

Cities that Work 

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POLICY FRAMING PAPER

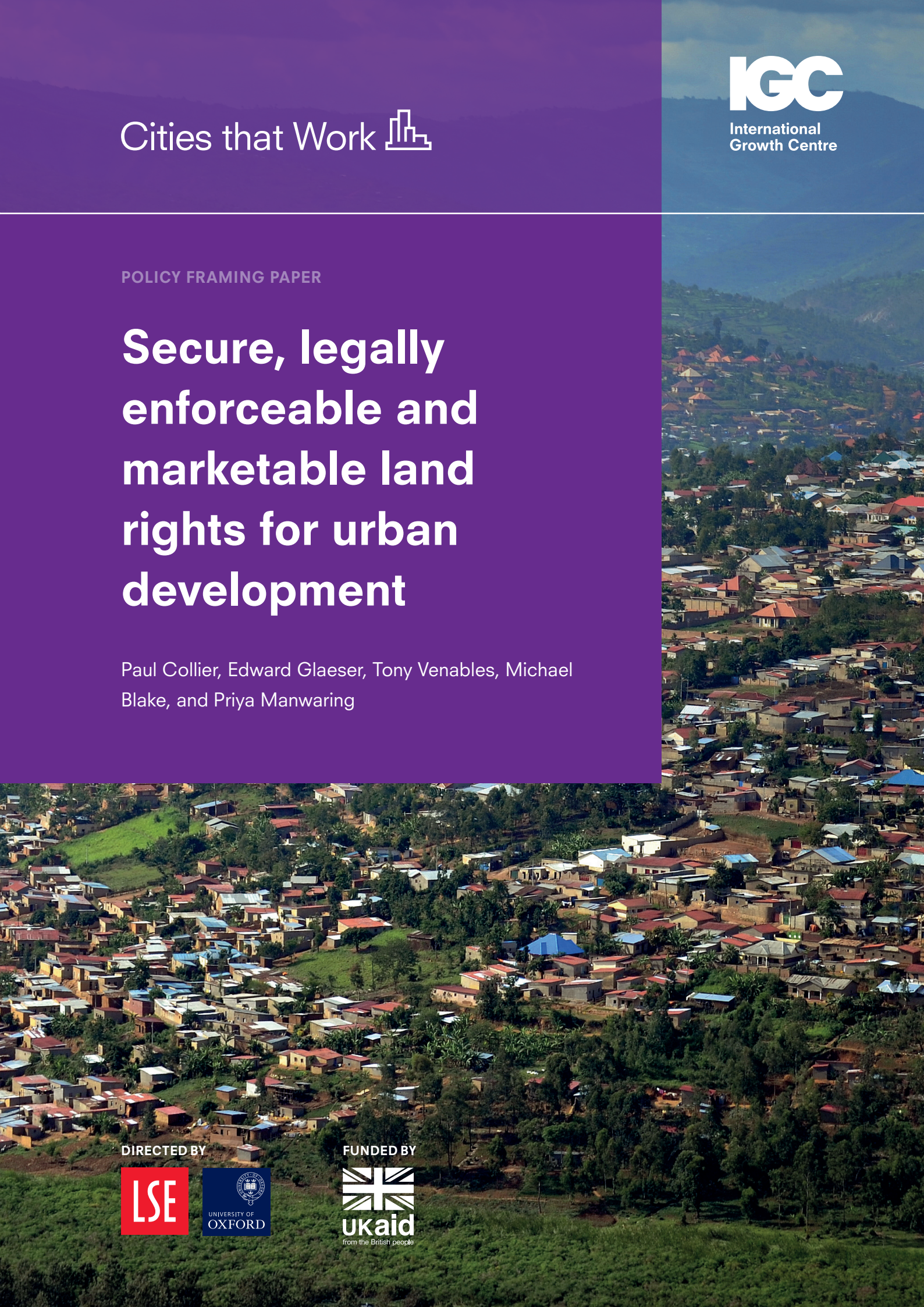
Secure, legally enforceable and marketable land rights for urban development

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This paper highlights the importance of secure, marketable and legally enforceable land rights for effective urban development. It brings together cross-country experience and cutting edge research to inform the trade-offs policymakers face in deciding which tenure systems are most appropriate for cities, and how to go about strengthening urban land administration and registration.

CONTENTS

Executive Summary	3
1 The importance of secure, legally enforceable and marketable land rights	6
2 Which tenure systems best capture the benefits of secure, legally enforceable and marketable land rights?	10
3 Strengthening legal and administrative systems	20
1) Building fair and efficient legal systems	20
2) Administration to facilitate effective planning, taxation and land markets	23
4 Tradeoffs in the process of formal land registration	26
1) Awareness-raising on land registration	28
2) Mapping and surveying land parcels	29
3) Resolving competing claims over land	31
4) Ensuring continued use of the formal system	39
Concluding remarks	39
Recommended further reading	40

LIST OF CASE STUDIES

Legally registered land rights enable property tax in Lagos	7
Land titling in Peru unlocks investment and land market activity	11
Land titling and female empowerment in Tanzania and Rwanda	12
Mailo land in Kampala – an unconventional tenure system	18
Welfare costs of centrally located slums in Nairobi	34

Executive Summary

Urban land is a scarce resource. For cities to be productive and liveable places, this land needs to be used efficiently and intensively. Well-functioning cities typically cluster firms and people together around productive central business districts that form the city's employment engine. By contrast, many low-income cities have failed to use prime central land efficiently. Instead, they continue to grow outwards through sprawling informal settlements that suffer from a chronic lack of investment. Establishing land rights that are secure, legally enforceable, and marketable is a prerequisite for tackling these challenges:

- **Secure** land rights give owners the certainty of future ownership required to make substantial investments in commercial or residential structures.
- **Legally enforceable** land rights play a crucial role in enabling the co-ordinated land-use planning, infrastructure provision, and taxation of land and property that makes cities work. Taxing land and properties can facilitate a virtuous cycle where appreciating urban land and property values finance the public investments that make the city more productive.
- **Marketable** land rights facilitate the transfer of land to its highest value use. This enables firms to buy up land to form productive clusters, and allows land use to remain dynamic, in line with the changing needs of the city as it develops. Beyond buyer to seller marketability, where land can be used as an asset that can be exchanged for credit on financial markets, this unlocks its use as collateral for large-scale loan and mortgage markets.

Inefficient land use and insufficient investment, both in private properties and in public infrastructure, is often underpinned by weak land rights. In many cities, land is gridlocked in a web of competing ownership claims and overlapping tenure systems. This inhibits the private sector from either making substantial investments on land, or transferring it to a more productive user. It also prevents governments from coordinating a virtuous cycle of infrastructure provision, co-ordinated land-use planning and land taxation to fund these investments.

Given the politically challenging nature of reforms to land tenure, inertia has been a common policy response. However, with African cities set to triple in size by 2050, and South Asian cities set to more than double,¹ this will only continue to reproduce the same patterns of low investment and inefficient land use that currently plague low-income cities.

¹ Asian Development Bank (2011), "Asia 2050: Realising the Asian Century"



FEATURES

HOW WEAK LAND TENURE LAWS ARE CHASING AWAY INVESTORS



In many cities, prime central land is occupied by vast informal settlements, such as Kibera in Nairobi (left). Weak land rights leave investors reluctant to purchase this land to use it more efficiently – for commercial property or medium-high rise housing (Photograph: Schreibkraft, 2000)

However, decisive public policy, backed by strong political will, can prevent this.

- From 2009–13, Rwanda formally registered all lands in the country under freehold or leasehold tenure, and implemented administrative reforms to facilitate property transfers. Significant political resistance to formalisation was addressed through a combination of high-level political will to push through legislation, and community-based dispute resolution mechanisms to resolve competing claims. In 2008 Rwanda was ranked 137th in the world for ease of property registration by the World Bank Doing Business Report. Now, Rwanda is ranked 4th. Furthermore, as a consequence of formal land registration, land-related government revenues increased **over five-fold** from approximately RwF 2bn (\$3.3m) in 2011 to over RwF10bn (\$15m) in 2013.²
- In Thailand, the 2003 Baan Mankong programme issued collective land titles to informal settlers as a key part of its slum-upgrading scheme. These were developed in collaboration with communities, based on concerns that private freehold or leasehold titles would be costly to implement and could lead to the disintegration of the community. The programme proved highly successful in increasing tenure security and homeowner investment; the share of urban dwellers living in houses made from durable materials increased from 66% in 2000 to 84% in 2010.³

Rwanda has gone from 137th to 4th in the world for ease of property registration. Large-scale land registration unlocked a five-fold increase in land-related tax revenues from 2011–13

² World Bank, Rwanda Land Governance indicators, April 2014. These figures concern land lease fees, property tax, rental income tax, transaction fees including notary fees, issuance of building permits etc.

³ Mattingly, M. 2013. *Property Rights and Development Briefing: Property Rights and Urban Household Welfare*. Overseas Development Institute, London.

This paper first outlines why secure, legally enforceable and marketable land rights play such a pivotal role in urban development. Section 2 discusses the trade-offs associated with different tenure systems, both formal and informal. Whilst there can be strong benefits in formalising land rights, processes of formalisation need to be underpinned by well-functioning institutions to ensure benefits can be felt. Section 3 therefore focuses on successful reforms from across developing countries aimed at strengthening land-related legal and administrative systems. Where policymakers decide to undergo a formal process of land registration, Section 4 addresses the key challenges policymakers face in the process of implementing such programmes.

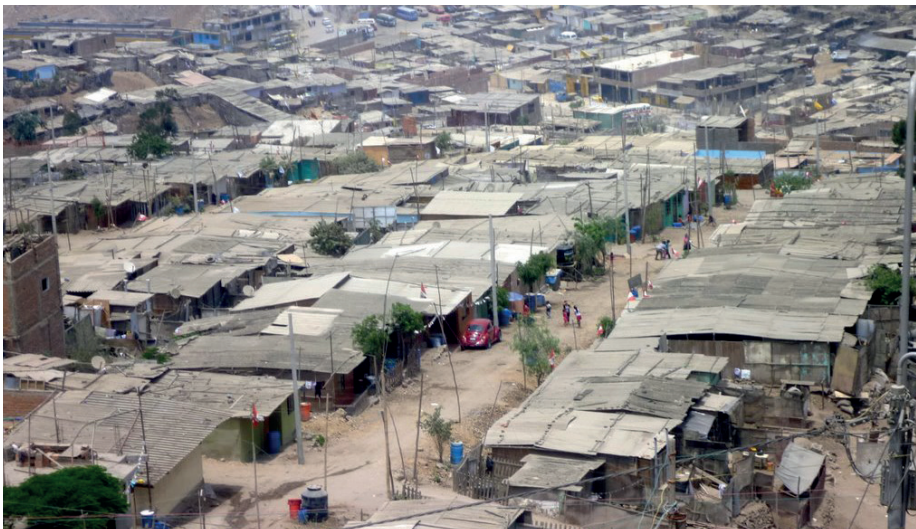
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The importance of secure, legally enforceable and marketable land rights

Secure

In many low-income cities, overlapping and often contradictory tenure systems result in competing claims over land and unclear land ownership. This can undermine property owners' security of tenure, leaving them reluctant to make long-term investments to improve their structures. Evidence from across the developing world has shown that perceived tenure security, be it provided through informal or formal institutions, gives the certainty of future ownership that is essential if owners or long-term leaseholders are to make substantial residential or commercial investments. In Lima, for example, a large-scale titling programme increased the rate of housing investments by over 60%.⁴ Furthermore, security of tenure means that residents, typically women, no longer need to stay at home to guard their properties during the day, and can instead seek work across the city. In Lima, titled residents worked on average 16 hours more per week, travelling to different parts of the city to find work.⁵

In Lima, a large-scale titling programme increased the rate of housing investments by over 60% and enabled owners to leave their plots to work



Left: Informal settlement in Lima (Photograph: Heike Hoffmann, 2011)

⁴ Field, E. (2005). "Property Rights and Investment in Urban Slums", *Journal of the European Economic Association* 3(2-3): 279-290.

⁵ Field, E. (2007). "Entitled to work: Urban Property Rights and Labour Supply in Peru", *Quarterly Journal of Economics*, 122 (4): 1561-1602

Legally enforceable

Legally enforceable land rights enable governments to **impose obligations on landowners for the public good**, facilitating effective urban planning, infrastructure provision, and the taxation of land and properties which can finance these.

First and foremost, legally enforceable land rights enable governments to tax the collectively generated increase in land and property values associated with the urbanisation process. This facilitates a **virtuous cycle** where appreciating urban land and property values finance the public investments that make the city more productive. Where land and property tax revenues accrue at the city level, they are generally the single largest source of municipal finance.⁶

Secondly, where land rights are legally enforceable, this enables local governments and utility companies to coordinate the provision of official public services to residents, and enforce the restrictions on land use required for effective urban planning and infrastructure provision.

CASE STUDY: LEGALLY REGISTERED LAND RIGHTS ENABLE PROPERTY TAX IN LAGOS

In Lagos, increased land registration and reforms to property taxes under governors Tinubu and Fashola that have been implemented since 1999 have helped the state to **increase public revenues from taxes five-fold to over \$1 billion in 2011**. Re-investing these revenues in urban infrastructure and public services has not only increased Lagos' productivity and liveability, but has also underpinned strong political support for the taxes - Tinubu and Fashola were both re-elected for second terms.

Finally, legal definition of private rights over land enables a **fair and transparent process of establishing public rights over land**. The ability of governments to acquire land for public purposes where necessary is an essential part of urban development. Without legally enforceable land rights to determine who is liable for compensation, land acquisition can be frustrated by opportunistic compensation claims by new settlers or companies lodging quasi-legal ownership claims.

Marketable

Land rights that can be bought and sold on an open land market allow **land to be transferred to its highest value use**, facilitating the **efficient use of urban land**. The marketability of urban land rights can be improved both through reforms to tenure systems, and to systems of land administration. These can have a far-reaching impact on the structure of a city, and the forms of economic activity occurring within it.

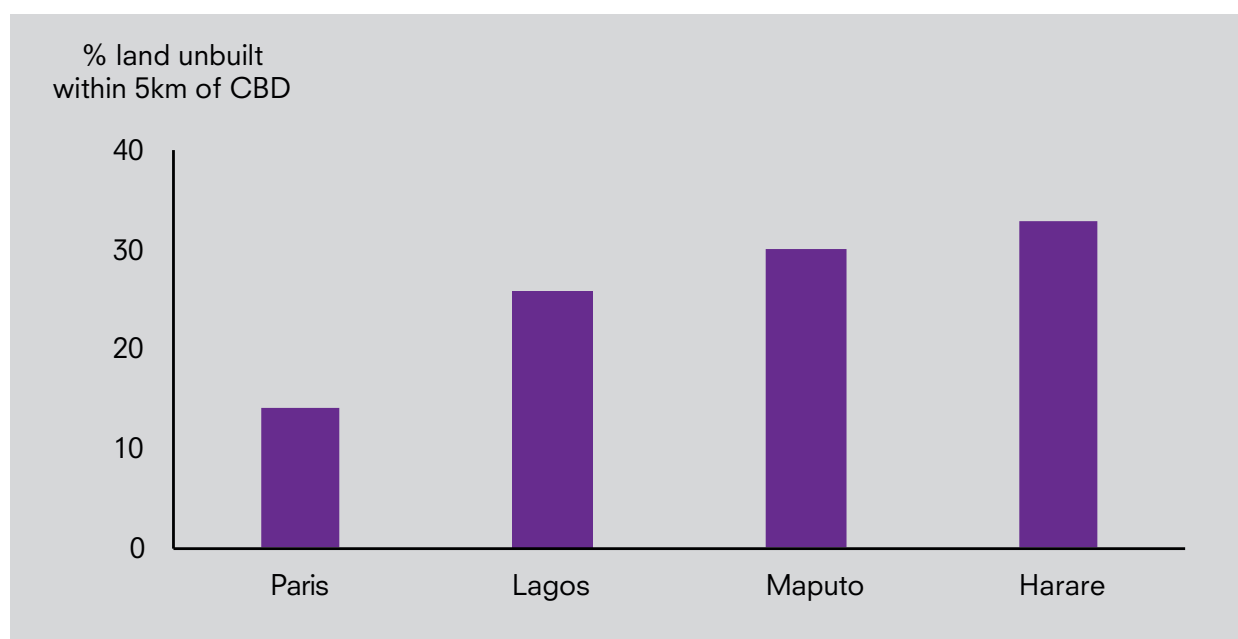
⁶ See *Cities that Work policy framing paper on Land and Property Tax*.

Currently, in many low-income cities, land rights are not easily marketable. This is largely due to the absence of formalised land records that allow legal recognition of new owners and generate publicly available information over land prices. In Dakar, Senegal, only 19 percent of owners report that it is easy to transact housing in their area.⁷ **When urban land markets cannot function properly, land use cannot remain responsive to the changing needs and economic activities of the city.** The result is inefficient land use.

In Dakar, Senegal, only 19 percent of owners report that it is easy to transact housing in their area

- Where informal settlements developed during the early-stages of the urbanisation process, they now often occupy prime central land near the central business district, for example Kibera, Nairobi and Dharavi, Mumbai. The lack of an open and competitive land market plays an important role in frustrating the transfer of this land to economically higher-value uses.
- Distorted land markets in Harare and Maputo have resulted in over 30% of land within 5 kilometres of the central business district remaining unbuilt, and unresponsive to rapidly growing demands for land in the city centre.⁸

Vacant land in African city centres frustrates connectivity



Source: Lall, Henderson, and Venables (2017).

Since urban land, particularly in central areas, is difficult and expensive to transact, many firms and property developers therefore choose to locate on the edge of the city or in ‘leapfrog’ patches in cheaper areas of the city. Cities therefore become fragmented and disconnected. Firms disperse across the city, and offer predominantly local services. This means they are unable to harness

⁷ Gulyani, S., E. Bassett and D. Talukdar, (2012) “Living conditions, rents and their determinants in the slums of Nairobi and Dakar”, *Land Economics*, 8, 251-74.

⁸ Lall, S. V., Henderson, J. V., and Venables, A. J. (2017), “Africa’s Cities: Opening Doors to the World”. Washington, DC: World Bank.

the benefits of scale and specialisation that underpin the productive advantage of cities. In order to harness these benefits and break into the production of high-value tradable goods and services, **firms need to be able to buy up land to form specialised clusters** – for example the technology cluster in Bangalore or the electronics cluster in Shenzhen.

Whilst marketable land rights are a necessary condition for efficient urban land use, they are not sufficient for this purpose. Investments in transport and power infrastructure alongside active zoning policies are often required to coordinate firms to cluster private investments in a particular area. Furthermore, where land ownership is highly fragmented, government intervention may be required to coordinate redevelopment schemes to transfer large chunks of land to more productive uses. Without such coordination, investors frequently encounter a ‘hold-up’ problem in the process of purchasing many adjoining land plots. Even if only a few landowners do not wish to sell their properties, this can paralyse large-scale property developments.⁹

African city centres are 25% more fragmented than Latin American or Asian cities. As a result, firms dispersing across the city to offer predominantly local services, rather than forming large-scale productive clusters

UNLOCKING THE COLLATERAL VALUE OF LAND

In order to unlock the vast collateral value of land for loans and mortgage markets, land rights must be legally enforceable to enable courts to foreclose on properties, and marketable such that land can be used as an asset that can be exchanged for credit on financial markets.

The use of land as collateral is a **precondition for the emergence of a mortgage market** where banks enable households to fund property purchases. Currently only 3% of African households can access mortgages¹⁰. Expanding access to mortgages will require the wide-spread issuance of legally enforceable land titles, alongside further legal and financial reforms.

It is important to note that there is limited evidence on the impact of land titling in facilitating expanded access to credit for **business loans**. Low-income households are often reluctant to risk their most valuable asset in order to access credit, and banks are often unwilling to lend to poorer households due to high perceived risks and significant transaction costs on smaller loans. However, land rights can play a significant and often underrated role in allowing real estate to be used as collateral for **large-scale investors**. It is estimated that 60-70 percent of loans in developed economies are collateralised and real estate plays a leading role in such collateralised transactions. The use of real estate as collateral can be even more important in developing countries where alternative financial instruments supporting collateralized debt are less advanced.¹¹

Currently only 3% of African households can access mortgages

⁹ see *Cities that Work framing papers on Informal Settlements*.

¹⁰ Collier, P. (2016), “African Urbanization: an Analytic Policy Guide”, International Growth Centre

¹¹ Chukuwa, C., Uche, S., and Babatunde M. (2013) “The Application of Real Estate as Loan Collateral in Nigeria’s Banking Sector”, Research Journal of Finance and Accounting, 4:11

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Which tenure systems best capture the benefits of secure, legally enforceable and marketable land rights?

Informal or customary forms of land tenure are the status quo in large parts of low-income cities. These can provide important *de facto* tenure security to landholders, but typically lack legal enforceability and marketability, best conferred by freehold or long-term leasehold titles. Intermediate forms of tenure can represent flexible and lower-cost methods of making land rights legally enforceable, but are typically less easily marketable than freehold or leasehold titles.

Informal land tenure

‘Informal’ land tenure is an umbrella term for tenure systems that are not formally recognised by the state within the legal system. This can range from the *de facto* rights obtained by informal occupancy of land, to well-established customary forms of tenure, backed by strong and historic communal ties to land.

Depending on context, informal land rights provide tenure security...

Informal land rights are not synonymous with insecure land rights. In some contexts, where informality has created a power vacuum and land ownership is fiercely contested between a web of different actors, the result is often fragile tenure security. However, in other contexts, tenure security can often in fact be higher under informal and accountable local governance structures than it would be under a formal system that is inaccessible and often corruptible. Furthermore, informal land governance, including rent payments and land transfers, is often closely linked to informal relationships surrounding employment and risk-sharing. Formalisation of land rights risks disrupting these important and often long-established relationships.

...but without formal state recognition, they lack the benefits of legal enforceability and marketability

- ✗ Since informal land rights are not enforceable through the formal legal system, they serve as **poor collateral** for households or firms within the formal banking system.

Informal land rights are not synonymous with insecure land rights

- ✗ Furthermore, where ownership of land is not formally registered, this **hinders effective urban planning** and deprives governments of important revenue flows from land and property **taxation**.
- ✗ Informal land rights limit the marketability of land in two ways. Firstly, without formal legal recognition of new ownership, buyers may not be fully confident that their full **rights to land will be respected** the prevailing informal authorities. Secondly, without the publicly observable record of land transactions and historic valuations that a well-administered formal land market can provide, informal land transactions fail to generate the **common knowledge of market prices** that is essential for a well-functioning land market.

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Freehold and long-term leasehold tenure

Freehold and long-term leasehold titles are the predominant form of land rights in developed economies.

- Under freehold tenure, a private owner (an individual or corporation) has full and perpetual rights to the land they own, and can develop, collateralise, and sell the land according to their own will.
- Under leasehold tenure, a landowner, typically the government, issues a long-term lease that gives the leaseholder full rights to the land for use, transfer and development for the duration of the lease, subject to the landowner's approval. Typical lease durations are 49-99 years.

If accompanied by well-functioning legal and administrative systems, freehold and long-term leasehold titles are the **'gold standard' of land ownership**. They are the most attractive form of tenure to titleholders for the purposes of tenure security, to banks for the purposes of collateral, and to large-scale investors for the purpose of buying up land for more productive uses.

If accompanied by well-functioning legal and administrative systems, freehold and long-term leasehold titles are the 'gold standard' of land ownership

CASE STUDY: LAND TITLING IN PERU UNLOCKS INVESTMENT AND LAND MARKET ACTIVITY

Between 1996 and 2003, the Peruvian government issued freehold titles to over 1.2 million urban households. Strong communication of the benefits of titling, alongside linking titling to infrastructure provision, generated a high level of public support and subsequent political will for the programme.

- The increased tenure security provided by the programme increased the rate of housing investments by over 60%.¹² It also enabled

¹² Field, E. (2005). "Property Rights and Investment in Urban Slums", Journal of the European Economic Association 3(2-3): 279-290.

residents to work on average 16 hour more per week, as they felt secure in leaving their houses to find work away from home.¹³

- The titling programme also unlocked significant land market activity. Land values for titled properties rose by 20-30%, and land market transactions increased by 134% between 1999 and 2003.¹⁴

However, the programme had limited effects on collateralization, with poor households often unwilling to risk their homes to raise capital for business loans, and banks unwilling to take the risks associated with mortgage or commercial lending to low-income households with unstable cash flows.

Key to the success of the programme was the creation of two well-funded and high capacity independent public institutions: the commission for the formalisation of informal properties (COFOPRI) and an urban property registry (RPU). Where land rights formalization has not been accompanied by successful institutional reforms, notably in Sub-Saharan Africa, social and economic impacts have been far more limited.

Freehold and long-term leasehold titles also enable governments to impose obligations on landowners including taxation and urban planning enforcement.

CASE STUDY: LAND TITLING AND FEMALE EMPOWERMENT IN TANZANIA AND RWANDA

Freehold and leasehold titles can also offer important benefits in terms of female empowerment in contexts where traditional and informal forms of land tenure deny women rights over land and land use. Land titling programmes can encourage joint titling, where land is registered in the name of both spouses, and facilitate legal recognition of female-headed households. Recent research from Tanzania shows that even small monetary incentives can encourage joint titling of land.¹⁵ Land titling in Rwanda increased agricultural investments by female-headed households in part because it was accompanied by legal changes to give women rights over the transfer and inheritance of land.¹⁶

¹³ Field, E. (2007). “Entitled to work: Urban Property Rights and Labour Supply in Peru”, *Quarterly Journal of Economics*, 122 (4): 1561-1602

¹⁴ Cantuarias, F. and Delgado, M. (2004) “Peru’s Urban Land Titling Program”, *Scaling Up Poverty Reduction: A Global Learning Process and Conference in Shanghai*, World Bank

¹⁵ Ali, D. A., Collin, M., Deininger, K., Dercon, S. and Sandefur, J. (2014). “The Price of Empowerment Experimental Evidence on Land Titling in Tanzania,” CSAE Working Paper, WPS-2014/23

¹⁶ Ali, D. A., Deininger, K. and Goldstein, M. (2014). “Environmental and gender impacts of land tenure regularization in Africa: Pilot Evidence from Rwanda”, *Journal of Development Economics*, vol. 110, pp262-276

However, there are significant challenges associated with registering freehold and leasehold titles.

- ✗ Where legal systems are weak, and administrative systems governing valuation and transfer are inadequate, issuing formal freehold and leasehold titles has had little impact on investments, credit access or land market activity. Where market activity has risen, this has often been because of ‘market evictions’ or ‘distressed sales’ where titleholders are pressurised by powerful private developers or investors into selling their land far below its market value. Freehold and leasehold titles must therefore be complemented by well-functioning legal and administrative systems governing valuation and property transfer.
- ✗ Given that many of the benefits of land registration are public rather than private in nature, individual demand for land titles is often weak, particularly relative to the unnecessary cost and technical complexity of many current systems of titling. A study in Tanzania showed that willingness to pay for a land title is between \$40-50. This is high relative to local incomes, but low relative to extremely high costs of cadastral surveying on individual properties at up to \$3,000 per parcel. Through surveying at scale and adopting a low-technology, participatory approach, however, countries such as Rwanda have been able to reduce registration costs to approximately \$6 per land parcel.
- ✗ Since freehold titles convey perpetual land ownership, issuing such titles in the context of informal settlements on contested land is often less politically feasible in the shorter term than implementing intermediate forms of tenure such as short-term occupancy certificates (see below). Addressing these potential conflicts requires strong political will, and in many cases innovative policies such as land-sharing or land-readjustment.
- ✗ Issuing freehold and leasehold titles in urban informal settlements makes the land much more valuable. This is good for owners, but can be detrimental for renters, who are frequently the poorest residents. In particular, titling may lead to issues of gentrification with rents rising as land becomes more valuable. This may be viewed as an unfortunate but necessary part of urban development and complemented with investments in adequate alternative housing. However, if for social reasons, governments wish to keep tenants in their existing homes, rent restrictions may be a necessary complement to titling programmes.

Through surveying at scale and adopting a low-technology, participatory approach, however, countries such as Rwanda have been able to reduce registration costs to approximately \$6 per land parcel

FREEHOLD VS. LEASEHOLD TITLES?

When governments are deciding whether to register lands under freehold or leasehold tenure, the main distinguishing factor between these tenure systems is that freehold titles give perpetual private ownership, whereas leasehold titles issued by the government retain government ownership over land.¹⁷

The key benefit for governments in assigning public ownership, and leasing out land to the highest bidder, is that the government retains ultimate ownership of the land once the lease has ended. This allows governments to capture urban land value appreciation and to retain strategic land parcels for future infrastructure developments. Public land ownership has been a key facet of China's urbanization experience as the **appreciation in value of government-held urban land has helped to finance large-scale urban infrastructure investment through land sales**. In 2013, Chinese local governments obtained over \$2.4 trillion in land sales, accounting for up to 35% of local government revenue.¹⁸



Government land sales in Shanghai have helped to finance key urban infrastructure to underpin connectivity (Photograph: hans-johnson, 2015 via Flickr)

However, where institutions surrounding lease assignment of government-owned land are weak, public ownership of land can lead to inefficient outcomes. Nationalised land in Nigeria is often leased on the basis of political patronage rather than through an open and competitive bidding process, resulting in inefficient land use.

¹⁷ Deciding between freehold and leasehold tenure arrangements can also be relevant for private land owners. However, where land is held privately under freehold tenure, it is generally best left to landowners to decide whether to lease out their land or sell it as a freehold.

¹⁸ <http://knowledge.ckgsb.edu.cn/2014/09/03/policy-and-law/the-role-of-land-sales-in-local-government-financing-in-china/>

Furthermore, in contexts where landholders feel they have strong occupancy claims, there can be serious political challenges in issuing leasehold titles where ultimate ownership of the land is given to the government. During Sri Lanka's Million Houses Programme in the 1980s, the government issued plots on 20-year leases in order to guarantee future government ownership. However, leaseholders successfully pressured the government to extend the tenure periods to 30 years, and then to 50 years, and finally to convert all leases into freehold titles in 2006.

Registering freehold tenure may therefore be more politically acceptable in such cases. In doing so, the government forgoes potential revenues from lease payments and land sales. However, it can still capture the collectively generated urban land value appreciation through land and/or property taxes (See *Cities that Work Policy Framing Paper on Land and Property Taxes*).

Since banks are often unwilling to accept leasehold land as collateral if lease durations are too short, Rwanda has introduced **conditional freehold titles**. Under these titles, urban, industrial and commercial land are granted 20-30 year leases, which can be upgraded to freehold status once landowners have completed a prespecified level of construction. This provides more security to banks than traditional leasehold titles. At the same time, these titles also ensure that if land is not being used efficiently, it can be transferred back to the state.

Intermediate forms of tenure

Certain 'intermediate' forms of land rights such as short-term occupancy certificates or collective ownership titles are often relatively easy to implement, and enable ownership to be legally enforced. Intermediate forms of formal tenure typically provide ownership to collectives rather than individuals, or provide shorter-term occupancy rights.

These alternative forms of tenure can often be **well-suited to the needs of informal settlements, particularly in peripheral areas**. This is because they increase tenure security, and unlock the process of urban planning, infrastructure provision and land taxation that comes with legal enforceability. However, they are poor forms of collateral for banks, and are also less able to be transacted than freehold and leasehold titles, making them **less suited for more central urban areas where efficient land use is key**.

Collective land titles

- ✓ In contexts of strong community ties to land, issuing collective land titles can provide increased tenure security, particularly where formal legal institutions are weak. This is because they can bind communities together and increase their bargaining power against powerful private developers

pressurising landowners to sell. In Thailand, the 2003 Baan Mankong housing programme allowed communities to register collective titles, and provided loans at a 4% interest rate to the new communal housing cooperatives. The programme proved highly successful in increasing tenure security and homeowner investment; the share of urban dwellers living in houses made from durable materials increased from 66% in 2000 to 84% in 2010.¹⁹



Left: Informal settlement in Bangkok (Photograph: Flickr, Alex Berger)

- ✓ Collective land titles are less likely to lead to ‘gentrification’. This is because collective titles do not raise land values to the same extent as freehold or leaseholds, and because communities may more willing to set rents at affordable levels to long-term inhabitants.
- ✓ Since individual plot surveying is not required in implementation, based on global cost estimates, collective titles may be **four times less expensive to implement** than individual titles for a community of 1,000 people.
- ✓ Collective titles can also be less controversial to implement since they do not require the formal resolution of internal boundary disputes within the community. However, where there exist larger-scale disputes between communities as long-term occupants and external parties claiming ownership, collective titles are less likely to diminish political tensions.
- ✗ By providing a buffer against market forces and ‘gentrification’, collective forms of tenure can **frustrate the ability of land markets to transfer land to more productive uses** – i.e. large-scale businesses or medium-high rise housing. Communal ownership can be especially problematic for marketability where there is disagreement within the community over whether to sell land. In such cases, land transfers may become protracted and entangled in legal difficulties surrounding divergent community preferences.
- ✗ Collective titles are often intended to pave the way for formalised private land rights after an initial period of group tenure. However, formalising

¹⁹ Mattingly, M. 2013. Property Rights and Development Briefing: Property Rights and Urban Household Welfare. Overseas Development Institute, London.

collective forms of tenure may risk institutionalising powerful leaders in local groups reluctant to relinquish control over group tenure. For this reason, collective titles are **more feasible as a medium term method of increasing tenure security, than a short term stepping stone to full freehold and leasehold titles.**

Starter titles

Starter titles have been created in many countries, such as Namibia, as a cheap and flexible alternative to current land registration systems. Typically, they provide titleholders with long-term or permanent rights of occupancy, but do not convey the full benefits of ownership.

Typically, starter titles provide titleholders with long-term or permanent rights of occupancy, but do not convey the full benefits of ownership

In Namibia, the Flexible Tenure System is designed around the needs of informal settlements, and operates in parallel with the existing land registry. Under this system, whole settlements or ‘blocks’ in areas where planners approve of long-term settlement have their external boundaries demarcated and residents are issued with ‘starter titles’. The internal boundaries of the settlement are not demarcated, so titles do not convey ownership over a fixed plot of land. However, starter titles can be incrementally upgraded into freehold titles over time.

- ✓ Starter titles help to both increase tenure security, and facilitate official utility provision and the collection of taxes.
- ✓ Similarly to collective titles, they can be issued at low cost since they do not require internal boundary demarcation. However, since they are provided to individuals, they are simpler to incrementally upgrade into full ownership titles.
- ✗ Since starter titles do not convey ownership over a fixed land plot that can be legally verified or valued, this impedes the ability of titleholders to collateralise land or sell it to property developers and investors.

Statutory recognition of customary forms of tenure

Statutory recognition of customary forms of tenure enshrines in law the ownership of communities over lands held under customary tenure. This can prevent cases of ‘land grabbing’ where compensation is either not provided or insufficient because the rights of customary landholders are not enshrined in law.

- ✓ To a certain extent, statutory recognition of customary forms of tenure can capture many of the benefits and related costs of collective titles.

However, responsibilities for land administration and local dispute-resolution remain at the community level, even if they must typically adhere to the principles of the state constitution.

- ✗ This can hamper the development of an open, formally recorded land market. It can also hamper the ability of local governments and utility companies from engaging in effective urban planning, infrastructure provision and taxation.

CASE STUDY: MAILO LAND IN KAMPALA - AN UNCONVENTIONAL TENURE SYSTEM

In Kampala, Uganda, 20-30% of households operate under a dual-ownership Mailo system, instituted by the British colonial government in 1900. Under the Mailo system a tenant owns the structure on the land generally paying below market rent determined by the Land Board at the Ministry of Lands. However, the land itself is typically owned by the Buganda Kingdom or by a small group of landowners.

The drawback of this system, however is that both the development and the transfer of property requires permission from both the landowner and the structure owner, often resulting in bureaucratic delays and lengthy legal proceedings. These hinder the efficient collateralisation and transfer of land. Consequently, whilst Mailo land represents an important source of cheap housing for low-income residents, it may be harming the overall productivity of the city. Recent research has found that differences in tenure systems can explain up to 38% of the variation in productivity across space in Greater Kampala. More specifically, the study finds that converting land from customary to leasehold tenure would improve productivity by 3% in manufacturing and 11% in local services. Converting land from Mailo to leasehold tenure would improve local service productivity by 8%.²⁰

Short-term licences

In cases where governments want to provide security to tenants, but are not yet prepared to commit to giving up claims over public land, licences which give short-term rights of occupancy can be expedient. These can vary from annual licences to longer-term licences which more closely resemble starter titles or certificates of occupancy. Furthermore, these can later be upgraded to full freehold or long-term leasehold titles once governments have planned how they want the land to be used.

There are a number of different kinds of such short term licenses. In Trinidad and Tobago, Certificates of Comfort do not confer full ownership on titleholders, but do provide a lifetime guarantee against the threat of eviction. In Nairobi, Kenya, Temporary Occupation Licences are issued for rent on an annual basis and encourage the use of idle public land for small businesses.

²⁰ Bernard, L., Bird, J. and Venables, A. J. (2016) “The Urban Land Market: A Computable Equilibrium Model Applied to Kampala.” Draft, July, University of Oxford.

- ✗ Licences may be too short in duration to provide meaningful tenure security. In Tanzania, Residential Licences are only two years in length.
- ✗ The short duration of tenure also makes these rights unattractive to buyers and generally unable to be collateralised by banks.

Which land tenure systems allow ownership to be secure, legally enforceable, and marketable?



3

Strengthening legal and administrative systems

Formally registered land titles are generally the most conducive to capturing the benefits of secure, legally enforceable and marketable land rights in urban areas. Yet large-scale land titling is politically and financially challenging, and typically requires national-level policy reform. Furthermore, for the benefits of formal land titles to be translated into practice, these depend on well-functioning legal and administrative institutions to underpin them. In many contexts therefore, legal and administrative reforms may be a more feasible short-term goal than large-scale land registration programmes.

1) Building fair and efficient legal systems

To a large extent, the lack of a fair and efficient legal system behind land rights in low-income countries reflects wider systemic weaknesses in court systems, which are often under-resourced, understaffed, slow to reach decisions, with poorly trained judges, absent in most areas outside urban centres, and susceptible to bribes and corruption. Ultimately therefore, enhancing the capacity of courts to address land issues must be part of the wider imperative of strengthening judicial systems and the rule of law. However, there are notable land-specific challenges and reforms that policymakers can and have addressed:

Addressing the length and cost of legal proceedings

In many low-income countries, disputes related to land constitute a disproportionately high percentage of court cases. This creates a vicious cycle involving large case backlogs and long processing times for disputes. Before a recent set of reforms in Ghana, for example, over 50% of all new civil cases lodged were related to land, and the average length of a land-related case was between 2 and 5 years.²¹ Where formal procedures are long, inefficient and costly, this increases opportunities for corruption, deters investors, and leaves the formal legal system inaccessible to low-income households.

Successful land-specific reforms aimed at addressing these challenging, whilst preserving due process and the rule of law, have included **hiring retired judges and paying sitting judges overtime**, and establishing **specialised courts for land cases**.

²¹ Byamugisha, Frank F. K. 2013. “Securing Africa’s Land for Shared Prosperity: A Program to Scale Up Reforms and Investments”, Africa Development Forum series. Washington, DC: World Bank.

In Ghana, the 2002 Land Administration Project introduced the simple yet effective measure of hiring retired judges and paying overtime to sitting judges to manage a backlog of 35,000 cases. The project was able to reduce the backlog by nearly a quarter over the space of only two years.²² However, whilst highly valuable in addressing current backlogs, clearly this is a **one-off** strategy that cannot deal with the fundamental reasons behind the backlog in the first place, and so must be accompanied by further, more fundamental reforms such as the establishment of specialised land courts.

In Ghana, hiring retired judges and paying overtime reduced a backlog of 35,000 land dispute cases by nearly a quarter in only 2 years

Specialised courts dedicated to land issues can help to expedite land dispute resolution procedures. This is because these courts are presided over by judges better trained in the complexity of land law than is typical in general courts. However, as experience in Ghana and Tanzania shows, without occurring in the context of legal and procedural reforms related to land issues, land courts remain vulnerable to many of the same problems that afflict the court system overall. Simply setting up land courts, without further reform just transfers cases from one court to another. Such reforms could include a greater emphasis on pre-trial settlements to avoid lengthy and costly legal battles.²³

Avoiding ‘distressed sales’ in land transactions

Improving the efficiency of the legal system can reduce the costs of obtaining legal protections for low-income households, and reduce opportunities for corruption by well-connected companies and individuals. However, further legal protections may be necessary for low-income households in particular to avoid ‘distressed sales’ where, once issued with a formal title, homeowners are pressurised into selling their land at far below its market value.

In Rwanda, concerns over ‘distressed sales’ post land-titling have been addressed through recent legislation requiring all transactions to be verified by a local notary, who provides an independent assessment of the market value of the property being sold.

Reforming legal practices surrounding compulsory land acquisition

The ability of governments to readily acquire land for public infrastructure, and in some cases large-scale redevelopment, is crucial for well-structured and high-connectivity urban development. For example, the density of paved roads in countries in sub-Saharan Africa is **less than a quarter** of that in other low-income countries.²⁴ This can only be addressed if governments acquire more land as public space. However, since governments cannot always rely on

Governments cannot always rely on voluntary market transactions to assemble large and coordinated land plots at the right time. In some cases, compulsory purchase is often necessary

²² Ibid.

²³ Byamugisha, Frank F. K. 2013. “Securing Africa’s Land for Shared Prosperity: A Program to Scale Up Reforms and Investments”, Africa Development Forum series. Washington, DC: World Bank.

²⁴ Vivien Foster and Cecilia Briceño-Garmendia, “Africa’s Infrastructure: A Time for Transformation” (2010),

voluntary market transactions to assemble large and coordinated land plots at the right time, the power of compulsory purchase is often necessary.

What constitutes a legitimate reason for compulsory public land acquisition is a source of controversy across the world. Generally accepted as a legitimate reason is the implementation of vital infrastructure projects necessary for the city's connectivity and liveability, such as road, rails, and piped utilities. However, in many cases publically acquired land put to *private* use can provide long term public benefits for a city. For example, land acquired for a private enterprise that provides well-paid employment to hundreds of low-income residents may can offer significant positive externalities for citizens. In Singapore, reforms to British colonial land acquisition laws played a pivotal role in the whole country's development path, enabling acquisition of land not just for infrastructure, but also for public housing and industrial parks. However, the use of government acquisition for private enterprise requires significant oversight to ensure that developers actually follow through with planned redevelopments rather than simply using government land acquisition to obtain rents from large-scale land assembly. In Delhi, a 2007 survey of demolition sites showed that over 46% of sites cleared from 1990 to 2004 were still vacant in 2007.²⁵

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In Dar es Salaam, the construction of the city's Bus Rapid Transit system (left) required the resettlement of almost 1000 residents. Compensation has been paid on the basis of certified market-value property valuations, as well as 'disturbance allowances' to compensate for the costs of relocation.

(Photograph: Hendri Lombard/World Bank)

Alongside adequate justification, compulsory acquisition requires adequate compensation to address resistance to acquisition. This typically involves:

- **Payment to landowners at the market value of their land and property before redevelopment projects are announced**, to prevent speculative investment driving up the price of land that is about to be acquired.
- In many cases **further compensation for landowners and occupiers who have been displaced** from the acquired land. This additional payment

²⁵ Dupont, V. (2008) "Slum Demolitions in Delhi since the 1990s: An Appraisal", Economic and political weekly: 43 (28)

for dispossession can include the costs of transport, the losses associated with existing unusable inventories, and the costs of establishing a business reputation and livelihood in an entirely new location.

By conducting detailed and participatory surveys in advance of acquisition, policymakers can identify informal landowners and occupiers who may require compensation, collect property data for valuation purposes, and evaluate the displacement costs to affected residents.

2) Reforming land administration to facilitate effective planning, taxation and land markets

Reforms to land administration can play a vital role in facilitating effective urban land use planning, broad-based taxation of land and properties, and well-functioning land markets based on common knowledge of prices.

Currently, land administration processes in many countries are costly, and based on poorly updated and inaccessible land records.

- ✗ Even a fully registered property takes 60 days to transfer in Sub-Saharan Africa, almost triple the average in high-income OECD average of 22 days. Challenges in acquiring land for large-scale investment represent a serious constraint to firms in many African cities, particularly for manufacturing firms.
- ✗ Failure to update and integrate land records frustrates the ability of urban planners to co-ordinate land use and facilitate effective infrastructure provision (see paper on Urban Land Use Planning). It also means that the valuations used in property transfers and to calculate tax payments, can be based on systems and data that are significantly out of date. For example, in Kenya, the valuation system has not been updated since colonial times and land records are out-dated. In Nairobi, land records were last updated in 1981.
- ✗ In many cases access to accurate data on historical transactions for valuation purposes is extremely limited. In Malawi, for example, the Local Government Act prescribes that valuation procedures based on transaction data can only be carried out by a very limited group of registered valuers.

Even a fully registered property takes 60 days to transfer in Sub-Saharan Africa, almost triple the average in high-income OECD average of 22 days

Three reforms which have often proved successful in tackling these challenges across many low-income countries are; computerising land records, decentralising land administration, and the establishment of ‘one-stop-shops’ for investors.

Computerising land records

A key reason behind poorly updated land records and lengthy processes of property transactions is the fact that over 80% of Sub-Saharan African and South Asian countries still have paper-based systems that are in deteriorated conditions.

- Computerising land records can greatly reduce the length of property transactions. According to the World Bank, the 27 countries that computerized their land registries in the past seven years have on averaged halved the time to transfer properties.²⁶
- By digitizing data on assets liable to tax, ownership records can be easily maintained over time. Tax billing, collection and appeals are also made more streamlined if **integrated into the same system**, whilst reducing the potential for corruption and discretion in the tax system. In 2014 the Arusha City Council integrated a GIS mapping system with the Local Government Revenue Collection Information System, electronically mapping all properties and their taxable values. Consequently, the city experienced a three-fold rise in the number of eligible taxpayers from 31,160 to 104,629. Within one year, the annual revenues of the city council increased by 75%, from 2.6 billion shillings (\$1.6m) in 2013 to 4.6 billion shillings (\$2.9m) in 2014.²⁷

The 27 countries that computerized their land registries in the past seven years have on averaged halved the time to transfer properties

However, the considerable benefits of computerisation are not immediately reaped. Computerisation can take years to develop and require considerable financial resources and capacity building. Computerisation therefore needs to be seen as an investment with a short-term outlay for significant longer term revenue flows from land and property taxation.

Decentralising land administration

Aside from the lack of computerisation, a further reason behind out-dated records is that land administration has not been adequately decentralised to local bodies that are better able to understand and keep track of local land transfers. This can also help to integrate land administration with local land-use planning. Since land issues can be complex to administer, and require knowledge and understanding of the local cadaster, it is necessary to implement appropriate training for local authorities. Centralized management may be needed to deliver technology, maintain uniform national standards, or ensure quality of services.

When decentralisation of land administration is combined with computerisation and local capacity building, updating land records can become far

²⁶ Byamugisha, Frank F. K. 2013. “Securing Africa’s Land for Shared Prosperity: A Program to Scale Up Reforms and Investments”, Africa Development Forum series. Washington, DC: World Bank.

²⁷ World Bank (2015) “The Tanzanian Strategic Cities Project. Improving Local Governments’ Own Source Revenues: The Arusha Experience.” Washington, DC: World Bank.

more efficient. In Ghana, where computerisation was combined with a decentralisation of deed registries to 10 regional centres, average time to register property transfers was cut from 169 days in 2005 to 34 days in 2011. Valuation rolls can now automatically be updated after transfers.²⁸

Establishing one-stop shops

Alongside more general reforms to land administration, one-stop-shops can ease the process of acquiring and developing urban land for large firms with high employment potential. These enable large-scale investors to deal quickly and efficiently with one committed institution to expedite the process of land acquisition and business licencing. This can represent a highly cost-effective way for cities to attract investment.

In Kigali, the Rwanda Development Board, in collaboration with the City of Kigali, has established a one-stop-shop (OSS) for foreign businesses with capital investments of over \$250,000 and domestic or COMESA businesses with capital investments over \$100,000.²⁹ In 2010, the OSS was given the mandate to issue deed plans, construction permits and land titles with a maximum delay of 30 days. The OSS also facilitates connection to utilities, tax services and environmental impact assessments. This has required significant and ongoing investment in staff training, integration of the OSS with broader urban planning, and awareness-raising to both investors and the public.³⁰

²⁸ Byamugisha, Frank F. K. 2013. “Securing Africa’s Land for Shared Prosperity: A Program to Scale Up Reforms and Investments”, Africa Development Forum series. Washington, DC: World Bank.

²⁹ <http://www.rdb.rw/one-stop-centre.html>

³⁰ Sagashya, D. G. (2012), “Rwanda: Reforming Land Administration to Enhance the Investment Environment”, published in *Untying the Land Knot: Making Equitable, Efficient, and Sustainable Use of Industrial and Commercial Land*, pp57-70

Trade-offs in the process of formal land registration

The need for coordinated, large-scale, and government-funded programmes

In many low-income countries, individuals are left to register their own land titles, and must go through a long, complicated, and expensive process to do this. In Rwanda in 2004, before a nationwide process of land registration, there were only two registrars of land titles in the entire country – the Mayor of Kigali for properties in Kigali, and the director of the land ministry for the rest of the country. It therefore took on average 354 days to get a property registered.³¹ In Lagos the process of obtaining a formal land title can cost up to 30% of the price of property construction.³² Unsurprisingly, many low-income residents choose not to follow this process.

Where policymakers decide to formally register lands currently held under informal or customary tenure, this therefore typically requires an **active role for government in leading a coordinated, large-scale and government-funded programme** of land registration. This enables the process of land registration to be far more efficient, cost-effective and politically acceptable:

- ✓ Land rights have **strong public benefits**, including functional land markets and the facilitation of land and property taxation, which individuals do not take into account when deciding whether to register their land. Government intervention is required to invest sufficiently in capturing these benefits.
- ✓ Large-scale land registration is far more cost-effective, avoiding repeated and costly surveyor visits to different areas. In Tanzania, it was estimated that **surveying at scale is over 20 times cheaper than surveying single parcels**.³³

In Lagos the process of obtaining a formal land title can cost up to 30% of the price of property construction

In Tanzania, surveying at scale is over 20 times cheaper than surveying single parcels

³¹ Sagashya, D. G. (2012), “Rwanda: Reforming Land Administration to Enhance the Investment Environment”, published in *Untying the Land Knot: Making Equitable, Efficient, and Sustainable Use of Industrial and Commercial Land*, pp57-70

³² World Bank, 2015, “*From Oil to Cities: Nigeria’s Next Transformation. Nigeria Urbanization Review*” Washington DC: World Bank

³³ Ali, D. A., Collin, M., Deininger, K., Dercon, S. and Sandefur, J. (2014). “The Price of Empowerment Experimental Evidence on Land Titling in Tanzania,” CSAE Working Paper, WPS-2014/23

- ✓ Government involvement in registration initiatives can facilitate large-scale solutions to address controversial issues surrounding competing claims over land.

Successful titling programmes in Rwanda and indeed throughout Latin America have therefore been large in scale, and typically implemented through national government legislation.

- In Rwanda, after extensive consultations, primarily championed by the Ministry of Environment, Forestry, Lands, Mines and Water, the 2005 Organic Land Law was passed, stating that all citizens had the legal right to use and acquire land under leasehold titles of between 3 and 99 years. Those occupying customary lands were granted 99 year leases.
- In Brazil, the 1988 Federal Constitution recognized the legal ownership of inhabitants who have lived in urban areas of up to two hundred and fifty square metres for five years. Individual and/or collective freehold rights were granted to occupiers of private land. Individual and/or collective leasehold rights were granted to occupiers of public land.

LAND REGISTRATION IS A LONG-TERM INVESTMENT

In the 1990s and 2000s over 20 African countries proposed reforms to issue millions of freehold titles to low-income households. Many of these reforms failed because policymakers, concerned about how to recoup their initial outlay on surveying and registering lands, have lacked sufficient political will and/or not funded projects adequately.

It is therefore important to consider land registration initiatives as a **long-term investment**. This requires a significant initial outlay, particularly on mapping and surveying lands, and ongoing investments in effective land administration. However, **if implemented cost-effectively, governments can more than recoup their initial outlay on land registration through land and property taxes**. For example, between 2000 and 2003, Bogota District updated its land and property cadaster at a cost of US\$4 million, expanding revenue potential from property taxes by \$24 million per year.³⁴

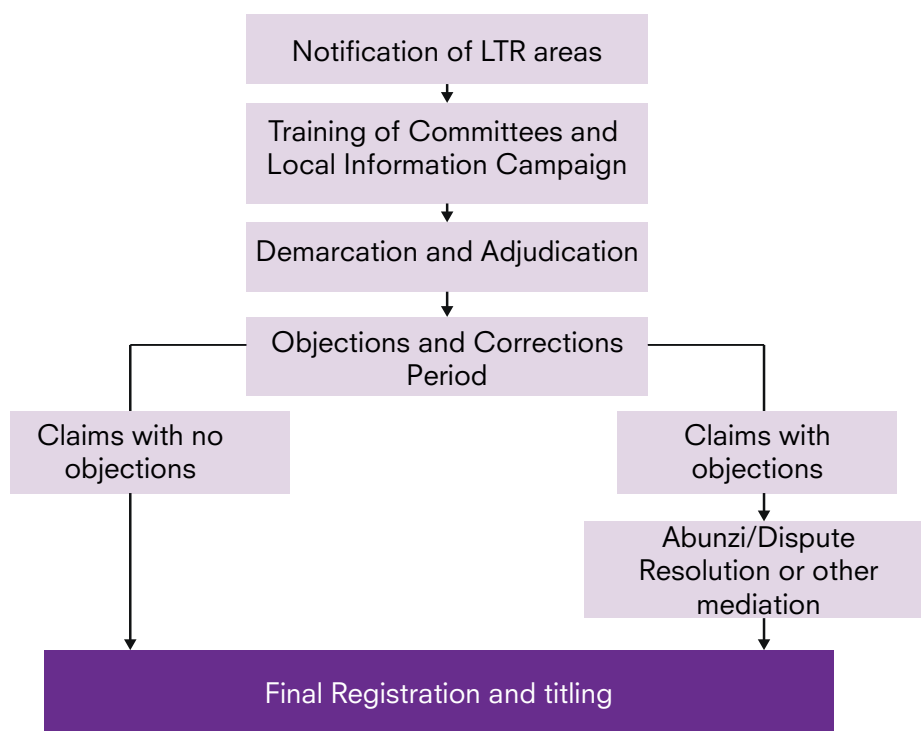
Updating Bogotá's land and property cadaster generated \$24 million in potential property tax revenue per year, at a total cost of only \$4 million

Key steps in the implementation of such programmes are:

- 1 Awareness-raising of land registration
- 2 Mapping and surveying land parcels
- 3 Resolving competing claims over land
- 4 Ensuring continued use of the formal system

³⁴ Gaviria, N. (2004) "The Bogotá Cadastre: An Example of a Multipurpose Cadastre", Land Lines April 2004, Lincoln Institute for Land Policy.

Process for Land Tenure Regularisation Programme in Rwanda.



Source: Sagashya (2012)³⁵

1) Awareness-raising of land registration

Awareness-raising before embarking upon large-scale registration programmes is often necessary to ensure the public understanding of the legal rights and responsibilities that come with formal property titles. Where owners are not informed of their rights, this leaves them vulnerable to sell off land at below-market prices. Where owners are not informed of their responsibilities, they may be reluctant to pay for property taxes or utility connections.

Furthermore, public awareness-raising can help to build the political support that is often vital in overcoming significant political and financial hurdles to the process. Peruvian economist Hernando de Soto exerted a strong influence on public discourse surrounding land titling in Peru by arguing that formalisation was a key part of nation-building – ensuring that both rich and poor live under the same rule of law. In Rwanda, public support for land registration was facilitated by a participatory, community-based process of land mapping.

Public awareness-raising can help to build the political support that is often vital in overcoming significant political and financial hurdles to the process

³⁵ Sagashya, D. G. (2012), “Rwanda: Reforming Land Administration to Enhance the Investment Environment”, published in *Untying the Land Knot: Making Equitable, Efficient, and Sustainable Use of Industrial and Commercial Land*, pp57-70

2) Mapping and surveying land parcels

Mapping and surveying procedures in developing countries represent the largest financial hurdle to land registration, typically constituting well over 50% of programme costs. Even where land registration was carried out at scale, a recent World Bank titling experiment in Tanzania put the cost of large-scale cadastral surveying at approximately \$45 per parcel, with official government estimates even higher at up to \$160 per parcel. These high costs have resulted in governments being unable to recoup their investments from land titling through taxation, paralysing widespread implementation.³⁶

Mapping and surveying procedures typically constitute well over 50% of land registration programme costs

One way to reduce the costs associated with mapping and surveying is to issue collective land titles, or titles that fall short of full ownership. Based on global estimates of titling costs, for a community of 1,000 residents, collective titles may be **four times as cheap to register** as individual ones.³⁷ In Namibia, high surveying costs for freehold titles were circumvented through creating a parallel ‘starter title’ registration system for informal settlements.

However, in many ways more sustainable is to reduce the cost and complexity of issuing full freehold or long-term leasehold titles. In Rwanda, during the 2009-13 Land Tenure Regularisation programme, mass participatory exercises based on aerial and satellite photographs meant that land titling for almost all of Rwanda’s estimated 10.3 million land parcels was achieved in five years, at an **average cost of only \$6 per parcel**.³⁸

Average mapping and surveying costs for individual titles per parcel³⁹

Tanzania (individual cadastral survey – official estimate)	Tanzania (systematic cadastral survey - official estimate)	Tanzania (systematic cadastral survey – World Bank estimate)	Rwanda (systematic photo-based mapping)
\$600-3000	\$90-160	\$45	\$6

Cost-effective methods are more important than state of the art technology

Modern cadastral surveying procedures are highly technical, and are often subject to insufficient scrutiny for cost-effectiveness by governmental agencies.

³⁶ Ali, D. A., Collin, M., Deininger, K., Dercon, S. and Sandefur, J. (2014). “The Price of Empowerment Experimental Evidence on Land Titling in Tanzania,” CSAE Working Paper, WPS-2014/23

³⁷ http://rightsandresources.org/wp-content/uploads/RRI-Study-on-Costs-Final-Draft-ID-55782_Aug-20-FINAL.pdf

³⁸ Sagashya, D. G. (2012) “Building Land Administration in Rwanda Through Systematic Land Registration”, Presentation at Geospatial World Forum, Amsterdam

³⁹ Figures represent average costs. Costs may depend significantly on plot size and characteristics.

There is a danger that, without such scrutiny, surveying professionals may recommend expensive, state of the art technologies, which are both unnecessary and unsuited to local contexts. Successful land titling experiences across the world have shown that low-technology approaches, using large scale aerial photographs as a spatial framework, with mass community participation to demarcate boundaries, can be far more cost-effective.

In 2009, Rwanda embarked on a large-scale, nationwide program to register its lands using photomaps produced from aerial photography and high-resolution satellite imagery. Low-technology ‘general-boundary’ rules and simple methods of boundary demarcation were implemented by locally recruited surveyors, rather than by professional cadastral surveyors. This was carried out in the presence of the local community so that boundary disputes could often be resolved on the spot. Competent parasurveyors then went on to train further parasurveyors in areas the programme had not yet reached. This use of local parasurveyors, alongside localized dispute-resolution systems, was not only highly cost-effective, but also meant that those responsible for demarcating the land were known to the claimants.

PROCEDURES FOR THE LAND REGULARIZATION PROCESS IN RWANDA

1. Notification of areas for a land tenure program
2. Local information-dissemination public meetings and sensitization
3. Appointment and training of land committees and para-surveyors
4. Demarcation of land and marking of boundaries on an image or photograph
5. Adjudication, recording of personal details, issuance of a claims receipt, and recording of objections and corrections simultaneous with demarcation
6. Publication of adjudication record and compilation of a parcel index map
7. Objections and corrections period finalizing the record and disputant lists
8. Mediation period for disputes
9. Registration and titling and preparation and issuance of documents.

Source: Operations Manual for land Tenure Regularization.

Across the world, from India to the Kyrgyz Republic, similar cost reductions have been reached by abandoning professional cadastral surveying in favour of aerial photographs and satellite mapping.



Participatory demarcation of land boundaries in Jalalabad, Afghanistan (Photograph: Flickr, USAID)

Piloting new technologies and scaling up successful ones

Whilst such **low-technology approaches** have historically been most cost-effective, recent technological innovations are increasingly facilitating cheap and viable solutions. In particular, improvements in and increased public accessibility to global navigational satellite systems have the potential to enable even cheaper and more participatory land mapping. For example, Google Earth makes spatial data freely and publicly available and provides a platform for users to upload data relevant to surveying and mapping, through tools such as the Trimble Business Centre. Furthermore, a recent Land Tenure Support Programme in Tanzania has pioneered the use of drones as a cost-effective technology to deliver 300,000 land titles in rural areas.⁴⁰

Given their great potential to reduce the costs and increase the efficiency of land registration and updating, it can be cost-effective in the long-term to pilot proactively such new technologies and scale them up if proven successful.

3) Resolving competing claims over land

Attempts to formalise land rights place governments in the highly politically controversial position of arbitrating between competing claims over land, often between powerful and well-connected interest groups.

Competing claims are ideally resolved through formal legal proceedings, but where such institutions lack the capacity or required documentation to effectively adjudicate between claimants, local dispute-resolution mechanisms can be more effective. In Rwanda, after initial mapping and surveying was carried out in the presence of local residents, any dispute unable to be resolved either on the day of the survey or after a 60-day mediation period was taken to local judicial authorities (*abunzi*). The open nature of dispute resolution, combined with the legitimacy and close community ties of these authorities,

Attempts to formalise land rights place governments in the highly politically controversial position of arbitrating between competing claims over land

⁴⁰ <http://www.dailymail.co.uk/wires/reuters/article-3780076/Tanzania-turns-drones-bring-peace-bitter-fight-land.html>

helped to prevent opportunistic ownership claims being lodged after the programme was announced.

RESOLVING DISPUTES BEFORE THEY START: LAND REGISTRATION ON THE URBAN PERIPHERY

The simplest solution for policy to avoid the large-scale land disputes that currently characterise many urban informal settlements is to prevent them from starting in the first place. This can be achieved through a proactive process of land registration on the urban periphery, in advance of future urbanisation. Where accompanied by the purchase of cheap land on the urban periphery for the provision of core housing foundations and infrastructure, this proactive approach to future urban growth can facilitate low-cost, incrementally built but well-planned settlements. Planning such infrastructure in advance can be three times less costly than retrofitting after settlement has already occurred.⁴¹ Furthermore, even where subsidies are needed to keep serviced plots affordable, these can be funded in the longer term by holding selected land parcels for delayed sale once land values have appreciated.

However, in the case of long-lasting and large-scale disputes between landlords and occupiers of informal settlements, there may be a need for more active government involvement. There are typically two options in these cases: awarding land rights to informal settlers, which usually occurs in the context of slum upgrading programmes, or resettling them in a different location.

Where policymakers are content to retain land under residential use, participatory *in-situ* slum upgrading is a cost-effective solution. This can enable informal settlements to **incrementally transform into dense, but highly liveable neighbourhoods**, integrating the city's low-income workforce into the urban fabric. Upgrading programmes can be accompanied by the issuance of shorter-term leases or occupancy permits where longer-term ownership disputes cannot currently be settled; however to some extent such 'solutions' simply postpone the need for clarity of land ownership in the longer term. Where such disputes can be resolved and residents are issued with freehold or long-term leasehold titles, this can unlock significant private investment. Furthermore, in the longer-term, the marketability of these land titles can allow for a gradual process of investors purchasing the land to transfer it to more productive uses at a price that suits both investors and titled residents.

Where existing land use is highly unsafe or inefficient from a city-level perspective, **resettlement may be needed to bring about a co-ordinated change in land use** in the shorter-term. In Ethiopia, the recent Integrated Housing Development Programme has involved resettling inner-city slum residents in over newly built 200,000 new housing units on the edge of the city, enabling the conversion of central land to more productive uses: higher-value residential properties, vital urban infrastructure, and commercial real estate to form

Where existing land use is highly unsafe or inefficient from a city-level perspective, **resettlement may be needed to bring about a co-ordinated change in land use**

⁴¹ <http://www.globalurban.org/GUDMago7Vol3Iss1/Abiko.htm>

the city's employment engine. However, without the financial resources to adequately rehouse displaced residents in well-connected locations, such resettlement programmes can be highly challenging. The destruction of local social networks and local employment opportunities in the relocation process, combined with the typically peripheral locations of new housing blocks, often leaves displaced residents **excluded from the social and economic fabric of the city**; in many cases, the majority of resettled residents have simply chosen to move back to more accessible urban slums.

Both of these policy options may require governments to tackle powerful vested interests who have taken advantage of weak governance in informal settlements to obtain strong de facto, quasi-legal ownership claims. Government can either legally override these claims, or compensate them in acquiring the land. Building alliances with more powerful government departments such as Finance Ministries, alongside effective communication to citizens on how vested interests are frustrating the city's potential, could help to achieve the city authority required for former. However, in many cases it is difficult to envisage city authorities being able to achieve this without fierce political and legal resistance. Monetary compensation may therefore need to be provided to these interest groups.

This compensation is expensive, but represents the price of clarity over land rights. In the long run, such compensation can be far less costly than the wasted productive potential that results from contested tenure arrangements. Effective negotiation can substantially lower costs, particularly where current rents obtained from the settlement by landlords are low. As part of slum upgrading and titling programmes in the Philippines, for example, landlords accepted compensation of only 15-20% of the value of comparable idle land nearby. They did this because it was preferable to their potential involvement in a lengthy, tedious and costly process of establishing legal control over the settlement.⁴² However, even when landlords require substantial compensation for lost rents, this can be far less costly than the tremendous waste of productive potential implied by current tenure arrangements.

Compensation payments to vested interests can be far less costly than the wasted productive potential resulting from current contested tenure arrangements

Where policymakers are reluctant to either relocate residents en-masse or retain land under its current inefficient and unplanned use, land sharing and land readjustment could represent two potentially 'win-win' policy solutions. These enable contested land to be pooled together and shared out productively between competing claimants.

⁴² Berner, E. (2016) "Housing Disablement: Market Failures, Haphazard Policies and the Global Proliferation of Slums" in Gomez, G. M. and Knorrinda P. (2016). "Local Governance, Economic Development and Institutions", EADI Global Development Series, Palgrave MacMillan

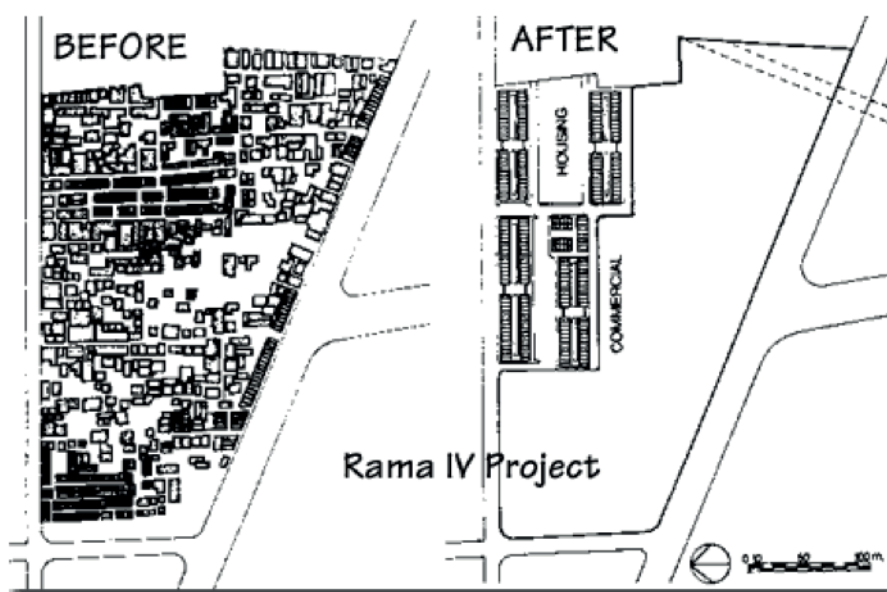
CASE STUDY: WELFARE COSTS OF CENTRALLY LOCATED SLUMS IN NAIROBI

In the informal settlement of Kibera in Nairobi, the cost of land use misallocation associated with informal low-rise residential development on prime central real estate, has been estimated at over \$1 billion. Auctioning off this land to property developers would provide such a large windfall that it could be used to compensate slumlords at the value in perpetuity of future rent payments (despite them having no legal claim to this), and obtain a surplus of \$13,000 per household. This is more than enough to help to relocate tenants currently paying an annual rent of \$260 per household.⁴³

Land Sharing

Land sharing solutions have been used extensively in countries in Asia both to facilitate more efficient land use in informal settlements, as well as to solve competing ownership claims between long-term occupiers and official landowners. These typically involve landowners agreeing to rehouse occupiers in medium-high rise apartments on part of the land of the informal settlement. This is cross-subsidised by freeing up the remaining portion of land for valuable commercial development by the landowner.

Land sharing agreements typically involve formal landowners agreeing to rehouse occupiers in medium-high rise apartments on part of the land of the former informal settlement



Source: Angel and Boonyabancha (1988)⁴⁴

⁴³ Henderson, V., Regan, T., Venables, T. (2017). "Urban Transition and Institutional Frictions", March 2017 Working Paper

⁴⁴ Angel, S. and Boonyabancha, S. (1988) Land Sharing as an Alternative to Eviction. In Third World Planning Review, 10 (2)

In Bangkok, for example, in the 1970s and 1980s, the Thai government brokered seven such land-sharing deals between slumdwellers and landowners. In the Rama IV slum, rehousing residents in 3-5 storey housing increased population density by approximately 300%, allowing the residential area of the slum to decrease from 8.50 hectares to 2.40 hectares. The official landowner, a property developer, was therefore able to build a commercial complex on the rest of the site. The value of the freed-up land for commercial uses was sufficient to cover the company's construction costs of new housing units for slumdwellers, issued through 20 year leases, as well as service infrastructure.

Land sharing solutions capture a key benefit of resettlement programmes by freeing up land for more productive uses. They also capture a key benefit of slum upgrading programmes by facilitating on-site improvements in living conditions for informal settlers. Furthermore, in Bangkok, by rehousing informal settlers near new commercial and higher-value residential developments, land sharing facilitated the emergence of mixed-use and mixed-income neighbourhoods providing significant local employment opportunities.

As an essentially market-based solution, land sharing requires that the **land freed up for commercial development is of such high value that it can compensate developers for building apartments to rehouse residents**. It is therefore most applicable in desirable and central urban areas in cities undergoing rapid economic growth. Weaker growth and lower land values in many areas of Phnom Penh, for example, have resulted in less successful land-sharing agreements, with property developers unable to meet the costs of rehousing residents. In particular, limited funds have led to disputes over what the cut-off date should be to determine which long-term occupants should receive new housing. Before land-sharing agreements are embarked on, it is therefore necessary to negotiate this cut-off date with affected communities, and then calculate both the cost of rehabilitating residents and value of land freed up for commercial development. Where the value of land freed up does not compensate for the cost of rehabilitation, there are various options that are not mutually exclusive:

- Governments can subsidise developers to rehouse residents. This requires use of limited government funding, but is far less expensive than governments having to provide new housing themselves. In Thailand, for example, many land-sharing agreements required government subsidies to be financially viable.
- Residents can contribute to the purchase of their new housing, as long as such payments are kept affordable. In India, for example, urban authorities have discussed the possibility that slumdwellers should pay 10-20% of the cost for their new apartments rather than receiving them for free.⁴⁵

⁴⁵ Gill, M. and Bhidé, A. (2012) "Densification through vertical resettlement as a tool for sustainable urban development", World Bank, Sixth Urban Research Symposium

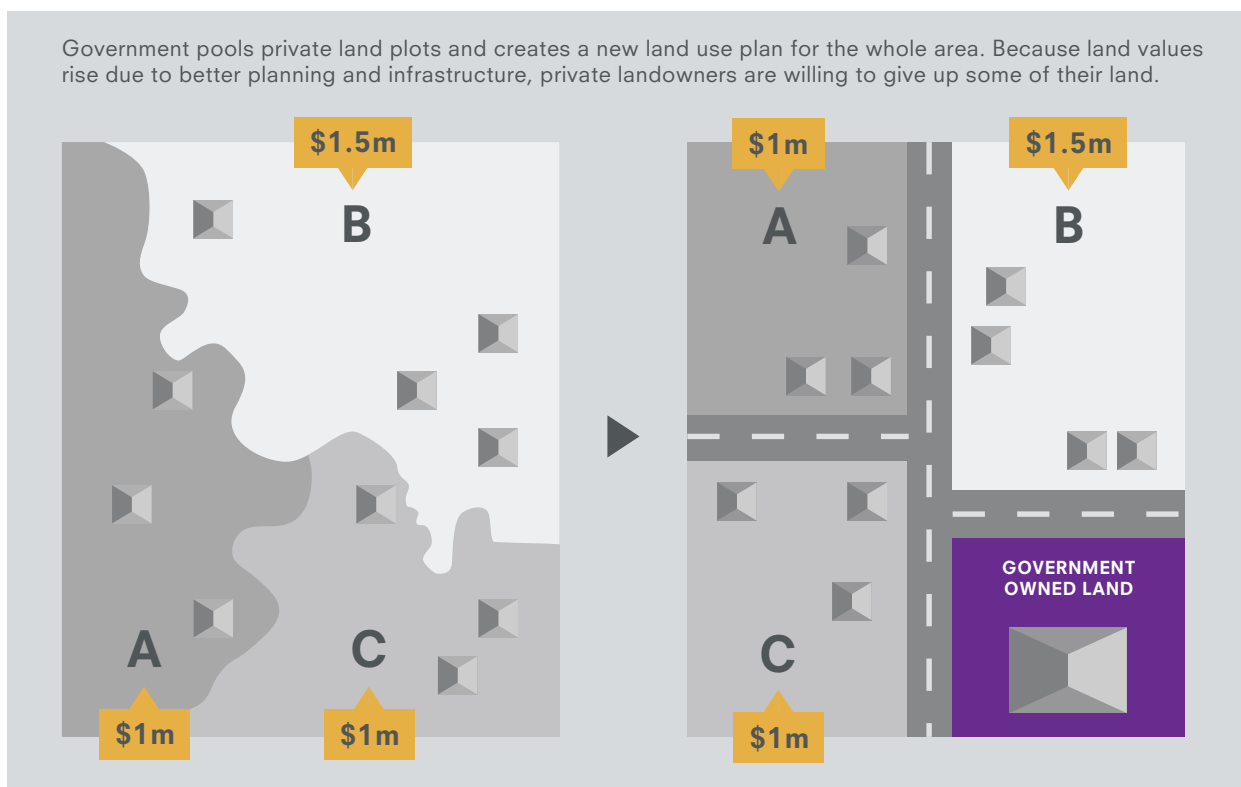
Land Readjustment

Under land readjustment schemes, governments pool together privately-held land plots, and this land is made more efficient through:

- Creating a new land use plan for the area
- Providing necessary public infrastructure on a portion of this land
- Coordinating and facilitating private exchanges between owners to allow for more contiguous ownership

After public infrastructure is supplied, the remaining land is reallocated to owners in proportion to their land plots before readjustment. As land values in the area rise due to better planning and infrastructure provision, private landowners are willing to give up some of their land to the government. Governments are able to acquire selected, strategic land parcels which can either be used for the planned infrastructure investments, or leased or sold to recover the costs of delivering infrastructure. Governments in South Korea, Japan and more recently Angola have extensively used land readjustment schemes as a tool for urban transformation .

Land readjustment schemes



- ✓ Land readjustment can therefore capture the benefits of land-sharing solutions in **resolving competing claims over land** in a way that minimises displacement of large populations.

- ✓ At the same time they can also facilitate greater planning and infrastructure upgrading of areas affected, particularly on the rural-urban fringe where access to infrastructure is more limited. In the Republic of Korea, for example, land readjustment proved extremely successful in managing the expansion of urban areas, and was responsible for 95% of urban land delivery between 1962 and 1981.⁴⁶
- ✓ Land readjustment requires **limited government financing**. This is because the government captures the land value generated by its own infrastructure investments, in the form of land payments by landowners. Under land readjustment schemes in South Korea in the 1940s, landowners gave up 30 percent of their land for the provision of public infrastructure and goods, and a further 20 percent to cover the costs of the project⁴⁷. More than half of the land area of the capital, Seoul, was redeveloped in this way. In Angola, landowners gave up 30% of their land for infrastructure, and a further 35% to fund the costs of the project. This was facilitated by planning for greater housing density in the remaining 35% of land.⁴⁸
- ✓ Land readjustment can incorporate local knowledge of land use and current inefficiencies, as well as local needs and aspirations, where landowners are allowed to play a part in the design of plans for their area. Such participatory land readjustment can be easier to implement, whilst fostering relationships for further public-private-community partnerships in land management.

In South Korea, land readjustment was responsible for 95% of urban land delivery between 1962 and 1981

However, the ability of land readjustment programmes to improve land use relies on:

- **Effective and empowered implementing institutions** – not least because landowners need to trust in their abilities if they are to be willing to give up substantial portions of their land. Angola offers a striking example of two diverging experiences of land readjustment schemes implemented between 2006-2008, based on differing funding arrangements for local governments:
 - In one successful scheme, the local government that implemented the project allocated 30% of land to infrastructure provision that raised surrounding land values, whilst retaining a further 35% for sale. Revenues from the sale of this additional land went into an infrastructure development fund to cover the costs of infrastructure provision.
 - By contrast, the second scheme, initiated shortly after a new decentralisation law in 2007, did not generate sufficient resources

⁴⁶ Povey, M. and T. Lloyd-Jones (2000) - *Mixed value urban development: Mechanisms for sustaining the livelihoods and social capital of the urban poor in core urban areas* - May 2000 ESF/N- AERUS workshop.

⁴⁷ Nancy Lozano-Gracia et al. (2013) “Leveraging Land to Enable Urban Transformation: Lessons from Global Experience”

⁴⁸ UN Habitat (2013) “Volume 1: Huambo Land Readjustment”, Urban Legal Case Studies

through land value capture to sustain itself. A large part of the reason for this was that the new decentralisation law did not incentivise local governments to create surplus incomes from local sources – all local revenues reverted to central government and investments funds were instead centrally allocated to local governments. As a result, the local government instead distributed land parcels for free to those on their waiting list for land for housing. No funds were recovered to invest in infrastructure. Wealthy landowners gained control over the replotting process, and used it simply to increase their landholdings.

- **Strong legal institutions to underlie the process of land title swapping**, as well as **accurate systems for land valuation before and after readjustment**. This is to avoid controversy in reallocation of land. Land can either be reallocated on the basis of relative size, or relative value:

- If determined by *relative size*, a pre-determined and fixed percentage of land per owner (e.g. 50%) is assumed to be needed. If more than this percentage is actually taken from any given landowner in the project, then the municipality must compensate the landowner for extra land taken at the market value. If less than this percentage is taken, the landowner must pay the municipality for land not taken through betterment fees⁴⁹.
- If determined by *relative value*, the land payment for each individual land owner is calculated such that they keep a land-holding of the same, or slightly higher, value as before the scheme.

Payment by relative size is administratively easier to calculate, particularly where land valuation systems are weak, as the same percentage of land is contributed by each landowner. However, this can be perceived as less fair than payment by relative value in cases where some owners are required to contribute much more valuable land than others. This may be more fair in cases where land values are relatively homogenous across the project area.

- **Effective means of participation**. If landowners are allowed to play a part in the design of plans for their area, it is more likely that such plans will incorporate local knowledge of land use, as well as reflect local needs and aspirations. This will be extremely useful in overcoming existing inefficiencies. More participatory land readjustment can be easier to implement, whilst fostering relationships for further public-private-community partnerships for land management.
- **Strong enforcement capacity**. Although land readjustment schemes are typically implemented with the aim of neighbourhood-wide comprehensive upgrading, there will likely be winners and losers in the process. Some landowners may also seek to free-ride off the communal infrastructure provided without giving up any of their land, and therefore

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⁴⁹ These refer to fees charged to land or property owners based on the increase in the value of their land or property that results from surrounding public investments

tactically oppose the scheme. This creates a need to enforce land readjustment for the collective good.

The extent of government involvement in land readjustment can vary. In Germany, *Umlegung* (the planning and implementation of the rural land readjustment process) is led by local authorities and is mandatory for landowners. By contrast, in France landowners are largely responsible for readjustment and carry out planning and implementation through collective decision making within broad outlines agreed on by government officials. Land readjustment projects in Japan can be initiated by a consensus of private actors or by local government, with publically initiated projects mandatory for landowners.

4) Ensuring continued use of the formal system

Costly investments in land registration risk being undone unless governments can ensure continued use of the formal system to register property transfers. In Buenos Aires, a large-scale land titling programme unlocked significant investment and property tax revenues, but these gains risk being reversed through a process of ‘deregularisation’ – 78% of property transfers since registration have taken place informally. This is hardly surprising since the cost of a formal property transfer was approximately 30% of property values in recently titled areas.⁵⁰ For land to remain formally registered, formal procedures for land transfer will therefore need to be cheap, accessible and not overly burdensome, in turn requiring ongoing efforts to streamline land administration.

High formal transaction costs in Buenos Aires mean that despite large-scale titling, land transfers continue to take place informally, and without record

Concluding remarks

Establishing land rights that are secure, legally enforceable and marketable enables urban land to be used **efficiently and intensively**. At the same time, such land rights also enable governments to initiate a process whereby land and property taxation **finances the co-ordinated infrastructure investments** that make the city more productive.

In many cities, overlapping and often contradictory tenure systems coupled with policy inertia, are acting as a brake on urban development. First and foremost, there is a need to **strengthen land-related legal and administrative systems** to provide the conditions for courts to enforce ownership, governments to tax and plan land use, and markets to transfer land to its highest value use. Where these systems are in place, large-scale programmes of formal land registration are key to fully unlocking these benefits in the long run in areas currently under informal or customary tenure.

⁵⁰ Galiani, S. and Schargrodsky, E. (2016) ‘The Deregularisation of Land Titles’, NBER Working Paper No. 22482

Recommended further reading

Sagashya, D. G. (2012), “Rwanda: Reforming Land Administration to Enhance the Investment Environment”, published in *Untying the Land Knot: Making Equitable, Efficient, and Sustainable Use of Industrial and Commercial Land*, pp57-70

Land Sharing as an Alternative to Eviction. Shlomo Angel and Somsook Boonyabancha. In *Third World Planning Review*, 10 (2) 1988.

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