The Role of Land in Achieving Adequate and Affordable Housing
THE ROLE OF LAND IN ACHIEVING ADEQUATE AND AFFORDABLE HOUSING

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<tr>
<td>CEPAC</td>
<td>Certificados de Potencial Adicional de Construção (Certificate of Potential Additional Construction)</td>
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<td>CLTs</td>
<td>Community Land Trusts</td>
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<td>GLTN</td>
<td>Global Land Tool Network</td>
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<td>IADB</td>
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<td>LBF</td>
<td>Land-based finance</td>
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<td>LP</td>
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<td>LR</td>
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<td>RFPs</td>
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<td>OECD</td>
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<td>TDR</td>
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<tr>
<td>U.K.</td>
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<td>U.S.A</td>
<td>United States of America</td>
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<td>USAID</td>
<td>United States Agency for International Development</td>
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Introduction

Despite the efforts of national and local governments, the private sector, civil society and the international community, access to adequate housing remains a major challenge for an increasing number of people throughout the world. What is perhaps different now is that this challenge is affecting people in countries at all levels of social and economic development. A key factor has been the increasing dominance of market economics that promote housing as an economic asset and not a place in which to live and grow as part of a community. Despite the lessons of the 2008 financial crisis, housing costs have risen far faster than incomes, making access to all forms of tenure increasingly difficult.

At the root of this challenge lies the legal and institutional frameworks by which land and housing are managed (Ryan Collins et al, 2017). A key factor in improving access to affordable housing is to improve the governance and management of land markets, especially in urban and peri-urban areas where demand far outstrips supply, causing inflationary spirals. While the costs of labour, public services and construction materials are commonly similar from one housing project to another, the costs of land can vary dramatically depending on its proximity to urban centres, commercial zones and public services, planning and development potential. For example, an urban residential plot of land may be worth a hundred times more than an adjacent agricultural plot, while another plot with full planning approval and access to public services may be worth significantly more than one without.

As Section 2 of this Review demonstrates, a wide range of innovative approaches to urban land management exist in the form of land-based finance (LBF). These approaches can provide a practical framework for improving access to affordable housing and include a range of tax-based, fee-based and development-based policy instruments, many of which have been applied in highly diverse contexts. While revenues from tax-based instruments tend to be integrated into general revenues, rather than to specific infrastructure projects such as housing, fee-based and development-based instruments provide an excellent opportunity to strengthen synergies between housing, land and urban planning by integrating housing with spatial planning though land management. For these reasons, this Review focuses on fee-based and development-based LBF instruments.

Government actors, at central and local levels, can play an important role by formulating and implementing policies and regulations that generate a reasonable share of the increment in land values resulting from state actions to be recaptured for allocation in the public interest. It is important to acknowledge that the methods of managing land vary from one context to another, so no single policy will be applicable in every case. For this reason, this document reviews a wide range of instruments that have been implemented in at least one context and lists their relative advantages and disadvantages. By reviewing the characteristics of each, policy makers and officials responsible for addressing the challenge of improving access to adequate and affordable housing will be able to apply those options most appropriate to local conditions. However, it may also require determination in addressing vested interest groups who are benefiting from the status quo.

In addition to land-based finance policy instruments, Section 3 reviews ways in which urban land governance exerts both direct and indirect impacts on access to affordable and adequate housing. It stresses the need for the regulatory framework to formulate planning standards that reduce land costs and planning and building regulations that permit incremental housing construction, or the use of residential units for home-based economic activity. Similarly, it demonstrates the need for administrative procedures that are clear, simple and fast. Other factors
include the need for spatial planning that puts land to efficient use, an institutional framework that is clear and a range of land tenure and property rights options available to reflect diverse and changing forms of housing demand.

Meeting this challenge will require senior officials in local government to develop and strengthen their understanding of land and housing markets. It will also be important to devise and enforce an administrative and regulatory framework that recognises the unique value and dynamics of ownership of each land parcel. This is particularly important in peri-urban areas, where changes in officially sanctioned land use from agricultural/pastoralist use to commercial/residential results in substantial price increases. Such a process of land market management needs to command broad public support to prevent it from becoming a basis for disputes. It will also be important to take into consideration different land tenure and property rights systems to improve access to land and housing.

UN-Habitat stands ready and willing to use its international experience to support the application of these innovative, yet practical, policy instruments.
SECTION ONE:

The role of land for affordable housing
Despite economic growth and the efforts of national and local governments, the private sector, civil society and the international community, access to adequate and appropriate housing poses a major challenge for increasing numbers of people throughout the world. What is perhaps different now is that this challenge is affecting people in countries at all levels of social and economic development. Not only low-income groups are subject to these challenges; young and even middle-income groups are facing increasing barriers.

Housing is the basis of stability and security for an individual or family. The centre of our social, emotional and economic lives; a place to live in peace, security and dignity. Housing is also key to realising sustainable urbanisation as a driver of development, peace, and improved living conditions for all. For these reasons, access to adequate housing is central to the realisation of the global development goals as set out in the suite of global agreements signed in 2015-16, including, most importantly, the Sustainable Development Goals and the Agenda 2030, in particular, SDG 11 to “make cities and human settlements inclusive, safe, resilient and sustainable” and targets to ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums, the Sendai Framework for Disaster Risk Reduction, the Paris Agreement on Climate Agenda and the New Urban Agenda agreed by UN member states at Habitat III in 2016.

Agreeing on goals and targets is only the first step in achieving progress in practice and the challenge of ensuring access to adequate housing is immense. In the New Urban Agenda, nations committed to “progressively achieving the full realization of the right to adequate housing as a component of the right to an adequate standard of living”. Under international law, to be adequately housed means having secure tenure – not having to worry about being evicted or having your home or lands taken away. It means living somewhere that is in keeping with your culture and having access to basic services, education and employment. The United Nations Committee on Economic, Social and Cultural Rights has underlined that the right to adequate housing should be seen as “the right to live somewhere in security, peace and dignity” and should, at a minimum, meet the following criteria:

- **Security of tenure:** housing is not adequate if its occupants do not have a degree of tenure security which guarantees legal protection against forced evictions, harassment and other threats.
- **Availability of services, materials, facilities and infrastructure:** housing is not adequate if its occupants do not have safe drinking water, adequate sanitation, energy for cooking, heating, lighting, food storage or refuse disposal.
- **Affordability:** housing is not adequate if its cost threatens or compromises the occupants’ enjoyment of other human rights.
- **Habitability:** housing is not adequate if it does not guarantee physical safety or provide adequate space, as well as a protection against the cold, damp, heat, rain, wind, other threats to health and structural hazards.
- **Accessibility:** housing is not adequate if the specific needs of disadvantaged and marginalized groups are not taken into account.
- **Location:** housing is not adequate if it is cut off from employment opportunities, health-care services, schools, childcare centres and other social facilities, or if located in polluted or dangerous areas.
- **Cultural adequacy:** housing is not adequate if it does not respect and consider the expression of cultural identity.

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3 Affordable housing is defined differently in different contexts. In the USA, housing is considered affordable if the total cost, including utility bills, etc, is less than 30 percent of net household incomes. However, in the UK, housing is defined as affordable if is 80% of the market price. The UN has defined affordable housing in terms of the Price to Income Ratio, within which 3.1 is considered affordable, 4.1 is unaffordable and 5.1 is severely unaffordable. For tenants, a Rent to Income Ratio is considered affordable if it is less than 30 per cent of total net household income.
The scale of the challenge has been intensified by COVID-19 pandemic, at a time when housing has become the frontline defence to prevent the spread of the virus and governments across the world are urging people to “stay home”. Over 1.8 billion people cannot comply with this order because they live in substandard, informal settlements without access to basic services and generally in overcrowded conditions – making them particularly vulnerable to contracting the virus.

The demand for urban land and housing is increasing rapidly and at a far greater rate than formal supply. Unless radical and sustained action is taken, the numbers living in settlements will continue to increase, threatening the ability to realise globally agreed objectives. This situation is a direct outcome of market-oriented policies that have steadily replaced various forms of social housing with credit schemes to promote individual ownership and the role of the private sector. This has been widely promoted from the 1980’s onwards in the course of liberalisation of the housing sector under the principle of ‘housing as a market enabler’ (World Bank, 1993). The excessive promotion of these policies globally has resulted in land and housing becoming financial assets for investment rather than a human right4, foreclosing the possibility of the large majority to access adequate housing. Across the globe, families are evicted to make way for luxury developments and people are pushed out from ‘prime land’ either because they cannot afford to live there, or as a result of market-driven displacement (Durand-Lasserve, 2006).

The impact of the shift from housing as a place to build a home, to housing as a financial asset, has made home ownership increasingly unaffordable and increased prices in the private rental sector. This crisis is affecting the quality of life for people at the expense of security, health and access to livelihoods and social facilities necessary for well-being.

Findings from the UN Global Sample of Cities’ survey in 170 cities of the UN Sample of 200 cities, reveals that people across all types of urban centres are not able to afford either home ownership or rental housing in a location with good access to livelihood opportunities (UN-Habitat 2005). At the same time, not all people who have housing live in adequate conditions: worldwide 2.4 billion people live without improved sanitation and 2 billion are affected by water stress (ibid). In low-income and high-income countries alike, households need to save up to eight times their annual income to be able to afford the price of a standard house in their city. If they rent, households tend to spend more than 25 percent of their monthly income on rent. Those unable to meet increased costs are forced into overcrowded or substandard housing or rendered homeless5.

Despite the lessons of the 2008 financial crisis, population growth and urbanisation have combined to make urban land and housing an attractive investment opportunity, forcing up prices and creating a situation in which even lower middle-income groups are finding access to land and housing in urban and peri-urban areas increasingly difficult. Demand is increasing due both to urbanisation and from speculative investment, creating a self-reinforcing inflationary spiral in land and property prices. As a result, access to adequate and appropriate housing is increasingly determined by prices, and therefore affordability, rather than need. To improve access to adequate and appropriate housing, a precondition is therefore to improve housing affordability.

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1.2 Land at the core of adequate housing

Land is central to achieve adequate housing as it defines at least three of its dimensions: tenure, affordability and location. Access to land is the first step towards obtaining a home. However, several conditions will affect access to well-located, serviced land, and therefore the availability of affordable housing. Moreover, exclusion to well-located and serviced land and housing reinforces socio-economic inequality, depriving excluded groups of employment and urban services. In many cities, the ability to buy and own housing or land has become the dominant factor in perpetuating inequality.

Therefore, in looking at the relationship of land and housing through exploring land markets, land use management, land-based finance, and the role of land in the spatial integration of cities, solutions can be drawn to realise the Right to Adequate Housing.

While the convention is to consider housing affordability as the relationship between housing costs and what households can afford to pay, the issue is much more complex than a simple expenditure-to-income ratio. The definition adopted by UN-Habitat is that the average house price is no more than 3 times the annual household income for those involved in home purchase and the ratio of the monthly rent for tenants is less than 25% of the net monthly household income.

However, this conception is contentious, as it relies on income, which is only one of many considerations in balancing housing demand and supply. For example, a large family will have different needs than a single-person household, or a retired couple, even if their incomes, and therefore affordability, are the same. Similarly, increases in household size may affect affordability in different ways. For example, a single person household consisting of an economically active adult will not increase housing needs significantly if joined in a relationship with another economically active adult, though affordability may double. Conversely, the addition of a child to a couple will significantly increase housing needs but actually reduce affordability on housing due to increased commitments.

Yet another factor, which is increasingly common within the self-employed sector, is that incomes may fluctuate considerably, reducing the amount that can be assumed as regularly affordable for housing or other regular outgoings. Yet another factor relates to differential levels of affordability at different levels of income. Hulchanski cites Schwabe to the effect that “as total family income rises, the amount allocated to housing increases at a lower rate”. Thus, housing affordability should be assessed taking into account three factors: household income, the price of the dwelling unit, and the terms of the finance (CAHF, 2019:4).

Hulchanski concludes by advising against applying a standard ratio as a universal measure or indicator of housing need or ability to pay.

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Affordability is clearly one of many considerations in assessing the relationship between housing needs and the level of household resources required to meet them. Nonetheless, it provides a yardstick for assessing the cost of entry to a given form of land and housing development designed to meet these other considerations of need and the level of financial support needed to make them accessible.

There are two ways in which housing affordability can be improved; by increasing household incomes or reducing housing costs. However, increases in incomes may generate inflationary pressures on costs, cancelling out the benefit. The most effective option is therefore to reduce housing costs since this can yield benefits within existing income levels. In assessing total housing costs, the key factors are land, materials, services, labour and finance.

In a well-regulated market, increased demand would lead to increased supply, stabilising costs. Materials, services, labour and, to some extent finance, can all be increased according to demand, though land with reasonable access to locations providing access to livelihood opportunities, public utilities and social amenities, is constrained and the cost of a given form of housing can vary many times depending upon its access to such benefits. The result is that in many countries and particularly in urban areas, an urban residential plot of land may be worth a hundred times more than a nearby agricultural plot, while another plot with full planning approval and access to public services may be worth significantly more than one without. Land costs commonly now represent the largest component of total housing costs. All efforts to improve access to adequate and appropriate housing therefore need to take into account affordability and this is heavily influenced by the cost of land. This in turn suggests that the greatest scope for improving housing affordability is to improve the management of land and property markets.

At the root of this challenge lies the legal, institutional, economic and political frameworks by which land and housing sectors are managed. The reduced role of public and non-profit forms of supply globally has resulted in private sector interests exerting a dominant position in regulating supply to maximise profits, rather than meet community needs. When supply of any resource is dominated by a limited range of providers, the need for them to be responsive to diverse and changing needs is significantly reduced, rendering markets unresponsive and ultimately inefficient. As the role of the state in the direct supply of housing has declined relative to demand in many countries, so the need to find ways of reducing the gap between demand and supply requires greater creativity and commitment on behalf of central and local governments to develop and apply their potential powers in the interests of the public and also the long term interests of market actors.

Fortunately, state actors, at central and local levels, can play an important role by formulating and implementing policies that can significantly improve housing affordability and the operation of land and housing markets, for the ultimate benefit of all stakeholders. This Review outlines options for realising this objective. They include: 1) managing land and housing markets through options for sharing the increment in land values resulting from state action for allocation in the public interest; 2) reviewing and, where appropriate revising, the regulatory framework of planning and building standards, regulations and administrative procedures for processing development applications reflect social and cultural preferences and economic realities; 3) developing and applying spatial planning policies to reduce social segregation; 4) ensuring that the institutional framework allocates available technical and human resources efficiently; 5) providing for a range of land tenure and property rights options to reflect the diversity and changing nature of demand and; 6) ensuring that the benefits gained are available for the long term.
1.3 Land planning for adequate housing

The fast pace of urbanisation coupled with a liberal approach to land and housing has led - in most cities across the world - to a massive housing delivery approach on the periphery of urban areas where land is available. In this context, access by low-income groups to housing has been mediated by either formal or informal systems: on the one hand, formal and massive housing programmes in disconnected and poorly consolidated peripheral areas, based on financing and subsidy schemes for the acquisition of finished housing units; on the other, construction of housing in informal settlements, that can also be on agricultural or environmentally sensitive land.

Despite the longstanding acknowledgment that these systems have perpetuated social exclusion, economic inequality, and environmental deterioration, they remain the dominant forms of housing delivery.

To reverse these trends and improve access to adequate intra-urban housing for low-income groups, it is fundamental to address the disconnection between land planning, urban management, and housing policies. Linked together, these policies can be crucial to meeting the demand of new households on under-used land while promoting compact, mixed-use areas.

1.3.1 Managing urban land and housing markets

As stated in the UN-Habitat Strategic Plan 2020-2025, adequate housing requires integrated responses and concerted actions that articulate planning, financial mechanisms and regulatory frameworks, focusing on both owner and rental markets. Given restricted state resources and limitations by the formal private sector to provide affordable housing at the scale and of the types needed to meet demand, a range of land-based finance (LBF) instruments have evolved over time and in different countries making a significant contribution to this critical outcome.

The role of land in facilitating or constraining access to affordable housing has been acknowledged for many years. A global consensus on urban public finance, land and international development was embodied in the 1976 Vancouver Action Plan — the founding document for UN-Habitat — which states:

“The unearned increment resulting from the rise in land values resulting from change in use of land, from public investment or decision, or due to the general growth of the community must be subject to appropriate recapture by public bodies (the community)”.

The underlying idea is that the value of land is created by society and should therefore be captured or shared for public benefit: “the value of land expresses in exact, tangible form the right of the community in land held by an individual; and rent expresses the exact amount which the individual should pay the community to satisfy the equal rights of all other members of the community” (George, 1962:344).

A wide range of innovative approaches to urban land management exists in the form of LBF. These approaches can provide a practical framework for improving access to affordable housing and include a range of tax-based, fee-based and development-based policy instruments, many of which have been applied in highly diverse contexts.

While revenues from tax-based instruments, such as a general tax on land and property, tend to be integrated into general revenues, rather than to specific infrastructure projects such as housing, fee-based, development-based or community-led instruments can be linked to specific projects and therefore tend to be more visible, promoting transparency and accountability in local governments.

They also provide an excellent opportunity to strengthen synergies between housing, land and urban planning by integrating housing with spatial planning through land management. For these reasons, the next section presents a conceptual framework and reviews a series of LBF instruments applied in different contexts to make adequate housing accessible to low-income groups.
SECTION TWO:

Land-based finance for affordable housing
2.1 Land-based finance

Mechanisms that allow governments to leverage the rising value of urban land are commonly categorised as ‘land value capture’ and ‘land-based financing’. However, it is important to differentiate both concepts. On the one hand, land value capture “seeks to quantify, collect and distribute the value of urban land that has risen due to state investment and regulation” (Berrisford et al, 2017:41). Thus, it is a market-driven instrument that relies on motivation for private property investment. On the other hand, LBF encompasses a larger set of financing instruments, that include land-value capture, but also other instruments that do not focus on value recoupment, such as contributions of affordable housing made by property owners as a condition of obtaining development permission (Suzuki et al 2015: 61).

Much of the literature on this subject focuses on the term ‘land value capture’ on the basis that the state is justified in capturing a proportion of the increment in land values generated directly or indirectly by state action. However, such a term can be regarded as confrontational in a context where the objective is to distribute benefits equitably between the state and private investors. For this reason, this Review will adopt the term ‘land value sharing’.

Proponents of land value sharing argue that governments should use taxes and fees to collect some share of this increase in value to increase fiscal revenues or to finance public goods, such as urban infrastructure, public services and social housing (Alterman 2012; Brown and Smolka, 1997; Smolka and Amborski, 2011; Suzuki et al, 2015; Walters et al, 2017). According to Suzuki et al (2015) and Smolka & Amborski (2001), land-based finance instruments can be classified under three categories: tax-based, fee-based and non-tax - or non-fee based - called ‘development-based’ instruments. An additional category can also be added in the form of community-led instruments and the following charts present these different instruments under each category.

### Tax-based instruments

<table>
<thead>
<tr>
<th>Instruments</th>
<th>Description</th>
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<tbody>
<tr>
<td>Land value increment tax</td>
<td>Tax assessed as a percentage of the increase in land value due to public actions or general market trends.</td>
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</table>

### Fee-based instruments

<table>
<thead>
<tr>
<th>Instruments</th>
<th>Description</th>
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</table>
| Sale of development rights   | Payments received in exchange for permission to develop or redevelop land at higher density or changed land use.  
                          | - Rights can either be sold at auction or at a fixed price by developers.  
                          | - Rights may be transferable to other locations or resold |

### Development-based instruments

<table>
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<tr>
<th>Instruments</th>
<th>Description</th>
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</table>
| Developer charges and impact fees | Payment fee (in cash, land or in-kind forms) in return for the right to build.  
                          | - Funds are used for public purposes, usually housing construction. |
| Land sales or Leases         | Payment received in exchange for land or its development rights.  
                          | - Up-front payment, leasehold charge or annual land rent payments through the term of the lease.  
                          | - Terms may vary from 2 to 99 years. |

10 The following definitions are based on ‘Leveraging Land: Land-based Finance for Local Governments A Reader’, UN-Habitat (2016).
Instruments | Description
---|---
Land Pooling/Land Readjustment (LP/LR) | Landowners pool their land and after subdivision and servicing, some plots are sold to recover costs, others may be allocated for housing or other public benefits and the remaining plots are returned to contributing landowners at a higher value than before the project was undertaken.

Inclusionary housing | Mandatory allocation of affordable housing in residential and commercial developments.

Request for proposals (RFPs) | Invitation to suitably qualified developers to submit proposals for a specific site that meet mandatory requirements.

Land banking | The aggregation of land parcels for future development. Land banking may be carried out by public sector entities for primarily public benefit, including affordable housing, or by private entities primarily for profit.

Community led instruments for affordable housing

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<tr>
<th>Instruments</th>
<th>Description</th>
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<tbody>
<tr>
<td>Community Land Trusts</td>
<td>Locally based, democratically run, not-for-profit membership organisations that own land and property in trust for the benefit of a defined community.</td>
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</tbody>
</table>

Housing Co-operatives | Democratically-run controlled enterprises whose objective is to pool resources to make investments in housing projects for the benefit of members. |

Communal land ownership | Ownership is vested in the tribe, group or community. It provides statutory recognition of collective or communal land ownership. |

2.2 The application of LBF policies

LBF instruments have been mostly adapted and implemented by municipal authorities to achieve stable and adequate financial resources for their general operating budget or to fund specific infrastructure projects. These land-based mechanisms have been largely studied and promoted by the Global Land Tool Network (GLTN), UN-Habitat and the Lincoln Institute of Land Policy Studies. They have produced rigorous studies to enhance and promote a broader understanding and use of land-based finance instruments. In particular, UN-Habitat and the Global Land Tool Network (GLTN) released a collection of papers on land and property taxation and policy guides on land-based finance for local governments: Innovative Land and Property Taxation (Sietchiping, 2011), Land and Property Tax: A Policy Guide (Walters, 2011), and Leveraging Land: Land-Based Finance for Governments: Reader/Trainer guide (UN Habitat, 2016). The latest is a training package on land-based finance designed for local governments to navigate the wide range of land-based finance instruments available.

These documents largely agree on the following points regarding the effectiveness of LBF systems:

- They require a political champion, land regulation - in particular property taxes, urban policies and decentralized authorities to implement them.
- They must be embedded in an effective land use management system.
They require adequate training for different stakeholders: policy makers, administrators and land developers.

Accurate and timely land valuation.

Evidence from empirical studies on designing LBF instruments such as “Land and Property Tax: A Policy Guide” (Walters 2011) show that decision-makers should also carefully consider four aspects of the local environment:

• How land tenure is defined in the community
• How land rights are publicly recorded or recognized by the relevant state, customary or religious authorities, and defended
• The maturity of local land and property markets
• The administrative capacity of those public agencies charged with implementing the land tax systems

The literature has mostly focused on the degree to which harnessing of the unearned increment in land values is a useful financial approach for the delivery of public services (Suzuki et al 2015:60). These mechanisms have undoubtedly strengthened the financial capacity of local governments and unlocked funding for urban development projects. However, they also have potential application as a financial mechanism for improving access to affordable housing and

the following sections provide examples from different countries.

Although various LBF instruments outlined above have been implemented by cities to capture a share of the increment in land values to invest in infrastructure projects, LBF fee-based and development-based instruments have been successful in achieving adequate housing goals for the following reasons:

**Transparency and accountability**

The proceeds of tax-based instruments usually become a revenue stream of the municipal budget, or they are placed in a general fund that does not specifically finance redistributive measures (Ingram & Hong, 2012:37). Furthermore, tax-based instruments are subject to an equity debate: if such taxes are introduced to pay for existing infrastructure, those who have enjoyed the services prior to the introduction of such taxes will benefit compared to those paying through increased taxation (Smolka & Mullahy: 240). Tax-based instruments are therefore not easily applicable to the provision of affordable housing. On the other hand, fee-based and development-based instruments can be linked to specific infrastructure or housing projects. Thus, residents and developers can engage with a specific project, monitor its development and witness the benefits in their own community and neighbourhood. In this way, these instruments can promote transparency and accountability in local governments.

**Land-planning**

Fee-based or development-based LBF regulatory tools not only can be used as a policy instrument to expand public expenditure for affordable housing, but also to increase access to land in central areas for low-income groups, improving their proximity to urban centres (IADB, 2016 b: 2). But these land policies can be designed not only to increase access to housing and services for low-income groups; if also designed as a spatial planning instrument, as outlined below, they can tackle intra-urban inequalities by directing affordable housing projects to specific locations with more employment opportunities, health and education services (OECD, 2018:18).

For these reasons, this Review focuses particularly on fee-based and development-based LBF instruments, as they provide an excellent opportunity to strengthen synergies between housing, land and urban planning by integrating housing with spatial planning through land management. As the examples reviewed below demonstrate, some can encourage development in locations where investment is more needed, while others can promote spatial integration through the conditions set for the provision of affordable housing, or by generating revenues from changes in approved land use. These measures can contribute to fund the creation of affordable housing. A series of examples is presented in the following section to showcase how these challenges have been met by local authorities and how they could help others in the formulation of policies related to affordable land, housing, and planning.
2.3.1  Land value increment taxes

**What are these?**

Land value increment is a percentage of land price increases due to public works or changes of approved land use. The purpose of value sharing or value capture taxes is to allow the community to benefit from the increased private value of properties that results when public infrastructure is improved, permission is granted to change land use or simply from changing market conditions.

The key for success is the legal and administrative framework that supports this value sharing tax. Bahl and Wallace (2008: 20) identify the following conditions, in any given context (even developing countries): a quantifiable change in land values; identifiable beneficiaries; a public mechanism to implement the tax; and the political will to implement the tax.

These land value increment taxes can be levied in different periods of time: when the change in land value takes place (i.e. with a new permit for a change in land use or increased density); at the time the land is sold or transferred to another party or over time, through an annually recurring tax applied to increases in land value (UN-Habitat, 2016:77).

**Where and how has it been implemented?**

Despite the extended use of this type of taxes to fund infrastructure, there are few cases where those revenues are applied to social housing policies. Some of the most emblematic cases are located in Argentina and Colombia.
Since 1997, Colombia’s 388 Law requires municipalities to develop urban plans that set aside a percentage of land to the construction of social interest housing with services provision and public spaces. In addition, the same law establishes mechanisms that ensure “the equitable distribution of the burdens and benefits derived from land use planning”; in other words, land value capture mechanisms that allow municipalities to regain added value generated by land use changes such as densification permits or public works. In this way, landowners that benefit from added value on their property should either pay the Municipality a 30% to 50% tax on land value gains or allocate a parcel of the development to social housing.

One of the landmark cases in Colombia, where a value capture strategy is used to self-finance the provision of serviced land to meet the needs of affordable housing is the New Usme project in Bogotá (Smolka, 2013: 47). Usme is located in the southern sector of Bogotá, where some 900 hectares had been illegally occupied by households, on non-serviced land. In June 2000, the city’s master plan designed “Operación Urbanística Nuevo Usme” (New Usme) to provide affordable services to low-income households living in informal settlements. The main objective was to finance the overall project through the land value increment resulting from urbanization processes.

This project involves the planning and management of 432 hectares for collective uses (roads, parks, recreation areas and other amenities) and 368 hectares for 56,000 housing units over 20 years. Over 40 percent of these units include housing for higher-income families and 73 hectares of land for social housing. Overall, 180,000 inhabitants are expected to live in this development.

It was structured around three value capture mechanisms: 1) land acquisition before the project release, to prevent land speculation; 2) a provision that allowed existing landowners to entrust their land to the project instead of having it expropriated (of owners accepted this scheme); and 3) the use of “Participación en la Plusvalía” which is the land value increment tax imposed on land value increment resulting from the changes of land uses.

To guarantee affordability for low-income inhabitants, these land value instruments enabled a cross-subsidy scheme ranged from an affordable $16/m² for serviced housing lots up to $80/m² for commercial lots, $21/m² for serviced lots combining housing and commerce on the main roads, and up to $70/m² for housing lots for higher-income families (Smolka, 2013:47).

In the case of Argentina, the Trenque Lauquen project stands out. In 2009, Trenque Lauquen, a municipality located in the province of Buenos Aires, decided to develop 700 hectares of rural land for urban spaces (residential, commercial and services, green spaces and public spaces). The municipal government began by issuing a local ordinance to regulate land management tools and LBF instruments such as zoning and Contributions for Improvements (special assessments). The local authority applied innovations to how Contributions for Improvements were applied by extending these instruments to social housing instead of public works (IDB, 2016: 29). In the locations of urban expansion, land value increases were assessed following land use changes, from rural to urban. This value increase was then charged to landowners at a rate of 12 percent. In this way, the municipality obtained a significant amount of land for the development of different projects, in particular for the construction of social housing (Duarte & Baer, 2013).

Advantages?
Although these instruments have not been largely applied for social housing investments, lessons of success can be drawn from Colombia and Argentina’s cases. In particular, the following:

1) planning at scale facilitates the equitable distribution of costs and benefits (obtaining land for collective and social purposes);

2) public investment and land regulations are the basis to obtain land for collective and social interests;

3) land acquisition and land management need to be done before the project release;

4) anticipate the development of informal settlements by providing public services needed for adequate housing and; most importantly

5) social housing can be integrated with high income residential areas.

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Disadvantages?

Although legislation on value capture taxes exists in many countries, implementation faces great resistance. The main challenges are their technical complexity and the reluctance of property owners to pay (Borrero, 2011). The technical challenge comes from the fact that it is difficult to quantify the land value increment resulting from infrastructure investments. Even in countries with up-to-date property data, recorded land values commonly account for two-thirds or less of the observed variation in the prices of land parcels (Peterson, 2009).

Land value capture taxes may also discourage investment as developers hold back in the hope of a change of government more aligned with their interests as happened in the U.K. when the government introduced levies. Investment only resumed with a change of government. The lack of effective penalties and their enforcement for non-development of land with planning approval or land use change also allows landowners and developers to manipulate the market for private gain, as has happened in Indonesia and other countries. This suggests that betterment charges may be difficult to apply in contexts where public sector capacity or commitment are not well established.

2.4 Fee-based instruments for affordable housing

2.4.1 Sale of development rights

What are they?

Development rights are regulatory requirements specifying the conditions for granting planning or building permission.

Development rights refer to the maximum amount of floor area or type of the built area that can be constructed on a land parcel. These rights can be sold or transferred through a regulatory system that allows local governments to regulate the nature and extent of a public benefit to be provided as a condition of obtaining planning and building permission. The underlying principle is that additional development created by re-zoning or permitting higher density development and public investments in a defined area, should not be available for free. Since public interventions influence land values, the sale of development rights allows public agencies to capture benefits by auctioning future economic benefits resulting from the public intervention.

Where and how have they been implemented?

In Mumbai, a land-owner was granted an increase in the permitted floor area for his land on condition that the additional profit would be allocated to the construction of free housing for households who had been living on the land for some years without permission. The landowner was able to make an acceptable profit, the informal settlers received adequate and affordable housing and the city recovered additional revenues.

CEPAC bonds in Brazil (Certificados de Potencial Adicional de Construção or Certificates for Additional Construction Potential) are another example of development rights sale through open auction. They are designed by cities as a means to attract private capital to finance through zoning changes and the issuing of bonds. This tool was created in 1995 in the Faria Lima Urban Operation, but it only began to operate in 2004, after the 2001 approval by Estatuto da Cidade, which included the CEPAC as an instrument that could be used in all Brazilian territory (Ingram & Hong, 2009:220).

CEPAC bonds are issued by municipal governments as additional development rights on specially designated areas within their cities that need redevelopment. The bonds entitle the bond buyers (typically, developers and investors) to build above the density limit specified by the current zoning regulations (referred to as ‘up-zoning’). The bonds are offered both through public and private auctions and are openly traded in the stock market (Smolka, 2013:53).
In São Paulo, these bond proceeds represented almost 60 percent of the annual property tax revenues for the city. The proceeds provided upfront funding to build roads, transit systems and affordable housing in the designated redevelopment areas. These certificates have generated nearly $3 billion in two neighbourhoods alone in Sao Paulo. The city has used the revenue to build a bridge, extend a metro line and a major avenue, and create affordable housing in the same districts where the redevelopment took place. Bonds sold in private auctions are also used by cities as non-budgetary funding to pay for infrastructure and housing contractors and vendors that provided goods and services in the redevelopment areas (Kim, 2016: 48).

To redistribute and direct proceeds to low income groups, São Paulo introduced Special Zones of Social Interest, areas that are dedicated to affordable housing. This policy helped the City actively improve housing conditions and redistribute land value to lower income groups.

The sale of development rights was also used to meet the major infrastructure costs of developing road and rail access to Navi Mumbai, the major extension to Mumbai, across the estuary on the mainland. By selling development rights to land near the proposed main railway and bus termini, as well as air rights above the stations, the City Industrial Development Corporation (CIDCO), established in 1970, was able to self-finance the basis for the new sub-city. A proportion of the revenues generated were allocated for the provision of affordable housing for low and very low-income groups, as well as public sector officials administering the new development.

South Kalimantan will be the first province in Indonesia to issue municipal bonds. The issue is expected to be used for infrastructure projects funding, from highway to port constructions, but not to improve affordable housing.

**Advantages?**

As the examples cited above illustrate, sale of development rights is a simple and potentially efficient instrument for generating local government revenues and for improving the provision of affordable housing. The option permits the provision of affordable housing on-site, as in the Mumbai example above, or on another site where development is being encouraged.

**Disadvantages?**

The sale of development rights has been criticised for causing displacement and increasing spatial inequality. On the one hand, as property prices increase, low income households can be displaced from their neighbourhoods (Durand-Lasserve, 2006). Unless these tools are connected to a redistributive mechanism such as inclusionary housing, preferably in the same area, they can induce segregation. On the other hand, proceeds can remain and concentrate in the same area, increasing unequal access to public amenities.

Finally, for improved access to affordable housing to be achieved, this will need to be specified by the city authorities when the sale is being proposed. Therefore, it relies on officials’ priorities and their willingness to address unequal access to housing and urban development benefits at large.

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2.5.1 Developer charges and impact fees

What are they?

Developer charges, also known as developer exactions, are required contributions by the private sector to either build or pay for additional public services, such as water supply and sewerage, required by new developments (Smolka, 2013:32). Local governments usually levy these charges or fees as a one-time, up-front charge, and receipt of payment is a precondition for public approval to develop land. This type of negotiable developer obligations are named ‘exactions’ in the USA ‘development charges’ in Canada, ‘planning obligations’ in the U.K., ‘participation’ in France, ‘exploitatiebijdrage’ and ‘bijdrage ruimtelijke ontwikkeling’ in the Netherlands, and ‘compromisos complementarios’ in Spain (Muñoz Gielen et al. 2017). Developer charges could assume any of the following forms of development:

- Required on-site improvements: public services infrastructure such as roads, water supply, sewerage and public spaces that must be constructed on the development project and then transferred to the local government.

- Payments required to offset the impact of the new project on off-site city infrastructure and services: payments in either land or money and are intended to provide the local government with the resources needed to expand public infrastructure and services for the increased service demands resulting from new developments.

- Payments required as the developer’s contribution to social improvements within the City: these requirements are a form of value sharing that can include payments in land or money earmarked for social housing.

Development impact fees are scheduled charges applied to new development to generate revenue for the construction or expansion of capital facilities located outside the boundaries of the new development (off-site) that benefit the contributing development.

Urban regulations can require developers to dedicate land, or to pay fees in lieu thereof, for housing, streets, parks, schools and recreational purposes as a condition to the approval of new land developments or buildings. This enables the instrument to exert considerable influence over spatial planning. Mandatory land dedication is generally upheld to defray the cost of additional public services required by new development (UN-Habitat, 2018b:34). For existing developments, rather than new development, betterment taxes can be applied. There are several criteria to assess the charges for the approval of additional development:

- The tax base for developer charges can be either the estimated market value or the size of the development.

- Charges can be estimated by calculating the impacts of new development on existing city infrastructure

- Fees can also be assessed to recover the cost of reviews and safety inspections by the city during the planning and construction of the development.

- In most instances, the charges are set at a level that has a documented relationship to the actual costs incurred or likely to be incurred by the city.

- If the level or purpose of the charges is not directly tied to actual infrastructure costs, it will likely still have to be earmarked for a specific social purpose and justified in terms of the cost of fulfilling that purpose.

According to UN-Habitat (2016b), the minimum requirements to implement development charges or exactions are:

- Estimates of the impact of the proposed development on existing infrastructure

- Administrative coordination with city planning functions

- Methods for calculating the amount of exaction due

- Adequate billing, collection and project monitoring systems.
Where and how have they been implemented?

Developer charges or exactions were first adopted in the United States of America (USA) in the 1920s by cities seeking new infrastructure financing alternatives. Initially, exactions were primarily in the form of developers’ dedications of land—e.g., for streets, sidewalks, utility easements—involving the transfer of land ownership to a local agency (Kim, 2018:17). They are implemented as a means of financing affordable housing through linkage operations (Smolka, 2013:35). This type of operation links higher density permits or new developments, to affordable housing provision by charging a fee to new commercial developments or new market-rate residential developments.

Across the USA, major cities such as Los Angeles, San Diego, San Francisco, Seattle and Boston, have adopted commercial impact fees to support affordable housing (BAE, 2016: 11). These linkage fees are charged on new commercial development projects within high-cost housing markets over a specific size, to provide affordable housing for the additional workers. These policies aim to provide on-site housing to new workers, who otherwise would need to commute long distances, pay more than 30 percent of their household’s income for housing, or live in overcrowded units.

In 1987, Boston was the first U.S. city to enact into law a linkage program to provide funds for affordable housing. The linkage payments are made by large-scale commercial developers who are required to pay exactions to the city for projects that require zoning approval. Developers are required to pay linkage fees totaling $10.01 per square foot after the first 100,000 square feet, with $8.34 per square foot designated for housing and $1.67 for job training. Payments are made to the Neighborhood Housing Trust (NHT) and Neighborhood Jobs Trust (NJT). Between 2005 and 2015, Boston’s Linkage Program generated over $51 millions to fund 2,181 new affordable housing units.

In order for land to be leased, there needs to be an inventory of land assets under the jurisdiction of the relevant authority, as well as knowledge about strategic direction that the authority is planning to take in order to be aware of whether the land is available for lease.

In the case of San Francisco, the Inclusionary Affordable Housing Program requires that all residential projects of 10 or more dwelling units pay the Affordable Housing Fee, or elect an alternative method of compliance, including providing affordable units. The proceeds of the fee go to the Mayor’s Office of Housing and Community Development (MOHCD), which uses them to finance new affordable housing developments. MOHCD also partners with non-profit housing developers and provides capital financing and operating subsidies to get deed-restricted, permanently affordable, housing built\(^\text{15}\).

Developer exactions are also a common value capture tool used in Latin America and are implemented as a means of financing affordable housing through linkage operations. The most consolidated regulations are in Brazil. In the case of São Paulo, the linkage policy was established as a zoning law in 1986, whereby owners of high-valued land can request higher density permits by providing social housing to the original occupants who would be displaced. Landowners can either pay their compensation in money or in-kind, by providing social housing itself (Smolka, 2013:32-35).

Advantages?
Some US cities have adopted ‘housing impact fees’ or developer exactions intended to provide affordable housing. It can also be done through a separate cash fee levied in conjunction with the development approval process as is done in some U.S. cities. In the latter case, the funds are used to provide affordable housing within the jurisdiction (Hickey, Sturtevant and Thaden, 2014).

Disadvantages?
As with many progressive policies on land management, the major challenge is the ability of local governments to enforce compliance. An important consideration is to set the fee level high enough to generate the funds for affordable housing, but not too high as to discourage development. This requires careful consideration and management, so the option is only appropriate in cases where local government capability to negotiate an acceptable level applies. It is also subject to market conditions and effective only when the housing market in an area is buoyant.

2.5.2 Land sales and leases
What are they?

Even in countries where most land is privately owned, large parcels of potentially valuable land may be held in public ownership. Where some of this is surplus to official requirements, or not put to effective use, affordable housing can be provided by selling or leasing land parcels for this specific purpose. Through this mechanism, public land is sold to developers or disposed of under leasing concessions to private users who pay a fee for the right to occupy the land for a given time period (Smolka, 2015: 19).

Land sales and leases can provide benefits for local governments and, in some cases, also for local residents if the land sold or leased is allocated for affordable housing.

In order for land to be leased, there needs to be an inventory of land assets under the jurisdiction of the relevant authority, as well as knowledge about strategic direction that the authority is planning to take in order to be aware of whether the land is available for lease. This would require an effective land asset management system (Peterson, 2009). Under land leasing, the leasing periods can vary from 40 to 99 years, with the most common lease terms being 40 to 70 years.

Where and how have the been implemented?

Land sales and leases are the most common form of accessing land for housing and other uses in countries such as China, Ethiopia, Mongolia and Tanzania, where the government owns or controls the supply of land for housing and other uses. This places the responsibility for matching demand and supply on central and local government authorities and on the integrity of land administrations to ensure that revenues generated are fully accounted for and put to the intended use. In Tanzania, leases of between 33-66 years are provided. In order to ensure that the land is used correctly, there are often clauses in the contract which state the timeline for development (Peterson, 2006).

The case of Mumbai, India, showcases the potential of land-leasing for affordable housing. In Mumbai, residents of Dharavi, the largest slum in South Asia, won the right, if registered before 1995, to have new housing provided for them free of charge in the same area as part of any redevelopment project. Newer residents have exerted political pressure for comparable compensation (Peterson, 2006:21). This protection has meant that public profits from redevelopment and land sales in Dharavi will be channelled primarily to housing for the poor rather than to finance city-wide infrastructure, though the need to develop high rise housing on such potentially high-value land has met local resistance since people's livelihoods depend upon ground level accommodation. Other restrictions direct India’s urban development authorities to provide land at the urban fringe to middle-income applicants at highly subsidized rates, not at market rates that would generate a profit available for investment.

Land leases have also been adopted successfully in the historic centre of Havana, Cuba, which is under the control of the Office of the Historian. Through an operative corporation, Cia Habaguanex, the office restores buildings to rent, lease, or sell and also offers special services. A revolving fund, created by the lease payments and other sources, supplements property taxes in the district. As Cuba opens up to international collaboration, the potential for such leasing arrangements in helping to restore the historic centre and provide affordable housing for the population appears considerable.

Advantages?

Land sales and leases can provide benefits for local governments and, in some cases, also for local residents if the land sold or leased is allocated for affordable housing. For example, in the Mumbai example, strong local commitment to remaining in the area over a long period enabled the residents to negotiate leases to new housing within the same site. Similar benefits were achieved in Cuba, though much more needs to be done.

Disadvantages?

In some cases, government agencies use their powers of land acquisition to pay less than the market rate to existing landholders to maximise the capital sums or revenues from land sales or leases, severely disadvantaging existing landholders, resulting in protests. In other cases, residents of older neighbourhoods in potentially prime locations may be forcibly evicted and relocated to the urban periphery where they lack services and support networks. The result is increasing resistance from original land users towards government agencies, state-owned enterprises, etc., regarding redevelopments, making it extremely difficult for the urban renewal projects to break ground (Lin et al, 2018). The high price paid for the land by the developers also restricts the extent to which the developed land is made available for affordable housing aimed at lower income groups since developers need to recover the land costs by selling new units at the market rate. It is important to allocate the costs and benefits of land sales and leases in ways that are seen to be fair to all involved in order to ensure long-term public support.

2.5.3 Land Pooling or Land Readjustment (LP/LR)

What is it?

LP/LR is a technique for managing and financing urban land development, in which land parcels, mainly in selected low value, frequently agricultural areas on the urban fringe, are assembled into a unified whole and planned comprehensively into urban development consisting of plots for residential, commercial, industrial and recreational use, with full provision of roads

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and other infrastructure. This process realises the full potential market value of urbanised land. Some plots are sold to recover development costs or allocated for affordable housing and other social benefits while the other plots are distributed to the contributing landowners in exchange for their original land parcels. The essence of the approach is that it harnesses the difference in the original and subsequent land values and allocates part of the increment to cover development costs and realise a public benefit, returning land areas to contributing landowners that are smaller in area but higher in value. A definition from another perspective is that LP/LR is a land management technique whereby a group of neighbouring landowners in an urban-fringe area combine into a compulsory partnership for the unified planning, servicing and subdivision of their land (Archer, 1998:114).

UN-Habitat defines land readjustment as “a mechanism that can be used to unlock the intrinsic, but latent, value of land that was previously inhibited by plot fragmentation and land ownership patterns which are incompatible with the optimal use of land” (UN-Habitat, 2018a:2).

In defining the boundaries of a land pooling/readjustment project, it is important to win agreement from a specified proportion of existing landowners. This varies from case to case, but all require a majority of landowners to consent. Others are then subject to local compulsory land acquisition terms and conditions.

Where and how has it been implemented?

The first documented example of LP/LR was in 1791, when it was introduced by George Washington as a means of amalgamating about 6,000 acres (2,428 hectares) of agricultural land parcels to develop the new US capital, Washington D.C. (Deuskar, 2013). Since then, it has been widely applied for many years throughout Asia (Archer, 1998), including Indonesia, Japan, Malaysia, Nepal, South Korea, Taiwan and Thailand, as well as Australia.

An innovative example of LR has been integrated in reconstruction strategies in Chile, following the 2010 earthquake and tsunami. LR offered a financial option for middle-income households that were landowners but couldn’t afford their house reconstruction. Neighbouring landowners merged their lands together to develop middle-low density housing projects that included mixed income housing units. Using their land as capital, landowners obtained a house that had the same value of land they put into the project (UN-Habitat, 2018b:155-168).

In India, LP/LR projects are known as Town Planning Schemes (Sanyal and Deuskar, 2012). Land pooling was first introduced in 1915 as part of the Bombay Town Planning Act in Mumbai. Since then it has been applied extensively in the states of Gujarat and Maharashtra and was recently proposed as the basis for possibly the largest global example involving 33,000 acres (13,350 hectares) of agricultural land for the development of one of three new state capitals for Andra Pradesh at Amaravati. A proportion of 5% of the land area of the proposed city was allocated specifically for low and very low-income households.

Advantages?

The benefits of the policy are that it reduces potential conflicts incurred by conventional land acquisition policies where land holders receive compensation based on agricultural values and enables the benefits to be shared between the public authorities and land holders. LP/LR is therefore an effective policy instrument for self-financed urban development. Contributing landowners benefit from receiving fully serviced urban land at significantly higher values than the undeveloped land they are contributing. Non-contributing landowners receive cash compensation at official land acquisition rates. However, these are invariably lower than the benefits received by contributing landowners. In addition to the sale of some plots to recover development costs, some plots may also be allocated for affordable housing or other social purposes. It is for these reasons that the policy has been widely applied internationally.

The benefits of the policy have been summarised by Ballaney (2008) as including:

- All the land, except whatever is needed for infrastructure development and social amenities, or affordable housing, remains with the original owner. The development agency plays a limited role in ensuring planned urban growth.

- The increment in land value resulting from the development accrues to the original owner whenever the land is sold and developed for urban use. Thus, the benefit of development goes to the original owner instead of the development agency.

- The original owner is not displaced in the process of land development and continues to enjoy access to the land resource. Thus, the negative impact of the process of urbanization on farmers (original owners) is minimised.
Disadvantages?

A common limitation of LP/LR is that to maximise support from landholders, the scope for generating a proportion of land for allocation to affordable housing for lower income groups is relatively limited since the natural tendency for all landholders is to maximise personal benefit. An essential component of LP/LR is to use the uplift in land values to finance infrastructure as this is an important factor in raising the land values to make schemes viable. Allocations for affordable and lower-income housing, therefore, tend to be a residual, rather than a central, element of the LP/LR approach. For their successful application on a large-scale basis, legal authority specifying the principles to be applied is essential.

A further limitation of the approach is that getting landowners to agree on a project’s value may be difficult and time consuming, particularly in countries where there is no precedent of successful examples, or a general distrust of government projects. There may also be significant loss of employment for agricultural workers and tenant displacement as they have no land to contribute. Projects may also be delayed due to political disagreement (UN-Habitat, 2016:3). Protection for tenants and agricultural workers is now recognised as an important consideration in many internationally funded or supported LP/LR projects.

A further limitation of LP/LR projects is that they can be applied by alliances among local governments, local political factions and big conglomerates. In Zimbabwe, progress in expanding initial LP/LR projects was constrained by the lack of a legal framework (Dube and Chirisa, 2013).

Ballaney (2008) summarised some limitations of LP/LR as:

- It is time consuming since the procedure prescribed for preparation and implementation of such land pooling or readjustment schemes is unduly complicated and cumbersome.
- Betterment charges are assessed at the beginning of the land pooling or readjustment scheme preparation. Due to the inordinate delays in finalizing schemes, the betterment charges levied on finalization of the scheme do not meet the cost of the infrastructure provided (Sait 2018).
• A final limitation is that the policy needs a clear legal foundation in order to ensure widespread implementation.

On balance, experience shows that LP/LR can be an effective policy instrument for self-financed urban development in countries where the institutional capability to manage the projects is well established and where the uplift in land values is sufficient for landholders to benefit, though the extent to which it improves access to affordable housing is likely to be limited.

2.5.4 Inclusionary housing

What is it?

Inclusionary zoning is a means of using the planning system to create affordable housing and foster social inclusion by capturing resources created through the marketplace. The term refers to a program, regulation, or law that requires or provides incentives to private developers to incorporate affordable or social housing as a part of market-driven developments, either by incorporating the affordable housing into the same development, building it elsewhere, or contributing money or land for the production of social or affordable housing in lieu of construction (Calavita and Mallach, 2010:1).

Inclusionary housing refers to the policies that link the construction of low and moderate-income housing to the construction of market-rate housing (Hickey, Sturtevant and Thaden, 2014). Inclusionary housing originated in the United States from the civil rights movement of the 1960s and the recognition of racial segregation in American society through land use regulation (Calavita and Mallach, 2010:2).

Through these policies, local governments encourage or require developers to preserve a percentage of housing units to be sold or rented at below-market prices (Stockton et al 2016: 11). The primary goal is not only to provide housing to low-income residents but by doing so promote socio-economic, ethnic and racial integration.

Although inclusionary zoning programs can vary in their design and structure from place to place, it is possible to identify the common instruments used to achieve inclusionary zoning’s policy goals. Inclusionary zoning programs have four basic formats: (1) mandatory without incentives; (2) mandatory with incentives; (3) voluntary under prescribed conditions; or (4) voluntary through ad hoc negotiated agreements (Floryan 2010:1058). Under mandatory inclusionary zoning programs, developers are forced to set aside a determined number of affordable units. Incentives that compensate developers for setting a portion of their housing units below the market price can take the form of density bonuses, reduced requirements, or waivers of development and building fees among others. In the case of very robust housing markets, inclusionary zoning programs sometimes also consider not offering incentives to offset the cost of providing affordable units.

Inclusionary zoning programs also differ in terms of the range of requirements for affordable units, with percentages that can vary from as little as 5 per cent up to 40 per cent in certain cases. Differences are found, not only in relation to the variance in affordability, but also with respect to its depth. In fact, inclusionary zoning programs can have different target levels of affordability, by specifying the maximum income allowed for the purchasers and renters of the affordable units.

Inclusionary programs may also impose limits on the affordability period of the low- and moderate-income units. While certain municipalities indicate the duration of affordability, which usually extends from 10 to 30 years, others do not impose limits, or instead require the units to remain affordable indefinitely (Schwartz, 2014).

Finally, local governments can provide other options apart from on-site construction to allow developers to meet their inclusionary obligations. “Some of the more common options include the construction of affordable dwellings in a different location, the payment of a fee in lieu of construction, participation in the purchase or rehabilitation of an existing development to provide long-term affordability, and the donation of a site suitable for affordable development” (Pendall, 2009:229).

Thanks to flexible requirements, a significant number of inclusionary zoning programs do not always include lower-income housing on site. Some of the most common alternatives to on-site development are the following:

(i) the developer constructs affordable housing units on a separate site elsewhere;

(ii) the developer dedicates land for affordable housing elsewhere in the community to be developed by another entity;

(iii) the developer makes a contribution to housing trust funds for the development or improvement of affordable housing in the municipality or county.
Where and how has it worked?

This policy instrument has been applied successfully in India, many European countries, the Philippines and the USA. In the United States, inclusionary zoning tends to be applied through statewide inclusionary zoning policies, such as New Jersey, Massachusetts, and California. Although comprehensive data on impact and program characteristics are not available for the majority of programs, a study (Thaden & Wang 2017, Abstract) did find that 373 jurisdictions reported a total of $1.7 billion in impact or in-lieu fees for the creation of affordable housing. Jurisdictions also reported creating a total of 173,707 units of affordable housing, which predominantly excludes additional units created with the $1.7 billion in fees:

- 443 jurisdictions reported creating 49,287 affordable home-ownership units;
- 581 jurisdictions reported creating 122,320 affordable rental units; and
- 164 jurisdictions reported an additional 2,100 affordable homes.

Differences in the production levels of programs are mostly explained by local housing market conditions and by whether policies are mandatory or voluntary.

In the UK, examples have been successfully implemented in London. In one case, 50 percent of 1800 units on prime land along the River Thames was allocated as affordable housing for key workers.

UK planning law and government policies allow for local planning authorities to apply a requirement for a proportion of affordable housing on commercially financed housing developments.

In the Philippines, developers of subdivision projects must develop an area for social housing which is at least 20 percent of the total subdivision area or 20 percent of the total subdivision project cost.

Advantages?

The main advantage of this instrument is that it allows for the provision of affordable housing in central locations in a more integrated manner since it creates mixed-income developments/neighbourhoods. In principle, it is a simple instrument to apply as it mandates a fixed proportion of

16 "Policy instrument is a linkage between policy formulation and policy implementation. The intention in policy formulation is reflected in policy implementation through instrument. Policy instruments are often known as governing tools as well, particularly when they are applied with all conditions associated to them." (Ali, M. 2013: 99)
a development for affordable housing. In any housing development, labour, materials and services costs do not vary significantly from one site to another; the main variable is that of land. If a developer knows in advance what proportion of costs will need to be allocated for a social benefit, in theory this can influence the market value that a land parcel can command. If a developer or investor has acquired land in the hope of a change of use for more profitable development, that is a risk which the developer or investor should bear and the state should not be required to take this into account when negotiating the financial viability of a development. When applied to specific areas, it can help to reduce the land values, making land more affordable.

**Disadvantages?**
Experience suggests that this policy instrument is limited to contexts in which the land market is buoyant, and prices are increasing. However, this is increasingly applicable.

In the U.K., it has proved extremely difficult in practice to achieve genuinely affordable housing from mandatory allocations for several reasons. First, the official UK definition of ‘affordable’ is 80 percent of the market price and this frequently requires household incomes that are double the national average, effectively making such units unaffordable. In many cases, developers successfully argue that the affordable component is reduced to a token level or even to nothing, with the developer paying cash compensation instead. Secondly, despite being an economy based on the competitive efficiency of market forces, the government considers it appropriate for developers to realise profits of 15-20 percent rather than allowing the market to determine profit levels. Finally, local governments have proved inadequate in negotiating allocations of affordable housing even within the official guidelines since developers have become extremely skilled in preparing financial viability assessments (FVAs) that they claim would make the site unviable to develop. This suggests that local governments need to be firm in negotiating with developers and investors when granting or withholding planning permission until a reasonable public benefit has been achieved from a private sector investment.

In the assessment of viability, determining the value at which the land is entered into the equation becomes problematic. This is both a technical and a political issue and has to do with how planning policy, variably applied, interacts with the land market in a market economy. While the intention of government policy is that development is plan led, in reality the delivery of the objectives is determined by the market. On this basis, the only option for providing affordable housing is through subsidies. As international experience has demonstrated, these can be difficult to target and can easily be captured by people outside of the target group.

2.5.5 Requests for Proposals (RFPs)

**What are they?**

Requests For Proposals (RFPs) are invitations to suitably qualified developers to submit proposals for a specific site, generally on publicly held land. They specify a number of mandatory requirements, together with some additional optional elements. Qualified developers are invited to submit proposals that meet all the mandatory requirements and include additional elements. It is a means of maximizing a public benefit from private development. From the developers’ perspective, the RFP approach increases access to highly desirable sites for development and offers an attractive alternative. RFPs have been widely implemented in Eastern Europe and Russia (Payne 2014).

An RFP for a specific site may require the government to review the bids from a list of pre-qualified developers or contractors to examine their feasibility, the health of the bidding company, and the bidder’s ability to do what it proposed. Many governments prefer using RFPs to secure a contractor for a project.

**Where and how have they been implemented?**

RFPs have been applied in countries that have undergone a transition from socialism or communism to market or mixed economic systems. In these contexts, extensive public land reserves were underdeveloped or unused and provided the opportunity for more financially and socially productive development. The United States Agency for International Development (USAID) has supported RFP projects in Bulgaria and Russia in the early 1990s to demonstrate the benefits of the RFP approach (Lynch, Brown and Baker, 1999). Although public/private partnerships had not previously been applied in Bulgaria, the authors state that the RFP approach was viewed with interest and enthusiasm by both municipal officials and private developers. Bulgarian municipalities carried a large liability in the form of housing units to compensate households whose property was expropriated during the 1980s for
The prospect of receiving between 20-30 percent of the proposed number of housing units in exchange for granting development rights on municipally owned sites to private developers, enabled the authorities to meet the needs of the dispossessed households at no direct cost. From the developers’ perspective, the RFP approach increased access to highly desirable sites for development and offered an attractive alternative to the often complex and lengthy negotiations with private landowners.

The Russian example concerned a land market which had been established by 1993 following legislation approving the private ownership of land after years of state control. The approach sought to capitalise on the value of land as a source of public revenues after years during which it contributed virtually nothing to the city budget. The approach was adopted enthusiastically and rapidly transformed options for efficient and affordable land development in both countries.

RFPs have also been implemented in India. In cases where land is already in the possession of the government. A suitable developer is selected through a competitive bid and contracts awarded where the bidding party provides the maximum number of Economically Weaker Section and low-income group houses on at least 70 per cent of the land. In return, the developer has the right to develop the remaining 30 per cent of the land for housing high income group categories, as well as reserve 20 percent of the saleable floor area for commercial use (which usually fetches about three times the price of residential land of the same area).

Advantages?
In countries where extensive land areas are held in public ownership, RFPs provide the opportunity for public sector agencies to develop their understanding of land market behaviour and the options for putting land to economically and socially efficient use. Where this expertise has been successfully acquired, RFPs have increased the provision of affordable housing. RFPs also provide an opportunity for emerging private sector groups to gain experience that enables them to accurately assess the margins that they can accept to undertake a project successfully.

Disadvantages?
The success of RFPs requires that the officials launching a proposal have a reasonable understanding of current market conditions. If a given site value is considered too high, a project will not attract proposals and a project will fail. Conversely, if a site is under-valued, benefits will accrue more to the developers.

RFPs are less likely to provide a means of increasing the supply of affordable housing on privately owned land as the primary motivation for the landowner, or holder will be to maximize the financial benefits. The provision of affordable housing at less than the market rate will therefore adversely affect the benefit to developers.

2.5.6 Land Banking

What is it?
Land banking involves the acquisition and aggregation of a number of land parcels at their existing use value for future development. It may be undertaken by public entities primarily to acquire land
at existing values for future development for public benefit or by private entities to provide affordable housing for employees or for profit. Another definition is that land banking is the practice of purchasing land with the intent to hold onto it until such time as it is useful or profitable to release the land for housing or other purposes. There are at least three fundamental actions to land banking, namely: a) land acquisition; b) land management and; c) land development. Achieving efficiencies in every one of these actions determines whether land banking objectives are met (Harrison 2006). The practice is applied in many countries globally.

Where and how has it been implemented?

Land banking has been applied in the U.K. for many years both by public sector entities, such as government funded development corporations and by private entities, either to provide housing and other needs of employees, or for future profit. Starting in 1946 as part of post-war planning, a series of 32 new towns were developed by a government funded New Town Development Corporation to provide affordable housing following the mass destruction of housing during World War II. In the early stages, land was acquired by the Development Corporation at near existing use values (which were in the main agricultural price levels), and which provided the New Towns with the financial as well as physical foundations for subsequent development. The basic economics of the New Towns was that land could be bought at agricultural values by the government and then transformed into urban values by the NTDCs (U.K. government 2006). The programme provided affordable housing and related facilities on a large scale nationally that also built communities. In the USA, extensive land banking has been undertaken since the 1920s. In the late 1970s, the city of Eugene, Oregon acquired various sites across the city and ‘banked’ them as reserves for the future construction of affordable housing. Harrison (2007) cites a number of examples in different states that successfully improved access to affordable housing. This was achieved by focusing on a narrow range of objectives, ensuring close coordination between city departments, accelerating judicial processes and creating an independent entity with an integrated management information system. She also reports on research by Acharya (1987) on the example of land banking by the Delhi Development Authority in India, that was, however, a failure. This was attributed to a lack of clear direction, as a result of which instead of regulating land values, they rose dramatically and only 44 per cent of land plots were allocated to low-income groups. Middle- and high-income groups were the main beneficiaries, “undermining the equity objectives of land banking” (Acharya 1987).

Advantages?

The main advantages of land banking are that it allows the purchase of land, relatively cheaply, for public purposes and provides a tool to influence the pattern of development in accordance with overall planning objectives’ (UNESCAP, 1993). Also, the establishment of a public land bank can be a strategic land value mechanism when a public development project creates an increase in land values. By doing so, effective local authorities can control speculation and of recover valorization induced by the same public works (Gilbert, 2001: 57). New Town variants in the U.K. were apparently the most effective mechanisms for delivering housing that was affordable to tenants (U.K. government 2006).

Disadvantages?

The approach requires long term financial commitments by the government and a strong and effective form of land governance within a well-defined and enforced legal framework. Where these conditions do not apply to the acquisition, management and development of land, land banking is unlikely to be successful.
2.6 Community-led instruments for affordable housing

2.6.1 Community Land Trusts (CLTs)

What are they?

Community Land Trusts (CLTs) are locally based, democratically run, not-for-profit membership organisations that own land and property in trust for the benefit of a defined community. CLTs capture the value of land and employ innovative development finance and equity sharing solutions to address local housing needs and encourage social enterprise. Land without planning consent has limited value, but once it receives planning permission, the uplift in the value of the site can be significant. The CLT model aims to capture this value increase to keep housing affordable for successive generations.

Where and how have they been implemented?

The model for the contemporary community land trust was initiated in 1969 near Albany, Georgia, U.S., by Civil Rights Movement leaders seeking to ensure secure access to land for African American farmers. CLTs have since been applied extensively in the USA, Canada and the United Kingdom. However, applications in developing countries have so far been extremely limited.

One of the most successful examples is Caño Martin Peña Community Land Trust in San Juan, Puerto Rico that won a World Habitat award in 2015. The Caño Martín Peña was once a navigable waterway through the centre of Puerto Rico’s capital, San Juan. Throughout the twentieth century, poor rural migrants settled along the canal; by 2010 over 25,260 inhabitants were living in this area on informal and unserviced land (Algoed et al, 2018:12). Facing environmental degradation resulting from the lack of sewerage and risks of flooding, the authorities launched a new strategy to engage communities.

From 2002 to 2004, authorities worked with the eight communities on a comprehensive development plan for the area (Letts, 2010:65). In 2004, this intensive grassroot participatory planning process resulted in a law that created two bodies that would implement the plans: the ENLACE Corporation (the administrative body) and the Caño Martín Peña Community Land Trust (Algoed & Hernandez, 2019:32). More than 80 hectares of public land was transferred to the CLT held by the residents, providing them with tenure on the land. Over 2,000 very low-to-moderate income families collectively own close to 78.6 hectares of land that were previously owned by the State.

Finally, it is worth mentioning the Community Land Trust Project in Kenya for Tanzania-Bondeni settlement upgrading, which remains one of only two examples to date in a developing country, the other being in Cochabamba, Bolivia. In a joint effort, the Ministry of Local Government, the Voi Municipal Council and the Commoner of Lands, Kituo Cha Sheria NGO and the people of the Tanzania Bondeni squatter settlements within Voi Township, provided access and security of tenure to the residents to assist them in developing a housing scheme (Murtaza, 1996). The government recognized the slum dwellers' right to secure communal title to land, while NGOs provided financial, logistical, technical and legal support and the National Cooperative Housing Union (NACHU) provided individual credit and organizational support. However, the approach was not expanded to other locations due to administrative ambivalence (Yahya 2002).

Advantages?

CLTs balance the needs of individuals to access land and maintain security of tenure with a community’s need to maintain affordability, economic diversity and local access to essential services. One of the main benefits of CLTs is that the value of land is used to generate capital for development, reducing the call on the public purse. CLTs

19 Global Community Land Trust map, Center for Community Land Trust Innovation https://cltweb.org/resources/clt-directory/
can then ensure better value for money by locking in the value of government subsidy in perpetuity so it can be used for the benefit of successive generations. CLTs, therefore, offer the potential for public engagement with the planning role of local authorities and promote active participation through local community trusts. With the communal ownership of the land as a secure asset, a CLT can ensure long-term affordability as it prevents land from being subject to market penetration. By doing so, low-income households are protected from relocation and neighbourhoods from gentrification.

**Disadvantages?**
A CLT requires first and foremost a thriving community with strong sense of belonging to the land and a shared desire to remain together. This is increasingly rare in urban areas. Secondly, it requires political will, available land, a legal framework and effective land administration for its enforcement. This could explain the limited application to date in rapidly urbanising countries, though the success of the example in Puerto Rico provides an example on which other countries may wish to build.

### 2.6.2 Housing Co-operatives

**What are they?**
In the broadest sense, a co-operative is an association of persons united voluntarily to meet their common economic, social, and cultural needs and aspirations through a jointly owned and democratically controlled enterprise (International Co-operative Alliance, 2015). A housing co-operative is a legal mechanism for ownership of housing where residents either own shares (share capital co-op) reflecting their equity in the cooperative’s real estate, or have membership and occupancy rights in a not-for-profit co-operative (non-share capital co-op), and they underwrite their housing through paying subscriptions or rent.20

Housing co-ops exist in every continent and come in many different formats; some are resident-owned while others are rented; dwellings can be either townhouses, small buildings or large buildings with hundreds of units. However, they are all run democratically: every member gets a vote in approving annual budgets and setting the cooperative’s policies.21

Housing cooperatives can be structured in different forms (UN Habitat, 2010):

- Co-ownership societies, where each member has one voting share in the cooperative that owns the building and has a registered right to occupy an individual unit. Limited equity housing cooperatives, which are often used by affordable housing developers, allow members to own some equity in their home but limit the sale price of their membership share to that they paid. In this way, housing remains affordable to incoming members and speculation is prevented. Usually membership to this type of cooperative is restricted to low-income households.

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• Land only cooperatives: only the land beneath the property is owned on a cooperative basis. The individual homes are individually owned subject to lease on the land.

• Market equity cooperatives: these allow stakeholders to sell their shares in the co-operative whenever they like for whatever price the market will bear, much like any other residential property. They are very common in New York City.

• Equity cooperatives are buildings in which individuals purchase a percentage share tied to the square footage of their unit while the building’s corporation holds back a percentage of the unit’s share equity to ensure owner occupancy.

• Leasing cooperatives: involve leasing land or property from an owner. The cooperative takes out a long-term lease with sometimes an option to buy. The residents then manage and operate the cooperative.

Where and how have they been implemented?

The co-operative movement began in Europe in the 19th century, primarily in the UK and France. It has since expanded dramatically in countries at all levels of social and economic development and different political contexts. According to Kumar of the Worldwatch Institute, in 2012, approximately one billion people in 96 countries had become members of at least one co-operative, while the turnover of the largest three hundred co-operatives in the world reached US$2.2 trillion.

Cooperatives are very active in a wide range of countries. In the United States, for example, it is estimated that over 1.5 million live in housing cooperatives and in Switzerland, where they have been established since the 1920’s, they represent today around one quarter of Zurich’s entire housing stock. Housing units are provided by either the local authorities, charities, or public co-operative partnerships whereby the city provides land to the housing co-operatives in the form of a ‘right of use’.

A good example is the co-operative housing project in Bangkok organised by the Community Organizations Development Institute (CODI) on the Bang Kaen canal that is enabling 3,000 households to remain along the banks of the canal and rebuild their homes using modest grants of $2,500 and community based loans of US$8,000 at interest rates of 6% over a period of 15 years. The project is one of the many undertaken as part of the Baan Mankong secure housing programme established in 2003 to improve housing, living and tenure security for 300,000 households (Boonyabancha 2005.27).

In Africa, housing cooperatives also play an important role in providing affordable housing in several countries such as Cameroon, Kenya, Senegal, South Africa, and Zimbabwe (Bah et al, 2018:244). For instance, the Zimbabwe National Association of Housing Cooperatives, an apex organization for housing cooperatives, has provided services to more than 20,000 plots and constructed over 10,000 houses in the country over the past decade,

In Kenya, housing co-operatives represent an important share of the housing stock. Since the late seventies, a broad movement integrated by civil society organisations, community-based organisations and international development partners in collaboration with the government, promoted the establishment of the National Cooperative Housing Union (NACHU), a non-profit housing finance and technical service provider for housing cooperatives. This umbrella organization represents 545 housing cooperatives (with 12,312 active members), provides technical support, community mobilization programs and loans to its members. It also develops community housing projects as well as commercial real estate projects. As a result, NACHU has completed 14 affordable housing estates with 1,573 units, from which 84% are low-income earners and 16% are on modest incomes (CAHF, 2018).

Another innovative housing initiative that offers insightful lessons, is the Banque de l’Habitat du Sénégal (BHS) scheme, which is based on a partnership with housing cooperatives represented by the National Union of Housing Cooperatives (UNACOOP-Habitat) and developers. The BHS prequalifies cooperative members for future loans and helps arrange agreements between the cooperatives and land or housing developers. BHS offers loans for the purchase or construction of new units, as well as for the purchase of the land by the cooperatives, the repayment being secured by the accumulated savings of cooperative member (Bah, et al. 2018: 85).

22 BHS cooperatives loans  https://www.bhs.sn/cooperatives/prets/credit-cooperatives
Advantages?

Housing co-operatives provide access to affordable housing to low income groups that cannot afford traditional mortgages to acquire and develop land and housing. They also enable groups to access finance and reduce construction costs (UN-Habitat, 2011). For example, in the case of Kenya, 90% of housing finance comes from Savings and Credit Cooperative Organizations (SACCOs) and housing cooperative networks, and only 10% of housing credits are mortgages from the banking sector (WB, 2017:28). This highlights the striking limitations of market-based housing finance, and the importance of cooperatives. Cooperatives also enable low income groups to obtain affordable housing in locations that might otherwise be unaffordable. However, this depends upon the land being made available on affordable terms in the first instance, either by a co-operative acquiring it before it becomes too expensive, or by governments, philanthropists or other social enterprises acquiring it on their behalf. Once land is held by a co-operative it protects the area against the risk of market-driven displacement, providing a valuable option in a diverse housing market.

Disadvantages?

Co-operatives need a clear legal foundation in order to operate, external financial support and a large enough community. As land prices and construction costs increase, low-income households need external support to afford land acquisition and bulk infrastructure provision. They also require a sufficient number of individuals to pool the resources required for housing construction. If they are too poor, they struggle to deliver housing units in time. Finally, without proper legislation, cooperatives can lack a good governance structure to effectively manage their investment (Bah et al, 2018:245).

2.6.3 Communal land ownership

What is it?

Land vested in the tribe, group, community or family. In many cases it may enjoy statutory recognition. As land prices in urban and peri-urban areas increase, individual ownership or even rental becomes increasingly unaffordable to many households. However, where land has been held for many years under customary forms of land tenure, access to land for housing is usually in the form of a token amount, facilitating access to all those in need. In other cases, communal ownership or leases of publicly held land may be granted to residents of existing settlements, enabling them to occupy areas that would otherwise not be affordable.
Where and how has it been implemented?

Communal land holding has been in existence for thousands of years and remains widely applicable in a large number of countries throughout the world, particularly in sub-Saharan Africa (Wily 2018). It exists primarily in rural areas but can also be found in urban and peri-urban locations. For example, in Lesotho, all land is vested in the Basotho nation and is held in trust by the King. The power to allocate land, to grant title to land and to terminate a lease is vested in the King. Once allocated, these rights are enjoyed in perpetuity unless certain breaches are committed. In the past, land had no price or value and was freely allocated to any Basotho through the chiefs using a Form C. This system of tenure gave free access to land for housing. Limited formal land and housing supply in the country’s capital, Maseru, has resulted in many urban households continuing to occupy land under a Form C.

Kenya is the most recent African state to acknowledge customary tenure as producing lawful property rights, not merely rights of occupation and use on government or public lands (Wily 2018). According to Wily, “This promises land security for 6 to 10 million Kenyans, most of who are members of pastoral or other poorer rural communities. Analysis is prefaced with substantial background on legal trends continentally, but the focus is on Kenya’s Community Land Act, 2016, as the framework through which customary holdings are to be identified and registered. A main conclusion is that while Kenya’s law is positive and even cutting-edge in respects, legal loopholes place communities at risk of their lands not being as secure as promised ahead of formalization, and at risk of losing some of their most valuable lands during the formalization process. This is mainly due to overlapping claims by the national and local government authorities. Political will to apply the law is also weak”.

In the Pacific Island state of Vanuatu, more than 90 per cent of land is held under customary tenure with the remainder, mainly urban land, in public ownership. The ownership of land by groups and not individuals was a ‘rule of custom’ as described in article 74 of the Constitution. However, as in Lesotho and many other countries where communal land ownership applies, the inability of the formal land and housing supply systems to meet the needs of increasing urban populations, has resulted in tensions within the customary or communal systems and it is under particular pressure in expanding peri-urban areas.

Advantages?
The major advantage of communal ownership is that it is widely understood and is simple to administer. As such, it enjoys social legitimacy. Where the concept enjoys statutory recognition, it could be adapted to provide long term communal ownership of land vested in a community. An additional option could be to provide communal leases for a period of ten years or more, subject to possible extension. In the case of Bangkok, communal leases of thirty years has resulted in a dramatic investment and improved living standards. It also prevents market-driven displacement of the existing residents. A community library was also developed offering social and educational facilities for all age groups.

Disadvantages?
Care will be needed to ensure that commercial pressure on land in urban and peri-urban locations does not result in community leaders agreeing to sell land to the highest bidder and undermining the social foundation of the system. In some cases, community-led land pooling/land readjustment or community leases could provide viable options.
SECTION THREE:

Land governance and housing
3.1 The regulatory framework

Using the policy instruments reviewed above to regulate land and housing markets offers great potential for generating financial resources for the provision of affordable and adequate housing. However, to be successful it relies upon the application of a committed and enterprising public sector and sustained political commitment. The regulatory framework of planning and building standards, regulations and administrative procedures for processing housing proposals must be realistic and appropriate for all those in need.

These standards, regulations and administrative procedures exert a great influence over the minimum costs of entering the formal housing sector and can therefore help to reduce land costs and improve housing affordability.

As urban areas are expanding dramatically, it is vital that planning and building standards, regulations and administrative procedures reflect current realities. To realize this, they need to reflect the needs, cultural practices and resources of all urban residents, taking into consideration different social and income groups. Norms based on aspirations rather than realities are likely to prove counter-productive by forcing many households into various forms of informal settlement.

Cultural factors are important in assessing acceptable minimum standards on issues such as minimum plot area. For example, Asian norms tend to accept more compact residential developments than in sub-Saharan Africa. This may be partly influenced by the fact that Asian countries urbanized much sooner than in Africa, though the latter is now urbanizing extremely rapidly, and this is influencing what is acceptable and affordable.

For countries with a high proportion of the urban population living in informal settlements, international research has demonstrated that a regulatory audit provides a major opportunity to review and revise all the relevant planning and building standards, regulations and administrative procedures applicable for housing provision to enable all those in need to access affordable and adequate housing. For households seeking their own home, the regulatory framework will be a vital consideration. The key priorities in such an audit is to protect public health and safety. However, experience has shown that substantial reductions in the costs of land can be achieved through these audits, which in turn can help improve access to affordable housing.

Regulatory audits should take into account land uses and forms of housing development found within well-established informal settlements as these can provide a reference for comparison with current norms. Once key differences, and the administrative authorities responsible for each aspect have been identified, consideration can be given to which offer the greatest possible reductions in cost while still meeting public health and safety considerations. Once the options offering significant cost reduction benefits are identified, it will be important to consult widely with private sector and civil society stakeholders and make changes where necessary to ensure that proposals command public support. The final stage can involve preparing a list of priorities for action, starting with those that can be changed immediately, with those that require institutional or legal changes being addressed later. In this incremental way, a continuous process can be established by which land costs can be reduced to improve housing affordability.

3.1.1 Planning and building standards

Planning and building standards are technical specifications to which all approved development must conform. They cover physical requirements for plot size, road widths, public open space and infrastructure provision. However, standards imply costs, and such costs are not always considered when standards are being determined. A key consideration is therefore that no matter how relevant planning standards may be environmentally or socially, they can only be enforced if residents or governments are able to afford them. To reduce the cost of land to housing units, whether these are in the

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24 Ibid., page 26.
forms of homes on individual plots of land or apartments sharing a plot of land, the gross permitted density level will exert a major impact. Higher densities will reduce unit land costs as a proportion of total costs, though this may be offset by higher construction and maintenance costs in high-rise developments. This suggests that roads and public open space should be designed for maximum efficiency in order to maximize opportunities for multiple uses.

Another aspect that can help reduce land costs and improve housing affordability is that of building setbacks and the amount of development permitted on a plot of land, sometimes known as the floor area ratio (FAR). The greater the area of land required to be set aside from plot boundaries, the lower the proportion of land available for development. This raises the unit cost of land and adversely affects affordability, so should be considered with caution, especially if it does not reflect cultural forms of land development. Similarly, constraints on the amount of development permitted on a residential plot will also increase the unit costs of land and impact on affordability.

In the case of housing units on individual plots, the official minimum plot area exerts a major influence on costs and levels of affordability, defining the level of income required to enter the formal housing market. If a regulatory audit demonstrates that the costs of current minimum plot sizes are unaffordable to a significant proportion of households, attention should be given to identifying norms within informal settlements, since this will provide an indication of what is acceptable. Revising and, where appropriate, reducing the minimum plot size will significantly improve housing affordability for lower income groups and their entry to the formal housing market, while still enabling those on higher incomes to afford larger plots. The minimum plot size will also determine the extent to which existing urban households can become legal occupants. For example, if the official minimum residential plot size is larger than the plot size that is routinely occupied in a given location, legality will become impossible. This suggests that the official minimum residential plot size should be affordable to the great majority of households. Anything larger than this will simply force households into various forms of informal development.

Since the unit price of land represents a significant proportion of total housing costs, the minimum official plot size will exert a major influence on the entry cost to formally approved housing. This suggests that small plot sizes will improve housing affordability dramatically. While cultural and public health considerations are important, small official minimum areas can considerably improve access to formal land and housing.

**Examples of progressive planning standards:**

In India, plot sizes of 25m2 are permitted and examples exist with buildings of two or even three floors. In Vietnam, it is common for urban plots to be long and narrow with frontages of 3 meters or less. These are known as ‘tube-houses’ and can often be several floors high, providing high density and efficient land use that helps to reduce costs and improve affordability.

3.1.2 Planning and building regulations

Planning regulations generally comprise legal and semi-legal instruments and may include statutory rules, proclamations, codes of practice and related requirements. These influence land and housing costs and therefore the ability of households to meet them. Some regulations may be clearly essential to public health and enjoy widespread public support, such as preventing or controlling polluting industries in primarily industrial areas. However, regulations that prevent residents from putting available land to productive uses, increase land prices and adversely affect affordability. The priority should therefore be to focus on protecting public health and those elements that command public support.

Planning regulations that permit mixed land use can encourage locally based economic activity which increases household incomes and thereby improves affordability. UN-Habitat (2013: 28) recommends that at least 40 percent of an urban area should be allocated for mixed land use and that mono-functional zoning should be reduced to no more than 10–15 percent of the overall urban land area26.

**Example of flexible regulations:**

In Phnom Penh, the capital of Cambodia, it is common for urban land plots to include a mixture of residential, commercial or office uses. These change over time enabling the urban environment to respond to changes in demand and reducing costs.

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In Israel, Project Renewal enables residents in selected housing developments to extend apartment buildings with government assistance and increase the area of accommodation that enabled some improve the quality of their housing at modest cost and other to move into another neighbourhood on affordable terms.  

3.1.3 Administrative procedures

Central and local governments establish regulatory frameworks to set the parameters for development in general, but more specifically for the city or municipal environment. While central governments are responsible for establishing the legal and policy framework, many local authorities are empowered to exercise delegated powers over urban development, though the situation varies considerably from one country to another. Since regulatory frameworks significantly influence the capacity of urban poor people to take a lead in their own development and achieve sustainable livelihoods, it is important that the right balance is struck between national and local needs and conditions.

Administrative procedures are the means by which planning standards and regulations are enforced. They encompass all activities, from applying to register, develop or transfer land for housing, to changing land use, obtaining permission to build or upgrading existing settlements. Procedures may be listed in codes of practice, administrative orders, management instructions or other statutory instruments.

Administrative procedures may require extensive visits to different government departments, and different official application forms and permits, certificates or licences. All these can take time and increase the official and unofficial costs of conforming to regulatory requirements. International research on regulatory frameworks demonstrated that while the impact of planning and building standards and regulations varied from one country to another, in each of several countries surveyed, administrative procedures constituted a significant cost to land and housing development.

Examples of cost-effective administrative procedures:

Soon after the internet was established, the city authorities in Hyderabad, India, introduced a number of e-centres throughout the city. These were staffed by young computer skilled young graduates who were trained to understand the procedures required for meeting a range of administrative services, from applying for passports, birth, marriage and death certificates as well as planning permissions.

Applicants were helped to complete the formal applications (an important element of the service in neighbourhoods where many applicants were illiterate). A reference number was given, and applicants were told how long the application would take to be assessed. On returning, they were either informed of the decision and any reason for rejection, or the staff member could call the official where the application had been held up to ascertain the reason. This system not only resulted in a massive improvement in urban governance, but also significantly reduced the costs involved.

Vietnam is one of a number of other countries that have established similar arrangements for processing planning and building applications and such 'one-stop-shops' have proved to be a very effective means of reducing the time, cost and uncertainty of conforming to official planning and building standards and regulations.

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3.2 Spatial and land use planning

The spatial allocation of land uses can also significantly influence land prices in urban and peri-urban areas. As discussed above, maximizing the area of mixed land use can enable housing to be in areas with good accessibility to employment and education, as well as social facilities.

Unit land costs can also be reduced significantly by maximizing the proportion of land available for development in productive use. For example, if 65% of the area at local, neighbourhood level is allocated for housing or other uses, leaving 20% for circulation and public open space and the remaining 15% for public amenities, such as primary schools, unit land costs will be minimized. However, if the area of productive land is reduced to 50% of the available land, the unit costs will increase substantially.

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Case 1</th>
<th>Case 2</th>
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</thead>
<tbody>
<tr>
<td>Area of housing and other productive land uses</td>
<td>65%</td>
<td>50%</td>
</tr>
<tr>
<td>Circulation and public open space</td>
<td>20%</td>
<td>35%</td>
</tr>
<tr>
<td>Public amenities, including primary schools, religious and social facilities</td>
<td>15%</td>
<td>15%</td>
</tr>
</tbody>
</table>

As the table shows, 20% of the land in Case 1 is devoted to circulation and public open space. This represents less than a third of the area of productive land (65%), whose occupants pay for both uses. By increasing the area of circulation and public open space by 15% to 35% of the total area, as shown in Case 2, this 35% has to be paid for by the occupants of only the 50% productive land, increasing the unit cost. In summary, for every 1% increase in unproductive circulation area, the unit land cost increases significantly. Simply by reducing the width of roads by 1 meter (or more) can therefore increase the area of productive land, reducing unit land costs and improving housing affordability.

The actual proportions will need to be adjusted to local conditions, and the proportion that can be achieved will reduce at larger scales of development, since this will need to include higher order roads, open spaces and public facilities such as secondary schools colleges and administrative facilities. However, the principle is relevant at all scales of land development. In this simple way, land costs of housing can be reduced significantly by maximizing the proportion of land in productive use.

3.3 The institutional framework

It is important to acknowledge that the methods of managing land vary from one context to another, so no single policy will be applicable in every case. For this reason, this Review summarises examples that have been implemented in at least one context and lists their relative advantages and disadvantages. By reviewing the characteristics of each, policy makers and officials responsible for addressing the challenge of improving access to adequate and affordable housing will be able to apply those options most appropriate to local conditions. However, it may also require determination in addressing vested interest groups who are benefiting from the status quo. It will also require that public sector officials are skilled in assessing the likely market response to a public investment in order to anticipate the likely increment that can be distributed to improve access to affordable and adequate housing.

All levels of government have a key role to play in addressing housing needs and bringing adequate housing back to the centre of urban planning practice, placing people and human rights at the forefront of economic policy and urban sustainable development. To achieve this, it is important to build a comprehensive governance approach, involving efforts to fight corruption and impunity, by strengthening the rule of law and ensuring public access to information.

The New Urban Agenda acknowledges these challenges and calls for action to “support subnational and local governments in their efforts to implement transparent and accountable expenditure control instruments for assessing the necessity and impact of local investment and projects, based on legislative control and public participation, as appropriate, in support
of open and fair tendering processes, procurement mechanisms and reliable budget execution, as well as preventive anti-corruption measures to promote integrity, accountability, effective management and access to public property and land, in line with national policies. Progress in realising access to affordable and adequate access to all will depend to a large extent on reducing corruption substantially and improving urban land governance.

A key requirement for successfully implementing land management policies designed to encourage investment and generate the maximum public benefit from it, is that the administrative and institutional framework for land management recognises the unique value and dynamics of ownership of each land parcel. This is particularly important in peri-urban areas, where changes in officially sanctioned land use from agricultural/pastoralist use to commercial/residential results in substantial price increases. Such a process of land market management needs to command broad public support to prevent it becoming a basis for disputes. It will also be important to take into consideration different tenure systems to improve access to land and housing as discussed below.

Developing and applying a consistent basis for evaluation that can command social legitimacy therefore presents a challenge for urban land administrations. This is particularly relevant in cases where the official tenure status of land is unclear or disputed, but also applies in contexts where the institutional and legal environments are well established, and the risk of abuse is minimal.

Efficient land administration requires that the institutional structure provides a clear division of responsibilities and resources between central, provisional and local level authorities and a degree of institutional stability that enables lessons to be learned from practice. The greater the number of agencies involved, the more cumbersome and inefficient, and therefore expensive, access to land and housing will become. If this creates conditions in which conformity is either too time consuming or expensive, an increasing proportion of development will take place outside the official planning and development system as the only means by which people are able to access land and housing on affordable terms and conditions. This suggests that an institutional audit can provide a valuable means of ensuring that all technical, financial and human resources are deployed to the greatest effect in benefitting those in greatest need.

A key factor in ensuring that land for housing is affordable to the majority of households is to ensure that land is made available for development at the rate of population demand. Undertaking land and housing needs assessments can provide a basis for ensuring that land in adequate quantities is made available in appropriate locations with access to transportation, public utilities and social facilities. This might also make it necessary to enforce penalties on developers who obtain development permission but fail to develop land within specified time limits.

### 3.4 Land tenure policies and practices

The mode by which land is held or owned exerts a major influence on access to housing. In cases where land is held under customary regimes, as in much of sub-Saharan Africa and the Pacific region, access is based more on membership of a community or ethnic group. However, customary tenure is often not legally applicable within urban areas and is even under commercial pressure in peri-urban areas where financial considerations are increasingly applicable. In cases where land is held under state ownership, access may be influenced more by membership of a political party rather than by cost and similar considerations apply under religious forms of tenure as in Islamic countries. To add further complexity, several legal systems co-exist in many countries, so that cost and affordability are not the only factors operating.

Despite these variations, the global trend has been to promote individual ownership. Access to land for housing is therefore increasingly predicated upon the ability of individuals or households to be able to pay the cost as defined by the market. Under such conditions, affordability is only possible for lower and even middle-income groups through the provision of subsidies that in the long term might distort market behaviour. Subsidies are also vulnerable to

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capture by non-target groups. Even under conditions of customary tenure regimes, the prevalence or promotion of financialization can erode the social foundation of this form of tenure and corrupt traditional authorities. International experience shows that diverse tenure options are most effective in meeting diverse and changing needs.

A common problem is the lack of clarity in existing tenure status. Before proposals to change the tenure status of an area are considered, it is therefore vital to identify all claims to land ownership or rights. This may require land registries and relevant agencies to be brought up to date and strengthened. Tenure policy should seek to enhance clarity, efficiency and equity in the registration, use, development and transfer of land and property. The key to success is to ensure that tenure systems build on and adapt tenure options that enjoy social legitimacy, and both promote diversity and the active role of communities.

International research provides a wide range of pragmatic and incremental examples that can provide sufficient levels of land tenure security and property rights to enable households at all income levels to be able to obtain affordable housing.

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The global application of market forces to the holding, use, development and transfer of land and housing have resulted in the commercial or exchange value of land asserting primacy over its social or use value. Governments and many international agencies have supported market-based land management policies, such as individual property ownership, at the expense of non-market-based options such as Third Sector options, including social housing or communal ownership. Despite the housing crisis of 2008, investors, developers and speculators continue to regard property as an asset class of choice compared to investment in more productive economic sectors. Combined with increasing demand due to rising urban populations, changes in household size and subsidies for ownership, prices have therefore risen far faster than incomes in countries at all levels of social and economic development, creating a self-reinforcing inflationary cycle.

The increments in land value resulting from state and private investments or approved changes of use from agricultural to urban residential or commercial land can often be extremely high, even as much as a hundred times. To date, these increments have been captured very efficiently, however, mostly by landowners, developers and investors, at the expense of the public interest. As formal land and housing ownership becomes increasingly unaffordable, it generates a ripple effect in the private rental sector, which is also becoming increasingly unaffordable. By ensuring that the unearned increments in value are captured, or shared, more equitably, a proportion of this increment can be allocated to provide affordable housing. This Review illustrates many of the policy instruments that have already been applied in a wide range of contexts to show how this can be achieved. It is hoped that these examples will encourage central and local governments to strengthen their ability to regulate urban land and housing markets more effectively in the public interest by adopting options appropriate to local conditions.

While the challenge of improving access to adequate and affordable housing is therefore daunting, this Review demonstrates that a wide range of land and housing policies and tools exist and can help to make substantial improvements. This is because land costs represent an increasing proportion of total housing costs and are more amenable to government influence than other areas of the housing construction sector such as labour or services provision costs. Governments therefore have enormous potential influence over land markets by determining and enforcing conditions for the granting or withholding of planning permissions and changes of land use, to name but two aspects, to increase the provision of affordable housing. Whether or not governments choose, or are able, to exert this potential influence will depend upon institutional capability and political will.

This Review has highlighted a wide range of policy instruments that have been applied in different contexts. Each can enable the benefits of land development to be shared equitably by providers, consumers and the wider public. The strengths and weaknesses of each policy instrument need to be considered carefully before deciding if they are applicable in different contexts. Each will make different demands on the legal, institutional, financial and technical resources available in both central and
local governments. However, the ultimate influence will depend upon the political will of central and local governments to adopt and enforce measures that can ensure that a significant proportion of the increment in land values resulting from urban development is reserved for public benefit.

A key challenge is the need for senior officials in local government to develop or strengthen their understanding of land and housing markets and the options that are most appropriate for interventions by increasing their knowledge and ability to manage these markets in the public interest. This involves anticipating the likely responses of key stakeholders to different policy instruments and the degree of leverage that exists at a given time and place to improve access to affordable housing. It is also vital that the experience gained is incorporated into knowledge development and capacity building programmes so that it can form the basis for the wider application of innovative approaches.

A key administrative issue is how to develop and apply a standard administrative system to the vast range of land parcels and properties, each of which has a unique market value. Developing and applying a consistent basis for valuation that can command social legitimacy presents a challenge even in contexts where the institutional and legal environments are well established and the risk of abuse is minimal. With disputes over land among the most common sources of disputes in civil and administrative courts in a majority of countries, formulating a basis for land valuation will require considerable care and commitment. This will need to include how such land and properties are to be assessed and by whom, and what means of appeal can be provided to resolve disputes.

A further consideration in applying any policy initiative is to identify the groups most likely to benefit and those likely to be adversely affected. If these are not accurately assessed, and openly acknowledged, policy outcomes are likely to be different from those intended and public support is likely to be limited. The policy instruments reviewed have the potential to enable central and local governments to increase their ability to manage urban and peri-urban land markets in the public interest without adversely affecting the financial interests of investors and developers or placing excessive demands on public sector resources. While central governments provide the political, legal and regulatory framework, provincial or local governments will also need to acquire the necessary technical expertise.

Ensuing that the institutional framework at national, provincial and local levels puts available technical, financial and human resources to the most efficient use can considerably help in reducing administrative costs, enabling land and housing to be affordable. International experience suggests that if senior administrators are retained in land management departments for a reasonably long period, this provides continuity that can enhance institutional capability. It can also enhance the ability to learn from experience and encourage staff at lower levels of seniority to innovate. A degree of continuity is therefore essential for medium to long term policy implementation.

The policy instruments summarised in this Review can provide a powerful basis for improving access to affordable and adequate housing. However, since market forces apply in almost every city around the world, even those where land is managed by the state or under customary systems, ensuring that affordable housing generated by LBF policy instruments remains available for lower income households in the future requires that the forms of land tenure and property rights provided will ensure long term availability for such groups.

All the above factors influence the cost of entry to the formal land and housing market. Where that cost is higher than households can afford, their only option is to access land and housing outside the formal market. For governments intent on improving the affordability of officially sanctioned land for housing, it is therefore essential that every effort be given to reviewing the existing aspects listed above to see...
in what ways changes to policy and the regulatory environment can help to improve affordability and access to adequate housing. However, given the increasing global demand for land in, and adjacent to, urban areas, progress will depend upon the degree to which governments are willing to address any evidence of corruption in land management and create and enforce systems of land governance that protect the wider public interest and the needs of vulnerable groups.

Meeting the needs of existing urban populations for affordable and adequate housing presents governments and the international community with an enormous challenge. This requires that some land is made available on a long-term basis using forms of land tenure that are outside the commercial land market and are not amenable to market forces. In other words, they cannot be traded or treated as financial investments and residents instead are empowered to effectively act as trustees, protecting the communal assets for future generations.

UN-Habitat, together with other multi- and bi-lateral development agencies, are available to support governments at all levels in the application and implementation of these tools and to support networks that help governments and other stakeholders build on existing international experience. The need for progress is great and the means of achieving it are at hand.
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