-specific, influenced by different cultures, economic, governance, and historical factors. The effectiveness of land based urban financing strategies in Africa is inextricably linked to the underlying land tenure system

A continuum of land rights should be recognized. Intermediate forms of land rights such as short-term occupancy certificates and certificates of collective ownership should be given legal backing to allow holders to leverage them within the financial sector and for municipal or city authorities to clarify any benefits from land-based financing instruments associated with such land.

Given the complexities of urban land tenure, African cities should adopt innovative, context-specific approaches to adapt LBF to customary and informal contexts in order to sustainably finance service provision for their rapidly growing urban populations.

Data systems are foundational. Digital, secure, transparent, accurate and updated land databases are a prerequisite for cities to realize the promised benefits of titling and to manage leases, conditions, and renewals effectively.

The goal for African policymakers should be to **design LBF instruments that contribute to the gradual improvement of land governance while reinforcing the “social contract” between the citizen and the city** through transparent, inclusive, context specific, politically aware reinvestment in local services. LBF implementation can also be leveraged to strengthen tenure security while mobilizing revenue.

While the formalization first approach is a valid long-term goal, it is resource and time intensive. If city or municipal authorities wait for full legal titling before implementing LBF instruments, they risk losing years of revenue while urban growth spirals out of control. City governments can take advantage of reforms in the land laws to recognize a continuum of rights, clarify mandates in levels of government, improve the functioning of land markets, **strengthen trust in the land sector and foster equity to build investor and public sector confidence to implement LBF instruments.**

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Chapter 3: Regulatory and institutional frameworks for effective land value capture

This chapter examines how regulatory frameworks, institutional arrangements, and governance capacity shape the feasibility and performance of land value capture and broader land-based finance in African cities. It argues that the effectiveness of LVC is not determined by legal design alone, but by how rules are translated into practice through coordination across institutions, administrative systems, and political cycles. The chapter identifies critical but underappreciated bottlenecks, including staffing gaps, sequencing failures, and misaligned mandates, and points toward incremental, fit-for-context approaches that are already gaining traction across Africa.

KEY TAKEAWAYS

- Effective LVC depends on coordination across planning, land administration, infrastructure provision, and fiscal management, and practical tools exist to strengthen these linkages incrementally.
- Fragmented governance, misaligned mandates, and uneven decentralization create implementation gaps, but targeted coordination mechanisms and phased reforms have enabled cities to operationalize LVC even under difficult conditions.
- Inherited and often outdated planning regulations constrain locally appropriate LVC, yet iterative updates to planning standards and education systems are building a new generation of practitioners equipped to work within Africa's rapidly changing urban landscape.
- Property registries, valuation systems, and integrated administrative platforms are foundational, and investments in these systems, even partial ones, have measurably improved cities' ability to link public investment to revenue generation.
- Experiences from Cape Town, Kigali, Lagos, and cities in Togo show that institutional sequencing and implementation guidance are decisive and where these are in place, LVC can evolve from an episodic and negotiated practice into a stable and scalable instrument of urban finance.

3.1. INTRODUCTION

Land is fixed in supply, immobile, and therefore its value is deeply shaped by public action. This is determined not only by market demand, environmental risk, or infrastructure investment but also by planning decisions as well as the legal and institutional arrangements that govern access, use, and transfer. In urban contexts, these forces are mediated most directly through location. Well-located land, close to jobs, transport, services, and social infrastructure, is inherently scarce and cannot be expanded. As cities grow and economic activity concentrates, demand for these locations intensifies, placing sustained upward pressure on land values.

Regulatory systems can shape the supply of serviced land through rezoning decisions, subdivision approvals, and coordinated infrastructure extension. Where these mechanisms fail to keep pace with urban growth, or where planning, infrastructure provision, and land assembly are institutionally fragmented, land scarcity becomes structurally embedded rather than cyclical. In this context, regulatory and institutional arrangements become decisive; they determine whether rising land values are channelled to support productive, inclusive, and liveable cities, or whether they deepen exclusion, informality and spatial inequality.

A critical starting point for regulatory design is the recognition that many of the largest land value gains are created by government action. Zoning changes that permit higher densities, infrastructure investments that improve accessibility, and planning approvals that convert land from rural to urban use can generate substantial uplifts in land value, often far exceeding the original public investment. As illustrative calculations based on experiences from Latin America demonstrates, where in many cities diverse LVC instruments have been used for decades, these gains arise not from private effort

alone, but from collective decisions and public expenditure (see Figure 3). This establishes a clear normative and economic rationale for land value capture: if public action creates land value, there is a strong case for reclaiming part of that value for collective use. However, unless this principle is clearly embedded in regulatory and institutional frameworks, value capture risks being perceived as arbitrary extraction rather than a legitimate component of public finance.

Across African cities, the translation of LVC principles into practice is constrained less by the absence of policy interest than by weaknesses in regulatory and institutional frameworks. Before introducing or scaling land-based finance instruments, policymakers need to assess whether the local enabling environment is supportive of implementation. In practice, this requires examining four interrelated dimensions: (1) the legal environment governing land rights and public value capture; (2) the administrative capacity of institutions responsible for implementation; (3) the historical and cultural context shaping land governance and public acceptance of charges and taxes; and (4) the maturity and functioning of local land markets (UN-Habitat/GLTN 2016). Together, these conditions determine both the feasibility of LVC and the types of instruments that can realistically be implemented.

The legal environment is particularly important. Land tenure complexity remains a fundamental challenge across many African cities. As discussed in chapter 2, overlapping systems of statutory, customary, informal, and hybrid tenure complicate the identification of ownership, valuation, and the allocation of benefits. In such contexts, it is often unclear who should pay, who should benefit, and how land value gains should be redistributed, making enforcement legally and politically fraught.

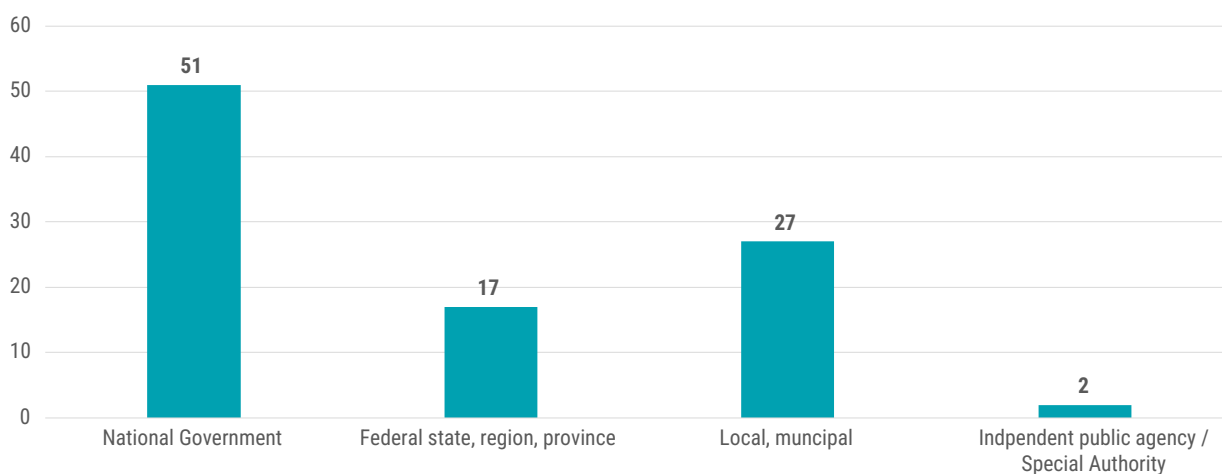
These tenure challenges are compounded by legal deficits. In many African countries, LVC is not explicitly defined or justified in national legislation, and few legal frameworks articulate the social function of land and property or the legitimacy of capturing publicly created land value. Where instruments are introduced without this grounding, they remain vulnerable to legal challenge, political resistance, and inconsistent application, limiting the state's ability to apply land-based instruments predictably and at scale.

Administrative capacity also plays a decisive role. Governance arrangements frequently divide responsibilities across different levels of government. Planning and fiscal frameworks are often defined at national level, while implementation responsibilities rest with local governments as highlighted by the 2022 Global

Land Value Capture Survey (see Figure 15). These differences in roles can create vertical misalignments in mandates, revenue rights, and decision authority.

Local governments may be expected to apply instruments they did not design and over which they have limited control, while national policies are frequently insufficiently attuned to local land market conditions. These governance gaps are often reinforced by administrative weaknesses. In many cities, cadastral systems and land registries remain incomplete, outdated, or unreliable, limiting the ability to assess liabilities, enforce compliance, or ensure fairness. Limited technical capacity within local governments further constrains property valuation, the negotiation of development obligations, and the transparent management of land-based revenues.

Figure 15. Level of Government involvement in setting LVC legislation globally



Source: OECD/LILP Survey 2022 Global Responses.

Historical and cultural factors related to land governance also shape implementation outcomes. Long-standing norms around land rights, customary authority, and the legitimacy of Government charges influence public acceptance of taxes, fees, and development obligations.

In contexts where trust in public institutions is low, resistance from property owners, often

representing local elites, can significantly constrain reform efforts. Where value capture mechanisms are not clearly linked to visible improvements in infrastructure, housing, or services, compliance weakens and political opposition hardens.

Finally, the condition and maturity of local land markets influence both the potential and the design of land-based finance instruments.

In rapidly urbanizing environments characterised by informality, limited transaction data, and fragmented land markets, it can be difficult to measure land values accurately or identify the beneficiaries of public investment. Without reasonably transparent and functioning land markets, governments struggle to estimate value uplift, assign liabilities, and implement LVC instruments effectively. Together, these legal, administrative, sociopolitical, and market conditions shape the enabling environment for land value capture. Where they are weak or poorly aligned, implementation tends to remain fragmented and negotiated, reinforcing a cycle of underperformance (Goodfellow et al., 2024).

Against this backdrop, this chapter examines how regulatory frameworks, institutional arrangements, and governance capacity shape the feasibility and performance of LVC and LBF in African cities, situating their implementation within the political, legal, and administrative systems that condition success.

Section 2 interrogates the persistence of imported and inappropriate planning, land, and fiscal rules, and how these constrain locally responsive and equitable LVC. Section 3 turns to governance and coordination, examining the alignment challenges between national and local governments, land agencies, planning authorities, and infrastructure providers that often undermine implementation. Section 4 focuses on property registries and valuation systems as the administrative backbone of LVC, assessing how data quality, coverage, and valuation practices affect revenue potential and legitimacy. Section 5 focuses on the skills and professional capacities required to design, administer and enforce LVC instruments in practice.

These institutional dynamics are grounded in experience through African case studies in section 6. Section 7 synthesises cross-cutting lessons and distils key takeaways for policy design, sequencing and institutional reform. Together, the chapter establishes the enabling conditions and institutional foundation for LVC and LBF to function better in the context of African cities.

Types of Land Use Change	Price Before Change (US \$ /m ²)	Incement (%)	Price After Change (US \$ /m ²)	Windfall of 5,000 m ² (US \$)
Rural to Urban Conversion	2	400	10	40,000
Building Norms	100	80	180	40,000
Zoning Regulations	200	100	400	1,000,000

3.2. FIXING IMPORTED AND INAPPROPRIATE RULES

The operationalization of LVC and related LBF instruments rests on a firm legal anchor that defines their scope, limits and purpose.

These instruments inevitably raise questions of public authority, including when and how the State may intervene in land markets, how obligations are assigned, and how resulting revenues are to be used. Where such authority is not clearly articulated in law, implementation becomes contingent, shaped by discretion, negotiation,

or political bargaining rather than rule-based governance.

This weakens enforceability and increases exposure to legal dispute and opposition from affected stakeholders. Codifying value capture in legislation can perform a stabilizing function: it formalizes mandates, standardizes procedures, and provides clarity to public agencies and private actors. By shifting value capture from a discretionary, case-by-case

practice to a rule-based system, legal embedding enhances durability, reduces arbitrariness, and enables consistent application across projects, jurisdictions, and political cycles. The Rwanda case, elaborated in section 6, illustrates this trajectory, where land readjustment has moved from ad hoc application toward more systematic rollout underpinned by clearer legal foundations.

Despite this, most countries worldwide, and particularly those in Africa, lack an explicit legal definition or justification for LVC. Evidence shows that while many jurisdictions apply instruments

that function as LVC in practice, only 21 per cent formally articulate value capture principles in legislation (OECD/LILP 2022). Value capture is typically embedded indirectly within planning, taxation, or infrastructure laws, rather than framed through coherent statutory frameworks that clarify purpose, scope and limits.

In Africa, this gap is especially pronounced. This legal deficit has far-reaching implications for land markets, urban governance and the capacity of cities to mobilize land value gains for public benefit.

3.2.1. Implications of weak and outdated legal frameworks

The weakness of LVC frameworks in Africa cannot be understood without reference to inherited planning and land laws. Much of the continent's urban legislation was established under colonial administrations, designed around assumptions of strong central bureaucracies, stable cadastral systems, and small formally employed populations.

These frameworks were also explicitly exclusionary, regulating colonial settlements while marginalizing indigenous and low-income residents. Despite profound demographic, economic, and spatial transformation since independence, many remain largely unchanged, amended only incrementally rather than fundamentally rethought (Berrisford & McAuslan, 2017). Cities consequently operate under legal regimes poorly suited to rapid urbanization, informality, climate risk, and fiscal constraint.

This misalignment is most visible in planning standards that are exclusionary by effect. Unrealistic plot sizes, construction standards, and servicing requirements push formal development beyond the reach of most households, making informality a rational response rather than a marginal deviation. As urban growth concentrates outside formal systems, the State's capacity to

regulate land use, track value changes, and apply LVC instruments weakens considerably. Legal pluralism compounds these difficulties, with statutory law coexisting alongside customary tenure, informal occupation, and politically mediated allocation. Authority over land is dispersed across ministries, local governments, and traditional institutions, creating ambiguity over mandates, revenue rights, and benefit-sharing. The result is a dual urban system: a small formal sector characterized by high land values and heavy regulation, alongside a dominant informal sector beyond effective regulatory reach, where LVC becomes technically complex, politically contested, and institutionally fragile. The case of Kampala, Uganda, illustrates these dynamics.

Legal ambiguity shapes how LVC is implemented and determines its beneficiaries. Where LVC lacks a clear statutory basis, outcomes are often driven by bargaining power rather than policy intent: well-resourced developers can negotiate exemptions or favourable terms, while smaller landholders and informal actors remain excluded from formal systems (Collier et al., 2020).

This selective application fuels perceptions of arbitrariness and unfairness, particularly in contexts marked by historical land grievances and

low trust in public institutions. When landowners do not see a transparent legal rationale for value capture, or visible reinvestment of revenues into housing, infrastructure, or services, opposition hardens and LVC is framed as confiscatory rather than redistributive (Berrisford et al., 2018).

These dynamics help explain why LVC instruments remains largely underutilized across Africa and concentrated in a small number of countries where legal authority and enforcement capacity

are comparatively strong.

By contrast, some broader LBF instruments, particularly property taxation, have achieved wider uptake because they rely on more familiar administrative routines, clearer legal mandates, and recurrent rather than discretionary application, making them easier to institutionalize even in contexts of limited capacity and contested land governance.

Box 8. Characteristics of effective urban legislation

Effective urban legislation in African cities is not simply a matter of legal drafting. Berrisford and McAuslan (2017) identify several qualities that distinguish laws that work in practice from those that remain poorly implemented or ignored.

Pragmatic and context-sensitive: Laws must set standards that people, organizations, and governments can realistically meet. Standards set too high push citizens and businesses outside the formal system and undermine the law's legitimacy.

Inclusive and rights-affirming: Effective urban laws give effect to the right of all citizens, including the poor, to live and work in the city. They address gender inequality and social exclusion as central concerns rather than afterthoughts.

Responsive and scalable: Laws must respond to the specific needs of individual cities while remaining implementable across a range of urban contexts, from large capitals to secondary towns.

Locally grounded: The most effective laws draw on local legal traditions, customary arrangements, and the lived experience of residents. Laws imported wholesale from other contexts frequently fail because the institutional and political preconditions for their success do not exist locally.

Consultative by design: Laws developed without genuine engagement with implementers, affected communities, and political stakeholders are routinely ignored. Consultation is the primary mechanism through which drafters understand context, test options, and build the legitimacy needed for implementation.

Implementable by a fragile state: Effective laws must be designed so that even a relatively weak city administration can apply them. Legislation that outstrips implementation capacity encourages informality and erodes public trust.

Source: Berrisford and McAuslan (2017)

3.2.2. Designing apt urban laws

Overcoming these challenges does not mean importing LVC instruments from other regions. Rather it calls for deliberate legal and institutional reform that grounds urban land-use law in local realities while clearly establishing the legitimacy and purpose of value capture. International guidance, including that from UN-Habitat, points to several core design principles that are particularly salient in African contexts (Berrisford & McAuslan 2017).

In particular, urban land-use legislation must be based on context-specific realism, taking prevailing land tenure arrangements, market conditions, and institutional capacity as its starting point (see Box 9 for some characteristics of effective urban legislation). Planning standards, development requirements and compliance thresholds should reflect what households, developers and public institutions can realistically deliver (Collier et al., 2020). Laws that are routinely unenforceable fail to regulate development and undermine revenue mobilization and institutional credibility.

Legal frameworks do more than enable or constrain specific instruments: they define and protect fundamental rights, establish institutions for lawmaking and enforcement, and provide mechanisms for dispute resolution (UN-Habitat/ GLTN 2021). Importantly, legal systems are never fully comprehensive. They define a continuum of action, from activities that are clearly prohibited, such as violations of property rights, to those that are explicitly required, such as paying taxes. Between these poles lies a wide space of activities that are neither mandated nor forbidden, and it is here that much policy innovation occurs. For LBF, this middle ground is significant: many instruments can be developed and applied within existing legal structures without waiting for explicit statutory authorization, allowing cities to gradually formalize and clarify new fiscal tools as experience accumulates.

Regardless of where an instrument sits on this continuum, effective LVC legislation must clearly articulate the public interest while enabling private initiative (Smolka, 2013). This means predictable, rule-based systems rather than discretionary negotiation. Clearly defined obligations, transparent calculation methods, and standardized application allow developers and landowners to factor value capture into project feasibility from the outset, reducing uncertainty, resistance, and the scope for ad hoc exemptions.

Flexibility and scalability are equally important. Given the wide variation in city size, market maturity, and administrative capacity across African cities, legislation should enable differentiated application through enabling clauses that allow cities to phase instruments, set locally appropriate thresholds, or pilot mechanisms before scaling, rather than imposing uniform national requirements that few cities outside the largest metropolitan areas can realistically implement.

Legal coherence and institutional alignment are critical to making these frameworks operational. Contradictions between land, planning, infrastructure, and fiscal legislation should be minimized, and mandates across national and local governments clearly delineated. Where local governments are responsible for implementing value capture instruments, they must also have the authority to assess, collect, retain and reinvest revenues. Without this alignment, value capture risks becoming centralized, fragmented, or disconnected from local development priorities, weakening both accountability and impact. Suitable frameworks must also recognize the continuum of land tenure (see chapter 2). Explicit legal recognition of customary and informal tenure is essential to ensure that value capture mechanisms do not exacerbate exclusion, displacement, or tenure insecurity.

In plural tenure contexts, instruments should be designed to work with existing practices, such as linking charges to land use or location rather than formal title alone, rather than denying their legitimacy. For LBF more broadly, and LVC in particular, these principles translate into specific legal requirements. Legislation should explicitly legitimize the right of society to share in land value gains created through public action, such as rezoning, infrastructure investment, or changes in development rights (OECD/LILP

2022). Implementing regulations should then specify the instruments that may be used, the methodologies for assessing value uplift, and clear rules for revenue allocation, ring-fencing and public reporting. A list of examples of measures that can be considered can be found in Box 8. Together, these measures help shift land value capture from a negotiated or exceptional practice to a predictable, transparent and development-oriented component of urban governance.

Box 9. Potential legal and regulatory measures for LVC and LBF

While no single blueprint exists for enabling LVC through legislation, given the highly context-specific nature of institutional arrangements, political economies, and administrative capacity across African cities, the following measures can be considered across different levels of governance.

National Legislative Frameworks:

- Explicitly recognize the principle that land value gains created through public action may be shared with society, establishing the constitutional or statutory basis for LVC.
- Anchor value capture in statute rather than discretionary negotiation, reducing legal challenge, political contestation, and dependence on individual political will.
- Specify which level of government is empowered to design, apply, collect, and enforce LVC instruments, resolving jurisdictional ambiguity that has paralysed implementation in many contexts.
- Clearly list eligible land-based instruments and establish legally endorsed methodologies for assessing land value uplift, proportionate to local data and capacity.
- Permit simplified or proxy-based approaches where full market valuation is not feasible, avoiding standards that only the most capacitated cities can meet.

Local governments should be empowered to:

- Implement LVC instruments and reinvest revenues locally, with ring-fencing provisions where necessary to protect land-based revenues from central appropriation.
- Use enabling clauses to phase instruments, set locally appropriate thresholds, and pilot mechanisms before scaling, without requiring national approval for each iteration.
- Apply existing property tax and fiscal registry powers incrementally, building the administrative foundations for more sophisticated LVC instruments over time.
- Engage with regional bodies and peer city networks to develop model by-laws and shared administrative platforms that reduce the cost of acting ahead of national reform.

Source: Author's Compilation

3.3. GOVERNANCE AND COORDINATION

Land-based financing, including LVC, operates at the intersection of land-use planning, fiscal management, and land administration. These functions are typically distributed across different ministries, agencies, and levels of government, each operating under distinct mandates, incentives and information systems. As a result, even where a sound legal basis exists, the effectiveness of LVC hinges on how well institutions coordinate in practice (Haas & Wani, 2019). Without governance arrangements that clearly allocate authority, responsibility, and decision rights across sectors and scales, value capture instruments tend to be fragmented, contested, or difficult to enforce.

In many African cities, weak coordination compounds existing legal and institutional gaps. Overlapping mandates, inconsistent approval processes and fragmented accountability often

disrupt the link between planning decisions, infrastructure provision and revenue mobilization (Collier et al. 2017; Collier et al. 2020_a). Development rights may be granted without corresponding investment in services, land value increases may go unrecorded or untaxed, and revenues may be collected without being reinvested locally. These disconnects reduce policy credibility, deter private participation, and limit the developmental impact of land-based instruments. Strong laws are therefore necessary but insufficient.

The persistent gap between legal design and administrative execution remains one of the central constraints to effective LVC implementation. Rwanda offers a useful illustration of the gap between legal readiness and operational delivery (see case 3.1).

3.3.1. Challenges of fragmented governance

The implementation of land-based finance systems is shaped by how institutions interact along four interrelated dimensions: vertical, spatial, functional and temporal (Colier et al., 2020a). Each dimension influences whether LVC mechanisms can be applied consistently, coordinated effectively, and sustained over time. Misalignment in any one dimension is sufficient to undermine outcomes, while cumulative misalignment produces deep institutional fragmentation.

Vertical fragmentation is among the most common challenges. In many African countries, national Governments design the legal and policy frameworks, while local governments are responsible for implementation. This division often creates a mismatch between legislative authority and administrative responsibility. Local governments are expected to apply instruments they neither designed nor fully control, while

national ministries retain authority over key approvals, fiscal rules, or land administration systems. In the absence of formal coordination mechanisms, this arrangement weakens accountability and constrains local discretion, limiting the ability of cities to respond to market conditions or infrastructure needs in real time. This is frequently compounded by uncertainty over revenue assignment. Even where local governments collect land-based revenues, national rules may restrict their retention or earmarking, undermining the incentive to implement LBF mechanisms robustly. Without clarity on who benefits from value capture, political support at the local level remains fragile.

Spatial fragmentation has accelerated with rapid urban expansion and has produced metropolitan regions that extend well beyond formal administrative boundaries of city administrations (Slack 2018).

Housing and labour markets and infrastructure systems increasingly operate at the city-region scale, while governance structures remain fragmented across municipalities. In the absence of metropolitan coordination, jurisdictions often compete rather than collaborate, resulting in duplicated infrastructure, uneven service provision, and limited capacity to implement LVC at scale. For property taxation and related instruments, spatial fragmentation has particularly acute consequences. Residents may live in one jurisdiction and work in another, while infrastructure costs and benefits are unevenly distributed. Where tax bases and service responsibilities are misaligned, incentives to invest and capture value weaken.

Functional fragmentation further constrains implementation. Responsibilities for land-use planning, valuation, infrastructure investment, and revenue collection are often dispersed across multiple ministries, parastatals, or departments that operate with limited coordination. For example, Cairo has about 18 separate government entities and four parastatal organizations each with a substantial role in Greater Cairo's transport and land-use planning (Gómez-Álvarez et al., 2017). Zoning decisions may be taken without reference to infrastructure budgets, valuation rolls may lag behind development rights, and fiscal instruments may fail to reflect changes in land

use or density. As a result, plans are frequently produced but not implemented, and value created by public action goes unrecorded or uncaptured. Cities are unable to link development approvals to fiscal returns systematically, constraining their ability to reinvest land value gains into housing and infrastructure. Functional coordination challenges are not limited to relations between levels of government agencies. Within local governments themselves, planning, valuation, and finance departments often operate in silos, relying on unlinked data systems and separate approval processes (Andema & Haas, 2017). This internal fragmentation reduces efficiency and accountability, as fiscal tools fail to reinforce planning objectives and planning decisions fail to generate predictable revenues.

Temporal fragmentation through frequent political turnover and changes in leadership in the context of institutional fragility interrupts ongoing reforms. Few cities have institutional mechanisms to protect multi-year plans or long-term investment commitments. LVC instruments linked to infrastructure investment, such as betterment levies or long-term development charges, require continuity to function. Credibility erodes and implementation stalls when policies are reversed or suspended with each electoral cycle.

3.3.2. Building coordination mechanisms across scales

While no single reform can resolve all governance challenges, targeted coordination mechanisms can have immediate and measurable impacts on the implementation of LBF and LVC. These mechanisms focus on improving collaboration across levels of government, jurisdictions, sectors, and time horizons, enabling legal frameworks to translate into enforceable practice.

In particular, strengthening vertical coordination is a foundational step. Formal platforms that link ministries of finance, land, urban development, and local government with municipal authorities can help bridge the gap between national policy design and local implementation. Such platforms clarify roles, align expectations and resolve disputes over authority or revenue sharing.

Where national governments retain control over key levers, coordinated arrangements can ensure that local authorities receive the mandate and support required to implement value capture instruments effectively.

Interjurisdictional governance is equally important in rapidly expanding urban regions. Metropolitan entities or city-region authorities can jointly provide a framework for coordinating land-use planning, infrastructure investment, and land-based finance across municipal boundaries (Slack, 2018). These arrangements can enhance scale, reduce duplication, and enable greater equitable sharing of infrastructure costs and benefits. Cape Town's metropolitan region provides one example (see Box 9).

Coordination is also required between public institutions and the communities affected by LBF reforms. Public participation and transparency also play an important role in strengthening coordination and building trust in land-based finance reforms. Given that instruments such as property taxation, development charges, and value capture mechanisms directly affect landowners and residents, public buy-in is essential for their legitimacy and long-term sustainability. Institutional structures can therefore incorporate participatory mechanisms at key stages of the policy cycle, including consultations during planning revisions, valuation updates, and the introduction of new land-based finance instruments.

Multi-stakeholder committees that include representatives from communities, professional associations, civil society organizations, and

the private sector can help mediate competing interests and provide oversight of implementation. Transparency in valuation methods, public disclosure of land and property information, and accessible grievance mechanisms for resolving disputes further strengthen trust in administrative processes.

Furthermore, public engagement can improve the accuracy of land records, strengthen institutional legitimacy, and increase willingness to comply with property taxation and related land-based charges.

Functional coordination across sectors is equally important. Aligning land-use plans with fiscal instruments (such as property taxation, developer obligations, and betterment levies) ensures that zoning changes translate directly into revenue potential. When valuation systems are updated in line with development rights and infrastructure investments, cities can capture value systematically rather than retroactively. Integrated systems also enable infrastructure planning to be fiscally grounded, improving predictability and transparency. Transit-orientated development is an example of integrated land use, transport, and fiscal planning.

Finally, tackling temporal fragmentation requires institutional mechanisms that protect long-term commitments. Multi-year investment frameworks, statutory earmarking of revenues, and professionalized local administrations can help insulate LVC reforms from political volatility. Where reforms are embedded institutionally rather than tied to individual leaders, continuity improves and confidence among private actors increases.

3.4. PROPERTY REGISTRIES AND VALUATION AS BACKBONE OF LVC

Effective LVC requires cities to identify, record, and value land and property accurately. Transparent,

regularly updated information on ownership, use, and value is not a technical add-on but a

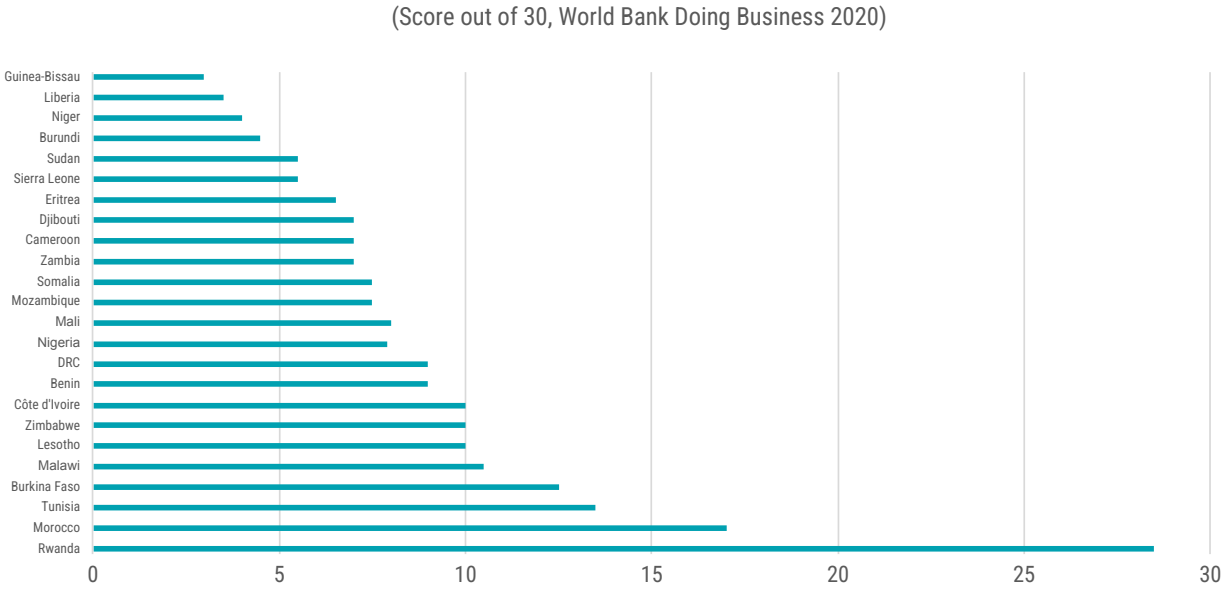
foundational requirement for any system that seeks to capture and redistribute land value for public purposes.

Across much of Africa, weaknesses in cadastral coverage and valuation systems remain among the most binding constraints on LVC implementation. The World Bank’s Quality of Land Administration Index measures five dimensions of land administration performance, namely reliability of infrastructure, transparency of information, geographic coverage, land dispute resolution, and equal access to property rights, on a scale of 0 to 30.

The 2020 data for Africa reveals a stark picture (see Figure 16): of 47 African countries assessed, only Rwanda scores above 20, at 28.5, reflecting its investment in a fully digital national land registry.

Just five countries score above 15, while the majority score below 10, with the lowest scores concentrated in Central and West Africa. Weak land administration is not a peripheral concern for land value capture but a fundamental constraint on its feasibility across most of the continent.

Figure 16. Quality of Land Administration Index



Source: World Bank 2020_a.

Box 10. Cape Town Unicity

Cape Town is an example of how metropolitan-scale governance and planning can be used to address deep spatial fragmentation. The city’s post-apartheid transition replaced a racially fragmented patchwork of municipalities with a single, unified metropolitan authority (the Unicity), explicitly designed to redistribute resources, integrate land-use planning, and coordinate infrastructure investment across the entire urban region. Under apartheid, wealthier central areas controlled the tax base, while peripheral townships lacked services and planning capacity. Metropolitan consolidation enabled Cape Town to pool fiscal resources, apply citywide planning frameworks, and align strategic land-use decisions with bulk infrastructure provision, public transport, and service delivery at scale. These changes were embedded within institutional reforms that clarified authority over planning,

infrastructure, and budgeting at the metropolitan level to reduce inter-jurisdictional competition, strengthen vertical coordination, and enabled redistribution from well-serviced areas to historically marginalized neighbourhoods.

Source: Steytler (2004).

Yet even where land administration systems are strengthened, a deeper challenge remains. The quality of any LVC instrument depends ultimately on the ability to value land accurately, and this is technically and institutionally more demanding than it may first appear. As highlighted, land value is shaped by location, permitted use, infrastructure access, environmental risk, tenure security, and expectations about future regulatory change, many of which are not directly observable or easily isolated. In contrast to buildings, land cannot be reproduced, depreciated, or replaced, and its value is often revealed only through market transactions that are themselves shaped by legal certainty and planning decisions. In contexts where land markets are thin, informal, or politically mediated, observed prices may reflect risk premiums, negotiated access, or speculative expectations rather than underlying economic value. These characteristics make the direct valuation of land particularly challenging in settings with incomplete data, contested tenure, and uneven enforcement.

Secure tenure plays a central role in meeting this challenge. Where rights to use, transfer, and develop land are clearly defined and enforceable, land transactions become more frequent, transparent, and comparable, allowing market values to emerge over time.

3.4.1. Building a fiscal registry

Property tax administration offers a pragmatic entry point for strengthening land-based finance systems (Franszen & McCluskey 2017; Prichard et al., 2025). Although often treated primarily as a revenue instrument, property taxation

Secure tenure also reduces uncertainty, lowers transaction costs, and enables land to be used as collateral, all of which contribute to more reliable price signals. Conversely, where tenure is informal, overlapping, or subject to discretionary allocation, transactions tend to be under-reported, prices opaque, and values difficult to verify. In such environments, land value remains largely latent, limiting the feasibility of valuation-based instruments and weakening the evidentiary basis for value capture (Deininger 2015; Collier et al., 2020b).

Integrating customary and informal land rights into cadastral systems suitable for land-based finance presents additional technical and institutional challenges. Plural tenure systems often involve collective or layered rights, flexible boundaries, and socially embedded claims that do not align neatly with parcel-based registration models. Formalizing these rights for fiscal purposes requires careful decisions about recognition, representation, and attribution of liability, as well as safeguards to avoid exclusion or dispossession (see chapter 2). Attempting to resolve these complexities comprehensively before activating fiscal instruments has, in many contexts, resulted in slow, costly, and politically contentious reforms that delay revenue mobilization and weaken administrative momentum.

performs a broader institutional role. By valuing observable, immovable assets, it can generate usable baseline data even where land tenure is imperfect, while its administrative structures, covering property identification, valuation cycles,

billing, enforcement, and appeals provide the operational infrastructure on which more targeted LVC instruments can be built. Valuation also provides a practical basis for identifying value increments attributable to public action, such as zoning changes and infrastructure investments, as expanded development rights are often reflected first and most visibly in property values.

A long-standing debate in land administration reform concerns sequencing: whether to prioritize legal titling and formal land registration before taxation, or to build fiscal systems first and expand legal registration in parallel. The traditional land registry-first approach has often proven slow, costly, and politically complex, particularly where customary tenure, overlapping claims, and limited administrative capacity prevail. Many countries have consequently accumulated partial or outdated registries that are poorly suited to supporting fiscal instruments, reflected in the outcomes measured by the Quality of Land Administration Index (see Figure 16).

An alternative approach, increasingly adopted across African cities, places property taxation at the centre of cadastral development. Under this model, fiscal registers are built incrementally through systematic property identification, mapping, and verification, regardless of formal title status, recording properties based on physical existence and use instead of complete legal documentation. Evidence from multiple contexts,

including Freetown’s property tax reform, suggests this approach can be faster, more scalable, and more sustainable in low-capacity environments (Prichard et al., 2025).

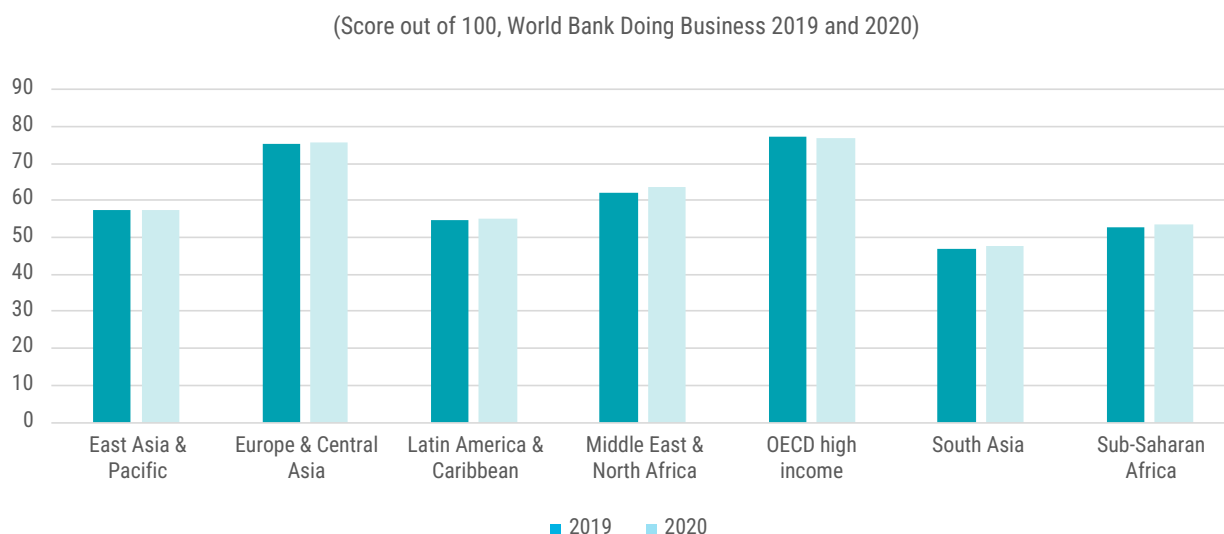
Yet even fiscal registers remain incomplete across much of the continent. A fiscal registry, designed primarily for taxation rather than full legal titling, may not initially include complete ownership records (Farvacque-Vitkovic & Kopanyi 2014; Collier et al., 2017), but in many African cities even this more modest foundation is absent. The World Bank’s Doing Business data illustrates the scale of the challenge: Africa south of the Sahara records an average registering property score of just 53.6 out of 100 in 2020, the second weakest regional performance globally, ahead only of South Asia at 47.6, and well below the OECD high income average of 77 (see Figure 17).

These findings are consistent with the Quality of Land Administration Index data discussed above, which shows the majority of African countries scoring below 10 out of 30. In many cities, fewer than half of properties are formally recorded or valued, and coverage can be substantially lower (Freire & Kopanyi, 2018). Informal subdivisions, unregistered construction, and rapid peripheral expansion frequently outpace administrative systems, making it difficult to identify who benefits from public investment or to measure the scale of value uplift generated by planning decisions and infrastructure.



Kilamba residential area in Luanda, Angola © Heibby Cris Marvel/Pexels

Figure 17. Ease of registering property



Advancing fiscal registers should not, however, come at the expense of broader land registration, which plays critical roles beyond taxation, including securing land rights, reducing tenure disputes, and protecting households from eviction. The two tracks can and should advance in parallel, provided they are designed to be inter-operable from the outset, so that incremental investments

in one reinforce rather than duplicate the other. Togo’s experience illustrates how incremental fiscal mapping combined with targeted legal reforms can expand property coverage, improve valuation accuracy, and gradually strengthen the administrative foundations for both property and land registries, as discussed in Box 10.

Box 11. The land administration domain model (ISO 19152)

The Land Administration Domain Model is an international standard (ISO 19152) that provides a common framework for organizing land administration information. Rather than prescribing specific software, it defines how data about land, people and rights should be structured so that different systems can exchange and use information consistently.

The model links three core elements: parties, meaning people or organizations holding land interests; rights, restrictions, and responsibilities governing land use and ownership; and spatial units such as parcels or buildings. By structuring these relationships, the model can accommodate multiple tenure types, including formal, customary, and informal arrangements, making it well suited to the plural tenure environments characteristic of African cities.

Critically for land-based finance, the model supports interoperability between planning, cadastral, and fiscal systems, enabling Governments to connect spatial planning decisions with property records and valuation data. This integration allows land rights, parcels, and fiscal obligations to be linked in a transparent and consistent manner, strengthening the administrative foundations for land value capture and fit-for-purpose land administration more broadly.

Source: ISO 2012, revised 2024–2025

3.4.2. Simplifying valuation systems

Valuation lies at the heart of land value capture. Measuring value uplift, setting development charges, and justifying inclusionary requirements all depend on the ability to estimate land and property values in a manner that is credible, transparent, and administratively feasible.

A major limitation of conventional valuation systems is that they typically apply only to formally registered land and properties. In many African cities, however, a large share of urban land remains unregistered or held under customary, informal, or hybrid tenure arrangements (see chapter 2). As a result, significant portions of the urban land market remain outside formal valuation systems, limiting both the coverage and equity of property taxation and land-based finance instruments. This gap can weaken the effectiveness of LVC by allowing value gains associated with public investment or regulatory change to accrue in areas that are not captured by formal valuation frameworks.

Guidance from UN-Habitat highlights that this challenge can be tackled through pragmatic approaches to valuing unregistered land (Enemark et al., 2016). Rather than requiring full legal registration as a prerequisite, valuation systems can rely on observable characteristics such as land use, plot size, building type, and location to estimate value. Area-based or typology-based valuation methods, combined with systematic field enumeration and geospatial mapping, allow Governments to extend valuation coverage to informal or customary areas while cadastral and registration systems continue to evolve. By progressively incorporating unregistered land into simplified valuation frameworks, cities can expand the fiscal base, improve equity across neighbourhoods, and ensure that value gains associated with urban development are more broadly captured and reinvested in infrastructure and services.

These pragmatic approaches also respond to a broader constraint facing valuation systems in many African cities: the limited availability of reliable market data. Formal property markets may be thin, transactions opaque, and valuation records incomplete. Attempting to apply technically sophisticated, market-based valuation models in such contexts often leads to administrative paralysis rather than precision. As a result, many cities have turned to simplified valuation approaches that prioritize administrative feasibility over theoretical precision.

The objective is not to estimate market value perfectly but to establish systems that are consistent, transparent, and defensible under low-capacity conditions. In such contexts, “good enough” valuation often outperforms complex models that cannot be implemented or maintained at scale. Points-based valuation systems exemplify this approach. Rather than relying on transaction data, properties are assessed using observable characteristics, such as plot size, building materials, number of floors, access to services, and location. These attributes are weighted to produce composite value estimates that can be applied uniformly across the tax base, making the system easier to administer and more robust in informal or data-poor environments (Orgeira et al., 2024).

Valuation banding offers a further simplified alternative. Properties are grouped into value bands based on location and basic characteristics, with standardized tax liabilities applied within each band. While this approach reduces administrative complexity and maintains a degree of progressivity, it requires periodic updating to avoid regressivity as urban development patterns evolve. Without periodic rebanding, rapidly appreciating areas may remain undertaxed, undermining both revenue performance and equity.

For these simplified valuation systems to function effectively, however, they must be supported by integrated land information systems. In many cities, cadastral, valuation, billing, and planning functions operate in institutional silos, often managed by different departments using incompatible data systems.

This fragmentation undermines accuracy and accountability and limits the effectiveness of land-based finance instruments. Successful approaches therefore prioritize interoperability rather than full centralization, linking planning databases, land registries, and tax systems through shared identifiers while respecting institutional boundaries. International standards such as the *Land Administration Domain Model* (ISO 2012, revised 2024–2025) provide

a conceptual framework for structuring land administration data, linking spatial units, parties, and rights or responsibilities in ways that facilitate interoperability between cadastral, planning, and fiscal systems (see Box 11).

Beyond technical capacity, property taxation also contributes to building a social contract around local revenue use. When taxpayers see a clear link between what they pay and the services they receive, resistance to additional land-based charges diminishes. This legitimacy is particularly important for LVC instruments, which often involve capturing windfall gains associated with public action. Regular revaluation and transparent data sharing strengthen the justification for development charges and betterment levies by making value creation visible and traceable.

Box 12. Lagos land use charge as a proxy valuation approach

The Land Use Charge (LUC) in Lagos, Nigeria, illustrates how proxy-based valuation methods can mobilize land-related revenue at scale where formal cadastral and valuation systems remain incomplete. Introduced in 2001 and significantly revised in 2018 and 2020, LUC consolidated multiple local charges into a single annual levy assessed using formula-based estimates of property value, rather than parcel-level market valuations. Values are derived using standardized assumptions about location, land use, and building typology, reflecting relative differences in accessibility, infrastructure provision, and development intensity rather than observed transaction prices.

While the levy does not isolate land value uplift from improvements or zoning changes, it has played a critical role in establishing billing systems, taxpayer registers, enforcement mechanisms, and appeals processes. These administrative foundations have enabled Lagos to expand own-source revenue substantially over time. By 2024, the State's internally generated revenue had reached approximately N1.3 trillion (USD -----), a 45 per cent increase on the previous year, with the LUC alone generating over N14 billion (USD -----), representing a 37 per cent year-on-year increase in property tax revenue. A comprehensive property enumeration campaign has now captured over 800,000 properties in the State's tax database. The Lagos case demonstrates how proxy valuation can support a positive feedback loop between public investment, rising property values, and municipal revenues, even in the absence of precise land valuation.

Source: Goodfellow and Owen (2018) and Oluyomi (2025).

3.4.3. Interim and proxy approaches

Nevertheless, governments may wish to pursue a more direct approach to land valuation because it is required by law, or in cases where property valuation remains incomplete, interim and proxy approaches to land can enable value capture to proceed while administrative systems evolve. In this case, it is also important to pursue methods that prioritize feasibility, consistency and transparency over precision. Common workarounds include location-based proxies, where land value is inferred from accessibility to infrastructure, transport corridors, or designated development zones rather than transaction prices.

Flat or banded development charges linked to zoning changes, permitted floor-area ratios, or proximity to transit stations, for example, allow cities to approximate value increase generated by planning decisions without relying on parcel-level valuation. Infrastructure-cost proxies apply a similar logic, using the cost of publicly funded investments, such as road upgrades or bulk services, as benchmarks for developer contributions or betterment charges. Cities may also use area- or typology-based rates, applying standard charges by neighbourhood, land-use category, or building type, particularly

in informal or fast-growing areas where parcel data are incomplete. While these approaches sacrifice granularity, they provide a defensible and administratively manageable basis for applying charges at scale and can be progressively refined as data quality and institutional capacity improve, as the example from Lagos demonstrates (see Box 11).

At the city level, indicative land value maps and simplified mass appraisal models are increasingly used to identify broad patterns of value and prioritize areas for intervention. Even if they are unsuitable for taxation, such tools support strategic decision-making by highlighting where public action is likely to yield the maximum value gains and where capture efforts may be most effective. These interim methods reduce reliance on discretionary negotiation, helping to shift LVC from ad hoc practice to rule-based implementation. All these workarounds underscore a broader principle: administrative credibility matters more than technical perfection. Over time, these interim approaches can be progressively replaced or complemented by more precise valuation as registries, markets, and administrative capacity strengthen.

3.4.4. Integrating IT and administrative systems

Technological advances have significantly accelerated registry development, with digital mapping tools, high-resolution satellite imagery, drones, mobile data collection, and street-address programmes enabling cities to identify properties rapidly and close coverage gaps at relatively low cost (Schenker et al., 2024; Schenker 2024). These technologies align closely with the principles of fit-for-purpose land administration, which emphasize building land information systems that are affordable, flexible, and capable of achieving rapid coverage, rather than pursuing technically

perfect but slow and expensive registries (UN-Habitat 2016). In practice, this often means relying initially on general boundaries derived from satellite imagery and community mapping rather than precise surveying, allowing Governments to establish basic property identification and tenure records quickly. When combined with field verification and community engagement, these tools can substantially improve completeness and transparency, as illustrated by Rwanda's Land Tenure Regularization Programme (see chapter 2).

However, technology alone does not resolve underlying governance challenges. Any registry must be embedded within clear institutional mandates, sustained funding arrangements, and routine administrative processes. Without regular updating, enforcement, and integration into decision-making, even the most sophisticated digital registry quickly becomes obsolete in fast-changing urban contexts. Equally critical is administrative integration. In many cities, cadastral, valuation, billing, and enforcement functions operate in silos, often managed by different departments using incompatible data systems. This fragmentation undermines accuracy and accountability, limiting the effectiveness of LBF and LVC. Integrating fiscal and spatial data systems allows land-use plans, property registers, valuation rolls, and billing records to reinforce one another. When zoning changes, infrastructure investments, or development approvals are systematically reflected in valuation and taxation systems, cities are better positioned to capture value prospectively rather than retrospectively.

Digital platforms can enable this integration, but only when accompanied by reforms to underlying business processes, staff roles, and interdepartmental coordination. Experience suggests that successful approaches prioritize interoperability rather than full centralization, linking planning databases, land registries, and tax systems through shared identifiers while respecting institutional boundaries. Such integration improves administrative efficiency and strengthens transparency by making visible how public decisions translate into land value changes and fiscal outcomes.

A credible, simplified and integrated property tax system can form the administrative backbone of LVC. Prioritizing fiscal cadastral development, adopting practical valuation methods, and ensuring interoperability between administrative systems enables cities to move from ad hoc value capture toward systematic, transparent, and enforceable LBF.

3.5. BUILDING THE SKILLS TO DELIVER

Laws, plans and administrative systems only translate into tangible outcomes when they are designed, implemented, and enforced by professionals with the appropriate technical, fiscal and governance skills. Across much of Africa, a profound mismatch exists between the speed and scale of urbanization and the capacity of the built-environment professions responsible for managing land, infrastructure, and urban development. This capacity gap has emerged as one of the most persistent and under-recognized constraints on the effective implementation of LVC and broader LBF instruments.

Two closely intertwined challenges define this gap. The first is a severe shortage of trained professionals in planning, valuation, surveying, engineering and municipal finance. The second is the misalignment between how these professionals are educated and the realities they face in practice. Even where graduates exist, many enter the workforce without the skills required to navigate the institutional complexity, fiscal constraints, and informality that characterize African urban systems. Together, these challenges limit governments' ability to operationalize land value capture in a consistent, transparent and scalable manner.

3.5.1. The professional capacity gap

African cities face an acute shortage of built-environment professionals capable of preparing zoning schemes, updating valuation rolls, managing cadastral systems, or negotiating developer obligations. This shortage is particularly pronounced in intermediary cities, which are often experiencing the fastest rates of population growth while operating with the weakest institutional capacity. Africa is the world's fastest urbanizing region, with cities growing at an average rate of 3.5 per cent per year.

The challenge of this movement is concentrated increasingly outside the major metropolises: of the 427 cities globally that grew faster than 4 per cent per year in the last decade, one third were in Africa South of the Sahara, and most were small and medium-sized cities rather than megacities (United Nations World Urbanization Prospects 2025).

More people in Africa today live in small and medium-sized cities than in large urban agglomerations, yet it is precisely these settlements that are most likely to lack qualified planners, valuers, and cadastral officers.

The stakes of this capacity gap are substantial. According to UNDESA projections, the African region is expected to add 300,000 square kilometres of built urban land by 2050, and according to OECD et al. (2025) half of Africa's urban land is yet to be developed. Unlike large metropolitan areas, intermediary cities typically have smaller municipal administrations, lower fiscal resources, and fewer established planning and land administration institutions.

They also struggle to attract and retain qualified professionals, who are often drawn to national capitals or private-sector opportunities where salaries and career prospects are stronger. As a result, technical functions such as planning, valuation, and cadastral management are frequently understaffed or absent altogether. Addressing capacity gaps in these cities may therefore require different approaches, including shared technical services across municipalities, regional support structures, simplified instruments, and greater use of digital tools that reduce administrative burdens. Comparative data generated by the Commonwealth illustrates the scale of the imbalance (see Figure 18)

Box 13. Updating urban planning education in East Africa

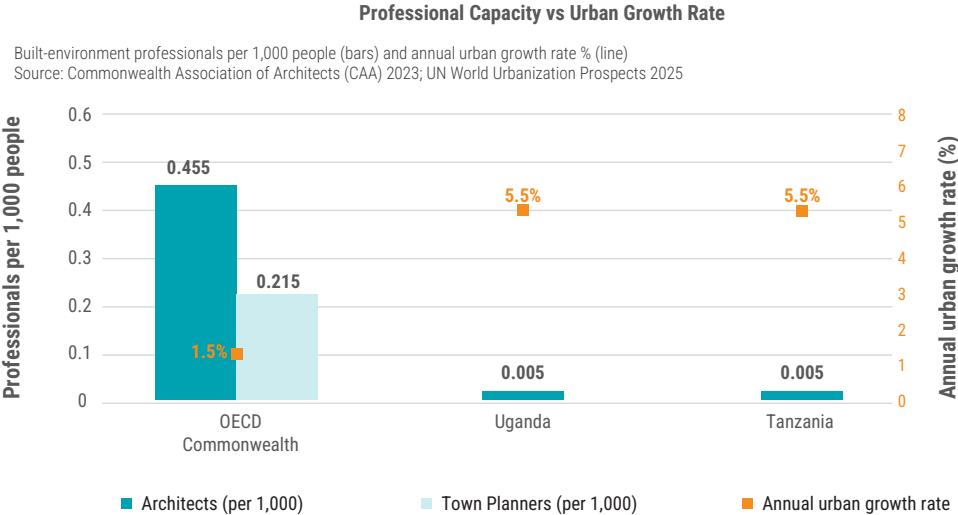
A coalition of East African universities is launching a new initiative to modernize urban planning education and strengthen the skills base of future urban leaders. Co-convened by Africa Urban Lab (Zanzibar) and the University Coalition on Curricula for Cities (UCCC), the initiative brings together Ardhi University (Dar es Salaam), the Urban Action Lab at Makerere University (Kampala), and Kenyatta University (Nairobi), which is to co-create a cutting-edge, Africa-focused urban planning curriculum for the 21st century.

The initiative responds to the reality that, despite African cities growing at an average rate of 3.5 per cent per year, many planning programmes remain shaped by mid-20th-century Eurocentric models that do not reflect contemporary urban conditions. These gaps are particularly evident in relation to informality, rapid spatial change, fiscal constraints, and the increasing role of digital and data-driven tools in urban management. To deal with these challenges, the coalition will, over 18 months, audit existing curricula across East Africa, identify priority content and skills gaps, co-design a modular

African Urban Planning Curriculum Framework, pilot new approaches at partner universities, and train faculty through regional knowledge-sharing workshops. Overall, this initiative aims to reach over 2,000 students, train 60 faculty members, and support adoption of the framework by at least 10 additional African universities within three years.

Source: Africa Urban Lab (2025).

Figure 18. Professional capacity gap in built environment professionals



Note: OECD figures represent averages for Australia, Canada, New Zealand, and United Kingdom. Architect data shown for Uganda; town planner data shown for Tanzania. Growth rates are approximate mid-range estimates of 5-6% per annum

Weak staffing within public planning, land administration, and finance departments directly constrains the implementation of LVC. Governments are unable to maintain accurate registries, conduct regular property revaluations, analyse land-value uplift, and design robust development contribution frameworks due to limited capacity. In practice, this often leads to highly discretionary decision-making, reliance

on external (often foreign) consultants, or the abandonment of LVC instruments altogether. Where capacity is limited, governments may avoid applying value capture tools for fear of legal challenge, implementation failures, or political backlash. This situation reinforces a cycle in which rising land values accrue privately while public infrastructure deficits persist.

3.5.2. Outdated curricula and institutions

Many African universities continue to teach planning, architecture, and surveying curricula rooted in mid-twentieth century colonial traditions. These programmes were originally designed for situations characterized by strong central bureaucracies, formal land markets, and regulatory control, which differ markedly from African cities today.

As a result, graduates often emerge with limited understanding of planning as a regulatory function rather than as an integrated practice that links land use, infrastructure finance, governance and social outcomes. Core elements of LBF, including land valuation, municipal fiscal systems, and the economics of land markets, are frequently marginal or absent from curricula.

Climate risk, informality, and incremental development, now central to urban management, are often treated as peripheral topics rather than as defining features of practice.

Institutional constraints within higher education systems reinforce these curricular gaps. Many universities face shortages of qualified teaching staff, limited access to GIS laboratories, digital mapping tools, and policy simulation platforms, and weak connections with municipal practice. Collaboration between universities, professional councils, and city administrations remains fragmented, resulting in graduates who are disconnected from the operational realities of

local government. Even though graduates are technically competent, they may lack exposure to the institutional and political dimensions of implementing LVC, such as stakeholder negotiation, intergovernmental coordination, and public communication. The result is a persistent disconnect between policy ambition and implementation capacity (CAA, 2023). Governments may adopt sophisticated legal frameworks for LBF, but they may lack the professionals to translate those frameworks into operational systems. Over time, this gap erodes institutional confidence and reinforces scepticism about the feasibility of LVC in African contexts.

3.5.3. Building pathways from policy to practice

Bridging the capacity gap, therefore, requires more than increasing the number of trained professionals. The measure calls for closer alignment between education, professional practice, and institutional reform around the practical demands of implementing LBF. The central challenge is to build a continuous skills pipeline that equips practitioners to work across planning, valuation, and fiscal management. Strengthening mid-career training and certification is therefore critical. This is particularly true for policymakers and technical staff already in government and are responsible for land administration and urban finance but lack formal training in LVC-related tools. Targeted professional development for planners, surveyors, and municipal finance officers can expand capacity quickly by building on existing institutional knowledge. This measure is often more effective than relying solely on new graduates, especially in contexts of high staff turnover.

At the same time, capacity-building efforts should recognize the gender and social equity dimensions of professional development. Women and other underrepresented groups often face structural barriers to entering and advancing

within technical professions such as planning, surveying, engineering, and municipal finance. Closing these gaps through inclusive recruitment, mentorship, and targeted training programmes can help ensure that the institutions responsible for implementing land-based finance reflect the diversity of the communities they serve and are better equipped to design and apply LVC instruments in socially inclusive ways.

At the university level, built-environment curricula require systematic updating to reflect contemporary African urbanization. Integrating urban data analytics, geospatial tools, property valuation, and fiscal planning is essential to prepare graduates for land-based finance in practice, alongside exposure to governance and political economy issues such as stakeholder engagement, intergovernmental coordination, and public accountability. Bridging theory and practice depends on collaboration between universities and city administrations, through joint modules, applied studios, and practitioner-led teaching anchored in real policy challenges. Initiatives such as the University–City Collaboration Consortium, which is one of the first of its kind, illustrate how partnerships between African universities and

municipalities are updating planning curricula to incorporate land-based finance and data-driven urban management (see box 5). Professional councils and accreditation bodies can reinforce these shifts by updating competency require-

ments and continuing professional development standards, thereby helping to embed LVC within mainstream urban management rather than treating it as a specialized or experimental tool.



Case 4. Land readjustment in Rwanda: From legal framework to implementation

Rwanda offers one of the most instructive examples in Africa of how land readjustment can evolve from a pilot intervention into a codified, legally grounded instrument, and of why the distance between enabling legislation and operational practice remains the critical challenge for land value capture. Over the past two decades, the country has pursued an ambitious, State-led development agenda in which urbanization is positioned as a central driver of economic transformation. Rwanda's urban population increased from just 9 per cent in 2002 to 27.9 per cent in 2022 and is projected to reach approximately 70 per cent by 2050. This rapid transition is explicitly anchored in Vision 2050 and successive National Strategies for Transformation (NST1 and NST2), which frame cities as engines of productivity, job creation and inclusive growth.

Recognizing that secure land tenure and transparent land administration are foundational to this agenda, the Government of Rwanda has invested heavily in building one of the most comprehensive land management systems on the continent. The Land Tenure Regularization Programme, completed in 2013, registered nearly all land parcels nationwide and issued long-term leasehold titles, significantly reducing tenure insecurity and legal ambiguity (see chapter 2). This was complemented by the establishment of the Land Administration Information System, a fully digital platform recording landownership, transactions, and leases. Together, these reforms substantially improved transparency, reduced transaction costs, and strengthened investor confidence.

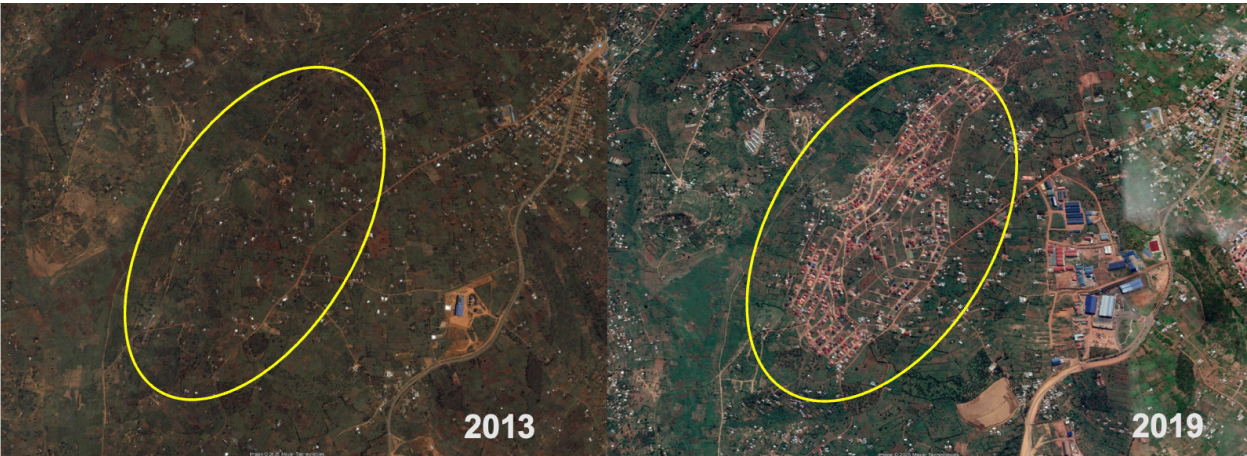
Beyond tenure security, Rwanda's legal framework embeds a range of LBF and LVC instruments, including land lease fees, development contributions linked to infrastructure provision, and zoning-based incentives that allow additional development rights under defined conditions.

In principle, this provides a robust legal basis for capturing part of the land value generated through planning decisions, public investment, and urban growth. Compared to many African countries, Rwanda is therefore well advanced in terms of legal coherence, data availability and institutional clarity.

Yet the operationalization of LBF and LVC, beyond property taxation, has remained uneven. Rapid urbanization continues to place pressure on land management systems, infrastructure provision, and service delivery, particularly in Kigali and emerging secondary cities. Urban expansion has often taken the form of low-density development, increasing per-capita infrastructure costs and weakening the fiscal logic of value capture. At the same time, the Government's limited stock of public land constrains the use of direct land-based financing approaches, heightening the importance of capturing value from privately held land.

It is within this gap between legal provision and practical delivery that land readjustment has emerged as a critical testing ground, not least because communities themselves had already begun to employ it organically as a means of coordinating land contributions for road provision and plot regularization, creating a practitioner-led momentum that preceded and helped to shape the formal policy response. The experience of Nunga, one of Kigali's early land readjustment pilots, illustrates the promise and the limitations of applying LVC principles in practice. In Nunga, fragmented peri-urban land was reorganized through a participatory readjustment process that enabled the regularization of plots, road access, and the provision of basic infrastructure while allowing landowners to retain a stake in their land. The case demonstrated strong community mobilization and confirmed land readjustment's potential as an in situ upgrading tool capable of unlocking development on privately held land (see Figure 19 for satellite images of Nunga before and after the land readjustment process).

Figure 19. Nunga before and after land readjustment



Source: Google Earth Images.

At the same time, Nunga also revealed a series of structural and procedural gaps. Roles and responsibilities between landowners, districts, and city authorities were not clearly standardized,

leading to uncertainty around decision-making and cost-sharing. Financing arrangements focused primarily on recovering the costs of basic infrastructure, with limited mechanisms

to reinvest land value gains systematically into wider neighbourhood improvements or city-scale public goods. More broadly, while spatial reconfiguration was achieved, there was no clear framework to ensure that land value increases generated through readjustment were measured transparently, pooled, or reinvested over time.

These practical challenges directly guided the adoption of the *Land Readjustment Instructions in September 2025*, which mark a significant shift from enabling legislation toward implementation guidance. The Readjustment Instructions explicitly define land value capture as an approach that enables land readjustment project proprietors to recover and reinvest increases in land value to ensure project self-financing and implementation (Article 4). Importantly, they also respond to gaps observed in earlier pilots such as Nunga by clearly specifying consent thresholds, land contribution rules, procedural steps, and the respective roles of landowners, districts, and the City of Kigali. By doing so, they aim to reduce ambiguity, strengthen predictability, and create clearer institutional pathways for translating land value gains into infrastructure delivery.

These Readjustment Instructions did not emerge in abstraction, as they were grounded in an existing reality in which landowners had already

begun to self-organize informal or semi-formal readjustment efforts to regularize plots and secure construction permits. By codifying these practices, the Readjustment Instructions seek to channel local initiative into a transparent, legally supported process, while tackling the coordination, financing and accountability challenges exposed by earlier cases. Although implementation is still at an early stage, with district-level sensitization beginning in January 2026, the context-specific origins and participatory formulation of the Readjustment Instructions suggest a stronger likelihood of uptake than earlier, more generic legal provisions.

Rwanda’s experience demonstrates that coherent legal frameworks are necessary but not sufficient for effective land value capture. The Nunga case shows how land readjustment can work in practice, but also why implementation rules, financing mechanisms, and institutional clarity matter for scaling impact. The recent Land Readjustment Instructions represent an important attempt to close this gap by translating lessons from practice into operational guidance.

The next phase of Rwanda’s land-based finance reform will therefore hinge on testing, refining, and institutionalizing these implementation tools across diverse urban contexts, and not of additional legal innovation.





Case 5. Togo: From legal registry to fiscal registry: A pragmatic sequencing

Togo's experience with property tax reform illustrates the trade-offs involved in building the administrative foundations for land-based finance in low-capacity contexts. As in many West African countries, strengthening local revenue mobilization has become a policy priority, with property taxation identified as a key instrument for financing urban services and more sustainable land management. Central to this effort has been the development of a fiscal registry capable of identifying taxable properties, assigning values, and supporting transparent and predictable revenue collection.

A critical conceptual distinction runs through Togo's experience: the difference between the legal and fiscal registries. The **legal (land) registry** is the formal system of property registration managed by the *Direction du Cadastre, de la Conservation Foncière et de l'Enregistrement* (DCCFE) under the *Office Togolais des Recettes*. The registry records ownership title, transaction history, mortgages, and other real rights, and serves as the basis for legally verified land administration. Properties enter this system through formal title registration, in accordance with the Land Code (*Code Foncier et Domanial*, adopted 2018). Historically, the issuance of a title depended on the verification of spatial boundaries, ownership claims, and legal status. The **fiscal registry**, by contrast, is used for property taxation purposes; it identifies taxable properties, assigns reference values, and supports billing and collection. Administered by the same *Office Togolais des Recettes*, under the General Tax Code (*Code Général des Impôts*), it does not require formal legal registration as a precondition for a property to appear on the tax roll.

In practice, the two registries are not fully synchronized, and this is not merely an administrative gap but a deliberate design feature. Tax liability is attached to occupancy and physical presence rather than to legal title, which allows collection to proceed even where formal registration is incomplete, contested, or out of date. A property may appear in the fiscal register under the name of the person identified during enumeration as the apparent occupier or owner, without this constituting or confirming legal title.

Tax payment receipts carry some informal evidentiary weight and may support ownership claims in dispute resolution, but they do not substitute for formal title registration and do not automatically update the land registry.

From legal-registry-first to property-tax-first

Historically, Togo pursued a land-registry-first reform strategy, aiming to establish a complete and legally verified land register before activating local property taxation. In principle, this sequencing promised a robust foundation for land-based finance by ensuring that taxation would rest on legally defensible and technically precise data. In practice, it proved difficult to sustain. The cost and technical complexity of producing and maintaining a comprehensive land registry system, however, exceeded local administrative capacity. Updating ownership records, tracking informal transfers, and keeping spatial data current required skills, staffing, and institutional coordination that were unevenly distributed across Togo's municipalities. As a result, progress was slow and activation of the property tax system was repeatedly delayed. Property taxation continued to perform poorly, largely due to incomplete or absent property registries across much of the country.

Recognizing these constraints, Togo shifted toward a property-tax-first strategy, focusing on progressively building the fiscal registry while pursuing parallel improvements to the land registry. This shift rested on replacing traditional manual valuation methods, which required certified inspectors to assess individual properties on site. However, this involved particular difficulties: shortages of cadastral inspectors and GIS specialists, the lack of a reliable cadastral map for the interior of the country, and insufficient software and topographic equipment to support the valuation database.

Therefore, this was replaced with a streamlined field enumeration process adapted to local administrative capacity. Under the simplified approach, trained enumerators conduct field visits using mobile devices, collecting geolocated data on each property. Rather than attempting a full appraisal of market or rental value, the process records observable physical attributes, principally property type, construction materials, approximate floor area, and use. These characteristics serve as proxy indicators for a points-based valuation, which assigns a reference value by comparing properties against standardized reference premises established for different property types and locations, ensuring a degree of fairness and consistency while acknowledging the local nature of property tax. The process also incorporates local verification: community leaders and local officials are involved in identifying properties and confirming occupants, improving data accuracy and building the social legitimacy of the tax register.

This approach differs from full land registry surveying in several important respects. It does not require legal title verification before a property is registered for taxation. It accepts proxy estimates of value rather than individualized appraisals. And it relies on observable, external characteristics rather than interior inspection or market transaction data. The trade-off is explicit: some degree of valuation precision is sacrificed in exchange for faster and cheaper coverage of the taxable base, with the expectation that accuracy improves incrementally through the process of routine administration.

Digitization as the path toward interoperability

The property-tax-first shift was enabled by a broader programme of institutional modernization. The average time to complete a full property transfer fell from 283 days in 2016 to an average of nine to ten days by 2019, with transfer fees consolidated to a flat rate of 35,000 FCFA (\$-----). By end-2019, 99.35 per cent of all land titles issued in Lomé had been digitized, and by January 2020 all 2,568 cadastral plans for Greater Lomé had been digitized and loaded into a searchable database. Tablet-based data collection and geolocation mapping reduced the unit cost of property enumeration relative to manual methods. While these improvements to the land registry are analytically distinct from the fiscal enumeration reform, they reflect the same institutional trajectory and have made the property-tax-first approach more viable by improving the underlying data environment.

While the two registries are deliberately not synchronized in real time, they are not intended to remain permanently separate. The 2022 decree on electronic land books and registers set out a framework for progressive integration, introducing an automated system for managing land registration data and tracking transactions and real rights on immovable property, with the explicit goal of improving coordination between the fiscal and legal dimensions of land administration. As the fiscal enumeration process generates geolocated, attribute-rich property data, this information is designed to feed progressively into the land registry, supporting its update and extension over time. The key design principle is interoperability: the fiscal enumeration database is structured so that its outputs can be cross-referenced with and gradually absorbed into the land registry as verification capacity allows, rather than operating as a permanently parallel system. In this sense, the fiscal registry functions as an entry point and the land registry as the destination, with the gap between them expected to narrow as administrative capacity strengthens.

The broader lesson is that while accurate and comprehensive land information systems are essential, the pursuit of technical perfection can become a barrier to implementation when capacity is limited. By separating the question of fiscal coverage from the question of land title verification, Togo has been able to begin generating revenue and building administrative infrastructure simultaneously, using routine tax administration as a driver of incremental data improvement rather than treating a completed legal registry as a precondition for reform. Importantly, the two systems are not conceived as alternatives: the objective is to develop them alongside each other over time, with the fiscal registry serving as an entry point and the land registry as the destination, each reinforcing the other as capacity and resources allow.

Chapter 3 Conclusions and takeaways

A clear and context-appropriate legal framework is the foundation of credible and equitable land value capture. Laws that explicitly recognize society's right to share in publicly created land value gains shift value capture from a discretionary fiscal tool applied on a case-by-case basis to a predictable and development-oriented mechanism for inclusive urban finance. Legal frameworks should specify which level of government is empowered to act, which instruments are authorized, and which valuation methodologies are legally endorsed, including simplified or proxy-based approaches where full market valuation is not feasible.

However, strong legal and institutional foundations are necessary but not sufficient. As Rwanda's experience with land readjustment illustrates, even well-designed frameworks require coordinated implementation and local capacity to translate land value gains into public investment. The distance between enabling legislation and operational practice remains the critical challenge: procedural gaps, unclear roles, and weak local institutions can prevent well-crafted laws from delivering results on the ground. Sustained political commitment and iterative learning between national and local actors are therefore as important as the quality of the legal framework itself.

Effective land value capture and land-based finance depend on governance arrangements that bridge the gap between plans and practice. Implementation gaps widen when planning, valuation, and fiscal responsibilities are fragmented across institutions or levels of government. Therefore, an authorizing environment that strengthens vertical, spatial, functional, and temporal coordination, while embedding transparency, public participation, and institutional trust, is essential for consistent

and sustained implementation. Coordination is particularly important in contexts where infrastructure investment decisions, land-use planning, and revenue collection sit within different agencies or tiers of government, as misalignment between these functions allows land value gains to dissipate before they can be captured.

A functional property tax system underpins all other land-based finance instruments. It does so by establishing reliable data on ownership and value, embedding the administrative routines on which land value capture depends, and creating a virtuous cycle in which public investment raises land values and revenues, enabling further reinvestment over time. A well-functioning property tax system also builds the institutional trust and taxpayer compliance that more complex land value capture instruments require, making it a prerequisite rather than an alternative to broader land-based finance reform.

Incremental, use-driven approaches to building fiscal registries and valuation systems are more effective in low-capacity contexts than pursuing technical perfection upfront. Property-tax-first strategies, as demonstrated in Togo, can deliver early fiscal returns while progressively improving data quality, institutional learning, and local ownership of reform. Rather than treating a completed legal registry as a precondition for taxation, such approaches use routine tax administration as a driver of incremental data improvement, with the fiscal and legal registries designed to be interoperable from the outset and to converge over time. Low-capacity environments—starting with transparent, simplified proxies—often generate greater compliance, political acceptance, and institutional learning than attempting to implement complex valuation systems that cannot be sustained.

Africa's ability to implement land-based finance instruments depends on expanding professional capacity. Shortages of trained planners, valuers, and municipal finance professionals represent a binding constraint on reform. Modernizing education systems and investing in skills development are essential to translate legal and administrative reforms into operational reality.

This challenge is particularly acute in small and medium-sized cities, which are growing fastest but are least likely to have access to qualified professionals. Therefore, such cities may require dedicated approaches like shared technical services across municipalities, regional support structures, and greater use of digital tools to reduce administrative burdens.

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Chapter 4: How land value capture can foster inclusionary housing

This chapter examines how land value capture and broader land-based finance instruments can be used to advance adequate housing in African cities. It argues that housing inadequacy is a product of how land is governed, valued, and serviced over time, operating alongside wider structural forces. By situating housing adequacy within the dynamics of rapid urbanization, land scarcity, climate risk, and financialized land markets, the chapter shows how publicly created land value can be redirected to expand the supply of well-located, serviced housing, while also underscoring the distributional risks that arise when rising land values are left unmanaged. It emphasizes that land value capture and land-based finance are not, on their own, capable of generating housing supply at the scale the continent requires. Their real contribution lies in forming one component of a broader integrated housing strategy that combines land-based instruments with direct public investment, housing finance reform, infrastructure provision, and enabling regulatory frameworks.

KEY TAKEAWAYS

- Housing inadequacy in African cities reflects the intersection of land market failures, including fragmented tenure systems, speculative holding, and weak coordination between land use and infrastructure, with broader structural constraints: poverty, income inequality, informality, and labour markets that leave a large share of urban households without earnings sufficient to access formal housing.
- Instruments such as density bonuses paired with inclusionary zoning and land readjustment enable Governments to intervene at the point where land is converted into development rights, expanding housing supply and embedding adequate housing in high-opportunity locations. Their viability depends on active real estate markets, credible planning enforcement, and institutional capacity to assess value, negotiate with developers, and monitor compliance, conditions that do not yet exist across much of the continent.
- Developer obligations and property taxation anchor housing adequacy over time by linking development to infrastructure provision and service delivery, ensuring that housing remains liveable beyond initial construction. Their redistributive potential depends on whether revenues flow back into the city as a whole or remain confined to the developments that generate them.
- Experiences from Stellenbosch and Dar es Salaam demonstrate how land-based instruments can work in practice, while also revealing their limits: the Stellenbosch policy is still too early to evaluate definitively, and the Dar es Salaam case illustrates the cost of failing to capture value gains or target initial beneficiaries effectively.
- When well designed, locally calibrated, and embedded within broader housing strategies, land-based fiscal and regulatory tools can move cities beyond fragmented housing delivery toward integrated approaches that expand serviced land, support inclusion, and manage the distributional impacts of rising land values. Without complementary safeguards, including tenure protections, anti-displacement measures, and gender-responsive land rights, they risk accelerating the exclusions they are intended to address.

4.1. INTRODUCTION

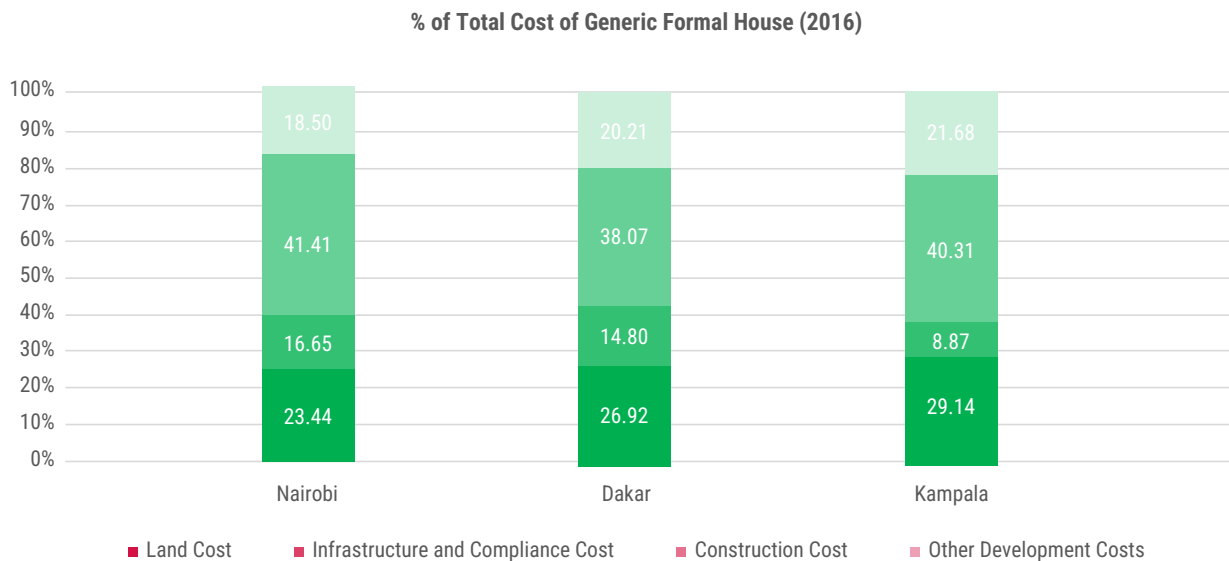
The scale of the global housing crisis is stark. By 2030, some 3 billion people, roughly 40 per cent of the world's population, will need access to adequate housing (UN-Habitat, 2024a). At the same time, about 300 million people worldwide are homeless, and more than 1 billion live in slums or substandard settlements (UN-Habitat, 2024b). Nowhere are these pressures more acute than in Africa South of the Sahara. Rapid urbanization, combined with limited public resources and weakly regulated land markets, has produced a pattern of urban growth in which formal housing provision lags far behind need. African cities absorb more than 40,000 new residents every day, and 90 per cent of future urban population growth globally is projected to take place in Asia and Africa South of the Sahara (UN-Habitat, 2024a). Informality, overcrowding, and inadequate access to services have come to dominate the landscapes of many African cities, with at least 51 million housing units needed to close the current supply gap (UN-Habitat, 2022a). Taken together, these trends point not only to a deficit in housing supply but to deeper structural failures in how cities plan, finance, and govern urban development.

At this scale and persistence, housing inadequacy cannot be treated as a technical or market failure alone but must be understood as a rights-based challenge, one that reflects not only failures of governance and policy design but also deep inequalities of income, wealth, and opportunity that constrain both households' ability to access adequate housing and governments' capacity to provide it.

(OHCHR, 2009). The right to adequate housing is firmly embedded in international human rights law. It is recognized in the interpretation of housing rights by the Office of the United Nations High Commissioner for Human Rights and enshrined in Article 25 of the Universal Declaration of Human Rights and Article 11 of the International Covenant on Economic, Social and Cultural Rights. Together, these instruments affirm that everyone is entitled to live somewhere in security, peace and dignity. Housing, in this sense, is a foundational condition for human development, well-being, and social inclusion (see Table 5 for the conditions of housing adequacy).

Seen through this lens, housing provision extends far beyond the delivery of physical shelter. Adequate housing encompasses a set of interrelated conditions that make housing liveable, secure, and socially meaningful. These conditions include affordability, habitability, sufficient living space, access to basic services, appropriate location, accessibility for different household needs, and security of tenure (UN-Habitat, 2023). Yet more than 54 per cent of the urban population in Africa South of the Sahara lives in conditions that fail to meet at least one criterion of adequate housing (Nature Cities, 2025; UN-Habitat, 2022b). While informality is often the most visible manifestation of this failure, inadequacy is not confined to informal settlements alone. Across many cities, even newly built, formally produced housing remains out of reach for the majority of urban households.

Figure 20. Percentage total cost of generic formal house (2016)

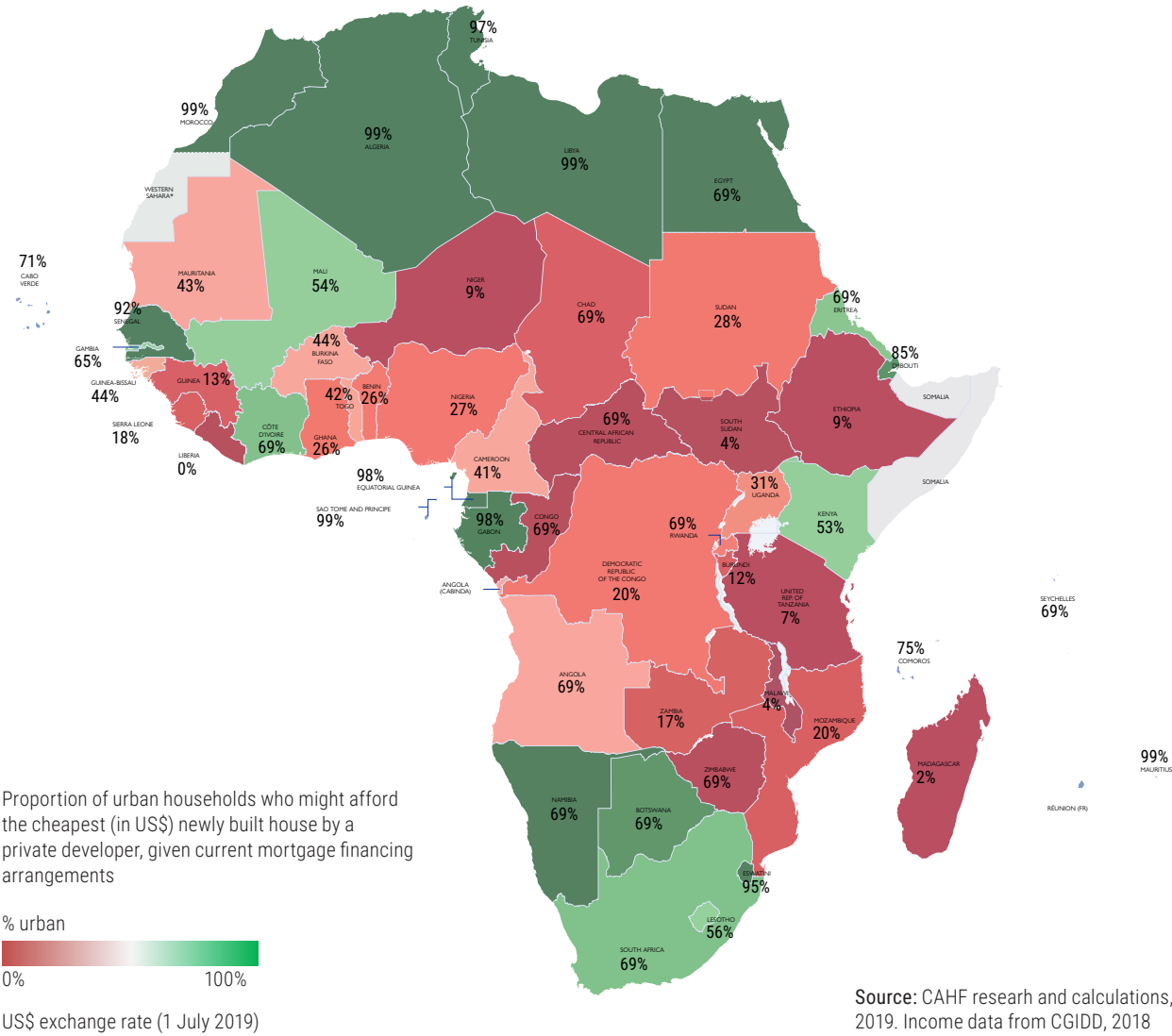


The affordability challenge, one of the elements of housing adequacy, is particularly acute: in Africa South of the Sahara, households spend an average of 43.5 per cent of their income on shelter, compared with a global average of 31 per cent (UN-Habitat, 2024b). Evidence from across the continent illustrates the scale of this mismatch. In many African cities, only a small share of urban households can meet the cost of the cheapest newly built formal housing unit (see Figure 20). This affordability gap reflects low and volatile incomes as well as the underlying cost structure of housing delivery. One of the most significant drivers of housing costs across African cities is land.

Comparative benchmarking of housing construction costs shows that while building materials and labour matter, land acquisition and servicing costs often account for nearly one third of total housing prices (see figure 4.1.2). These costs are shaped by land tenure arrangements, as well as regulatory practices and planning decisions that determine how land can be allocated and serviced (see chapters 2 and 3). This relationship points to a critical, but often underappreciated, reality: the crisis of adequate housing cannot be resolved without attending to the land dimension of housing systems.



Figure 21. Percent urban household who can afford a \$8,040 house (2019)



Land is one of several interlocking drivers of housing exclusion, alongside poverty and income volatility, weak urban planning and governance, informality, and labour market structures that leave a large share of urban households without stable or sufficient earnings (UN-Habitat, 2021). However, it is also a critical lever for policy, because decisions about how land is allocated, serviced and valued directly shape what housing is produced, where, and at what cost. LVC broader land-based finance instruments provide mechanisms through which publicly created land value can be redirected toward public objectives, including the provision of adequate housing. When well designed and governed, these tools enable cities to translate

rising land and property values into expanded housing supply, infrastructure investment, and more inclusive urban development. Yet the scale of the challenge demands more than well-designed instruments applied in isolation. Africa’s urban population is projected to grow by 700 million people between now and 2050, with 80 per cent of the continent’s total population growth concentrated in cities (OECD, 2025). At this pace of urban growth, piecemeal interventions, however effective in their own terms, will not move the needle on housing adequacy at the scale required. Land-based finance is not a sufficient response to this challenge on its own, but it has an important role to play in enabling larger-scale, more spatially

integrated approaches to urban development. This means moving beyond project-level applications of individual instruments toward land-based finance strategies that can support citywide planning frameworks, leverage significant private investment, and link housing delivery to the infrastructure and services that make it adequate.

It is important to note from the outset that the rising land values that make these instruments viable can themselves become a driver of housing inadequacy if left unmanaged. When land values increase in response to public investment, planning decisions, or broader market pressures, the costs are not borne equally. Marginalized communities, including low-income renters, informal settlers, women, and young people with insecure tenure, are particularly exposed. Rising values can translate directly into higher rents, pricing out those with the least bargaining power, or can trigger evictions as landowners and developers seek to realize gains from appreciated land.

These dynamics can displace precisely the communities that inclusive housing strategies are intended to serve, concentrating the benefits of urban growth among those already advantaged while intensifying housing inadequacy among those most vulnerable.

Land value capture instruments must therefore be designed and deployed with an explicit awareness of these distributional risks. This requires complementary policy instruments to be put in place alongside them: secure tenure protections, anti-eviction safeguards, gender-responsive land rights, and mechanisms that ensure the revenues and benefits generated are directed at those most in need. Without these safeguards, instruments intended to promote inclusive urban development risk accelerating the very exclusions they seek to address.

With both the potential and the risks of these instruments clearly in view, this chapter examines how LVC and LBF instruments can strengthen adequate housing strategies in African cities by situating housing adequacy within the realities of rapid urbanization, unpacking the structural links between land and housing outcomes, and assessing the policy tools available to governments to influence housing production and the servicing that makes housing liveable. Drawing on case studies from Stellenbosch, South Africa, and Dar es Salaam, Tanzania, the chapter illustrates how land-based approaches can be adapted to different institutional and market contexts.

Table 5 Conditions of housing adequacy across Africa

Component	Definition
Security of Tenure	Protection from arbitrary eviction and legal recognition of occupancy.
Availability of Services, Materials, and Infrastructure	Access to water, sanitation, energy, waste collection, and transport.
Affordability	Housing costs should not compromise other human needs.
Habitability	Physical safety, adequate space, and protection from weather and hazards.
Accessibility	Equal access for disadvantaged groups, including women, persons with disabilities, and the elderly.
Location	Housing must be near livelihoods, services, and transport.
Cultural Adequacy	Housing should respect cultural identity, community practices, and ways of life.

4.2. THE LAND-HOUSING NEXUS: UNDERSTANDING MARKET FAILURES IN AFRICA

Across Africa, pressures on land and housing have intensified over recent decades due to a combination of structural, environmental, and policy-driven factors that interact rather than operate in isolation (Collier & Venables, 2013). These dynamics are compounded by the income and employment conditions facing most urban households. In many African cities, a large share of residents are employed in informal or casual labour markets, with earnings that are low, irregular, and insufficient to service formal housing costs. For these households, the gap between income and housing cost is not primarily a function of land prices alone but reflects the intersection of land market failures with poverty, weak employment conditions, and the absence of accessible housing finance. Together, these forces reinforce land scarcity, concentrate value in a limited number of locations, and systematically marginalize low- and middle-income households from formal housing markets.

Rapid urban population growth has consistently outpaced the expansion of planned and serviced land, forcing cities to densify within constrained administrative and infrastructural footprints (Lall & Lorzano-Garcia, 2014). This mismatch between population growth and serviced land supply has two interlinked consequences. First, it drives up land prices in central and accessible locations, making these areas increasingly unaffordable for the most households, including many formally employed urban residents. The impacts of this exclusion are not evenly distributed. New migrants, women, youth, and other socially or economically marginalized groups often face additional barriers to accessing land, credit, and

formal housing, making them disproportionately exposed to insecure tenure and precarious living conditions. Second, it pushes lower-income households toward peripheral locations where land is cheaper, but access to services, transport, and economic opportunities is limited. Spatial inequality is thus reproduced through land markets themselves, embedding long-term social and economic costs into the urban fabric and increasing reliance on informal, incremental, and often precarious housing solutions (Denninger, 2015).

Climate change further tightens these land constraints and intensifies their distributional impacts (see chapter 5). Flooding, sea-level rise, erosion, landslides, and extreme heat are already reducing the amount of habitable and developable land in many cities. Informal settlements are often disproportionately located in high-risk areas, while new development is increasingly steered toward sites deemed climatically “safe”. As these safer areas become scarcer, demand concentrates further, driving up land values and reinforcing exclusionary dynamics within already constrained urban land markets. This process is giving rise to climate-driven patterns of displacement and gentrification (see chapter 5). As environmental risk is repriced into land markets, low-income households are priced out of safer locations and into increasingly vulnerable areas, often with either limited political visibility or protection. In this context, land scarcity is no longer only a function of urban growth, but also of environmental limits, which are likely to intensify over time and further constrain the supply of affordable, well-located land.

4.2.1. From State provision to financialized land and housing

These structural and environmental pressures have been amplified by shifts in housing and land policy over the past four decades. From the 1980s onward, many African countries underwent structural adjustment reforms that fundamentally reshaped the role of the State in housing provision (Buckley & Kalarickal, 2006).

Governments were repositioned as “enablers” rather than direct providers of public housing, with public investment in housing construction scaled back in favour of private development, mortgage finance, and market-led delivery. Under this model, housing policy became increasingly subordinated to market logic (Rolnik, 2019; Ryan-Collins et al., 2017). Land allocation and housing production were expected to respond to price signals, with affordability attained indirectly through economic growth, household income gains, and financial deepening (Glaeser & Quigley, 2009). While this approach expanded formal real estate markets in some cities, it did little to correct the structural mismatch between incomes, land prices, and housing costs, particularly for households excluded from formal finance or stable employment (Rolnik, 2019; McAllistar & Rozas, 2020).

From the 1990s onward, globalization and financial liberalization further transformed land and housing markets (Rolnik, 2019; Ryan-Collins et al., 2017). Property markets became integrated into global and regional capital flows, and land and real estate emerged as preferred investment assets. Land increasingly served as collateral, housing as a vehicle for wealth accumulation, and price appreciation as a primary objective. In this context, speculative behaviour was a rational response to policy frameworks and market incentives that rewarded holding land for future gains rather than productive or socially beneficial use (Rolnik, 2019; Ryan-Collins et al., 2017). In many African cities, this dynamic is reinforced by the limited appeal of

alternative savings and investment mechanisms. Where financial markets remain shallow, returns on savings are low, and inflation erodes the value of monetary assets, land and property represent one of the few reliable stores of value available to households and investors alike. Speculative land holding is, in this sense, not simply a product of greed or market dysfunction but a rational response to a broader environment of financial underdevelopment.

The consequences of this shift are now visible across many African cities (Goodfellow, 2020). Well-located land is frequently held vacant, as owners and developers wait for zoning changes, infrastructure investments, or market shifts that will unlock higher values. Studies of vacant urban land, including evidence from Uganda, show significant shares of serviced or strategically located parcels remaining undeveloped, even in cities facing acute housing shortages (Haas & Kopanyi, 2018b). This helps explain why vacant land taxes, except at very high rates, have shown limited impact on development outcomes, as they do little to remove the structural constraints that often delay or deter construction, including infrastructure deficits, financing conditions, regulatory uncertainty, and weak effective demand (Haas & Kopanyi, 2018a).

These dynamics have contributed directly to rising land and housing prices that have far outpaced household incomes. Rental affordability has declined, tenure has become more precarious, and informal arrangements have proliferated as households are priced out of formal markets. Housing has increasingly been reframed from a place to live into a financial asset whose value is judged primarily by performance and returns, rather than by its contribution to adequacy, stability, and social well-being (Ryan-Collins et al., 2017). Underlying these market dynamics are structural conditions that land policy alone cannot

address. Poverty, low and volatile incomes, and labour markets characterized by informality and underemployment mean that a large share of urban households are simply unable to afford adequate housing at any cost structure that

private markets, even well-regulated ones, are likely to produce without direct subsidy. Land market reform is a necessary but not sufficient response to this reality

4.3. LVC INSTRUMENTS THAT SHAPE HOUSING SUPPLY AT POINT OF DEVELOPMENT

Expanding the supply of adequate housing in rapidly urbanizing cities requires intervention at the moment when land is converted into buildable plots and development rights are exercised. It is at this point of development, where planning approvals are granted, land is assembled, and densities are fixed, that public authorities have the greatest leverage to influence what is built, where, and for whom.

Reconnecting land's market value with its public social purpose through targeted regulatory and fiscal instruments therefore offers a critical pathway to shaping housing supply and advancing more inclusive urban development outcomes (UN-Habitat, 2021).

LVC operates precisely at this interface between public action and private development (see chapter 1). By conditioning development rights on the delivery of clearly defined public objectives, such as adequate housing, serviced plots, or spatial integration, LVC instruments allow governments to shape private investment behaviour at the moment value is created. When designed and implemented effectively, these mechanisms provide a practical means of translating urban growth and rising land values into tangible housing outcomes, rather than allowing those gains to be captured entirely by private actors. The analysis that follows focuses on three land-based instruments that are particularly relevant at the point of development in rapidly urbanizing contexts: strategic land management, density

bonuses paired with inclusionary zoning, and land readjustment (for minimum regulatory requirements for use of each instrument see chapter 1). Strategic land management plays a foundational role in housing systems by shaping the availability, location, and timing of land entering the development process (see case 5.2 for example). Through tools such as public land banking, land assembly, and the coordination of land release with infrastructure investment, governments can influence where housing is built, at what cost, and under what conditions.

These functions are critical for ensuring a steady supply of well-located land for adequate housing, and for preventing speculative land hoarding that constrains supply before development even begins. One example of where this has been done is in Addis Ababa, through Ethiopia's Integrated Housing Development Programme, launched in 2006 as part of the country's flagship national affordable housing effort (see Case 4.6.3).

At the same time, strategic land management operates as an overarching governance function rather than a discrete, stand-alone instrument. It cuts across land administration, spatial planning, infrastructure provision, fiscal policy, and housing delivery, and is most effective when embedded within broader urban development frameworks.

For this reason, it is not treated as a separate subsection in this chapter. Instead, its role is reflected throughout the discussion of density bonuses, inclusionary zoning, and land

readjustment, each of which depends on proactive land management to function effectively at the point where development decisions are made. While these instruments differ in their institutional design and operational logic, they are grounded in a shared principle: publicly created land value, generated through planning decisions, regulatory change, and coordinated development, can be

deliberately redirected to support the expansion of adequate housing. Together, they illustrate how governments can intervene at the point of development to expand housing supply, integrate adequate housing into well-located areas, and align private investment with broader social objectives, even in contexts of rapid urbanization and constrained public resources.

4.3.1. Density bonuses and inclusionary zoning

A density bonus allows developers to build at a higher density or height than would otherwise be permitted under existing zoning regulations. In exchange for this additional development potential, developers are required to deliver a clearly defined public benefit. It should be noted that this mechanism operates only in formal development contexts where the municipality has both the regulatory authority and the practical capacity to enforce the rules; where planning systems are weak, fragmented, or routinely bypassed, the leverage needed to negotiate and secure developer contributions does not exist. This can take the form of affordable or adequate housing units, but it may also include public amenities, infrastructure provision, or cash contributions earmarked for housing or service delivery.

Inclusionary zoning establishes a regulatory obligation requiring that a specified share of housing within new residential or mixed-use developments be affordable to defined income groups (see figure 4.3.1). These affordability thresholds are typically grounded in local income distributions and are often complemented by technical standards related to housing adequacy, including minimum dwelling sizes, occupancy rates, or overcrowding thresholds. While global monitoring commonly defines sufficient living space as no more than three people per room, urban planning systems may apply more granular measures, such as minimum square metres per

person or unit-level size requirements, to ensure that inclusionary units meet adequacy standards in practice.

On its own, inclusionary zoning can place pressure on project feasibility, particularly in markets characterized by high land costs where providing affordable units is not profitable. This is where density bonuses play a critical enabling role. By allowing additional height or floor area beyond baseline zoning, density bonuses expand the development envelope and increase the revenue-generating potential of a site, helping to offset the cost of delivering affordable or adequate units. Therefore, together, density bonuses and inclusionary zoning function as a land value capture mechanism (Development Action Group, 2024). By authorizing additional development rights that did not previously exist, public authorities directly increase the development potential and value of land. A share of this publicly created increased value is then recovered through the provision of affordable or adequate housing units, or other clearly defined public benefits. When effectively designed, these instruments advance housing adequacy through a combination of supply expansion, spatial integration, and fiscal leverage. Allowing higher densities in targeted, well-located areas, typically close to employment centres, transport corridors, and existing infrastructure, increases housing supply where demand is strongest and land scarcity most acute.

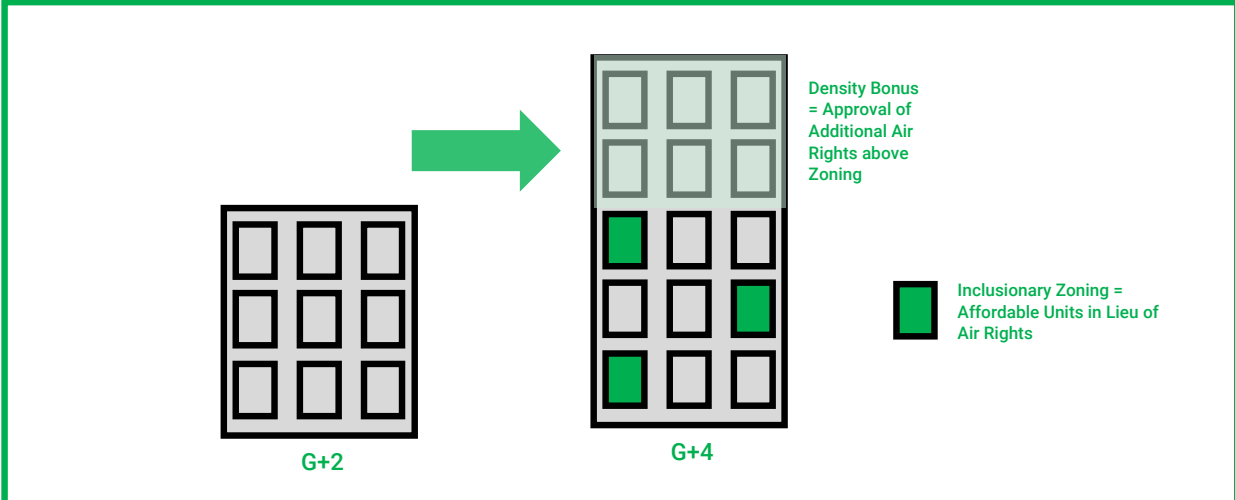
In doing so, density bonuses help relieve development pressure in central locations where restrictive zoning has historically constrained supply and driven up land and housing prices. Crucially, this approach links private development gains directly to public housing outcomes, embedding affordability and inclusion within the land development process rather than treating them as residual objectives.

At the same time, inclusionary requirements ensure that this additional supply translates into socially inclusive outcomes. Adequate units are delivered as an integral component of market-led developments rather than as isolated public housing projects, supporting mixed-income neighbourhoods and reducing the spatial segregation that has characterized many urban housing interventions. Importantly, these instruments reallocate part of the responsibility for adequate housing provision from overstretched public budgets to the land development process itself. While they do not replace the need for public investment, they enable governments to influence private development activity to deliver public objectives in a fiscally efficient manner,

particularly in contexts where rising land values are driven by public planning decisions and infrastructure investment.

A key design question that decision-makers and stakeholders must confront is where the inclusionary units are located. There is an inherent tension between delivering a smaller number of units within the development itself, in well-located, high-value areas, and delivering a larger number of units off-site, in less costly but typically fewer desirable locations with weaker access to services, employment, and transport. The first option maximizes locational quality and integration but at significant cost per unit; the second maximizes the number of units produced but risks recreating the spatial marginalization that inclusionary approaches are designed to overcome. Neither option is inherently superior, and the right balance will depend on local market conditions, land values, and the specific housing needs being tackled. What matters is that this trade-off is made explicit and deliberated openly, rather than resolved by default in favour of whichever outcome is most convenient for the developer or least costly for the municipality.

Figure 22. Density bonus and inclusionary zoning



In this diagram, the city grants the developer permission to build two additional floors beyond what zoning normally allows, increasing the building height from G+2 to G+4 (density bonus).

This additional development right enables the developer to generate higher revenues from selling or renting the extra units, representing publicly created land value. In exchange for this added value, the developer agrees to provide three housing units within the building at affordable prices, which constitutes the inclusionary zoning requirement.

Enabling conditions

LVC instruments that can impact housing supply depend on active, competitive real estate markets that generate sufficient value uplift to be captured and redirected. A functioning property market is fundamental: density bonuses generate value only where there is sufficient demand for additional floor space, allowing part of that value to be redirected without undermining development viability. In weak markets, incentives may be insufficient to stimulate development; in overheated ones, requirements must be carefully calibrated to avoid fuelling speculative escalation.

In practice, this means they are most viable in some parts of primary and capital cities where demand for density is strong, development activity is sustained, and land values are rising. In smaller cities, secondary urban centres, or markets characterized by thin demand, informal land transactions, or weak planning enforcement, the enabling conditions may not yet exist. Even where markets are sufficiently active, these instruments remain at an early stage of application across most of the continent, with only a limited number of implementations starting to happen. Therefore, the contribution of these instruments to closing Africa's housing gap should not be overstated.

Clear land-use plans and a robust legal framework are equally important, as developers need certainty about baseline zoning, bonus entitlements, and compliance mechanisms. Therefore, density bonuses and inclusionary zoning will not function in contexts where development control is weak or planning enforcement capacity is limited. This applies to a large share of African cities, where informal development predominates,

planning regulations are routinely bypassed, and municipalities lack the staff, systems, and authority to negotiate with developers and monitor compliance. In these contexts, the preconditions for these instruments simply do not exist, and attempting to apply them without first addressing institutional capacity risks producing rules that are ignored in practice. Where enforcement capacity does exist, or is being actively built, the effectiveness of these instruments depends on several further enabling conditions working together.

Authorities also need the technical capacity to assess how much value is created by increased development rights, using tools such as residual land value analysis or comparable sales analysis of sites with different zoning envelopes. Without this, cities risk either over-extracting value and stalling development or under-capturing it and forgoing housing gains. Poorly calibrated bonus provisions may contribute to gentrification if additional development rights significantly increase land values without corresponding safeguards. Overly stringent requirements can deter investment, particularly where development margins are already tight.

Social acceptance is a further consideration: developers and landowners may resist inclusionary obligations perceived as arbitrary or unpredictable, while communities may fear that higher densities will strain infrastructure or alter neighbourhood character. This is because higher densities increase pressure on transport, water, sanitation, and social services. Transparent rule-setting, consistent application, and clear

communication of public benefits are therefore critical to building legitimacy. It also requires increase density to be coupled with infrastructure investment, ensuring liveable, adequate neighbourhoods. To manage these risks, many cities adopt phased implementation strategies, pilot programmes in selected zones, and regular

monitoring of market responses, combined with structured engagement with developers, communities, and professional associations to improve policy design and ensure that density bonuses support inclusive urban development without undermining supply or market stability (see Case 6 of Stellenbosch).

Box 14. Land readjustment for in-situ upgrading, Egypt (Hayenna Project)

Building on the successful approach in Banha (see Case 11), the **Hayenna Project** launched by the Government of Egypt, in partnership with UN-Habitat and the Swiss State Secretariat for Economic Affairs, piloted land readjustment as a tool to support land value capture and inclusive urban development in Qena Governorate. Introduced in contexts where land parcels are fragmented, infrastructure is limited, and tenure systems are incomplete, the pilots demonstrate how land readjustment can reorganize land *in situ* while safeguarding residents' and landowners' stakes. In Qena, two urban extension areas, Alhumaidat and Almaana, were selected. These areas were characterized by predominantly private ownership, limited services, and emerging residential development. Through participatory planning processes, including public meetings, design workshops, and landowner representative committees, fragmented plots were reconfigured to create space for roads, service corridors, and public facilities. Landowners agreed to contribute approximately 28–30 per cent of their land, distributed proportionally, in exchange for serviced, better-connected plots within an approved detailed local plan. Crucially, the process prioritized community engagement and transparency, enabling landowners to retain ownership while benefiting from improved access, connectivity, and future infrastructure investment.

Source: Haas (2023)

4.3.2. Land readjustment

Land readjustment contributes to housing adequacy through several interrelated channels that focus on the quality and location of housing supply, in greenfield development and the upgrading of existing informal settlements. By pooling fragmented parcels and producing serviced and legally regularized plots, it enables the construction and incremental improvement of housing that meets adequacy standards related to sufficient living space, access to basic services, and structural durability.

This is particularly important in contexts where informal subdivision and unplanned growth dominate urban expansion, resulting in

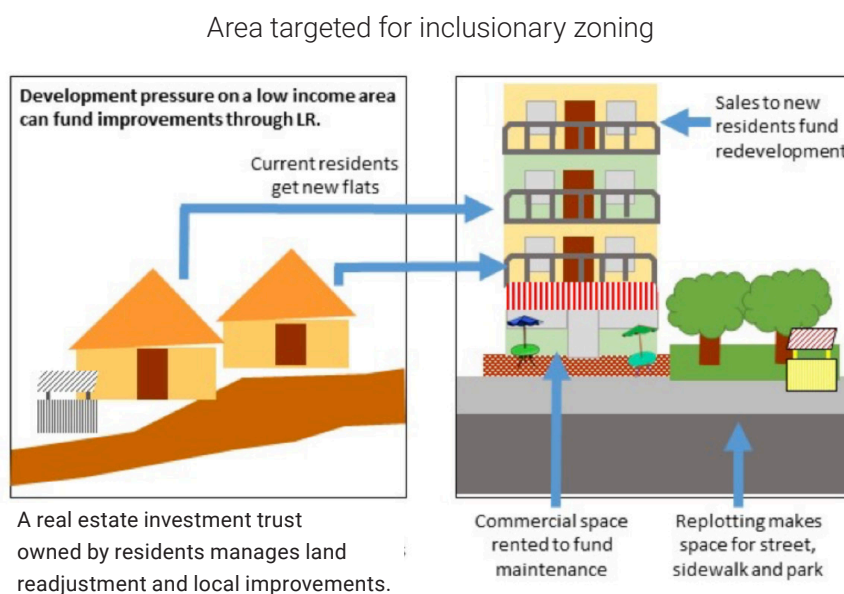
overcrowded layouts, inadequate infrastructure, and insecure tenure (Michels et al., 2021). In this respect, land readjustment shares important conceptual ground with sites-and-services approaches (see Dar es Salaam case study in 6.2), as both seek to support incremental housing development by ensuring that land is planned, serviced, and legally accessible either before settlement or as part of a structured upgrading process.

When applied to informal settlement upgrading, land readjustment allows authorities to reorganize plots, roads, and service corridors *in situ*, improving access, connectivity, and

service provision while enabling residents to retain a stake in their land and housing (see Box 14). Where a portion of the reconfigured land is deliberately reserved for affordable or adequate housing, land readjustment also creates a direct and predictable pipeline of well-located land for public, cooperative, or inclusionary housing development. This early public investment in basic infrastructure lowers entry barriers for households and private builders, crowding in subsequent housing investment over time. By sequencing land consolidation, infrastructure installation, and housing development, land readjustment reduces the risk of displacement, limits the need for ex-situ relocation, and lowers the long-term fiscal and social costs associated with retrofitting services in already built-up areas. In this way, land readjustment supports more orderly, efficient, and inclusive urban development while strengthening the link between land servicing, incremental development, informal settlement upgrading and housing adequacy.

Another way land readjustment can be used is to relieve development pressures in low-income areas. In this approach, residents living in informal settlements collectively contribute their plots in exchange for housing units in a newly planned development (UN-Habitat, 2016). A portion of the newly constructed apartments can then be sold on the market to help finance the redevelopment process, while commercial spaces can be rented out to generate revenue for long-term maintenance. At the same time, the replotting process allows planners to create space for essential public infrastructure such as streets, sidewalks and parks. Beyond improving the physical layout of the area and upgrading living conditions for existing residents, this approach can also support more socially mixed neighbourhoods. By combining housing for former residents with market-rate units and commercial uses, land readjustment can enable forms of inclusionary development in which households of different income levels share the same neighbourhood while benefiting from improved services and public space (see Figure 23).

Figure 23. Land readjustment can relieve development pressures in low-income areas



Source: UN-Habitat, 2016.

Beyond the plot or neighbourhood scale, land readjustment also plays an important role in integrating housing development into broader citywide planning frameworks. As the process reorganizes land parcels as part of a structured planning effort, it allows municipalities to align local redevelopment with wider infrastructure corridors, transport networks, drainage systems, and public service provision. Roads, service corridors and public facilities created through replotting can therefore be designed not only to serve the immediate settlement but also to connect with metropolitan infrastructure networks and planned urban expansion areas. In this way, land readjustment helps ensure that improvements in housing adequacy at the plot level are embedded within coherent urban form and functioning service systems.

Enabling conditions

The effectiveness of land readjustment depends not only on legal and technical design, but on its ability to support housing outcomes support the dimensions of adequate. While clear legal and institutional frameworks are important to define procedures, protect landowner rights, and establish the authority of implementing agencies, successful land readjustment does not always begin with legislation.

In many contexts, land readjustment practices emerge organically as communities respond to rising land pressure linked to infrastructure investment, urban expansion, or improvements in accessibility. In Rwanda, for example, informal land readjustment practices developed as landowners reorganized plots in response to new roads and services, before these practices were later codified in national law (see case 3.3.1).

Where land readjustment builds on locally recognized practices, it is more likely to produce serviced plots that households can develop incrementally into adequate housing, rather than

displacing residents or imposing standards that are unaffordable in practice (Hong & Needham, 2007).

Stakeholder participation and trust-building are therefore vital to the success of land readjustment as a land management tool and its contribution to housing adequacy. As the mechanism relies on voluntary cooperation among landowners and residents, confidence in the fairness, transparency, and predictability of outcomes is essential. This includes credible assurances that replotted parcels will allow households to meet adequacy standards related to space, services, accessibility and tenure security. Where land readjustment is perceived as coercive, opaque, or externally imposed, it risks undermining housing security and triggering resistance or informal reversion. Conversely, where it aligns with local land practices, tenure arrangements, and community norms, it can strengthen tenure security and enable households to invest progressively in improving their housing conditions (Michels et al., 2021).

Technical and financial capacity remains an important requirement, but it must be calibrated to support, rather than undermine, housing outcomes. Land readjustment can involve highly technical processes, including cadastral surveying, urban design for replotting, legal expertise for land pooling agreements, and financial modelling for infrastructure cost recovery. While such precision can improve clarity, overly technical or expensive approaches can increase the cost of serviced land and reduce its accessibility for low- and middle-income households. From a housing adequacy perspective, the objective is not technical perfection, but a pragmatic and trusted process that delivers plots with basic services, legal recognition, and sufficient space to support incremental housing development. Eventually, the equitable distribution of benefits is essential if land readjustment is to contribute meaningfully

to adequate housing. If landowners and residents perceive that value gains are unevenly distributed, or that public authorities capture a disproportionate share of the uplift without reinvesting in local services or housing provision, participation will decline and housing outcomes will suffer. Where benefits are clearly shared, for example through improved infrastructure, reserved land for affordable housing, or enhanced tenure security, land readjustment can unlock housing development in well-located areas that would otherwise remain fragmented, underserved, or informally developed. In this sense, land readjustment operates not merely as a technical planning instrument, but as a negotiated governance process that must be adapted to local contexts to support the delivery of adequate housing.

Despite its potential, land readjustment also carries risks that require careful management. Where participation is not genuinely voluntary or where information asymmetries exist, land readjustment processes may generate conflicts over land boundaries, perceived losses of land value, or disputes regarding the allocation of replotted parcels. In contexts characterized by informal or customary tenure systems, there is also a risk that individuals with weaker tenure claims, including tenants, women, or secondary

rights holders, may be excluded from negotiations or displaced during redevelopment. Similarly, where governance is weak, elite capture may occur if politically connected landowners secure preferential treatment in the reallocation of plots or benefit disproportionately from rising land values. These risks are particularly pronounced where land values increase rapidly following infrastructure investment or rezoning.

Mitigating these challenges requires careful institutional design and sustained community engagement. Transparent rules for land contribution and reallocation, participatory planning processes, and clear grievance and dispute-resolution mechanisms are essential to maintaining trust among stakeholders. Legal recognition of customary and informal tenure arrangements can further reduce exclusion by ensuring that a broader set of rights holders are represented in land pooling agreements. Phased implementation, pilot projects, and independent monitoring can also help governments learn from early experiences and adjust procedures before scaling programmes (see Rwanda case study 3.3.1). When these safeguards are in place, land readjustment is more likely to function as a collaborative mechanism for reorganizing land and financing infrastructure, rather than as a source of displacement or social conflict.

4.4. INSTRUMENTS THAT FINANCE SERVICING, SUSTAIN HOUSING ADEQUACY OVER TIME

While the instruments discussed in Section 4.3 operate at the point where land is assembled and development rights are exercised, housing adequacy is ultimately determined by whether the neighbourhood around a dwelling is serviced and maintained over time. A house that is structurally sound at the moment of construction can become inadequate within years if the roads around it deteriorate, water and sanitation connections fail,

drainage is not maintained, or social infrastructure is not sustained. In many African cities, the binding constraint on housing adequacy is therefore not building capacity alone, but the slow, uneven, and underfinanced provision and maintenance of bulk and neighbourhood infrastructure.

When servicing lags behind or breaks down after development, housing is delivered or left without

adequate foundations, reinforcing patterns of underserved formal development and informal settlement. This section shifts focus from how housing supply is shaped at the moment of development to how it is serviced and kept adequate over the life of a settlement. Land-based finance instruments offer a means of dealing with this challenge by embedding infrastructure provision and long-term service funding within

4.4.1. Developer obligations

Private developers are obligated to contribute to the infrastructure and services necessary for housing to be adequate, liveable, and sustainable (UN-Habitat, 2021). These contributions may take the form of direct construction of roads, water and sanitation networks, drainage, or social facilities, the in-kind provision of serviced land, or financial payments to the public authority. The underlying rationale is that housing cannot meet adequacy standards without timely access to basic services, and that new residential development should therefore be accompanied by the infrastructure it requires. In rapidly growing cities with limited fiscal space, the absence of such obligations often produces a dual development dynamic: formal, higher-income developments that are serviced but where obligations are weakly enforced or negotiated away, alongside informal, lower-income settlements where households bear the cost of infrastructure provision themselves or go without, placing the residual burden on overstretched municipal budgets.

By linking development approval to infrastructure delivery, developer obligations expand the supply of serviced land and can enable housing development in areas that would otherwise remain unviable. However, significant caution is needed about how this plays out in practice. Where infrastructure provision is left primarily to private developers, it can deepen rather than reduce urban inequality. Higher-income, formally developed

the urban development process itself, rather than treating them as downstream or residual concerns. The analysis that follows focuses on two such instruments, developer obligations and property taxation. Together, they illustrate how cities can mobilize land-based revenues to finance essential services and sustain housing adequacy over time.

areas, often gated or privately managed, receive well-serviced environments that are deliberately disconnected from surrounding neighbourhoods, while lower-income areas remain dependent on underfunded public provision. The infrastructure delivered through developer obligations in this model is, in effect, private infrastructure: it serves the development that paid for it rather than contributing to a shared urban system. This dynamic mirrors the privatization of public space discussed in chapter 5, where private actors can deliver higher-quality environments, but the result is exclusionary rather than genuinely public.

The critical design question is therefore not simply whether developer obligations generate infrastructure, but whether the revenues and assets they produce are directed only toward the developments that trigger them or whether they contribute to cross-subsidization across the city. Where obligations are pooled and redistributed, they can support more balanced and coordinated urban growth, aligning housing expansion with transport networks, water and sanitation systems, and social services, and reducing the risk of isolated developments disconnected from jobs and amenities. Where they are not, they risk entrenching the dual development dynamic they were intended to overcome.

The same principle applies when developer obligations extend beyond infrastructure to housing provision directly.

Developers may be required to deliver adequate units alongside infrastructure contributions, allocate land for social housing, or provide housing in lieu of specific service investments. When clearly regulated, transparently administered, and designed with cross-subsidisation in mind, these obligations integrate housing and infrastructure provision within a single development process. In this form, developer obligations function not only as a servicing mechanism but as a land value capture instrument, reinvesting a portion of publicly created land value into the foundations of adequate housing.

Whether applied to infrastructure or housing, their redistributive potential depends entirely on how the obligations are structured, where the contributions flow, and whether the governance arrangements exist to ensure they serve the city as a whole rather than only the development that generates them.

Enabling conditions

The effectiveness of developer obligations depends on a set of interrelated legal, institutional, and technical conditions. A clear legislative and regulatory basis is essential to define the scope of permissible obligations, establish standardized approaches to calculation, and provide predictability for developers and public authorities. Where obligations are poorly defined, inconsistently applied, or negotiated in an informal manner, they risk becoming opaque, contested, or vulnerable to legal challenge, thereby undermining infrastructure provision and the delivery of adequate housing. Legal clarity is particularly important in contexts where development pressures are high and municipal capacity is constrained, as uncertainty weakens public leverage and limits the ability to secure servicing alongside housing growth.

A functional planning and building permit system is equally critical. Developer obligations are most

effective when they are embedded within routine development approval processes, allowing infrastructure and servicing requirements to be identified early and integrated into project design. Where planning and permitting systems are fragmented, slow, or weakly enforced, obligations may be applied inconsistently or too late in the development cycle to influence outcomes meaningfully. In such contexts, housing may still be delivered without adequate services, reinforcing patterns of underserved formal development and undermining the very purpose of the instrument.

Technical capacity to assess infrastructure needs and costs is another key enabling condition. Authorities must be able to estimate the cost of trunk and local infrastructure with sufficient accuracy to set contributions that are fair, proportionate and feasible. This includes understanding how different types of development affect demand for roads, water, sanitation, drainage and social facilities. Overestimating costs can deter investment and constrain housing supply, while underestimating them risks leaving new housing underserved and shifting long-term costs back onto households or municipal budgets. In both cases, housing adequacy is compromised.

Transparency and the ability to ring-fence revenues or earmark spending are central to legitimacy and trust. Developers require clarity on how obligations are calculated and applied, while communities and local governments need assurance that contributions are used for their intended housing or infrastructure purpose. From a technical standpoint, this often involves establishing dedicated funds, escrow accounts, or explicit legislative mandates that ensure financial contributions are segregated from general revenues and reinvested in ways that support housing adequacy. Where contributions are delivered in kind, similar clarity is needed

to ensure that infrastructure or land provided directly serves housing adequacy objectives. However, ring-fencing contributions exclusively to the development that generates them risks concentrating benefits in areas where land values are already high and development activity is already strong, precisely the locations where infrastructure costs are capitalized into housing costs and where lower-income households are least likely to be present. A proportion of contributions should therefore be available for cross-subsidization, directed toward lower-income settlements, underserved areas, or citywide infrastructure systems that benefit a broader population. Without this redistributive dimension, developer obligations will deliver visible improvements in high-value locations while leaving the majority of urban residents, who cannot afford to live in areas where infrastructure is privately financed, without equivalent benefit. Visible reinvestment across the city, not only within individual developments, is what ultimately reinforces the link between urban growth, adequate servicing, and more equitable housing outcomes.

It is worth noting that a form of ad hoc developer obligation already exists across much of the continent, where private developers negotiate infrastructure provision directly with authorities in exchange for development permission, delivering roads, water, and sanitation within their own developments as a condition of approval. In higher-income residential developments, this often results in well-serviced but entirely

privatized environments, disconnected from surrounding areas and accessible only to those who can afford to live within them. At a larger scale, some countries are pursuing public-private partnerships to develop entire new urban areas in which infrastructure is privately delivered in exchange for development rights, a model that can be understood as developer obligations at scale but which, in practice, tends to reproduce and intensify the patterns of social exclusion associated with privately serviced enclaves. These arrangements illustrate both the reach and the limits of developer obligations as currently practised: they demonstrate that the private sector can and does deliver infrastructure when the incentives are right, but that without redistributive design and public governance, the benefits flow overwhelmingly to those already advantaged.

South Africa stands out as a notable exception in terms of formalized application, largely due to the long-standing integration of development contributions within its planning and municipal finance frameworks. The Spatial Planning and Land Use Management Act of 2013 provides the enabling conditions for municipalities to impose conditions on development approvals, which are then regulated through specific by-laws and policies at a municipal level, setting out how obligations are calculated, implemented, and ring-fenced. However, even in the South African case, the use of these obligations is contested (Graham & Berrisford, 2022).

4.4.2. Property tax and related instruments

Unlike one-off development charges, property tax captures a share of the *ongoing* value created by urban growth, public investment and service provision. Property tax revenues are typically used to fund local infrastructure and services such as roads, street lighting, waste collection, drainage, and sanitation, all of which directly

shape housing adequacy by affecting habitability, health outcomes and neighbourhood quality. In contexts where formal land markets or tenure systems are weak, property tax can also function as a pragmatic proxy for land value capture. Even simplified or area-based valuation systems enable governments to link land and building values to

service provision, reinforcing the relationship between public investment and private benefit over time.

Several complementary instruments build on the property tax base to finance infrastructure more proactively and strategically. Tax Increment Financing (TIF) allows governments to borrow against future increases in property tax revenues generated by infrastructure investment or urban regeneration, using the anticipated “increment” to repay upfront capital costs. However, as the use of TIFs requires regularly updated valuations and the ability for a city to borrow against future property tax revenue, this is not applicable in the majority of African contexts. Special assessment areas offer a more direct and often simpler approach, requiring property owners within a defined area to contribute to the cost of specific infrastructure improvements in proportion to the benefits they receive.

While TIF relies on future revenue growth, special assessments involve direct, transparent charges to beneficiaries and are often easier to administer and communicate in lower-capacity contexts. Together, these instruments strengthen the role of property tax in supporting adequate housing by enabling municipalities to maintain and expand the infrastructure networks on which housing quality depends. Predictable, recurrent revenue streams improve the capacity of local governments to plug service deficits in formal and informal neighbourhoods, reducing reliance on sporadic capital grants or ad hoc projects. When spatially targeted through tools such as TIFs or special assessments, property taxation can also support urban regeneration and infill development, improving housing conditions in underserved areas and expanding the supply of serviced land within existing urban footprints.

Property tax also plays an important behavioural role within housing systems. By imposing a recurring cost on land and buildings, well-designed

property tax regimes can discourage speculative land holding and incentivize the more productive use of well-located plots. In this way, property taxation complements regulatory and planning instruments aimed at increasing housing supply, reinforcing a broader land-based approach to improving housing adequacy and urban inclusion.

Enabling Conditions

The effectiveness of property taxation as a tool for supporting adequate housing depends on a set of core administrative, institutional and political conditions. At a minimum, governments require robust information management systems to identify properties, track ownership and maintain up-to-date valuation records. In many African cities, data constraints necessitate simplified or proxy-based valuation approaches, such as area-based or points-based models. While these approaches may be less precise, they can still support housing adequacy if they are applied consistently, communicated clearly, and linked to visible improvements in local services and infrastructure that directly affect living conditions.

Taxpayer education and communication are equally critical. Property tax is often politically sensitive, particularly where trust in government is low or where households already face high housing and service costs. Compliance is more likely when residents understand how property tax revenues are used and can see tangible improvements in roads, drainage, sanitation, lighting and neighbourhood services. This visibility is especially important in informal and low-income areas, where strengthening the link between taxation and service provision can reinforce tenure security and perceptions of housing adequacy rather than deepen resistance.

For more advanced instruments such as TIFs and special assessment areas, the institutional requirements are significantly higher. Special assessments are generally easier to implement,

as they involve direct charges linked to specific infrastructure improvements within clearly defined areas, making the connection between payment and benefit relatively visible. TIFs, by contrast, are technically complex and institutionally demanding.

Effective TIF implementation requires reliable baseline property valuations, stable and predictable property tax collection, strong municipal borrowing authority, and sophisticated financial management to forecast future revenues and manage long-term debt obligations. In many African cities, these preconditions are difficult

to meet. Property tax bases are often narrow or volatile, valuation systems may be incomplete, and municipal access to credit is limited or highly regulated.

The long-time horizons associated with TIFs also pose risks in contexts characterized by political turnover, fiscal uncertainty, and competing development priorities. As a result, while TIFs can theoretically support infrastructure investment and housing regeneration, they often remain impractical in settings where more basic property tax administration and service delivery challenges have yet to be resolved.



Case 6. Stellenbosch, South Africa – Housing supply and inclusionary zoning

In May 2023, Stellenbosch Municipality adopted an *Inclusionary Zoning Policy* in response to an acute shortage of affordable housing and entrenched spatial inequality. Like many South African cities, Stellenbosch’s urban form remains deeply shaped by apartheid-era planning, which systematically restricted access to well-located land, infrastructure, and economic opportunity along racial lines. As a result, lower-income households, predominantly within black and coloured communities, continue to be pushed to peripheral locations far from jobs, services, and public transport, reinforcing long-standing patterns of exclusion.

At the same time, Stellenbosch has experienced sustained development pressure driven by population growth, a strong local economy, and rising demand for high-end residential and mixed-use projects.

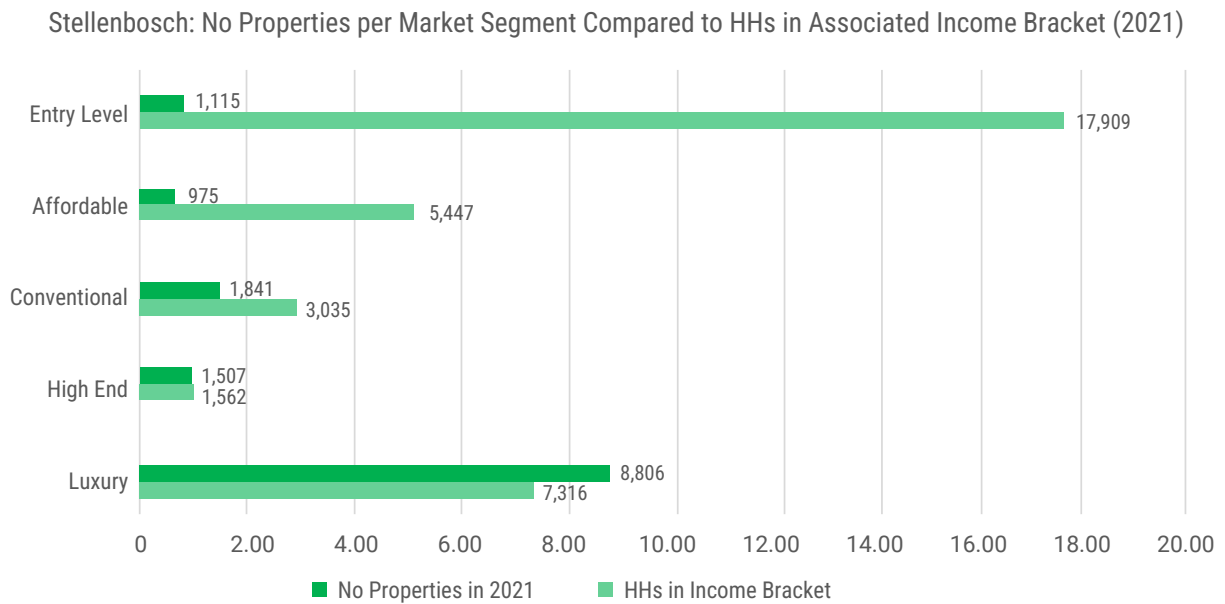
While this growth has contributed to escalating land and property values, it has not translated into a corresponding expansion of affordable housing supply. The inclusionary zoning policy was introduced as a deliberate intervention in this dynamic, seeking to ensure that new development contributes directly to housing affordability and spatial integration rather than reproducing existing divides. Framed as both a housing and spatial instrument, the policy explicitly aims to locate affordable units within well-connected, high-opportunity areas, supporting mixed-income neighbourhoods and a more inclusive trajectory of urban growth.

The policy did not emerge in isolation. Its development was underpinned by an inclusive and consultative process involving developers, housing practitioners, civil society organizations, and potential beneficiaries. This engagement helped surface concerns around feasibility, clarify design parameters, and build a shared understanding of the municipality's objectives. Crucially, it contributed to broader buy-in. Developers were engaged early on in discussions around thresholds, unit mixes, and implementation mechanisms, reducing uncertainty and resistance. At the same time, the municipality maintained a clear regulatory stance, positioning inclusionary zoning as a necessary response to structural housing challenges rather than a discretionary or voluntary add-on.

The governance framework reflects a strong awareness of implementation risk. By embedding the policy within existing planning and development approval processes, Stellenbosch sought to avoid impromptu negotiations and ensure consistency across projects. This institutional anchoring is likely to be critical to the policy's long-term effectiveness, particularly in maintaining credibility and enforceability as development pressures continue.

A defining feature of Stellenbosch's approach was its decision to ground affordability requirements in local income realities. Prior to adoption, the municipality undertook a local affordability survey to establish what "affordable housing" actually meant in the Stellenbosch context (see Figure 24). The analysis revealed a significant mismatch between national housing benchmarks and local income distributions. The policy therefore targets households earning between R 3,501 and R22,000 (\approx 189 – 1,189 USD) often described as part of the "missing middle" because they are above the minimum threshold to qualify for free government-subsidized houses (because it is capped at R3,500; approximately \$-----) but too poor to access private bank financing. These households earn too much to qualify for fully subsidized government housing, yet far too little to access mortgage finance or market-rate rental housing. By contrast, the national affordability benchmark of R22,000 per month (approximately \$1,173) bears little relation to the lived realities of most municipal residents. By adopting a locally defined threshold, Stellenbosch ensured that the policy would respond to actual housing need rather than abstract national categories, thus strengthening its credibility and its intended impact.

Figure 24. Stellenbosch Housing Survey

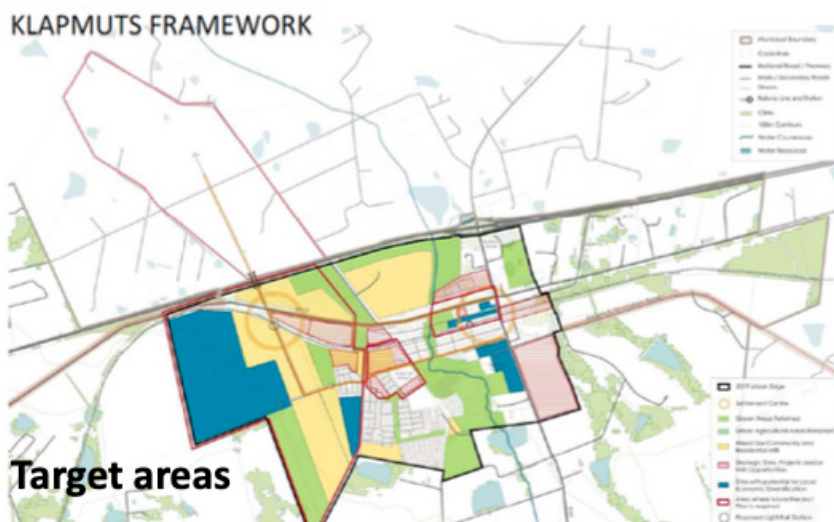


Source: Stellenbosch Municipality 2025.

The *Inclusionary Zoning Policy* applies to all new residential or mixed-use developments comprising 20 units or more. Developers are required to allocate at least 20 per cent of total units as affordable housing, framed as a regulatory obligation tied to development approval rather than a voluntary incentive in targeted areas. A central feature of the policy is its emphasis on location.

For any private residential developments that are constructed, affordable units must be provided in specifically zoned areas that are also prime locations (see Figure 25), defined by proximity to public transport, employment opportunities, services, and social amenities. This locational requirement directly focuses on the spatial dimension of housing adequacy, ensuring that affordability is not achieved at the expense of access or opportunity.

Figure 25. Klapmuts Area Inclusionary Zoning Plan



Source: Stellenbosch Municipality 2025.

The policy allows affordable units to be delivered either for sale or for rental, providing flexibility across tenure options. To safeguard long-term affordability, a 30-year moratorium is imposed on the conversion of these units to market-rate housing. This provision seeks to prevent the gradual erosion of affordability through resale or rent escalation, a common challenge in inclusionary housing schemes. Taken together, these design features position inclusionary zoning as a land value capture instrument. By permitting development in high-value, well-serviced areas, the municipality captures a share of land value created through planning decisions and market demand and redirects it toward affordable housing outcomes.

The overarching objective of the policy is to prevent the continued reproduction of locational inequality. By requiring affordable units within high-opportunity areas, Stellenbosch aims to ensure that lower-income households can access the social and economic benefits of urban growth. While it is still early to assess quantitative outcomes, the policy has already begun to

influence broader debates around housing and land use. Notably, Stellenbosch's experience has guided discussions in Cape Town and other municipalities exploring inclusionary zoning as a tool to deal with housing affordability and spatial inequality. In this sense, the policy functions as a local intervention and a reference point for African cities seeking to apply land-use regulation to advance housing adequacy and spatial inclusion.

The Stellenbosch case shows how context-specific inclusionary zoning, grounded in local affordability realities and supported by multi-stakeholder collaboration, can begin to tackle entrenched spatial inequality. By linking development rights to adequate housing in well-located areas, the policy illustrates the potential of land-based instruments to align urban growth with social inclusion. However, it is important to note that the policy is still at an early stage of implementation, and it is too soon to draw firm conclusions about its effectiveness. Careful, ongoing evaluation will be essential if other African cities are to draw reliable lessons from it.



Case 7. Dar es Salaam, Tanzania – Infrastructure-led housing development

In the 1970s and 1980s, Dar es Salaam was one of several cities across Africa, including Dandora in Kenya and Dakar in Senegal, that implemented a series of sites-and-services projects with support from the World Bank to manage rapid urban growth and curb the expansion of unplanned settlements. Rather than delivering completed housing units, these projects focused on the early

provision of basic infrastructure in greenfield areas, recognizing that informality was driven less by household choice than by the absence of planned, serviced land. By prioritizing roads, drainage, water and sanitation networks ahead of large-scale settlement, the city sought to create the conditions for households to build and upgrade their homes incrementally over time.

The projects were structured around the advance installation of essential infrastructure, establishing planned urban layouts capable of accommodating future growth. Serviced plots were then allocated to households, who took responsibility for home construction as resources allowed. This approach served two objectives: reducing the risks associated with informal settlement by signalling public commitment and basic service provision, and crowding in private investment by creating secure, serviceable plots suitable for gradual upgrading. Public investment costs were deliberately kept low, estimated at around \$13 per square metre, reflecting a focus on enabling infrastructure rather than fully built housing.

Longitudinal studies comparing former sites-and-services areas with other parts of the city show substantial long-term gains. Michaels et al. (2021) distinguish between two types of intervention: “de novo” neighbourhoods created from scratch on previously unoccupied greenfield land, where basic infrastructure was laid out before any settlement occurred, and “upgrading areas,” where similar infrastructure was retrofitted after low-quality housing had already developed organically (see Figure 26).

Their central finding is that this sequencing is decisive: servicing land before settlement consistently produced better long-run outcomes than upgrading areas or unplanned control areas. In de novo areas, land values increased by approximately \$75–100 per square metre over subsequent decades, far exceeding initial infrastructure costs of \$8–13 per square metre. Housing outcomes improved significantly: dwellings were larger and better constructed, access to electricity and sanitation was higher, and neighbourhood layouts supported improved connectivity and service delivery. These gains were driven not by continued public housing provision, but by private investment catalysed by early public servicing, which reduced development risk

Figure 26. Example images of de novo, upgrade and control areas in Dar es Salaam and encouraged incremental consolidation over time.



Source: Michels et al(2021)

However, the distributional record of the projects is more ambiguous. In particular, with regards to LVC, there were no systematic mechanism was put in place to capture the resulting land value increases. The public sector therefore absorbed the upfront infrastructure costs but did not recoup a share of the substantial appreciation that followed, leaving local authorities without the revenues that could have financed further servicing elsewhere in the city. This is a significant gap; the Tanzanian experience illustrates precisely the missed opportunity that better-designed land-based finance instruments could have addressed.

Furthermore, the projects were criticized at the time for not reliably reaching the lowest-income households, with evidence suggesting that initial plot allocations disproportionately benefited more affluent groups. Over subsequent decades, active secondary land markets developed in former sites-and-services areas, with upward sorting of residents as plots changed hands. While de novo areas did attract better-educated residents than comparable unplanned areas, the available evidence suggests this reflected gradual market sorting rather than wholesale displacement, and housing outcomes in these areas remained substantially better than in surrounding informal settlements.

Dar es Salaam's experience nonetheless illustrates the continued relevance of sites-and-services approaches for contemporary housing policy, particularly in rapidly growing cities facing acute constraints on serviced land. Strategic investment in basic infrastructure can help crowd in private housing investment, support incremental upgrading, and improve long-term housing adequacy, even in low-income contexts. At the same time, the Tanzanian case makes clear that these gains do not translate automatically into either fiscal sustainability or social equity. For sites-and-services approaches to deliver on their potential, they need to be paired from the outset with three complementary measures: land-based finance instruments designed to capture a share of the value uplift generated by public servicing; robust targeting and allocation mechanisms to ensure that initial plot access reaches lower-income households; and tenure protections and anti-displacement safeguards to preserve affordability as land values rise over time.

Without these, the infrastructure investment crowds in private capital but leaves the public sector unable to reinvest in the next wave of servicing, and the households most in need of adequate housing may ultimately be priced out of the areas they helped to consolidate.



Dar es Salaam, Tanzania © Alex Levis/ Pexels



Case 8. Addis Ababa housing and social development

By Iman Abubaker, Agraw Ali, Alemakef Tassew

The Integrated Housing and Development Programme (IHDP), launched in 2006, is one of Africa's most ambitious State-led housing efforts. The programme has delivered approximately 250,000 subsidized condominium units in and around Addis Ababa (Zewde & Schwab, 2024). Despite its scale, the programme faces critical affordability and equity and social inclusion challenges. Units are allocated via a lottery system to qualified applicants who must meet strict residency and financial criteria. High lease fees and the volatility of auction driven land prices continue to inflate overall housing costs. Paradoxically, the subsidies often fail to reach the most underserved; many low-income residents cannot afford the down payments or mortgage installments, leading to a filtering up where wealthier residents purchase units from original beneficiaries. Furthermore, redevelopment of public land in the city centre often results in the displacement of the urban poor. This process shifts low-income residents to the peripheries where access to jobs and social services is limited (Berhanu et al., 2022).

To mitigate these social costs, in situ land readjustment mechanisms, which allow communities to remain on site after redevelopment by reallocating smaller, serviced plots within the newly developed area could be employed. An example of this is the developer contribution of OVID Group (a real estate developer in Ethiopia), which together with the Government, designed and built affordable housing for former low-income residents in the Aware neighbourhood (New Business Ethiopia, 2024).

Addis Ababa's Corridor Development Project provides another example of utilizing the increased value of a redeveloped area to provide affordable housing. Led by the newly established Corridor Development Authority, the city is implementing a Government-led redevelopment model largely structured through public-private partnerships. In these projects, the Government retains 30 per cent of newly developed housing units, with the remaining 70 per cent allocated to private developers.

The Government's share is explicitly intended to resettle households displaced by redevelopment, enabling in situ relocation and allowing affected residents to remain within their original neighbourhoods rather than being pushed to the urban periphery.

In addition, the project includes full compensation and replacement land for private landowners, along with compensation for construction costs, in line with the nation's Constitution. The broader intent is to use Government-owned land to deliver mass housing for displaced low- and middle-income residents, while coupling redevelopment with social safeguards to avoid the spatialization of poverty. However, the effectiveness of these measures depends on strong governance, transparent implementation, and complementary reforms such as transitioning toward a dual lease and property tax system to ensure land value gains are captured equitably and redevelopment benefits are shared with underserved communities

There is a need for more concerted efforts to introduce value-capture mechanisms that systematically monetize land gains and invest in projects to mitigate shortage of affordable housing.

Chapter 4 conclusions and takeaways

Their contribution of LVC and LBF with respect to adequate housing lies in forming one component of a broader integrated housing strategy. This combines land-based instruments with direct public investment, housing finance reform, infrastructure provision, and enabling regulatory frameworks. Housing inadequacy in African cities reflects the intersection of multiple structural forces, therefore a strategy that reforms land instruments without attending to these underlying structural conditions will continue to fall short.

The availability, location, and adequacy of housing are strongly shaped by how land is governed, serviced, and valued over time. Rising land values, driven by public investment, infrastructure provision, and planning decisions, are not automatically redistributed to those who need them most. Left unmanaged, they can entrench spatial inequality, accelerate displacement, and price lower-income households out of well-located areas.

Land value capture provides a policy framework to redirect part of this value toward expanding serviced land supply and supporting more adequate housing outcomes. But these instruments must be designed with explicit awareness of distributional risk: without complementary safeguards including tenure protections, anti-eviction measures, and gender-responsive land rights, they risk accelerating the exclusions they are intended to address.

Well-designed land-based instruments can align private incentives with public housing goals, but their application across African cities remains at an early stage and is constrained by market conditions, regulatory capacity, and the strength of development control. Examples include density bonuses and inclusionary zoning, which are viable only where real estate markets are sufficiently active to generate value uplift, where planning enforcement is credible, and where institutional capacity exists to assess development value, negotiate with developers, and monitor compliance, such as in Stellenbosch.

In cities where these conditions do not yet exist, applying these instruments risks producing rules that are routinely bypassed.

Land readjustment, developer obligations, and related instruments are most effective when they are locally adapted, transparently administered, and embedded within clear planning frameworks rather than applied as isolated technical solutions.

Land readjustment's contribution to housing adequacy depends on participatory processes that build trust, recognize customary and informal tenure arrangements, and ensure that replotted land is serviced and legally accessible to households who can develop it incrementally. Developer obligations generate infrastructure and housing contributions, but without redistributive design their benefits concentrate in high-value areas and privately serviced enclaves, deepening rather than reducing the dual development dynamic. The cross-subsidization potential of both instruments

depends entirely on whether revenues and assets flow back into the city as a whole or remain captured within the developments that generate them.

For sites-and-services and land readjustment approaches to fulfil their potential, they must be paired from the outset with land-based finance instruments designed to capture a share of value uplift, robust allocation mechanisms that prioritize lower-income households, and tenure protections that preserve affordability as values rise. The Dar es Salaam case shows that early, modest public investment in infrastructure can unlock substantial private housing investment over time and produce lasting improvements in neighbourhood quality. However, this case also makes clear what happens when land value gains go uncaptured and targeting mechanisms are weak as the public sector absorbed the upfront infrastructure costs but recouped none of the substantial land value appreciation that followed.

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Chapter 5: Land-based finance strategies for public space and climate adaptation

This chapter examines the urgent challenges of protecting public space (both streets and open areas) and building climate-resilient cities. It explores how land-based finance can help meet these challenges, with particular attention to impacts on vulnerable populations. Public space and climate resilience are closely linked, and investments in climate risk reduction can be connected to land values through the benefits created by public space. The chapter reviews a range of land-based finance instruments that can support public space and climate interventions, depending on the goals and context, with a focus on strategic land management and land readjustment. It concludes by reflecting on how land-based finance is currently being used to support environmental objectives.

KEY TAKEAWAYS

- As cities expand, protecting public space and guiding urban development in climate-resilient patterns is urgent, and failure to do so will have dire consequences. Already, access to public space is low and declining; the toll from climate disasters, such as excessive heat and flooding, is significant; and the urban poor, in particular, are facing high and increasing risks of further harm.
- Land-based finance offers a range of tools to help create and pay for public space and climate interventions, and combining the two is useful for linking them to the value of land. In most African cities, risk-reduction alone is not effectively capitalized into land values due to shortfalls in information and the lack of insurance and mortgage markets to translate risk into property pricing.
- Strategic land management and land readjustment hold promise for the creation of public space and the implementation of spatial plans. When paired with other revenue-generating instruments, the creation of public space can contribute significantly to increased revenues.
- Although there are success cases from which to draw, environmental interventions and land-based finance are largely disconnected in African cities. There is an additional disconnect between neighbourhoods facing the greatest need for intervention and the households best poised to benefit from land value capture. Therefore, while there is enormous scope for linking environmental interventions and land-based finance, doing so should be paired with a pro-poor approach that includes cross-subsidization and efforts to increase the scale of interventions so that they do not solely benefit those with access to wealth and power.

5.1. INTRODUCTION

African cities face a dual and deeply interconnected challenge: a growing deficit of public space and escalating exposure to climate risks. Rapid urbanization, much of it informal and poorly coordinated, has left many cities with limited green space, inadequate drainage, fragmented street networks, and expanding settlement in high-risk areas (see for example, Box 15). These patterns undermine quality of life, constrain economic productivity, and heighten vulnerability to flooding, heat, and other climate shocks, particularly for low-income households.

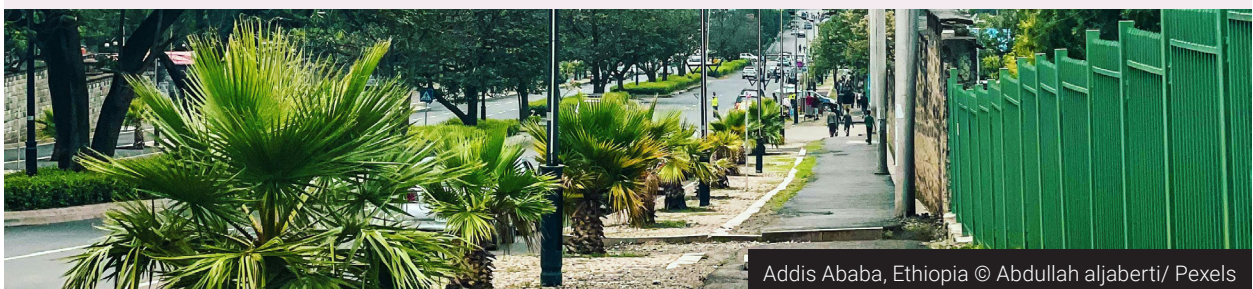
These challenges are unfolding at a critical moment. More than half of Africa’s urban development is still to come, meaning that today’s land management decisions will largely determine whether future cities are resilient, inclusive, and well connected, or locked into costly, inequitable, and climate-vulnerable patterns. Proactive action to reserve land for streets, parks, and nature-based climate solutions is far more cost-effective

than retrofitting built-up areas after the fact. Yet financing such forward-looking investments remains a persistent constraint, especially in cities with limited fiscal space and weak infrastructure provision.

Land-based finance offers underutilized opportunities to confront these challenges simultaneously. Public space and climate adaptation interventions often create or redistribute land value, whether through improved accessibility, enhanced environmental quality, or reduced risk. When these value effects are recognized and exploited, land-based instruments—such as betterment levies, developer charges, strategic land management and land readjustment—can help finance environmental investments, guide development away from high-risk areas and expand access to public space. Importantly, the right instrument will depend on the local context and type of intervention, as well as mechanisms to promote inclusivity.

Box 15. Environmental challenges of rapid urbanization in Addis Ababa

A host of environmental problems impacting African cities arise from lack of proper land management and coordination at the frontier between urban and rural areas. The city of Addis Ababa is a case in point, with social and climate pressures building up along the quickly urbanizing metropolitan edge. Owing to the ongoing proliferation of informal settlements largely on the city periphery, coupled with deforestation and soil erosion, Addis Ababa’s mountainous landscape has already been degraded. Poor drainage systems, improper waste disposal, and the loss of green spaces accompanying informal settlement are factors exacerbating the city’s environmental shocks and stressors, making it vulnerable to drought, heat waves, and flooding. Already 67 per cent of the population in Addis Ababa lives in flood prone areas (Dusseau, et. al.. 2023). However, land-based instruments offer some possible solutions for improving the sustainability of development (see Case 1 and Case 8).



5.2. THE TWIN CHALLENGES OF PUBLIC SPACE AND CLIMATE RISKS FOR AFRICA'S URBAN DEVELOPMENT

5.2.1. Public space

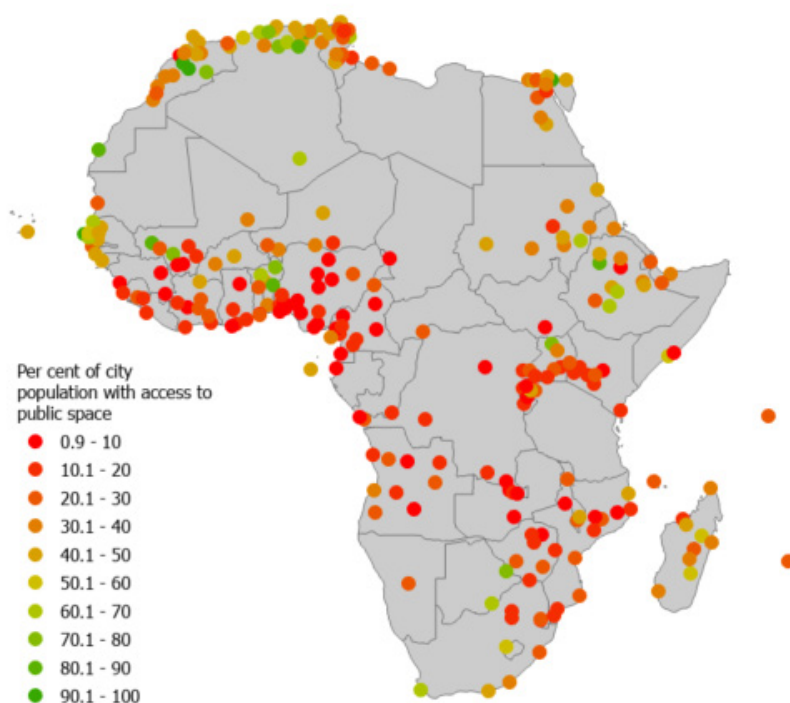
UN-Habitat defines public space to include green areas, parks, walkways and streets, although local definitions differ by city. Public space enhances growth, jobs and livelihoods by promoting connectivity, mobility, and by attracting firms and talent. Public space is crucial in defining the form and functioning of a city. "It frames the image of a city, ... and forms its skeleton upon which all else rest," (UN-Habitat, 2018, p.3).

UN-Habitat proposes an average of 45–50 per cent of urban land be allocated to streets and open public spaces, of which 30–35 per cent be

reserved for streets and sidewalks and 15–20 per cent for open public space (UN-Habitat, 2018).

However, across a sample of 295 African cities with data between 2014 and 2021, only 15 per cent of the urban area is allocated to streets and open public spaces on average, far below the recommendation.⁸ And, on average, less than one third of the urban population has convenient access (within 400 metres walking distance) to public open space, with very low percentages in some of the fastest urbanizing cities (see Figure 27).

Figure 27. Share of city population with convenient access to open public spaces (%)



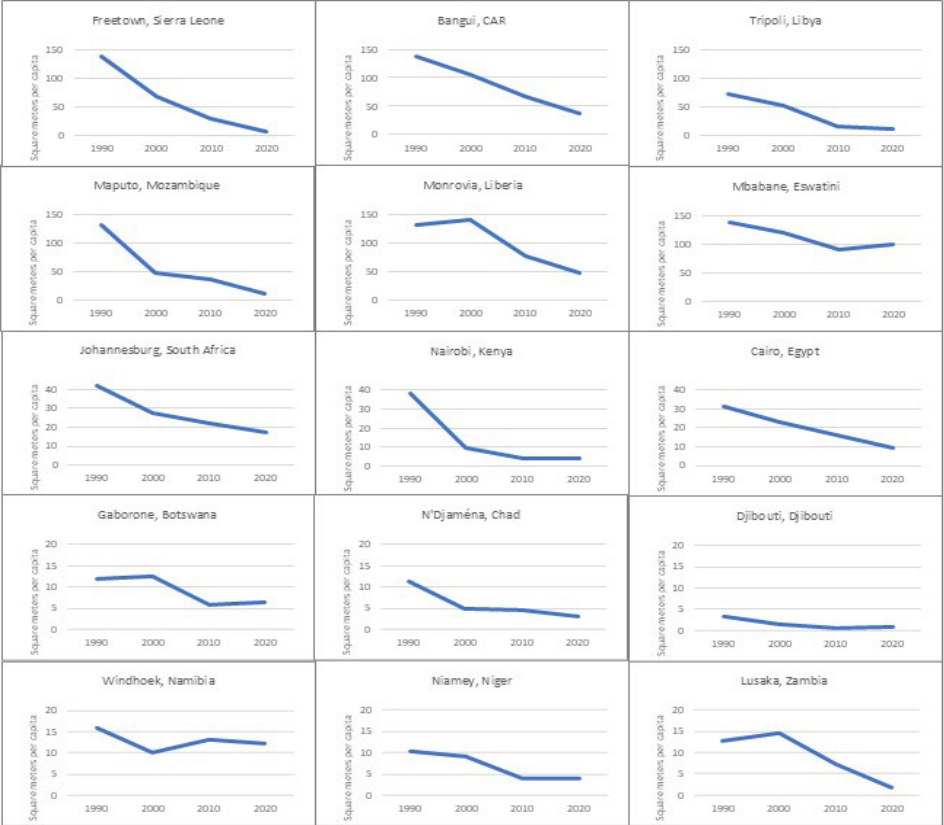
Source: Authors, using data from UN-Habitat Urban Indicators Database.

⁸ Based on data from UN-Habitat's Urban Indicators Database

Green spaces in particular are critical for health and climate resilience. Globally, access to urban green spaces is shaped by stark inequalities, with cities in developing countries generally having one third the level of access of those in rich countries. In addition, there are high disparities within cities themselves with almost twice the level of greenspace exposure inequality in the Global South vs. the Global North (Gini of 0.47 versus 0.27; Chen et al. 2022). One example comes from South Africa, where one study of urban areas found that neighbourhoods with parks had 82 per cent higher income levels than those without parks, white-dominated neighbourhoods had 12 per cent higher tree cover than others, and Black African citizens on average live 2.6 kilometres from a park, whereas the average white citizen has a park only 700 metres away (Venter et al., 2020).

Green space in African cities is estimated to be the lowest among the world’s major regions, and urban tree coverage has been declining the fastest (Muhoza & Zhou, 2024). Concerningly, city planners in major cities like Addis Ababa and Kampala view green space as leftover wasteland, and have created no strategy for planning green spaces. Green spaces are not considered integral to infrastructure networks, but are implemented later through ad hoc greening projects (Mulatu, Larsen & Yeshitella, 2025). Across a sample of 108 cities, the average amount of green space per capita has declined steadily from 57 square metres in 1990 to 15 in 2020 (see Figure 28).⁹

Figure 28. Declining green space per capita in a selection of African cities



Source: Authors, using data from UN-Habitat Urban Indicators Database.

9 According to data from the UN-Habitat Urban Indicators Database

Financial pressures on government and globalization have led to an increasing share of open spaces that are privately managed, such as those within malls or private housing developments (see Box 16 on Nairobi and Johannesburg). While these legally private spaces can be functionally public, and better managed than those owned by government, critics warn of commodification, exclusion, and serving only the “consumer citizen” and those with financial access to areas gated under the pretext of safety.

Regulation is needed if privately owned spaces are truly to serve the whole public. Moreover, governments must act to ensure public access and inclusivity within public-private partnership agreements and permits granted for large scale private developments. However, African cities often lack the legal frameworks, information systems, negotiation capacity, and political will to safeguard inclusiveness (Banerjee, 2001; Fält, 2018; Devereux & Littlefield, 2017; Mulatu, Larsen and Yeshitella, 2025; Palmer & Berrisford, 2015).

Box 16. Private control and public space in Nairobi and Johannesburg

The experiences of Nairobi (Kenya) and Johannesburg (South Africa) illustrate how access to public space in African cities has been shaped by a long history of exclusion, followed by more recent shifts toward private sector involvement in public space management. Colonial planning legacies, including Nairobi’s 1948 Master Plan and apartheid-era legislation in Johannesburg, produced highly unequal urban forms, with lasting effects on the quantity, design, and accessibility of public space. By the 1960s, only about 3 per cent of Johannesburg’s Central Business District was open public space, and in Nairobi fewer than 500 of the 2,934 hectares of parkland originally designated in 1948 still remain publicly accessible (Adams et al., 2021).

In response to rising safety concerns, fiscal constraints, and pressures to retain investment, both cities increasingly adopted public–private partnership models, such as city improvement districts, supplementary levies, and planning incentives that traded additional development rights for publicly accessible space (Mandy, 1984). As a result, private custodianship of public space has expanded. In Nairobi, surveys show that roughly 31 per cent of open public spaces are managed by private individuals. While these arrangements have helped stabilize property values and fund services such as security and waste management, they also risk limiting access for poorer and marginalized groups (UN-Habitat, 2020; Simone & Abouhani, 2005).

At the same time, evidence from both cities suggests a more complex reality than a simple public-private divide, as publicly and privately managed spaces are often interwoven, allowing varying degrees of permeability, sociability, and shared use. While ownership, regulation, and security strongly influence publicness, everyday practices and social interactions ultimately shape how urban public spaces function and who benefits from them (Adams, et al.. 2021).



Uhuru Park, Nairobi, Kenya © Justin Brian/ Pexels

5.2.2. Climate risks

African countries contribute the least to global greenhouse gas emissions yet face the most severe climate risks, with particularly acute impacts in rapidly growing cities. Across global indices, Africa ranks lowest in resilience, reflecting high exposure combined with limited adaptive capacity (CDP, 2020; Figure 29). According to Verisk Maplecroft’s Climate Change Vulnerability Index,¹⁰ 92 per cent of Africa’s

fastest-growing cities, including at least 15 national capitals, are at extreme climate risk. The economic exposure is already substantial: an estimated \$1.4 trillion in African GDP was exposed to extreme climate risk in 2023, and climate change is projected to reduce African GDP by 2–4 per cent by 2040 (Verisk Maplecroft, 2018; Africa Climate Foundation, 2023).

Figure 29. Climate vulnerability and adaptation readiness by country, 2021



Source: Authors using data from ND-GAIN.¹¹

Urban heat, flooding, and sea level rise represent the most significant climate threats. Rapid urban expansion is occurring increasingly in high-risk locations, including low-elevation coastal zones, floodplains and arid areas. Between the years 2000 and 2030, urban growth in low-elevation coastal zones is expected to expose an

additional 54 million to 62 million people to sea level rise. Compared with the year 2000, urban land exposed to arid conditions is projected to increase by 700 per cent by 2030, while urban areas exposed to high-frequency flooding are expected to rise by 2,600 per cent across West, Central, and Eastern Africa (IPCC, 2022).

¹⁰ Verisk Maplecroft’s Climate Change Vulnerability Index is a proprietary dataset that combines 42 indicators across three dimensions: climate-related disasters, human sensitivity in terms of population patterns, natural resources, agriculture and conflicts, and adaptive capacity of the national government.

¹¹ ND-GAIN indexes of climate vulnerability and adaptation readiness are compiled based on a number of indicators. The methodology is described here: <https://gain.nd.edu/our-work/country-index/methodology/indicators/>

Rising urban temperatures are already imposing measurable economic and social costs. Higher temperatures impact health, reduce labour productivity, increase absenteeism, and raise mortality and violence (Deininger & Goyal, 2024). By 2100, between 300 million and 2 billion people in African cities could be exposed to extreme 15-day heat events exceeding 42°C, depending on emissions pathways (Marcotullio, Keßler & Fekete, 2021).

Tropical African countries already experience frequent heatwaves, with the region averaging 40–50 heatwaves annually between 1989 and 2009, and severe events causing loss of life, including documented heat-related mortality in Ghana, Nigeria, and Senegal (Azongo et al., 2012; Kunda, Gosling & Foody, 2024). Urban form exacerbates these risks: cities with limited green space and extensive impervious surfaces are significantly

warmer, as illustrated by a roughly 2°C increase in Addis Ababa’s land surface temperature between 1986 and 2011 (Kunda, Gosling & Foody, 2024; Teferi & Abraha, 2017).

Flooding also poses a severe and growing threat. Urban built-up areas in flood-prone zones have expanded rapidly, often outpacing population growth. In Africa South of the Sahara, flood exposure in cities increased by 126 per cent between 2000 and 2015, compared to population growth of 58 per cent (Carrera et al. 2023). Flooding already imposes high economic costs: travel time lost due to road flooding costs an estimated \$1.2 million per day in Kinshasa, while major floods in Dar es Salaam are estimated to cost 2–4 per cent of city GDP. These disruptions disproportionately affect the poor by spreading disease and limiting access to jobs, services and markets (Deininger & Goyal, 2024).

5.2.3. Inequity in risk exposure

Climate risks are most severe for the urban poor, who face higher exposure and lower capacity to adapt. Informal settlements are often in disaster-prone areas and lack durable infrastructure and access to basic services. Residents in such areas are more vulnerable to floods, heat and related health risks.

Flood exposure is strongly associated with lower incomes and poorer public service provision (Deininger & Goyal, 2024). Heat risks are also more extreme in informal settlements, where higher wet-bulb temperatures, limited electricity access and low household adaptive capacity compound vulnerability (Ramsay et al., 2024).

As climate risks reshape urban land values, safer areas become more expensive, contributing to climate gentrification and the concentration of low-income households in the most hazard-prone locations.

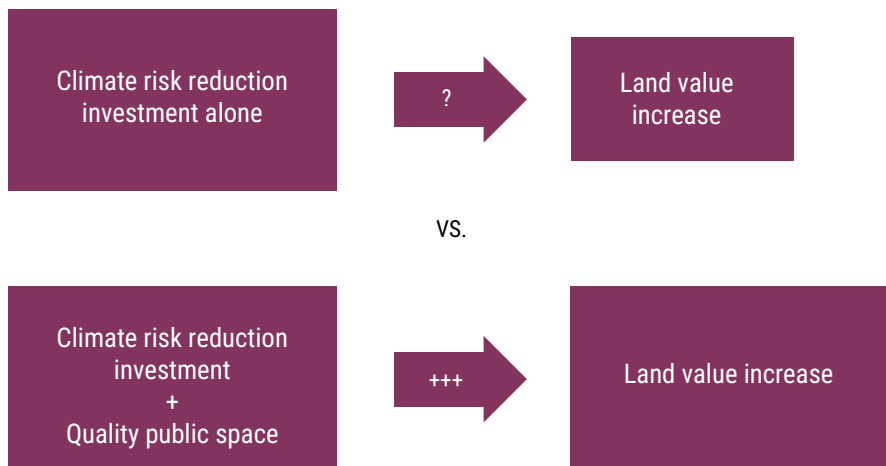
Overall, climate change poses systemic and escalating risks to African cities and economies. Without significant investment in climate-resilient urban development and targeted support for vulnerable populations, these risks threaten to deepen inequality, undermine growth, and place increasing strain on public finances and urban systems.

5.3. LINKING ENVIRONMENTAL INTERVENTIONS TO THE VALUE OF LAND

Theories of land value capture hinge on the creation of value through public actions (see chapter 1). The provision of public space and climate adaptation interventions are public goods within the mandate of governments, and should in theory increase land values. This is indeed the case for public space.

However, the situation with climate adaptation interventions is more complex due to the contextual factors in African cities as described below. Linking the two types of interventions may provide the best opportunity for climate-related land value capture (see Figure 30).

Figure 30. Land value increases arising from climate risk reduction alone vs. in combination with public space



Source: Figure by Authors.

Public space investments offer a clear and intuitive link to land value creation. A large body of international evidence shows that proximity to parks, green spaces, and high-quality streetscapes is associated with higher property values, reflecting both improved amenities and enhanced neighbourhood desirability (Acevedo, Hobbs & Martinez, 2017; Chen et al., 2022; Grafacos et al., 2019; Panchapagesan, Venkataraman & Ghosh, 2021; Wang & Levinson, 2024). As a result, parks, greenspace, and street improvements are frequently used as the basis for direct value capture instruments, such as betterment levies, because the relationship between the public investment and increased land value is relatively easy to observe and communicate.

Climate-related investments can influence land values through three mechanisms. The first is direct value creation through the reduction of climate risk to people and property. In theory, investments that lower exposure to flooding, heat, or other hazards should increase land values by reducing expected losses. Empirical studies from China, Latin America, and the United States have quantified such effects, demonstrating measurable increases in property values following climate mitigation or adaptation investments (Welch et al. 2024). However, the link between risk reduction and land values may operate weakly in many African urban land markets, where climate risks are systematically under-priced.

Inadequate risk assessments, limited public disclosure of risk information, speculative development practices, limited housing options for the majority of households, unplanned development and weak enforcement of land-use regulations mean that properties in high-risk areas often remain overvalued, while risk reduction investments are not fully rewarded by the market (Goytia, 2024).

Insurance and mortgage loans can leverage the capacity of the financial sector to assess risk and translate it into property pricing (Deininger & Goyal, 2024). However, these mechanisms are not functioning in most of Africa's urban areas. Only an estimated 1 per cent or less of natural catastrophe losses is covered by insurance across Africa (Munich R.E., 2024). When disasters occur, the cash-strapped public sector is left to provide recovery resources. Because climate risk is rarely priced through insurance premiums or lending conditions, it is largely excluded from property purchase decisions.

Insurance is an essential element of climate resilience. It can incentivize risk pricing and climate proofing. Additionally, insurance can cushion cities, business and households from financial losses during disasters. Such calamities for cities may mean credit rating downgrades, increased borrowing costs, and depleted municipal budgets. In turn, this situation would discourage investment, and prolong the time for cities to recover and bounce back in a financially sustainable manner (Sasson et al., 2021).

The dynamics of high-risk taking and impromptu recovery efforts create conditions that can deepen existing urban inequalities: low-income households are more likely to be located in high-risk areas, yet in post-disaster contexts, better-resourced speculators are often better positioned to benefit from public recovery spending, while poorer households receive limited support. As a result, the potential for land value gains arising

from reduced risk is uneven and may reinforce, rather than mitigate, spatial inequality (Goytia, 2024).

The second mechanism linking climate risk to land values operates through geographic advantages and disadvantages, which change as climate impacts intensify and the public sector takes or fails to take action. Increases in demand for lower-risk locations drive up land values in safer areas relative to high-risk zones. Particularly in contexts characterized by information asymmetries and weak regulation, these dynamics can accelerate inequitable outcomes and lead to climate gentrification in lower-risk areas, reinforcing patterns of segregation and displacement rather than supporting inclusive resilience.

The third mechanism linking climate risk intervention to land value creation is through co-benefits, or the urban amenities created alongside adaptation and mitigation investments. Many nature-based solutions, such as increased tree canopy, green spaces for stormwater management, and restored wetlands, enhance the quality of life while reducing risk (Welch et al., 2024).

These amenity effects are more visible and more readily valued by land markets than abstract reductions in future risk. As a result, climate investments that also function as public spaces or urban amenities are more likely to translate into higher land values in the near term and provide a practical basis for land value capture (see Figure 30). This suggests that integrating climate adaptation with public space provision creates clearer pathways for mobilizing land-based finance in African cities. However, attention to equity is still warranted. If risk reduction interventions are only implemented in those neighbourhoods most able to pay for them, the outcome will be even more deeply entrenched inequalities (see Box 17).

Box 17. Climate risk, land values, and exclusion in Lagos

Widely identified as one of the African cities most vulnerable to sea level rise, Lagos already experiences severe flooding, with major events in 2012 and 2020 causing widespread displacement, loss of life, and infrastructure damage. Recurrent flooding is estimated to cost the city about \$4 billion annually, with infrastructure losses alone exceeding \$22 million per year. Rapid and largely unregulated urban expansion has contributed to the loss of wetlands, lagoons, and beaches that once provided natural protection. At the same time, low-income households in informal settlements face chronic flood exposure and inadequate sanitation, bearing the brunt of climate risk.

Despite these risks, climate impacts are poorly reflected in land values. Projections suggest a grim future: roughly 32 per cent of Lagos could be inundated by 2100, with significant impacts expected by mid-century; yet highly exposed residential properties sell at only about a 0.5 per cent discount compared with less exposed areas. This under-pricing reflects limited risk assessment, weak public awareness, information asymmetries, low insurance penetration and weak enforcement of zoning regulations. This under-pricing is combined with speculative, short-term investment behaviour that prioritizes immediate returns over long-term safety. As a result, development continues in high-risk areas, and climate vulnerability is effectively transferred to households and the public sector, which acts as a default insurer when disasters strike.

The Eko Atlantic project on Victoria Island highlights the potential and the risks of climate-resilient urban development in this context. Developed through a public-private partnership and designed with extensive coastal protection and modern infrastructure, Eko Atlantic offers a highly climate-resilient enclave within an otherwise vulnerable city. However, rents in the area are only accessible to the ultra-wealthy, thus reinforcing a dual land market in Lagos, as robust climate protection and high-quality public space become premium assets accessible primarily to higher-income groups, while the majority of the city remains exposed. The case underscores how, without broader regulatory frameworks and inclusive investment strategies, climate-proofing can increase land values in selective areas, while deepening spatial and social inequalities across the urban region.

Case reference: Goytia, 2024



Civic Towers, Lekki, Lagos Nigeria © Nupo Deyon Daniel/ Unsplash

5.4. LAND-BASED FINANCE INSTRUMENTS FOR ENVIRONMENTAL INTERVENTIONS

5.4.1. Matching the instrument to the context and objective

Land-based finance can provide useful instruments to implement public space and climate adaptation. The right instrument depends on the intervention and the local context. Table 5 lists LBF instruments organized by type of intervention, which vary in their aims, beneficiaries, and link to property values.

Where public action generates clear and property-specific value gains, tools such as special assessments or betterment levies can be effective, since costs can be recovered directly from benefiting landholders. These instruments work best where governments can reliably identify affected properties and enforce payment, often as an add-on to an existing property tax or land lease system. However, low-income households may be unable to absorb additional charges, making exemptions, phased payments, or complementary subsidies necessary to avoid regressive outcomes.

For interventions that reduce climate risk or improve environmental conditions in ways that are less visible or slower to capitalize into land values, recurring, citywide instruments like property taxes and land leases are more appropriate. These tools pool resources across neighbourhoods, and over time allow cities to finance essential but less visible services like drainage and flood control.

In formal development contexts and places where development controls are effective, a host of tools are available to pass risk mitigation costs onto beneficiaries and leverage the value of land to discourage or forbid development in high-risk areas. Developer charges, impact fees, and special assessments are land-based options for landholders to pay for mitigation actions from

which they benefit directly. One example comes from the city of Boston, in the United States. In the city's Seaport area, which is vulnerable to sea level rise, developers are required to meet climate resilient building standards and pay exactions that go toward a Climate Resiliency Fund. The city has used the fund to pay debt on adaptation measures including a seawall (Welch et al., 2024).

However, in some high-risk places, risk mitigation may be more costly than land values can accommodate. For example, a study in Cape Town, South Africa, compared the present value of flood mitigation capital costs with projected property tax increases over a 50-year period. Using estimated discounts for assessed and sales values of properties in flood-prone areas, it found that in low-density neighbourhoods with lower property values and limited commercial activity, land value gains from existing properties were insufficient to cover the costs of flood attenuation projects (Rebe, 2023).

Impact fees or the cessation of public subsidies can help to disincentivize development in risk-prone areas. A 2024 World Bank report recommends that African cities use land value surcharges and property taxes to finance adaptation measures in order to avoid moral hazard, (i.e. risk reduction that unintentionally incentivizes risk-taking actions; Deininger & Goyal, 2024). Requiring private landholders to pay extra for higher-risk development is prudent, as governments typically bear many of the recovery costs when disaster strikes.

Another example from the United States is the Coastal Barrier Resources Act of 1982. The legislation bans federal spending on new

infrastructure and disaster recovery in designated storm surge areas, resulting in an 85 per cent reduction in private development in these areas (Druckenmiller et al., 2023).

Transfer of development rights (TDR) is another land-based tool that works well in contexts with strong market mechanisms and predominately formal development. The instrument allows landowners in designated areas to sell unused development rights to those developing in other locations, shifting development away from restricted or high-risk areas toward places better suited for growth. In Curitiba, Brazil, the instrument was used to shift development away from the flood banks of rivers, making way for the city's largest park (Welch et al., 2024).



Barigui Park in Curitiba, Brazil, created for flood mitigation and recreation. Source: Photo courtesy of Saplak

Where informal development and squatter settlement is a persistent issue, tools that involve development restrictions are less likely to work. In order to deter development in no-build zones, it is necessary to expand the supply of low-cost land and housing elsewhere. Implementing parks and other amenities may also be part of the solution as was done in the north-western Ethiopian city of Bahir Dar, which combined actions to expand the supply of connected and formalized land and the creation of public parks and trails in flood zones (see case 5.2). In addition, evidence from East Africa suggests that community management of green spaces may help prevent their loss to informal development (Mulatu, Larsen & Yeshitella, 2025).

When disaster does strike, recovery costs can be significant. Moreover, in Africa, insurance covers less than 1 per cent of such losses (Munich R.E., 2024). In addition to low private property insurance coverage rates, municipalities in Africa often lack catastrophe insurance. Even in South Africa, one study found that only 32 per cent of municipalities used insurance post-disaster. This situation was due to a lack of coverage for infrastructure assets, assets covered at value rather than actual replacement costs, and lengthy claims processes (Thom et al., 2025).

However, shared municipal risk pools are one potential option to expand coverage. Landholders can contribute to this option through property taxes or similar recurring charges. For example, South African municipalities in the Western Cape Province, which is vulnerable to flooding, are considering creating a special purpose pooled disaster risk insurance company to provide each municipality with disaster insurance. The company would then purchase reinsurance in the private market (Macedo and Steinbach, 2023).

Table 6 Land-based finance instruments for public space and climate adaptation

Impact of the intervention	Examples	LBF instruments ¹²	Prerequisites and caveats
Visible benefits that add value to specific private properties	<p>New roads or road improvements</p> <p>New parks and park improvements</p> <p>Resolving recurring flooding</p> <p>Expanding the neighbourhood tree canopy</p>	Special property tax assessments or betterment levies to recover the costs from benefitting landholders	<p>Governments must be able to identify benefitting properties and enforce assessments. It is useful if a property tax or land lease is already in effect and this can be an add-on.</p> <p>Low-income households may be unable to absorb added costs, requiring exemptions or subsidies.</p>
Risk reduction or environmental improvements with indirect, intangible or delayed value impacts	<p>Improving underground drainage capacity</p> <p>Adding flood levies</p>	Recurring value-based tools (land lease or property tax) cover a range of visible and invisible municipal services.	Key challenges include cadastral coverage, fair and updated valuations, and political resistance.
Infrastructure necessary to accommodate new development safely or mitigate its externalities	<p>Flood prevention infrastructure for new developments</p> <p>Wastewater connections to manage run-off from new developments</p> <p>Expanded transport infrastructure to accommodate added traffic</p>	Developer exactions and impact fees recover the cost of development-induced investment needs.	<p>These instruments only apply to formal development.</p> <p>Over-reliance on developer exactions for infrastructure may lead to stark neighbourhood inequalities with basic infrastructure only provided to high-income formal neighbourhoods.</p>
Reducing development intensity in high-risk zones	Rules and disincentives to reduce formal development in high-risk areas	<p>Developer exactions, impact fees or betterment levies to shift the cost of mitigation to the beneficiaries.</p> <p>Ending public subsidies and public investments can also deter private development.</p>	Disincentives mainly affect formal development and may not impact informal settlement.

¹² Each LBF instrument is more fully defined in Chapter 1.

Impact of the intervention	Examples	LBF instruments ¹²	Prerequisites and caveats
Preventing formal and informal development in high-risk areas and areas designated as public space	<p>Creating or enforcing a no-build zone in an area prone to landslides or floods</p> <p>Creating public rights-of-way or space for public parks</p>	<p>Transfer of development rights (TDR) allows landholders in sending areas to sell their development rights to landholders in receiving areas, thus promoting development in low-risk areas rather than high-risk areas.</p> <p>Land readjustment can shift private plots in a way that makes room for no-build areas (see case 5.3).</p> <p>Strategic land management, where the Government buys, develops, and sells or leases land, can create public space and generate revenue.</p> <p>Inclusionary housing elsewhere (see chapter 4)</p>	<p>TDR requires effective control over zoning and land use as well as a transparent market for development rights.</p> <p>Inclusionary zoning regulations can increase the cost of formal development and decrease the supply.</p> <p>Government land purchases have high upfront costs.</p> <p>Land readjustment is typically low cost but can be time-intensive if land rights are unclear and if many landholders are impacted.</p>
Risk reduction and public space for the most vulnerable in situ	Flood and heat mitigation through improved drainage and green space in poor neighbourhoods	<p>Land readjustment to create public space/green space</p> <p>Cross-subsidies funded by recurring or one-time land-based taxes and fees</p> <p>Small betterment levies raised in low-income neighbourhoods for incremental yet high-impact investments</p>	<p>Cross-subsidies may face political opposition from high-income elite.</p> <p>Improvements in low-income neighbourhoods may create gentrification pressure leading to displacement if tenure rights for low-income households are weak.</p>
Combatting climate-gentrification and exclusion in low-risk areas	Provisions to help the poor locate in or remain in low-risk areas	<p>Inclusionary housing (see Chapter 4)</p> <p>Land from strategic land management or land readjustment schemes set aside for affordable housing (see case 5.2)</p>	Meeting the demand for well-located, low-risk land is fundamentally an issue of scale.

Impact of the intervention	Examples	LBF instruments ¹²	Prerequisites and caveats
Expanding disaster insurance coverage	Setting up a disaster assistance fund at the municipal level	Impact fees or a special assessment levied in high-risk areas put toward a disaster recovery fund Purchasing disaster insurance at the municipal level, funded by property taxes	Impact fees and special assessments will only impact formally developed areas. Municipal-level disaster insurance is often lacking or inadequate in Africa.

Source: Table by authors, drawing upon Goytia, 2024; Welch et al., 2024.

5.4.2. Addressing challenges of inequity

One persistent problem is the ability of low-income neighbourhoods to pay for environmental interventions, especially because they have the lowest access to public and green space, the highest exposure to risk, and the lowest access to recovery resources. In addition, improvements that are limited to few neighbourhoods can create or worsen gentrification pressures that displace and exclude the poor.

Cross-subsidization is one element of an inclusive approach to public space and climate adaptation. Land-based revenues from high-income neighbourhoods should not be limited to expenditures in those same localities. This presents a trade-off, as tools such as betterment levies are effective in part because they directly

link payments from landholders to hyper-local improvements. However, concentrating investments solely in neighbourhoods that can most easily pay for them will reinforce patterns of inequality and deprivation. Therefore, it is necessary to allocate some portion of land-based revenues to investments in places where households are less able to pay for basic access to public space and disaster safety.

Another critical element in making environmental interventions inclusive is scale. As long as demand far exceeds the supply of low-risk land with good access to public space, the poor will be pushed to areas lacking these amenities. Therefore, wider scale interventions are necessary to broaden the pool of beneficiaries.

5.4.3. Strategic land management and land readjustment as instruments to create public space

When it comes to the creation of public space (streets, open spaces and green space), two land-based finance instruments deserve particular attention: strategic land management and land readjustment.

The need for such tools is urgent: African cities are expanding rapidly, and more than half of Africa's urban development is yet to take place (OECD et al., 2025), yet spatial planning has largely failed on

the continent due to the inability of governments to implement plans. Strategic land management and land readjustment harness the value of land to overcome obstacles to plan implementation and make spatial plans a reality.

The long-term urban form, connectivity, resilience, and productivity of the urban fabric will be determined partly by the way urban development proceeds in coming years.

Ensuring urbanization proceeds in well-planned patterns is critical, and much less costly than attempting to retrofit the urban layout after development has taken place. Making space for a connected grid of streets, preserving public space for parks and green areas that can reduce heat and provide drainage, and deterring development in high-risk areas are critical land management tasks. The network of streets and public space has a long-term impact on urban growth and development. In Tanzania, provision of arterial

infrastructure and basic infrastructure under “site and service” projects of the 1970s enabled incremental plot upgrades, resulting three to four decades later in larger buildings, better electricity access, and stronger socioeconomic outcomes than in untreated areas or in slums (see case 4.2; Deininger & Goyal, 2024). Public space in the form of street connectivity, in particular, is fundamental for the economic benefits of urban space (agglomeration economies), and foundational for long-term productivity and accessibility.

5.4.4. Strategic land management

Strategic land management, where government purchases and develops land, and then leases or resells it for higher values, can generate income while preserving the areas needed for public space. City authorities use public land strategically to orient urban development within the context of urban and spatial planning.

This instrument may also be useful in cities where public landholdings are significant, as cities can utilize strategic land management to cover the costs of extending urban infrastructure to meet rapidly rising demand. Strategic land management also allows city governments to reserve land at planned locations or areas for future investment (i.e. land banking). Strategic land management requires financial and technical capacity to plan ahead and the capital to buy up land in areas with development potential and implement necessary public investments. Fast growth in most African cities, combined with low public resources and high land values, is outpacing the ability of government to do this at a large scale.

However, there are low-cost simplified approaches that appear to be effective at expanding the scale of strategic land management (see Case 8). These approaches can generate income in a revolving fund to extend public space as cities grow. Strategic land management is used to some degree in a variety of African countries, although

public space is not typically the main goal (OECD and Lincoln Institute of Land Policy, 2022). It is generally more effective where governments already hold significant land assets or exercise strong control over land rights (as in Egypt and Ethiopia), or where robust legal and regulatory frameworks support expropriation and public land acquisition (as in Morocco and Tunisia). Some governments are able to expropriate land below market price or freeze prices before the public announcement of upgrades, making public acquisition more financially feasible.

However, there are trade-offs to this approach, and underpayment for land may result in grievances (see Case 8 on Ethiopia). Other trade-offs to be considered in the use of strategic land management include how land is used (revenue generation versus redistributive or productive purposes), the role of public authorities (as speculative landholders versus land-use regulators), and how land sales and redevelopment are coordinated (through market mechanisms or political decision-making; Artioli, 2021).

In addition, when the private sector is involved in strategic land management, there may be trade-offs between expanded capacity to develop high-quality urban space and outcomes that privatize public space and exclude vulnerable populations (see Case 1). Risks of social exclusion are inherent

in a trend of city-scale urban projects built by the private sector (for example, Appolonia in Ghana, New Cairo in Egypt, Modderfontein in South Africa, Eko Atlantic City in Nigeria, Kigamboni in Tanzania; van Noorloos & Kloosterboer, 2018).

5.4.5. Land readjustment

Land readjustment (LR) is a land management technique in which multiple land parcels are pooled and reconfigured with adequate space for streets and open space, with each landowner receiving a smaller but more valuable plot in the reorganized area. The technique leverages land value creation from public investments in streets and open spaces to obtain the willingness of landholders to contribute a portion of their land.

In contrast to strategic land management that involves public purchase, land readjustment does not offer financial compensation at all for public space. Instead it deducts only a portion of private land in exchange for a better serviced and more valuable, albeit smaller and readjusted plots. Counter-intuitively, this no-payment approach may have higher favourability among contributing landholders. In Bahha, Egypt, when offered a choice between either selling land or contributing a portion and keeping a portion of plots, landholders overwhelmingly chose the latter, viewing land as a critical personal investment beyond the value of immediate cash (see case 5.3).

Similarly, when a simplified urban expansion methodology was used in Ethiopia, where farmers were compensated for their land contributions, the land acquisition process was more contentious than a similar methodology in Somaliland, where instead of being paid compensation, all landholders contributed a standard proportion of their plots and kept the remainder (see case 5.2).

Land readjustment can be applied to greenfield and built up areas,¹³ although the latter is typically

Public-private partnerships should be careful not to undermine provision of space that is truly public, as well as public goods such as climate risk mitigation.

a much more complex process, particularly in densely built settlements. However, even there, the instrument can be used to improve living conditions and create public space. Japan has decades of experience using land readjustment in built up urban areas, and often provides the model of land readjustment that has helped to guide the practice in other countries.

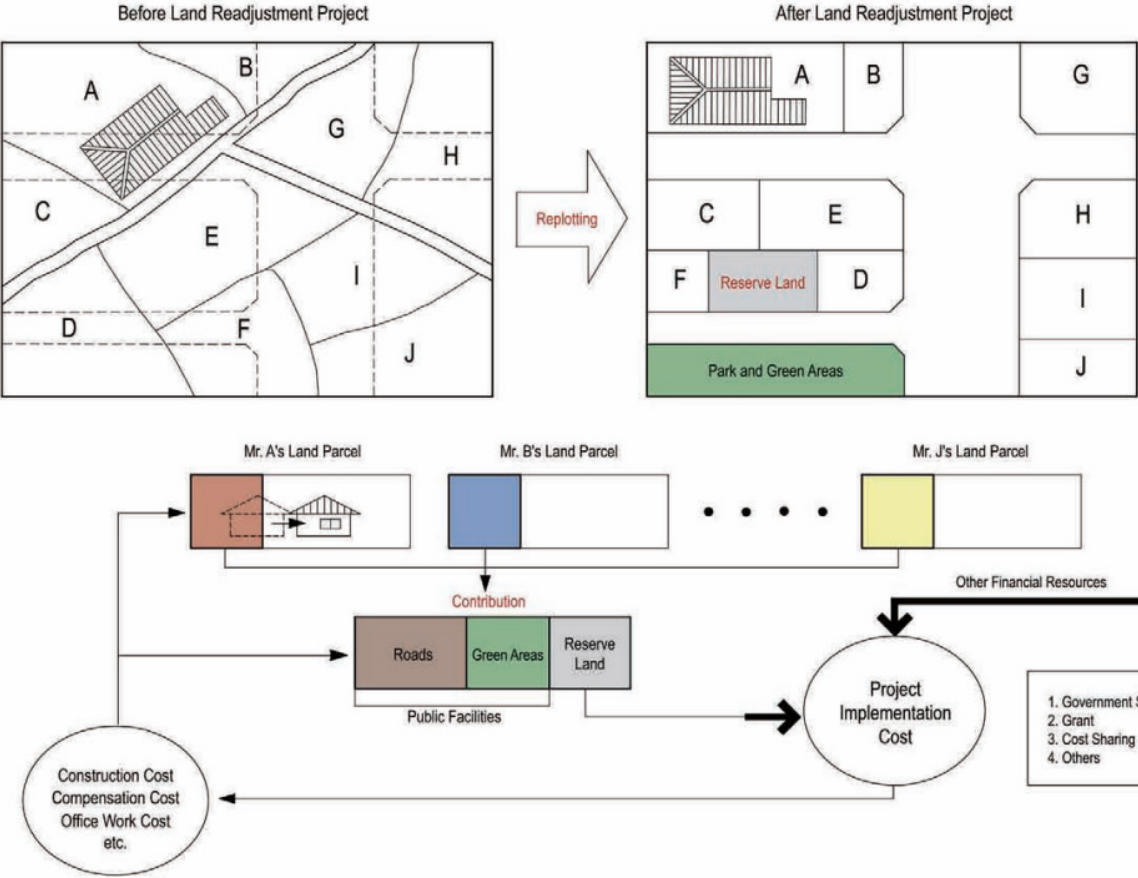
In some cases of Japanese land readjustment in built up areas, buildings are lifted and moved to conform to the new pattern of plots and streets. Reserve land is set aside to help fund compensation for the cost of building relocation (Inagi City, 2024; see Figure 31). In places where the value of land cannot support building relocation, or buildings are fewer permanent structures, as is often the case in informal areas, structures may be removed and households resettled.

Djibouti city provides one example, where a World Bank project titled Djibouti Integrated Slum Upgrading Project combined street upgrades, public service provision and land titling in a dense informally settled area. In some cases where structures were located in street upgrading areas, households were resettled in a planned and serviced resettlement area (GPSC, 2020). Another example comes from Lideta in the heart of Addis Ababa, where a densely built informal settlement was subject to land readjustment.

In that case, some residents were temporarily relocated and then given back smaller but serviced plots in the area, while others were permanently resettled off-site (see Box 18).

¹³ Land readjustment and examples are also discussed in Chapter 4.

Figure 31. Land readjustment methodology from Japan



Source: De Souza, Ochi & Hosono (2018).

Box 18. Land readjustment in an informal settlement in Addis Ababa, Ethiopia

In 2009, residents of Lideta, an informal settlement in the heart of Addis Ababa, submitted a redevelopment request to the local government. The area was densely built with inadequate public space and narrow roads that constricted vehicular movement. The local government partnered with residents to establish goals and a process, identify landholders, and implement a land readjustment scheme with 30 per cent of the land dedicated to public streets, about 3 per cent reserved for parks and green spaces, and nearly 20 per cent reserved for private mixed-use development to recover project costs through leasing. Contributors were compensated primarily through secure housing, serviced plots, or relocation opportunities rather than cash payments. The Lideta land readjustment followed a five-year process with the following basic steps:

- The city government established a dedicated redevelopment unit, clarified institutional roles, and defined project objectives.
- Residents were divided into focus groups, and formed a community committee to liaise with the city and negotiate project details. A memorandum of understanding was signed between the community and the city defining roles and project scope.

- Preliminary studies and surveys were conducted to understand site conditions, household preferences, and financial capacity. Land and household data were collected and verified, including claims documentation, with results publicly posted. Disputes were resolved by working with community representatives and through an appeals process.
- A draft redevelopment vision and land-use concept was prepared and presented to residents.
- Residents selected compensation and resettlement options (on-site housing, relocation plots, apartments, or cooperative development).
- Housing and land allocations were assigned using lotteries to ensure fairness, and temporary relocation arrangements were made for some residents during construction.
- Site clearance was carried out, with owners allowed to demolish structures and reuse materials.
- Land was re-parcelled and redistributed according to the new urban plan with housing, roads, services and commercial plots.
- Infrastructure and building construction began immediately, and a portion of land was leased to private developers to recover redevelopment costs.
- Residents moved into new housing or relocation sites with rent-to-buy housing or serviced plots. Vulnerable groups were connected to support programmes, including assistance with credit and livelihoods.

Reference: Zeluel, 2018

On the urban periphery, land readjustment is well-suited to tackling the challenge of reserving public space for streets and open space before it is built upon, and is much more cost effective than retrofitting the urban form later (see case 3.1; Deininger & Goyal, 2024). Land readjustment can also be used to contribute to a network of infrastructure in advance of informal development, creating significant value, signalling

development potential and encouraging private formal development, as illustrated by the case of Banha, Egypt (see Case 11) and Nunga, Rwanda (see case 3.1). On the urban periphery of cities in Somaliland, land readjustment with a standard 15 per cent plot area deduction for streets and public open space has led to plots quadrupling in value in areas of the urban periphery with high development potential (see case 5.2).

5.5. CURRENT USE OF LBF FOR ENVIRONMENTAL INVESTMENTS

While municipalities outside Africa like Boston and Curitiba have experience utilizing land-based finance for public space and climate resilience (as noted above), the field is largely still nascent in

Africa. Even places that have successfully raised land-based revenues, like Ethiopia, and where the creation of public space has played a major part in land valuations, have struggled to reinvest

land-based revenues into public space (see case 5.2). In South Africa, a number of cities have been exploring the use of special assessment districts or tax levies to fund drainage and flood risk reduction projects, but challenges around interjurisdictional coordination and ways to ring-fence associated revenues have yet to be resolved.¹⁴

Kumasi, Ghana, is considering a pilot to ring-fence a portion of the revenue from property rates to pay for green space and nature-based solutions that would reduce heat and flooding (see case 5.1); however, this is yet to be implemented. The reality is that a series of disconnects characterize most African cities when it comes to the state of land-based finance instruments and environmental interventions. Where land-based finance instruments are being used, the resulting

revenues or contributions are rarely used to invest in public space and climate resilience. And, where environmental investments are occurring, they are often poorly linked to value capture.

Another disconnect arises given that the highest needs for public space and climate resilience investments are in high-poverty areas, whereas much of the potential for value increase is elsewhere. The combination of poorly managed and documented land rights and poorly functioning property markets makes intervening in a way that pairs good return on public investment with pro-poor outcomes challenging. Where interventions uplift property values, urban residents with weak tenure rights are susceptible to being displaced either forcibly or through market pressures, often exacerbating the proliferation of informal settlements in high-risk areas (Cain, 2012).



Downtown Kumasi, Ghana © ZSM/ Wikimedia Commons

Case 9. Kumasi: LBF strategies for management of public spaces

By Nii Darko (WRI)

Context

Kumasi has been known as the “Garden City” of West Africa since the 1940s. From some accounts, the name was bestowed on the city by the late Queen Elizabeth due to the lush green environment that was a character of the city. Various neighbourhoods like Kejetia, Nhyiaso and Amakom had

¹⁴ As part of the National Land Value Capture Programme supported by Development Action Group, the Lincoln Institute of Land Policy, and the National Treasury’s Cities Support Programme; personal communication with M. Clark and R. van Rooyen, 27 January, 2026.

large tracts of green spaces. This character of the urban fabric existed till the late seventies when due to a number of factors, these green open spaces began to shrink.

The degradation of public green spaces

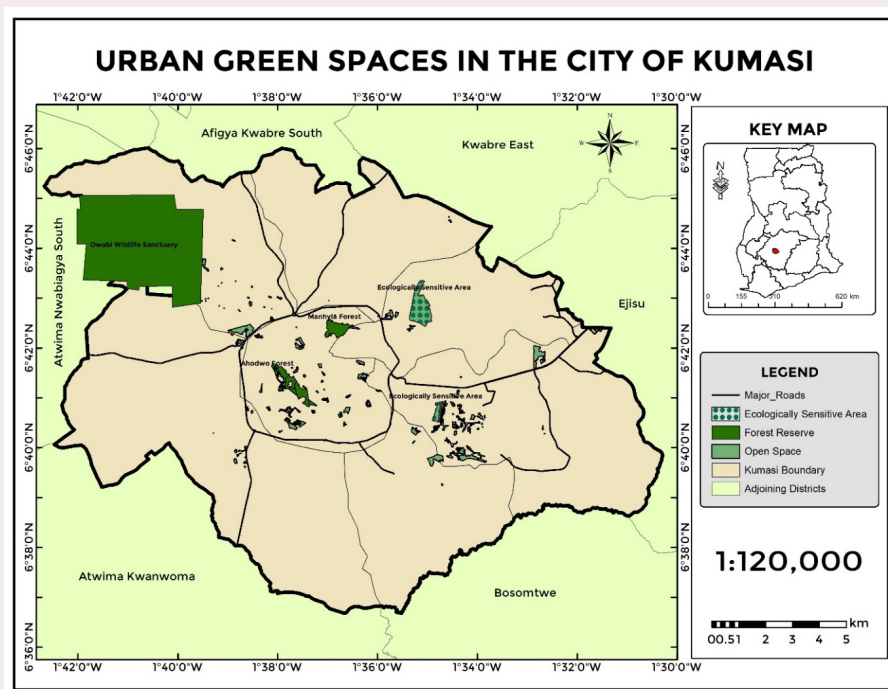
The economic boom after Ghana’s independence, largely fueled by the exportation of cocoa, timber and gold had a tremendous effect on the living standards in Kumasi. This was because most of these resources were located in the Ashanti Region with Kumasi as the capital city. Most of the wealthy merchants with their newfound economic power decided to build new houses in Kumasi. Most of the land that had been reserved as greenery or open spaces were used for these new developments. The city’s new financial status attracted lots of industries and commercial entities, which in turn drew new residents. The resultant demand for accommodation led to major developments in the housing sector and infrastructure such as roads schools, and hospitals. The fallback for land had to be in these green spaces, open spaces and vegetation within and abutting the inner city. This led to most of the green areas being lost to the new infrastructure, thus enabling Kumasi to realize the status of an emerging city.

The current state of Kumasi’s public green spaces and their maintenance

The status of the green spaces in Kumasi currently is quite dire, according to various researchers and institutions. Narh et al. (2020) note an 84 per cent decrease in the available acres of parkland per 1,000 population between 2000 and 2019.

The city authorities are unable to maintain the existing green spaces properly due mostly to funding shortfalls, which has led to neglect of large portions of these lands (see Figure 32 for fragile areas).

Figure 32. Forests, ecologically sensitive areas and nature reserves (2022)



Source: Green Space Accessibility Mapping for Kumasi, WRI (Tassew & Fikresilassie, 2024)

economic, environmental, and health advantages. However, clear and reliable data on the spatial extent, distribution, accessibility, and attractiveness of green spaces and parks in the three African cities (Addis Ababa, Kumasi, and Musanze

As a result, various green parks, like the Kumasi Children’s Park, have been abandoned to squatters. There are, however, some parks and green spaces that are well maintained due to the commercialization of these public spaces. Recreation facilities such as the Rattray Park and Asem Park charge entry fees and thus creates a ready source of funds for maintenance. Other green spaces, such as the botanical garden at Kwame Nkrumah University of Science and Technology, are maintained by the university using its own internally generated funds. The Kumasi Metropolitan Assembly also maintains ceremonial green spaces that are found especially within the numerous roundabouts and monuments.

LBF for management of public spaces

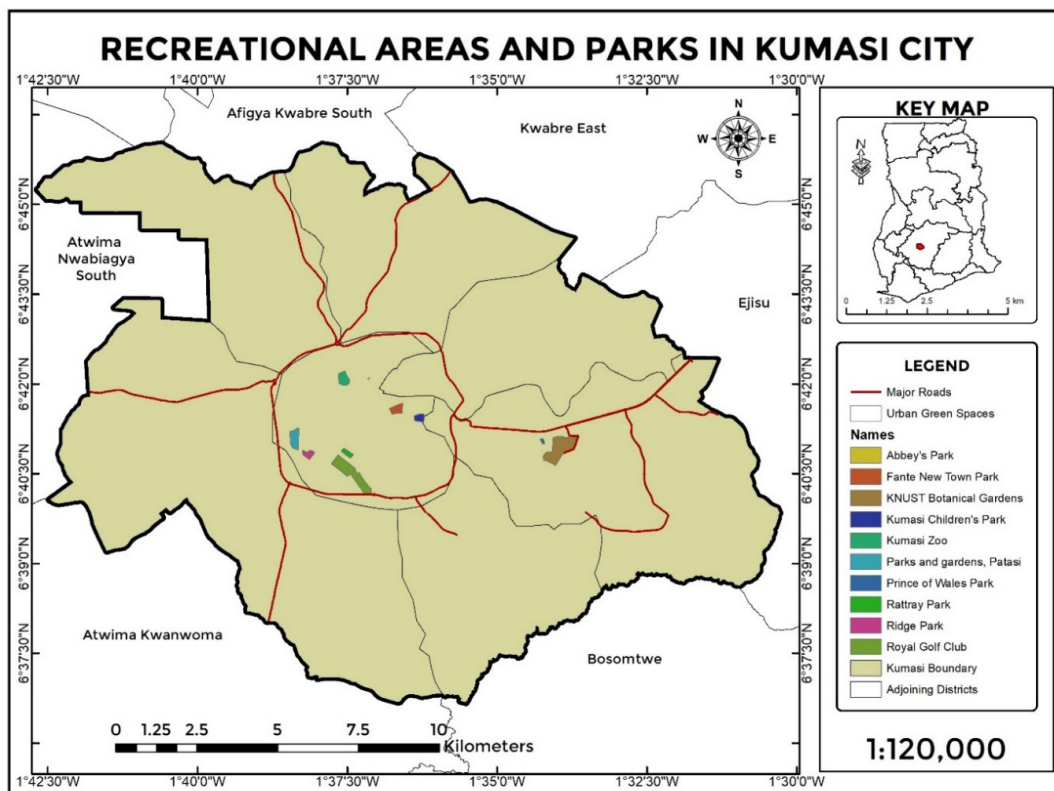
Discussions have been held to explore the possibility of piloting a ring-fencing project to raise adequate fund for the maintenance of the city’s green spaces (see Table 6 and Figure 33). One idea is to allocate a percentage of property rates collected from certain suburbs for nature-based solutions. These funds would be used to care for existing green open spaces within these localities. The proposed percentage to be earmarked for ring-fencing is being discussed; it ranges between 5 per cent and 10 per cent. It has been proposed that this will be piloted in three suburbs for property rate only, and not the land tax. These identified suburbs are areas where there are adequate green spaces and surrounded by a green belt. If this pilot is successful, it would be scaled to other suburbs of the city.

Table 7 List of Kumasi’s parks and recreational areas

Name	Locality	Land Size (m ²)
KNUST Botanical Gardens	KNUST	129,000
Prince of Wales Park	KNUST	14,958
Fante New Town Park	Fante New Town	88,967
Kumasi Zoo	Kejetia	1,497,337
Kumasi Children’s Park	Amakom	60,703
Ridge Park	Danyame	62,558
Parks and Gardens	North Patasi	150,000
Abbey’s Park	Ashtown	1,134
Rattray Park	Danyame	50, 142
Royal Golf Club	Ahodwo	376,358

Source: *Green Space Accessibility Mapping for Kumasi, WRI, 2022.*

Figure 33. Map of Kumasi's recreational areas, parks and gardens



Source: *Green Space Accessibility Mapping for Kumasi*, WRI, 2022.

The pilot scheme is set to run for a year before being rolled out to other suburbs. It has been proposed that two suburbs be added to the scheme each year, depending on the property rates collected.

This project has the possibility of cooling the city and its suburbs, thereby mitigating the current urban heat regime. The project is also expected to prevent flooding within these suburbs and the city centre. Kumasi experiences widespread flooding during the rainy season as a result of the over-dependence on non-permeable pavement used for property fronts and within properties. The project also holds the potential for the Kumasi Metropolitan Assembly to hire maintenance workers for these green open spaces. However, the greatest challenge will be for the general population to accept this pilot scheme, as around 65–75 per cent of the city's

property owners are compliant with property tax payments. Maintaining the spaces as public green areas may be a challenge because political influence plays a major role in the allocation of land for development, and that could lead to encroachment on public open spaces.

Lessons and policy implications, recommendations

If this pilot succeeds, it is highly likely that the Assembly would include in its bye-laws that certain percentages of the city's internally generated funds, especially property rates, be ring-fenced for nature-based solutions.

Lessons from the pilot scheme could also strengthen the framework for ensuring that nature-based solutions become a core part of the Assembly's urban planning routine. .



Case 10. Urban expansion planning in Ethiopia's secondary cities

The rapid expansion of unplanned development at the urban periphery of many African cities is proceeding at a pace that has outstripped the ability of governments to devise and implement urban plans. Unplanned, disconnected land use is thus increasingly shaping African cities. The Ethiopia Expansion Initiative has responded to this challenge with a tailor-made simplified planning and implementation mechanism that takes advantage of the land value created by planning.

Supported by New York University's Marron Institute, the programme began in 2013 in four regional capitals: Adama, Bahir Dar, Hawassa, and Mekele. It was subsequently expanded to 14 additional secondary cities (Downs et al., 2025). The aim was to direct the expansion of Ethiopia's secondary cities in a planned manner by creating a grid of connected arterial streets to become the backbone for new urban development. The simplified planning approach had the practical benefit of being fast and low-cost enough to pre-empt unplanned growth, thus outperforming the majority of planning methodologies utilized in low-income rapidly urbanizing contexts.

Steps in the urban expansion methodology include the following:

1. Forecasting the amount of land needed for expansion over the coming 25 years.
2. Identifying areas suitable for expansion based on topography, proximity to the existing urban area, and the location of environmentally sensitive and high risk areas.
3. Planning a grid of arterial streets, and formally adopting the plan.
4. Demarcating roads on the ground in order to protect them from squatting and unplanned settlement.
5. Constructing the roads incrementally, prioritizing rapid deployment of low-cost paving materials (such as graded dirt and gravel) that can immediately guide the pattern of peripheral development and be upgraded as budgetary resources are available (Lamson-Hall, Angel & Tafesse, 2022).

The first four cities all approved their expansion plans locally at the end of 2013, but Adama’s plan was not approved at the regional level, slowing progress. Changes in local political leadership have further stalled plan implementation. By 2017, the other three cities had constructed a combined 560 kilometres of dirt, gravel and asphalt roads.

The simplified planning process helped to move quickly toward implementation. In fact, one government report remarked that “detailed assessments on the socioeconomic, environmental and political factors” were not done, but that the basic information on population and land was “good enough for start-up” (Seid, 2017, p. 4). Of the additional 14 cities using the urban expansion methodology in Phase 2, eight were found to have built significant lengths of arterial roads in accordance with their plans a decade later (Downs et al., 2025). Less successful cities did not allocate initial budget resources to implement plans, and faced discontinuities in city leadership, or both (Lamson-Hall & Martin, 2022).

Land rights and payments followed Ethiopia’s land lease system, where urban land is Government owned and land leases are issued for 20–50 year periods. A down payment of 10–20 per cent is required at the start of the lease period and annual payments thereafter. Compensation, based on a formula from the regional government, was paid to those landholders required to give up land for streets and public spaces. In some cases, farmers did not feel adequately compensated, resulting in grievances. However, other landholders welcomed the increased accessibility and value created by arterial extensions and planned urbanization (Seid, 2017; Lamson-Hall, Angel & Tafesse, 2022).

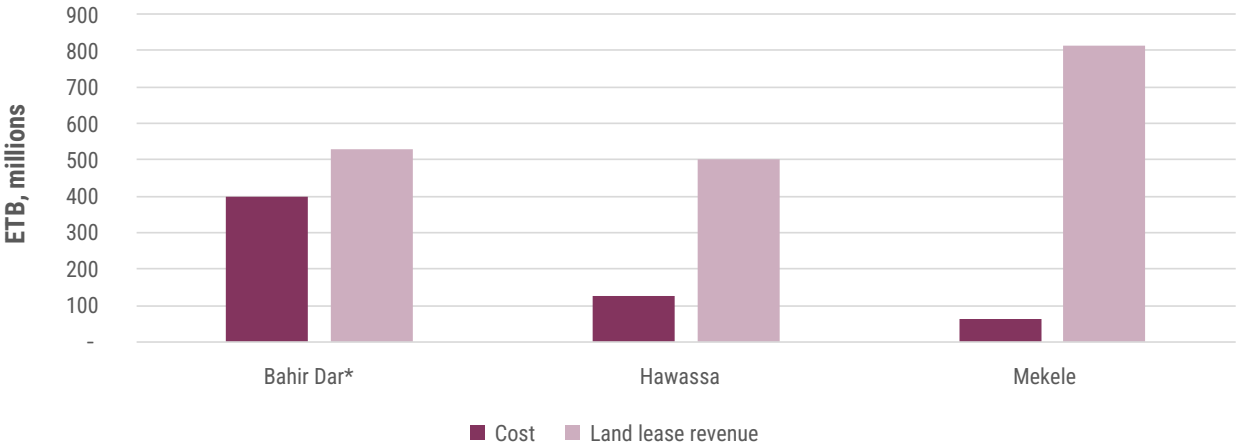
Land leases were issued to private landholders after allocating 15 per cent of the land for public space including streets. In addition, across Bahir Dar, Hawassa and Mekele, over 500 hectares was granted to housing associations for low-cost housing; 100 hectares was provided to youth associations for small and micro-enterprise workshops; and 1,390 hectares was set aside for industrial parks with funds for land compensation coming from regional governments (Seid, 2017).

Even after forgoing lease income for land grants to social associations and industrial parks, by 2017, initial land lease payments exceeded by far the total costs of compensation for the land for public space, including streets as well as road construction costs. In Hawassa, revenues were nearly 400 per cent of costs, and in Mekele, they were over 1,300 per cent (see Figure 34).

Even so, land leases have proceeded slowly in comparison to plans, due to the legal and financial requirements to develop the land before issuing leases. There have been regulations enacted by regional governments to invest 90 per cent of land lease revenues back into land development, but local governments have not complied and have often prioritized other expenditures (Seid, 2017).



Figure 34. Costs of streets, open space compared to land lease revenue 2013 –2017 in three cities



Source: Authors, using data from Seid (2017).

Note: *Bahir Dar road construction costs include additional city roads. Data specific to the expansion area was not available.

The expansion plans have assisted in mitigating disaster risk by guiding urban expansion toward low-risk areas. For example, in the city of Bahir Dar, informal settlements taking place in high-risk floodplains was a persistent problem, as settlers returned every time the government cleared the area.

However, providing a serviced urban expansion area to redirect settlement pressure, in combination with the implementation of public parks with walking and cycling paths in the flood-prone area has greatly reduced informal settlement. In addition, on the urban periphery of various cities, settlement has been guided away from high-risk areas simply by providing other settlement areas with better roads (Lamson-Hall, Angel & Tafesse, 2022). The impact of planned urban expansion has benefitted households through improved accessibility and livelihoods.

A 2025 survey of 400,000 households, conducted by researchers at the Africa Urban Lab, comparing those in informal expansion areas with those in planned expansion areas finds that, after controlling for socioeconomic variables,

households in planned expansion areas had significantly higher household incomes, greater entrepreneurial activity, better asset accumulation, and greater use of public transport (Downs et al., 2025).

It is not clear whether households improved their incomes by locating in planned and connected areas, or whether households already having higher incomes were able to obtain land in the planned areas; it is likely a mix of both. Even so, the planning process had pro-poor benefits arising from land grants to low-cost housing associations, the regularization of informal plots for 17,920 residents in Hawassa, and from the sheer number of households benefitting overall from the increase in the supply of planned land.

The same methodology has been taken up by cities in Somaliland and Uganda, with initial positive results. In Somaliland, the process is more similar to classic land readjustment, with a uniform 15 per cent of plots deducted for streets and public space, and no compensation paid for land contributions. In the Somaliland city of Gabiley, plot values rose from \$1,000 to \$2,000

and up to \$8,000 as a result of better connectivity and access to markets and schools included in the expansion plan (Lamsom-Hall & Yetbarek, 2025). Ugandan pilot cities have not yet started the implementation phase, but already landowners

have expressed support and even offered to contribute some land free of cost and help pay for construction equipment (P. Lamsom-Hall, personal communication, 10 December, 2025).



Banha, Qalyubia, Egypt © Diego F. Parra/ Pexels

Case 11. Participatory inclusive land readjustment in Banha, Egypt

During the 2013–2014 period, UN-Habitat and the Government of Egypt piloted a participatory and inclusive land readjustment methodology in the city of Banha, demonstrating the effectiveness of a participatory approach combined with strong coordination and high-level political support.

Egypt has faced decades of rapid urban expansion, much of it informal and occurring on high-value agricultural land, in spite of planning regulations. This was the case in Banha, a medium-sized city approximately 45 km north of Cairo in the Nile Delta. Although a General Strategic Urban Plan for Banha was approved in 2011 and defined new urban expansion areas, implementation lagged due to weak land registration, fragmented ownership, and the absence of workable mechanisms for turning agricultural land into legal building plots (Soliman, 2017).

UN-Habitat and the Egyptian Ministry of Housing's General Organization of Physical Planning selected the El Rezqa area of the city to pilot a participatory, inclusive land readjustment (PILaR) methodology. The area covers a 4.5 hectare area that had been illegally subdivided and was mostly vacant, with a few residential buildings, a gas station, and a strip of public buildings on the southern edge. Critically, the area lacked internal circulation, limiting the options for developing the area.

Landowners had attempted to organize their own subdivision plan, but negotiations had occurred for three years without success. Proposed layouts failed to meet legal requirements for street widths and plot sizes, and the owner of a large plot that cut off access to the main road for other plots had offered to sell part of his plot to become an access point, but at a price too high for the other landowners to afford (Soliman, 2017).

At the start of the PILaR project, UN-Habitat and the General Organization of Physical Planning staff formed a technical team to assist with planning, stakeholder participation and negotiations.

The process followed five stages (Soliman, 2017):

- 1. Building trust.** The technical team positioned itself as an independent facilitator rather than an arm of the State, to overcome fear of land confiscation. Through frequent meetings with landowners, the team established shared values of transparency, equity, credibility and efficiency.
- 2. Data collection.** Given the lack of up-to-date cadastral information, the team combined field surveys, owner-provided documents, and archival cadastral maps to reconstruct an accurate picture of landownership and parcel boundaries.
- 3. Planning and design.** The technical team created alternative development scenarios and discussed them with landowners to reach consensus.
- 4. Final plot negotiations.** Once the overall subdivision plan was agreed upon with the right number of plots, the final detailed negotiation to determine which landholders would receive which plots was delegated to key figures among the landholders, making use of existing social networks.
- 5. Approval and registration.** Finally, the plan was formally approved by the Qalyubia Governorate in 2014, followed by steps toward plot registration and building permits (Mansour, 2024; Soliman, 2017). The governor's endorsement was critical in moving from negotiated plans to formal approval and registration, illustrating the importance of political support at the local level (Mansour, 2024).

The final subdivision plan complied with requirements reached with landowners at the start of the project. These included equal land deductions for roads and services, minimum street widths of 10 metres, minimum plot sizes of 120 square metres, and efforts to reassign plots close to original locations (Mansour, 2024; Soliman, 2017). If, after land readjustment, a landowner's remaining share was too small to form a standalone plot, the landowner's remaining area (even if very small) was carried over as a proportional share in a larger, shared plot co-owned with others who were in the same situation. This avoided creating plots below the legal size while protecting the interests of small landholders (Soliman, 2017).

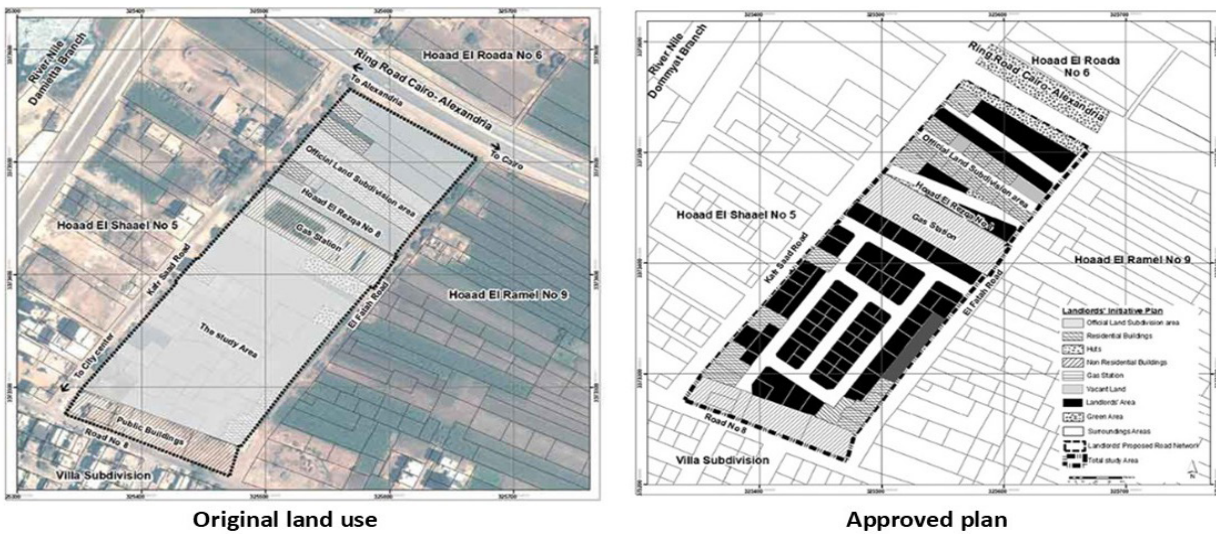
Importantly, the project relied on the increased value of the serviced land to compensate landowners for land that was given up to provide streets and public uses. Initial conversations between the technical team and landowners made clear that the landowners would not accept payments for their land, but were willing to exchange large, unserved plots for smaller ones with street access and legal status. The owner of the large street-facing plot agreed to provide enough land for a street connection in exchange for land elsewhere in the readjusted area, thus circumventing his initial infeasible request to be paid. In the final plan, landholders contributed 32 per cent of their plots to become streets and public areas.

The final outcome was a coherent urban layout with a functional road network, improved access, and land allocated for a clinic and a mosque. Landowners received officially recognized, serviced plots, significantly improving tenure security and enabling legal construction (Soliman, 2017).

The result highlights the ability of land readjustment to create street space without financial compensation to landholders and without expropriating land from unwilling parties. It also illustrates the usefulness of a highly participatory process for implementing land management methodologies that were up until then legally possible but practically infeasible.

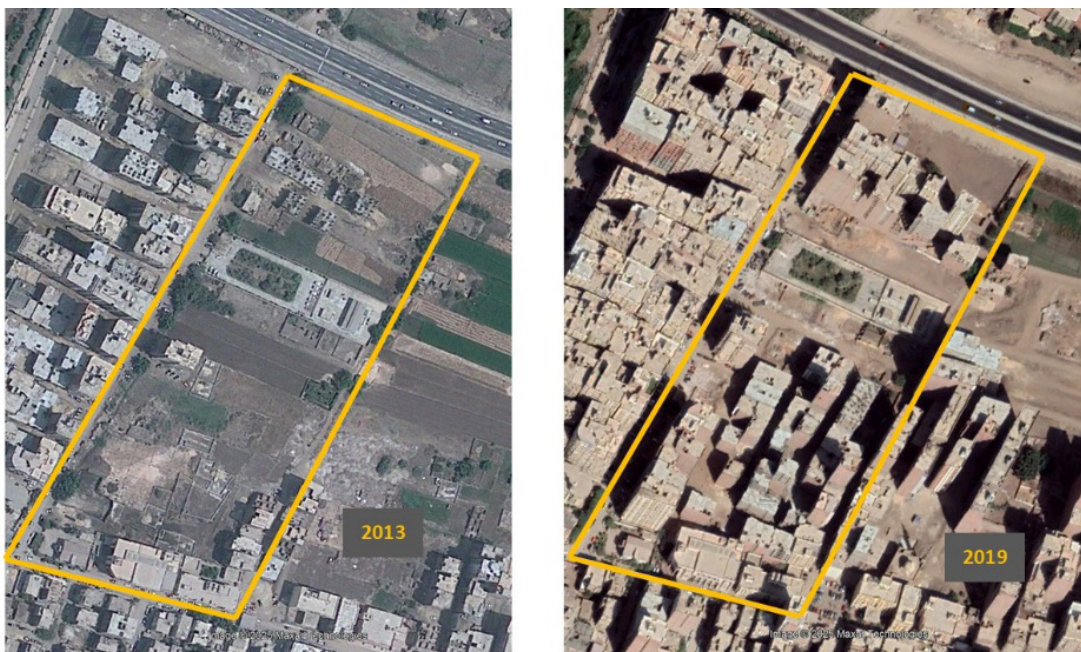
The official decree for the project was issued in the Egyptian Gazette in July of 2015, 18 months after the start of the project. Since then, plots have been rapidly developed in compliance with the agreed upon plan (see Figure 35 and Figure 35).

Figure 35. Original and approved land uses in El Rezqa area



Source: Soliman, 2017

Figure 36. Land development in El Rezqa before and after land readjustment



Source: Authors using Google Earth images

Chapter 5 Conclusions and takeaways

Urbanization accompanied by declining public space and increasing climate risks is creating both an urgent need and an opportunity. The scale and pace of urban development in African cities is causing rising land values, an urgent need to protect public space, and exceptionally high climate risks. However, this confluence of factors also creates opportunities to leverage LBF instruments to mobilize land values for equitable and sustainable urban development.

Combining investments in adaptation and public space is a useful approach. Parks and green space can provide nature-based solutions to manage heat and improve drainage while providing co-benefits that increase land values more than less visible risk reduction strategies. Thus, parks and green spaces are more readily linked to value capture approaches. In addition, pairing no-build areas with open space used for public recreation can help deter squatter settlement.

Land-based finance instruments can help pay for climate adaptation investments and incentivize lower-risk development patterns. The best-suited LBF instrument will depend on the local context as well as the goal of the intervention or investment (see Table 2).

Governments should take swift and strong actions to allocate and protect public space in advance of unplanned development. Street and public open space are the backbone of the city and determine its long-term future. Land readjustment and strategic land management offer methods to overcome obstacles to spatial plan implementation and create public space. Simultaneously strengthening basic land-based revenue mechanisms, like the land lease and property tax, can turn such public space interventions into engines of revenue generation.

Tackling inequality is a major challenge, and will require cross-subsidization and acting at scale. The areas with the highest need for risk mitigation and public space are often those with the lowest ability to pay. Thus, without cross-subsidization, pairing environmental investments with revenue based on land values can exacerbate inequality. In addition, limited-scale interventions can cause or worsen climate-based gentrification. Until climate-safe neighbourhoods are available at a scale that can meet demand, the poor will be pushed into high-risk areas. To achieve the necessary scale, simplified approaches are needed, particularly in cities where financial and administrative capacity is limited. There are already successful examples (see Case 10).

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Chapter 6: Designing effective land-based finance policies

This chapter reflects on the case studies and experiences discussed in prior chapters to identify recurring themes and main findings, and assess the impacts of land-based finance according to the criteria proposed in chapter 1. It then makes recommendations for local and national governments, and the international community to better utilize land-based finance in African cities.

KEY TAKEAWAYS

- African cities have distinctive features that present challenges for the application of traditional land-based finance models, but new contextually grounded approaches hold major promise. Successful cases utilize incremental reforms based on pragmatic approaches and existing capacity, and simplify methods to enable scaling up. Participation, transparency, social equity and linking revenues to service delivery are all critical elements.
- Although the use of land-based finance is still nascent in most places, where it is used it has had largely positive impacts, including in a wide array of domains beyond revenue mobilization. These include economic, social, environmental, spatial and institutional benefits.
- There is an urgent need to guide rapid urbanization toward sustainable development, and land-based finance can play an important role. Local governments should act quickly, beginning with simple approaches and then scaling up. Strong horizontal and vertical coordination can support these efforts, and national governments and the international community should support both revenue administration and the use of the resulting revenues in visible and impactful ways.

6.1. INTRODUCTION

Land-based finance in African cities remains underutilized relative to the scale of urban growth and land value creation taking place across the continent. While land values are rising rapidly, only a small share of this value is systematically captured for public purposes. In most cities, land-based revenues remain marginal compared to intergovernmental transfers and donor funding, limiting their contribution to sustainable urban finance.

At the same time, various cases demonstrate that LBF is not absent, but unevenly applied. African cities are experimenting with a wide range of instruments. The property tax is widely utilized but in most places, there is immense potential for improvement. Effective property tax administration in many cases is a good first step toward utilization of other land-based finance tools, and the systems established for property tax reform pave the way for betterment charges and increment taxes. Land leases can perform similarly to the property tax in places where land is publicly owned (see Case 1 and Case 10 on Ethiopia). Developer obligations are already being used to leverage the private sector's capacity for urban development; however, more effort is needed to ensure such schemes do not exclude

the poor, and to build in obligations that generate benefits for the poor (for example, through inclusionary zoning). Public land development via strategic land management is also being used but should be scaled up as a means to guide urbanization in sustainable patterns. Similarly, land readjustment has been piloted at a limited scale in various places, but with effective results that demonstrate its potential for negotiated upgrades to the urban layout in built up areas, and for unlocking connected development patterns at the urban periphery. These efforts are shaped by local politics, institutional capacity, and land governance arrangements, and demonstrate the necessity of tailoring the range of LBF instruments to the local context of specific cities.

An examination of evidence and various cases highlights some common challenges, including political support, fragmented governance, legal hurdles, capacity limitations, complex tenure systems, inadequate land records and informality (see chapter 1). At the same time, several promising trends point toward a more optimistic trajectory, and experiences across the continent demonstrate that land-based finance can work in diverse institutional and economic contexts when adapted to local conditions.

6.2. MAIN FINDINGS

This report has examined the application and potential of land-based finance in African cities, drawing on case studies and existing research. Several recurring themes emerge and are discussed below.

6.2.1. A distinctly African model of land-based finance

Attempts to directly replicate land-based finance approaches from other regions, even with minor modifications, are unlikely to succeed in African cities. The distinctive urban, legal, and institutional conditions of African cities (see

chapter 1) mean that a one-size-fits-all model is inappropriate; instead, models must be shaped by diverse African realities. The continued use of imported and ill-suited planning and fiscal rules has constrained the effectiveness of LBF

and, in many cases, contributed to inequitable outcomes (see chapters 2 and 3). Tailoring and contextualization are therefore essential, across tenure-responsive land-use planning, instrument selection, administrative design, and reform sequencing. These choices should be guided by what is legally feasible, administratively realistic, politically acceptable, and aligned with policy objectives. Importantly, LBF reform can go hand-in-hand with recognizing a continuum of land rights, strengthening land management, and improving tenure security.

Importantly, some features often viewed as constraints can be leveraged as strengths.

6.2.2. From revenue to results

Linking land-based finance to visible, localized improvements can strengthen trust and contribute to the emergence of a local fiscal contract. Conversely, revenue mobilization without improvements to public services or infrastructure makes paying households worse off, and when citizens see little connection between what they pay and the services they receive, resistance and evasion are likely to persist.

6.2.3. Participation and transparency

Public support and trust are essential to both the initial and long-term success of land-based finance reforms. Without public support, sustaining the successful application of land-based finance instruments is unlikely (Walters, 2020).

Meaningful community participation is particularly important where land rights must be clarified or formalized. Community buy-in helps overcome implementation hurdles and is critical to the sustained functioning of land registries and fiscal instruments. Public support relies on participation, transparency, and accountability. Clear communication is necessary but not sufficient to get the public's buy in.

Customary and group tenure systems can help protect low-income households from displacement in rapidly appreciating areas. Alternative dispute resolution mechanisms consistent with customary practice can resolve conflicts more quickly and at lower cost (see chapter 2).

In contexts of widespread informality and weak land records, the increased tenure security that can come with implementation of a fiscal cadastre can make the administration of instruments like the property tax or land lease more popular. The distinctive features of African cities are likely to give rise to LBF innovations not seen elsewhere.

Area-based approaches, such as betterment charges and land readjustment schemes, can be particularly effective in this regard, as they make the connection between contribution and benefit clear. When residents see improvements in their own neighbourhoods, support for LBF tends to increase, reinforcing compliance and political sustainability.

Accountability means the “public have access to public financial information in an accessible format and the ability to sanction inefficient and inappropriate behaviour of public officials” (Walters, 2020, p. 44). Compliance with taxes and fees is closely tied to perceptions of fairness, transparency, and the visible use of revenues to improve services.

Cities should therefore prioritize clear communication and engagement around both revenue collection and expenditure. Transparent valuation methods, assessment processes, and reporting on revenue use can build credibility and reduce perceptions of arbitrariness or corruption.

6.2.4. Social equity by design

It is critical to consider the impacts of land-based finance interventions on vulnerable populations, including the urban poor. LBF instruments that are not explicitly designed to be pro-poor are at high risk of reinforcing inequality, including spatial inequality that pushes low-income households toward marginalized, disconnected, or climate-vulnerable areas, thereby increasing their overall burden.

Well-targeted exemptions are necessary to avoid overburdening the poorest households. In some cases, even poor households are willing to pay land-based charges in exchange for the services they cover. Public engagement can help inform decision makers about whether this is the case. The impacted households are the best poised to know whether they will be made better off in the LBF process. In contexts of widespread informality and complex tenure systems, LBF approaches focused primarily on revenue generation, and economic development can have adverse effects on the urban poor.

6.2.5. Leveraging technology

Technology offers major opportunities to strengthen land-based revenue administration. The geographic information systems and GPS make it far easier to document and register properties accurately, creating reliable spatial records that form the backbone of the land management system.

Digital tools also support formula-based valuation, reducing discretion and improving consistency. Integrated databases allow local governments to track taxpayers, monitor billing and payments, and identify gaps in compliance. At the same time, digital platforms improve communication and

An exclusive focus on municipal revenue can lead to the displacement or eviction of poorer and often marginalized groups living on high-value, centrally located land but lacking secure tenure or formal land rights (Sait, 2020). Land value capture, which by definition involves raising land values through public action, can expose low-income households to market pressures, higher assessments, and increased risk of displacement. Urban land development and redevelopment may further exacerbate these risks, including through forced displacement or inadequate compensation where land rights are insecure.

Protecting the poor from displacement can take many forms, including reserving space for them in redeveloped areas, maintaining their access through group tenure arrangements, and scaling up LBF interventions to cover a wider range of locations, thereby making space for poorer households.

transparency, enabling taxpayers to access their property records, understand their assessments, and make payments more easily. In short, every stage of land-based revenue administration can benefit from well-designed technological systems.

Africa's local governments are already taking advantage of advancements in technology, reductions in their cost, and expanding access to mobile devices and the Internet. These innovations hold major potential for enabling the rapid scaling up of LBF, as well as improvements to urban land management more broadly.

6.2.6. Horizontal and vertical coordination

In many places, the rapidly expanding urban extent crosses multiple local administrative boundaries. Growing metropolitan areas function as a single labour market, but are often fragmented into many municipalities. People cross local jurisdictions for work, purchases, recreation, and to search for jobs and housing; and businesses serve markets and source inputs from areas that span across municipal boundaries. Therefore, interjurisdictional coordination with the support of higher levels of government should be part of implementing LBF in order to capitalize on rising land values and match them with service delivery in the urban core and the periphery (see chapter 3). It will also be needed to use revenues for harmonized services across the urban area that take advantage of economies of scale, and to enable cross-subsidization and targeted investment in high-priority areas.¹⁵

Effective land-based finance also depends on strong vertical coordination between national, subnational, and local governments. In many cases, legal authority, approvals, and fiscal rules remain centralized, while cities are responsible for implementation. Functional fragmentation that assigns planning, land management, valuation, revenue administration and investment functions to different agencies or levels of government is also commonplace. The resulting misalignment weakens accountability, constrains local discretion, and reduces incentives to apply LBF instruments (see chapter 3). A lack of clarity or disagreements on areas of authority can exacerbate such disconnects. Strengthening vertical and functional coordination is therefore essential for successful use of land-based finance.

6.2.7. Progress not perfection

Incremental reform focused on building administrative capacity and securing early wins often proves more effective than comprehensive legal overhauls. Approaches that focus on the practical can move implementation past the typical stumbling blocks of inadequate land records and complex valuation methods.

For example, Governments in Freetown (Sierra Leone) and Togo (see cases 1.2 and 3.2) began levying the property tax on a rapidly defined fiscal cadastre rather than waiting for the official cadastre to be legally verified. Using this approach, they sidestepped a complex and time-intensive legal process, while also contributing data that can be useful in official legal property record updates. While updated property registration systems hold many benefits, their absence should not prevent an update to the fiscal cadastre for

property tax purposes. In fact, fiscal and legal property registration systems can be updated in parallel, provided that there is coordination and data sharing to prevent duplicate and inconsistent systems.

Simplified valuation techniques, like points-based or banded methods, are also adequate when time- and skill-intensive market valuations of individual properties is not practically feasible at scale (see chapter 3). Similarly, simplified planning approaches can be used to extend basic infrastructure and plots rapidly in advance of informal growth, rather than utilizing a time-intensive comprehensive or detailed planning methodology which is unfeasible to implement and quickly becomes outdated. Building in LVC mechanisms can help fund the incremental upgrading of infrastructure in planned areas, while

¹⁵ See Enid Slack's (2019) Metropolitan Governance: Principles and Practice for five models of metropolitan governance, described using evaluation criteria and multiple real-world examples.

private households incrementally upgrade their housing (see cases 4.2 and 5.2). Thus, building simplified practices on existing legal mandates

can avoid hurdles that stall the reform process, and acting quickly to establish functioning revenue systems can help reform outlast political turnover.

6.2.8. Scaling up

The current application of land-based finance in African cities remains limited in scope and scale, standing in sharp contrast to the speed and magnitude of urbanization. As a result, much of the potential of land-based finance remains untapped, and existing interventions often benefit only a narrow segment of the population, typically those with the greatest ability to pay. Without scale, land-based finance cannot meaningfully contribute to solving widespread infrastructure and service deficits or to broadening access to its benefits.

Scaling up is therefore essential, both to meet growing urban needs and to ensure that land-based finance supports more inclusive outcomes. This makes simplified, administratively feasible approaches even more important, as they allow governments to move beyond isolated pilots. Identifying what works in practice and rapidly expanding those approaches is critical to aligning land-based finance with the pace of urban growth.

6.3. THE IMPACT OF LAND-BASED FINANCE IN AFRICAN CITIES

Although underutilized, in places where land-based finance is used it has the potential to influence overall development outcomes through a variety of avenues, and its impacts can be assessed

according to fiscal, social, economic, institutional, spatial and environmental dimensions defined in chapter 1 (see Table 7).

Table 8 Criteria for assessing the impact of land-based finance and report findings

Area of impact	Criteria	Findings
Fiscal	<ul style="list-style-type: none"> ▪ Revenue generated ▪ Administrative cost effectiveness ▪ Stability of revenue (predictable with limited volatility) ▪ Buoyancy of revenue (growing as the economy expands) 	<ul style="list-style-type: none"> ▪ LBF instruments have major, often untapped, revenue potential. ▪ Technology is making cost effective improvements feasible. ▪ Recurrent instruments (property tax and land lease) can generate stable revenues. ▪ Buoyancy will be low until market-based valuation is feasible.

Area of impact	Criteria	Findings
Social	<ul style="list-style-type: none"> Payment burden on poor households Total impact, including spatial impacts and the distribution of services delivered, on vulnerable populations (such as women, members of minority groups and those in informal settlements) Impact on housing affordability 	<ul style="list-style-type: none"> LBF holds major risks to vulnerable populations due to cost-burden and displacement risks. Scaling investments up and locational cross-subsidization is necessary to prevent displacement and exclusion. Tools like inclusionary zoning hold promise but are so far infrequently used.
Economic	<ul style="list-style-type: none"> Degree of investment in infrastructure and services that can attract and support local business Financial impact on firms and potential firms 	<ul style="list-style-type: none"> LBF can crowd in and unlock private investment. Land-based revenues can fund basic services that support the local economy.
Institutional	<ul style="list-style-type: none"> Revenue administration transparency Impact on quality and management of the land and property registry (cadastre) Impacts on land market efficiency (for example, through more transparent records or increased formalization of transactions) Budgeting process impacts, including on transparency or public engagement Improvements to development control 	<ul style="list-style-type: none"> LBF implementation has positive institutional spillovers for land management and planning implementation. Fiscal cadastres can contribute to the development of full legal property registration.
Spatial	<ul style="list-style-type: none"> Impacts on densification, sprawl, connectivity, or deterrence of speculation Creation or protection of public space 	<ul style="list-style-type: none"> Land readjustment and public land management can help reorient urban form but are underutilized.
Environmental	<ul style="list-style-type: none"> Deterrence of development in environmentally fragile or high-risk areas Facilitation of low-carbon development patterns such as transit oriented development 	<ul style="list-style-type: none"> Land readjustment and public land management can protect green space. An array of LBF instruments can fund environmental interventions, but this is still uncommon in African cities.

6.3.1. Fiscal impacts

From a fiscal perspective, property taxes and land leases offer potential for recurrent and stable revenues, and there are successful cases from which to draw, such as those of Freetown (see Case 2), Ethiopian cities (see Case 1 and Case 10) and Lagos (see Box 11). Reliable revenue streams are a precursor to creditworthiness; therefore, LBF can have a fiscal impact beyond simply boosting annual earnings. Revenue from Lagos’s land use charge (a type of property tax) contributes to the State’s credit rating (Fitch Ratings, 2025).

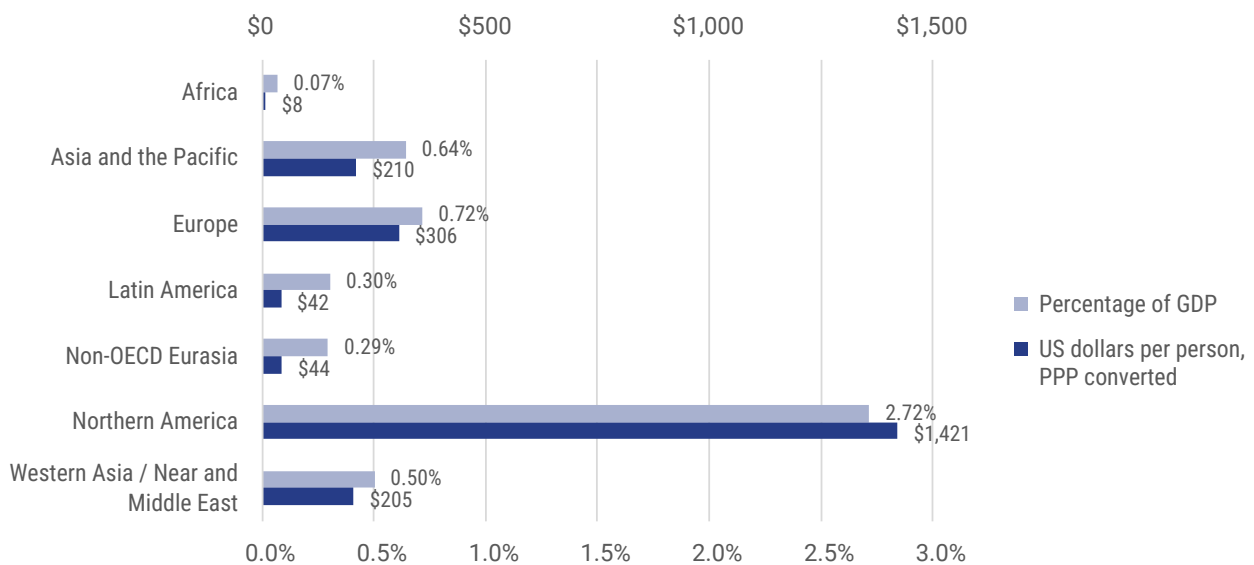
The property tax is utilized in nearly all African countries (Franzsen & McCluskey, 2017); however, its performance is currently 80–90 per cent below potential in most (Deininger & Goyal, 2024), and local governments in Africa raise on average only 0.07 per cent of GDP in property tax revenues, compared with 0.64 per cent in Asia, 0.30 per cent in Latin America, and 0.70 per cent in Europe (Figure 37). Various cases highlight persistent challenges in coverage, valuation, enforcement, decentralized authority, and taxpayer trust.

Cities that begin working through these challenges could tap into significant revenues.

Other LBF instruments are more often used infrequently or as a one-off, and even instruments designed to link directly the value of urban

development with revenues to fund the necessary public services (such as developer exactions) do not automatically translate into improved service delivery or reinvestment in urban infrastructure.

Figure 37. Local government revenue from property taxes by region, 2020



Source: Authors using data from OECD SNG WOFI database.

6.3.2. Social impacts

High levels of poverty and informality make social considerations paramount to assessing land-based finance in African cities. Evidence shows that some LBF interventions can deliver meaningful social benefits, particularly where they strengthen tenure security. Land regularization has been especially important for improving the rights of women and vulnerable households, as demonstrated in Rwanda (see Case 3).

Across multiple cases, stakeholder participation, transparency, and visible fairness in enforcement have also proven critical to building public support. Public engagement, targeting higher income taxpayers, and improvements in transparency through public awareness and digital records have helped increase trust and reduce corruption risks (as in Case 2).

At the same time, LBF interventions can produce significant social harm if equity considerations are not resolved. Poor households, tenants, and residents of informal settlements remain the most likely to lose access to land during redevelopment, often being displaced to less accessible or higher risk locations with negative consequences for access to jobs, services and amenities. Even where affordable housing is included, benefits frequently filter up to wealthier households. These risks underscore the tension between revenue generation and social protection in rapidly growing cities.

Some approaches show promise in mitigating these impacts. Attempts to incorporate affordable housing through land readjustment, developer exactions, or reserving units for affected

households have provided critical support to many families, while land-based tools have also been used to regularize informal settlements (see Case 6, Case 8 and Case 10). However, most efforts remain too small to meet overall housing needs, and public land management can inadvertently constrain supply and drive up costs. Large scale approaches that extend planned land and support

incremental housing investment, such as sites and services in Dar es Salaam (see Case 7), and particularly those that use land revenues to finance planned and serviced land (see Case 10), offer a more promising path. Achieving scale will be essential to ensure that the social benefits of land-based finance extend beyond those with money and power.

6.3.3. Economic impacts

Case evidence shows that land-based finance can support economic objectives. Land readjustment can unlock development potential by improving accessibility. In Kigali, Rwanda, and Banha, Egypt (see Case 4 and Case 11), land readjustment enabled landholders to develop plots in areas where development had previously been constrained by poor access.

Strategic land management has also improved accessibility in Ethiopian cities, leading to higher public transport use and increased household incomes in planned and readjusted areas (see

Case 10). In this case, land was also set aside for economic uses, including industrial zones and workshops for small and medium enterprises, supporting youth employment and livelihoods.

Land-based revenues can also finance basic services that underpin economic activity. In Freetown (see Case 2), property tax reform increased local revenues that were used to repair major roads, clean streets and public markets, and employ hundreds of waste management workers, contributing directly to improved urban functioning and livelihoods (FCC, 2020).

6.3.4. Institutional impacts

Limited institutional capacity is often cited as a barrier to implementing land-based finance, yet the case evidence shows that contextually appropriate approaches are feasible and effective. Rather than requiring comprehensive cadastral or legal reforms upfront, several cities have adopted simplified and administratively realistic systems that allowed LBF instruments to function while institutional capacity is developed over time. Formula-based valuation in Lagos, for example (see Box 11), enabled the establishment of billing systems, taxpayer registers, enforcement, and appeals processes, laying a practical foundation for tax administration. Land-based finance has also generated positive institutional

spillovers. In Rwanda (see Case 3), rapid land tenure regularization and digital land registries strengthened Government capacity for planning and land-based finance, while improving traceability and transparency in land transactions. In Freetown and Togo (see Case 2 and Case 5), the creation of fiscal cadastres and billing systems provided an impetus for property owners to come forward and update records, improving data quality incrementally, paving the way for improved land registration, and strengthening local ownership of land and tax administration. Routine use of these systems embedded them in everyday practice rather than treating them as standalone technical projects.

6.3.5. Spatial and environmental impacts

In African cities, land-based finance instruments are rarely used to attend explicitly to environmental purposes, and when environmental interventions occur, they do not typically leverage the value of land. There are a wide variety of LBF instruments that can be used for environmental purposes, depending on contextual factors and the type of environmental intervention (see Table 5).

Pairing climate risk reduction investments with high-quality public space is one way to link such investments with land values, thus making value capture possible. Land readjustment and strategic land management are particularly applicable instruments to protect environmentally sensitive

or high-risk areas from development (see Case 10), and the value created by public green spaces can be captured to help maintain them (see Case 9 on Kumasi).

In the same vein, there are a variety of examples of land-based finance changing the spatial layout of cities. In Ethiopian and Somali cities (see Case 10), strategic land management has guided the expansion of cities into planned areas and connected patterns. Even in more urbanized areas, land readjustment can contribute to spatial connectivity and accessibility, as in Kigali and Banha (see Case 4 and Case 11).

6.4. THE WAY FORWARD

6.4.1. Actions for local governments

In many of Africa's urban areas, urban population growth and expansion are proceeding rapidly and will lead to an immense transformation in the coming decades. In such places, land management in the near term will shape the long-term future of the city and the people who live there. Local governments have the urgent task of guiding urbanization rather than leaving urban development to proceed in unplanned and fragmented patterns that restrict accessibility, undermine sustainability, and are costly to correct.

Urban planning has largely failed in African cities, with most plans lacking in implementation mechanisms, being divorced from reality and becoming quickly outdated. Cities therefore need to prioritize simplified approaches that can be rolled out on the ground quickly and at scale, and land-based instruments like land readjustment and strategic land management can play a part (as in Case 10). Urban expansion will entail massive increases in the value of land.

LBF can play a role in pairing planned urbanization with revenue generation that can enable governments to continue investing and guiding urban growth.

Africa's local governments have much to do, and land-based finance can help by producing recurrent, predictable revenues through instruments like the property tax, land lease, or developer exactions, depending on the legal and development context. Betterment levies and special assessments can also help fund specific investments and services (such as in case 5.1), and can be particularly effective if used for the top priorities of taxpayers. Identifying the right entry point for advancing LBF requires careful consideration (see Table 8). Local governments should take advantage of a growing confluence of support available for LBF efforts. There is increasingly accessible technology to create and manage land records, property valuations and tax assessments.

This can help automate, simplify and digitalize revenue administration, and can help bring about quick wins that will generate support for reforms to continue and scale up. In addition, there is a growing level of interest from the international community in assisting with LBF through funding

and technical advising. Local governments should also seek assistance from higher levels of government that promote local revenue mobilization, as they can be invaluable partners in reforms to land management and revenue administration.

Table 9 Key considerations for identifying LBF reform entry points¹⁶

Area	Main questions
Legal authority and fiscal autonomy	Can local governments legally implement LBF? Do they control the key administrative pieces (registration, valuation, assessment, billing, collection, enforcement)? Can they keep the revenue?
Land tenure and cadastral coverage	To what extent are land records available and landownership known?
Property tax performance (as a gateway LBF instrument)	How effective is the property tax and what are the challenges?
Planning and regulatory effectiveness	Are planning and development regulations effective and therefore a path to creating and capturing value?
Political and social acceptability	What political risks must be navigated to use LBF effectively?
Expenditure and service provision capacity	When revenue is available, can local governments effectively prioritize and implement investment projects and expansions of public services?

Source: Authors

6.4.2. Actions for national governments

Land-based finance is typically and most effectively implemented at the subnational level. Therefore, national governments should empower local governments by granting them decentralized authority to use land-based instruments and manage the revenues and assets (such as land or in kind developer contributions) that such instruments generate.

National authorities will play a critical role in creating the legal and institutional enabling environment for effective LBF. Priority actions include clarifying fiscal authority, harmonizing land and local government legislation, and reducing overlaps in mandates across ministries and agencies that manage land, valuation and

taxation. They can also help shape political incentives to apply subnational land-based finance instruments, for example by allowing municipalities to keep the revenues arising from such instruments, or by aiding in enforcement to tackle tax dodging by politically connected local landholders.

Alongside increased authority, national governments should partner with local governments to provide technical assistance and capacity-building, as well as matching grants or seed funding to incentivize and enable effective use of LBF instruments. Care must be taken to avoid penalizing use of LBF with reductions in national transfers.

¹⁶ There are several related diagnostics and decision frameworks available. UN-Habitat’s Rapid Own Source Revenue Analysis (ROSRA) provides a revenues-focused diagnostic. Gauntner (2023) provides a decision framework for international institutions supporting local fiscal interventions. Kelly, White and Anand (2020) provide an extensive diagnostic manual focused on the property tax. UN-Habitat’s publication titled *Where to Start? A guide to land-based finance in local governance* (Walters, 2020) provides a number of considerations, assessment questions, and a list of potential entry points.

Partnering with local governments to capture value increases associated with national investments is one potential starting point. National-level support will be particularly important to mid-sized and smaller cities with fewer staff and smaller budgets. For larger cities, improvements to LBF can be one step in the process of achieving or strengthening creditworthiness with national support. Lastly, national governments should support interjurisdictional coordination among municipalities in metropolitan urban areas to

coordinate and harmonize their use of LBF and associated public investments. They can facilitate mergers and annexations of smaller local governments, or the creation of metropolitan-level authorities to either manage broad governance functions or serve as special purpose districts to manage specific services (such as regional transport or waste management). Or, at a minimum, central governments can facilitate interjurisdictional dialogue and cooperative agreements (Slack, 2019).

6.4.3. Actions for international and intergovernmental agencies

The international community can play a role in supporting local governments using land-based finance, and should recognize and act swiftly when there are moments of political opportunity to implement reform.¹⁷ Support can take many forms, ranging from training and technical advising to financial assistance to set up new cadastral and valuation systems. Part of capacity-building can also involve professional training and partnering with educational institutions to update standards and practices to incorporate, better, purpose-built and contextually relevant approaches (see chapter 3).

Importantly, donors and development agencies should pair revenue-focused support with assistance to improve transparency and public engagement, and support for governments to

utilize revenues effectively (Gauntner, 2023). Many of Africa's local governments would benefit from improving their capacity for project selection, preparation, and implementation (Haas et al., 2023). Additionally, public engagement and transparency will not only help build public support for LBF reforms, but will help avoid outcomes that make the intended beneficiaries of international projects worse off.¹⁸

There is also an important role for the international community in knowledge generation and peer learning. Applications of LBF have received comparably little research and documentation in African contexts. Comparative case studies, South–South exchange, and applied research can help cities learn from contextually similar experiences.

6.5. CONCLUSION

Urbanization is creating immense challenges and equally immense opportunities. There is an urgent need to ensure urban development proceeds in connected and sustainable patterns supported by basic infrastructure and services. It is essential to overcome the challenges of land

management and public resources for investment and service delivery. Land-based finance brings to bear a set of impactful approaches for connecting the dots between increasing urban land development pressure and increasing needs for land management and revenue generation.

¹⁷ Insights from personal communication with W. Prichard, 16 December, 2025

¹⁸ See Gauntner (2023) for a discussion of local power dynamics, the risks inherent to supporting revenue mobilization without supporting community engagement or expenditures, and options for mitigating such risks.

The current state of practice in the region is spotty, and LBF is widely underutilized. There are common hurdles facing almost all African cities: incomplete and contested cadastres, low capacity for land valuation, and high rates of informality and poverty. Yet successful cases demonstrate how even in contexts with all of these challenges, revenues can be mobilized with the support of landholders and urban residents. These cases demonstrate lessons for other cities in the region and show that LBF holds a high degree of promise. The rise of supportive technology and a supportive international community further set the stage for major progress.

Looking ahead, African cities face a critical window to harness land-based finance as a driver of sustainable and inclusive urban development. Progress will require acting with urgency, beginning with simplified and feasible approaches, engaging residents and stakeholders in transparent processes, and strengthening systems incrementally over time. With continued learning, adaptation, and commitment, land-based finance can play a central role in shaping more resilient, equitable, and well-managed African cities in the decades ahead.

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